ATTACHMENTS

ORDINARY COUNCIL MEETING

to be held at
the Council Chamber (Level 1), Civic Centre,
23 Dundebar Road, Wanneroo
on 16 December, 2025 commencing at 6:00PM

2 APPROVAL SERVICES

PS02-12/25 Consideration of Precinct 3 - Elliot Road Local Structure Plan following advertising

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CS07-12/25 **City of Wanneroo 2024-25 Annual Report

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EAST WANNEROO
PRECINCT 3 - ELLIOT ROAD
LOCAL STRUCTURE PLAN

VARIOUS LOTS ON ELLIOT ROAD, BENMUNI ROAD,
NICHOLAS ROAD AND LENORE ROAD, WANNEROO

CITY OF WANNEROO

8 May 2025

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0	24/06/24	First issue internal	CT	Jon Burgess
1	13/01/25	Draft V1	CT/JB	Jon Burgess
2	12/03/25	Draft V2	JB	Tony Free
	31/03/25	Final Draft issued	JB	Tony Free
Final	08/04/25	Final for submission	JB	
	08/05/25	Include Lenore Road within Precinct boundary	Request by City of Wanneroo	Jon Burgess

ENDORSEMENT OF THE PRECINCT 3 – ELLIOT ROAD LOCAL STRUCTURE PLAN

This structure plan is prepared under the provisions of the City of Wanneroo District Planning Scheme No.2.

IT IS CERTIFIED THAT THIS STRUCTURE PLAN WAS APPROVED BY RESOLUTION OF THE WESTERN AUSTRALIAN PLANNING COMMISSION ON:

_____ Date

Signed for and on behalf of the Western Australian Planning Commission:

_____

An officer of the Commission duly authorised by the Commission pursuant to section 16 of the Planning and Development Act 2005 for that purpose, in the presence of:

_____ Witness

_____ Date

_____ Date of Expiry

TABLE 1: TABLE OF AMENDMENTS			
AMENDMENT NO.	SUMMARY OF THE AMENDMENT	AMENDMENT TYPE	DATE APPROVED BY WAPC

TABLE 2: TABLE OF DENSITY PLANS		
DENSITY PLAN NO.	AREA OF DENSITY PLAN APPLICATION	DATE ENDORSED BY WAPC

EXECUTIVE SUMMARY

VISION

The vision for the Precinct 3 'Elliot Road' Local Structure Plan (LSP) is to create a high-quality residential enclave nestled between conservation/recreation areas to the north and east, and a rural lifestyle precinct to the south, as a sensitive extension of the existing urban areas to the west.

The Local Structure Plan has well defined boundaries with these high amenity areas. In addition, significant areas of vegetation are retained within the LSP area, together with the key ingredients of a high-quality residential environment, being:

- a Primary School
- a Neighbourhood Shopping Centre
- Neighbourhood Playing Fields, and
- connected areas of local recreation and open space

The area is characterised by long term generationally owned rural land parcels of both an active and passive nature. Many families have lived on their properties for decades, contributing to a strong sense of place and identity. This is a well-established, neighbourly community with a number of members who wish to remain living within the project area.

Facilitating a seamless continuation of this sense of community is an important part of the vision for the project. Implementation of the vision will occur by way of the following project principles:

1. Injecting Heart – embracing and enhancing the existing strong sense of place, facilitating a connected community and meaningful relationships, where residents feel healthy, safe and happy
2. Creating A Thriving Neighbourhood – embracing leading design principles, innovation, environmental sustainability and community integration
3. Establishing a blueprint to cater for the current and future needs of residents and to respond to the demands of modern life. Connecting residents to the local and broader East Wanneroo area, providing easy access to amenities including education, employment, retail and medical facilities.

DESIGN RATIONALE

The design rationale for the Local Structure Plan is very simple, as follows:

1. To integrate the important Integrator Arterial Road/Rapid Transit Route (along the alignment of Elliot Road), as depicted on the East Wanneroo District Structure Plan. This corridor connects Lenore Road (the primary north-south roadway through the East Wanneroo urban area), via the future District Shopping Centre (within adjacent Precinct 12), to the future Yanchep-Whiteman Freeway
2. To integrate the north-south Neighbourhood Connector (B), central to the Local Structure Plan, as shown on the East Wanneroo District Structure Plan. This road connects to future development precincts to the north, linking the community to the proposed Primary School and various areas of recreation, including the Neighbourhood Playing Fields
3. To carefully locate a Neighbourhood Shopping Centre (Local Centre) for efficient access and high-level exposure, together with ensuring it is positioned to service its catchment – without negatively impacting the future District Shopping Centre to the east
4. To maintain and enhance a number of areas of significant remnant vegetation
5. To provide efficient residential cells with appropriate orientation for solar gain, incorporating various lot typologies to facilitate the development of a range of dwelling forms to meet changing market demands

Regarding the latter, the Local Structure Plan incorporates simple street blocks on north-south and east-west orientations for solar and development efficiency. These street blocks also provide legible links to and between recreational areas and many provide vistas to parklands, assisting with the creation of amenity and sense of place.

Proposed 'Green Streets' link recreation areas across the Precinct and provide legible access to the Primary School. These streets provide for additional street tree planting and shared paths to enhance pedestrian/cyclist movement and to increase tree canopy across the LSP area. Located mainly at the end of cells, the planted verges are mostly uninterrupted by driveways, providing for a seamless landscaped environment.

Green Street locations also facilitate the retention of existing tree avenues where appropriate.

Precinct 3 is primarily a Suburban Neighbourhood, though also includes areas of higher density ('Urban Neighbourhood') shown abutting the Neighbourhood Shopping Centre and in close proximity to the future District Shopping Centre, generally in accordance with the East Wanneroo District Structure Plan.

Areas of higher density are also shown at the location of various retained homesteads, facilitating alternative product typologies when these sites are redeveloped in the future. These homestead sites meet the locational performance criteria for the provision of increased density.

The road layout has also been carefully planned to provide for development without the construction of Shenton Road at the southern boundary. At this location, roads are design to 'T' into Shenton Road with no direct lot frontage to Shenton Road. This conservative approach has been proposed in order to consider the expectations of landowners within Precinct 2 to the south, given the long-term nature of that rural lifestyle living area.

Importantly, however, the construction of Shenton Road may be necessary to satisfy the access requirements of the **Bushfire Management Plan** – refer **Appendix 3**. This element can be further considered at the time of subdivision and it is noted that construction of Shenton Road will also improve the bushfire safety of existing homes within adjacent Precinct 2.

OPPORTUNITY

Importantly, approval of the Local Structure Plan for Precinct 3 presents an opportunity for the expedited progression of residential development within the East Wanneroo urban corridor due to several favourable factors:

1. Strategic Alignment

   The whole of Precinct 3 is identified within the East Wanneroo District Structure Plan (DSP) as a short-term 'Stage 1 2021 - 2031' development area, supporting early activation and streamlined approval pathways. This is particularly important given potential delays to Stage 2 areas (and low-lying Stage 1 areas) due to ongoing refinement of the groundwater management scheme.

2. Servicing Readiness

   The precinct benefits from its proximity to existing infrastructure, allowing for the straightforward extension of services and reducing lead times for delivery.

3. Affordable Housing Outcomes

   The Local Structure Plan facilitates the timely provision of affordable and accessible residential lots, aligning with broader government and community housing objectives.

4. Non-Contingent Delivery

   Unlike other Precincts within the East Wanneroo District Structure Plan area, Precinct 3 is not reliant on unresolved matters, such as the groundwater management scheme, enabling its progression as a stand-alone development opportunity.

These factors collectively support a prioritised assessment and approval process for the LSP.

EXECUTIVE SUMMARY TABLE

The Precinct 3 Elliot Road Local Structure Plan applies to land generally bound by Bush Forever Site: 471 to the north, Benmuni Road to the east, Lenore Road to the west and Shenton Road to the south, being the land located within the inner edge of the line denoting the structure plan boundary on the Structure Plan Map (refer **Plan 1**). The boundary of the LSP accords with that shown on the East Wanneroo District Structure Plan. A summary of all key statistics and planning outcomes of the structure plan is provided in **Table 3** below:

TABLE 3: SUMMARY TABLE		
ITEM	DATA	REPORT REF.
Total area covered by the structure plan	141.0216 (hectares)	
Area of each land use proposed: - Residential (net subdivisible area) - Non-creditable open space - Commercial - Church - MRS P&R Reserve - MRS Other Regional Road Reserve - Public Purposes – Primary School	 107.1874ha 1.2300ha 2.0859ha 1.8554ha 14.2469ha 10.6638ha 3.7528ha	Section 5
Net residential area (excluding roads)	63.1991ha	
Total estimated lot yield	1,753 lots	5.3
Estimated number of dwellings	1,856 dwellings	5.3
Estimated residential site density (dwgs/site ha)	29.36	5.3
Estimated population	5,568	5.3
Number of high schools	Nil	N/A
Number of primary schools	1	5.7
Estimated commercial floor space (NLA)	7,950m^2	5.8
Estimated area and percentage of public open space given over to: - Regional Open Space (ha/%) - District Open Space (ha/%) - Neighbourhood Parks (ha/%) - Local Parks (ha/%) - Creditable POS	 14.2469ha/10.10% 0.00ha/0% 4.5003ha/3.19% 7.4776ha/5.30% 10.7479ha (10.03%)	5.2
Estimated percentage of natural area	18.60%	

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LIST OF ABBREVIATIONS

DSP	East Wanneroo District Structure Plan (2021)

PART ONE | IMPLEMENTATION

1. LOCAL STRUCTURE PLAN AREA AND OPERATION

This Local Structure Plan for 'Precinct 3 – Elliot Road', within the East Wanneroo District Structure Plan, applies to all land within the inner edge of the line denoting the Structure Plan boundary on the **Structure Plan Map** (**Plan 1**).

The Local Structure Plan is in effect from the date stated on the approval letter issued by the WAPC and is valid for a period of 10 years [or for any longer period approved by the WAPC].

2. PURPOSE

This Local Structure Plan has been prepared to guide the subdivision and development of land within 'Precinct 3 – Elliot Road' as identified on the endorsed *East Wanneroo District Structure Plan (2021)* (DSP) and follows the guidance set out in the DSP and WA Planning Manual 'Guidance for Structure Plans' *(August 2023)*.

3. STAGING

Given Precinct 3 abuts established residential housing to the west, the available road connections through or abutting the Local Structure Plan area, such as Elliot Road, Lenore Road, Nicholas Road and Benmuni Road, facilitate an orderly and logical extension of existing development.

The first stage of development is anticipated to occur on Elliot Road centrally within the Precinct generally within the vicinity of the existing drainage area. This low point within the Precinct is the location of the first wastewater pumping station, it will contain future drainage and it includes a proposed recreation area. This location is also situated at the intersection of Elliot Road and the north-south Neighbourhood Connector road, providing ideal connectivity and access as future stages are developed.

It is anticipated that a total of more than 20 stages of development will be required to deliver the overall Local Structure Plan, spanning an estimated 7 to 10 years. **Figure 9 - Indicative Early Staging Plan** is included in **Part Two – Explanatory Section** herein

and **Section 5.11 - Staging** of this report also provides further information regarding indicative staging for the Precinct.

The Indicative Early Staging Plan shows the intended location of the initial four stages of development based on servicing and landownership, with Satterley Property Group having assembled landholdings to ensure delivery of a connected, legible and cohesive project. The location of future stages will be considered as development progresses over time.

4. SUBDIVISION AND DEVELOPMENT REQUIREMENTS

4.1 LAND USE ZONES AND RESERVES

Land use permissibility shall be in accordance with the **Structure Plan Map** (**Plan 1**) and the corresponding zones and reserves set out in the City of Wanneroo *District Planning Scheme No.2*.

4.1.1 ZONES AND PRECINCTS

Land uses shown on the **Structure Plan Map** (**Plan 1**) include:

Metropolitan Region Scheme

- Parks and Recreation
- Other Regional Roads

Local Planning Scheme

- Residential (R30-R60) – (DSP 'Suburban Neighbourhood')
- Residential (R40-R80) – (DSP 'Urban Neighbourhood')
- Public Open Space
- Public Purposes – Primary School
- Commercial

4.1.2 ROAD RESERVES

The **Transport Impact Assessment** (TIA) included at **Appendix 7** details the specifications for the proposed movement network within the Local Structure Plan.

Table 4 over page summarises the proposed road function and characteristics.

TABLE 4 ROAD FUNCTION AND CHARACTERISTICS				
Road Hierarchy	Max speed (km/h)	Max range volume (vpd)	Indicative reserve width	Min Pavement width (m)
Integrator Arterial Rd Rapid Transit Route	60 or 70	35,000	45m (to allow for rapid bus)	4 x 3.5m traffic 2 x 2m cycle
Integrator A (four lanes)	60 or 70	15,000 to 35,000	35m (32.4)	2 x 8.2
Neighbourhood Connector A	50	7,000	25m (24.4)	2 x 7.1
Neighbourhood Connector B	50	3,000	20m (19.4)	11.2
Access Streets				
B (Wider Street)	50	3,000	15-20m (17.9)	9.7
D (Yield or Give Way Street)	50	1,000	15m (15.4 – 16)	6.0 – 7.2

The Local Structure Plan proposes a network of streets based on Liveable Neighbourhoods guidance, together with a number of 'Green Streets' which are designed to accommodate additional trees. These 'Green Streets' are positioned to provided key east-west and north-south vegetation linkages through the Precinct, providing a safe, shady pedestrian and cycling focussed environment connecting to the primary school and public open spaces.

The Structure Plan Map details the proposed movement networks, the formal hierarchy for which includes:

- The Integrator Arterial Road/Rapid Transit Route (45m)
- Integrator A (35m)
- Neighbourhood Connector A (25m)
- Neighbourhood Connector B (20m)
- Access Street B (17.9m)
- Access Street D (15.4m)

Cross Sections for these streets are included in **Appendix 7**.

4.1.3 PUBLIC OPEN SPACE

Public Open Space (POS) shall be provided generally in accordance with the **Structure Plan Map** (**Plan 1**). A **Public Open Space Schedule** is attached at **Appendix 5**.

The POS distribution within the Local Structure Plan has been provided in accordance with statutory guidance, being approximately 10.03% in creditable area. This may be further refined during development. This marginal over-provision provides flexibility with regard to ongoing district and local water management and to provide flexibility with the proposed parkland reserves specified in the DSP.

4.1.4 OTHER RESERVES

The Local Structure Plan includes various reserves, including:

- Parks & Recreation and Public Open Space
- Public Purposes – Primary School (1)
- Neighbourhood Playing Fields
- Waste Water Pumping Stations (permanent and temporary with final locations to be confirmed)
- Commercial

The Parks & Recreation reservations are associated with areas of suitable quality vegetation as identified within the East Wanneroo District Structure Plan (2021) (refer **District Structure Plan Extract** at **Figure 6**). The vegetation on Lot 43 Elliot Road, Lot 66 Nicholas Road and a portion of Lot 67 Nicholas Road has been preserved in proposed Parks & Recreation reserves as a result of the environmental technical analysis contained herein – and further to those properties being identified as "Parklands Subject to Confirmation" in the DSP.

The Primary School is located south of Elliot Road and central to its catchment, in accordance with the DSP. The Primary School abuts the proposed north south Neighbourhood Connector B road reserve to provide efficient access through the LSP area and also to adjacent Precincts 2 and 13. The site area of 3.7528ha meets the operational policy requirements for collocated primary schools.

The Neighbourhood Playing Field is provided in accordance with the East Wanneroo Community Infrastructure Plan (2023) and is co-located with the proposed Primary School site in accordance with part 3.9 'Schools and Community Facilities' of the DSP.

The Waste Water Pumping Station sites (permanent and temporary) will form part of future reserves. The proposed permanent WWPS will be situated on the southern side of Elliot Road, west of the Neighbourhood Connector within POS 5, with the exact reservation identified following further detailed engineering design.

The temporary WWPS sites are proposed to be located within POS 4 and POS 11.

A Commercial zone, to facilitate development of a Neighbourhood Centre, is included within the Local Structure Plan area as required under the DSP. It has been located at the north-eastern corner of the intersection of Lenore Road and Elliot Road, as a strong reference point for the precinct, to cater for passing traffic and to allow for easy access to public transport.

4.2 DENSITY AND DEVELOPMENT

The **Structure Plan Map** at **Plan 1** designates the R-codes applicable to subdivision and development in the structure plan area.

4.2.1 DENSITY AND R-CODES

The **Structure Plan Map** at **Plan 1** shows the majority of Precinct 3 as 'Residential R30-R60' in accordance with the 'Suburban Neighbourhood' classification designated in the District Structure Plan.

Portions of the Precinct are also shown as 'Residential R40-R80', generally in accordance with the 'Urban Neighbourhood' designation under the District Structure Plan.

The latter classification also applies to the six 'Homestead Lots' incorporated into the Local Structure Plan. This classification facilitates the future redevelopment of these sites to provide for a variety of housing typologies to suit market demands.

4.2.2 LOCATIONAL CRITERIA

A Residential Density Code Plan shall be submitted with all residential subdivision applications indicating the residential density coding applicable to each lot, generally in accordance with the following criteria.

Note these are maximum density targets and it is intended subdivision form will respond to prevailing market conditions and may also include development at a density less than R30.

Density coding criteria:

I. A base code of R30

II. R40 for lots:

   a. At the end of residential street block cells;
   b. Within 250m of Public Open Space or Parks & Recreation reserves;
   c. Abutting or directly opposite the primary school;
   d. With frontage to a Neighbourhood Connector or Integrator A road; and/or
   e. Within 500m of a public transport stop or equivalent.

III. R60 for lots:

   a. Within 250m of a public transport stop or equivalent; and/or
   b. To which II applies that also:
      i. have access to a laneway; and/or
      ii. Are over 600m^2 in area and that are to be developed for grouped or multiple dwellings*.

**Note: Section III (b) ii is not intended to facilitate the re-subdivision of sites for green-title or survey strata lots. If this is proposed a new density code plan shall be submitted that complies with the criteria listed above.*

IV. Up to an R80 density for development on lots within the Urban Neighbourhood residential catchment of the District Shopping Centre as shown on the DSP and designated Residential R40-R80 on the LSP.

Upon approval by WAPC, the R-Codes plan forms part of the Local Structure Plan.

4.2.3 DEVELOPMENT LAYOUT

Figure 8 – School Sites Indicative Development Plan shows an indicative layout of school buildings and recreational facilities on the proposed Primary School site.

The layout places the proposed recreational/oval facilities in the eastern portion of the Primary School site to minimise any potential bushfire impact from the neighbouring 'Parkland Reserve' on Lot 66. Note that there is a strip of public open space situated between the bushland area on Lot 66 and the Primary School to provide access to the Neighbourhood Playing Fields and separation to the bushland.

4.2.4 LOCAL DEVELOPMENT PLANS (LDP)

Local Development Plans are to be prepared for lots:

i. Of irregular shape or less than 260m² in area;

ii. That obtain access from a laneway or right-of-way;

iii. Directly abutting areas of public open space; and/or

iv. Intended to contain grouped or multiple dwellings,

And shall set out the following (as applicable):

1) Street and boundary setbacks;

2) Dwelling/building orientation;

3) Fencing;

4) Open Space;

5) Garage setbacks and width;

6) Vehicular and pedestrian access;

7) Parking requirements;

8) Overshadowing; and

9) Visual privacy.

4.3 OTHER REQUIREMENTS

4.3.1 BUSHFIRE PROTECTION

A **Bushfire Management Plan** (refer **Appendix 3**) has been prepared as a strategic guide to demonstrate how development compliance will be delivered at future planning stages in accordance with the WAPC Guidelines. Aside from the preparation of BMPs to accompany future subdivision and development applications where appropriate, there are no further items to implement, enforce or review at this strategic stage of the planning process.

Future BMPs prepared for subsequent subdivision and development applications are to meet the relevant commitments outlined in this strategic level BMP, address the relevant requirements of SPP 3.7 (i.e. Policy Measures 6.4 and 6.5 respectively) and demonstrate in detail how the proposed future development will incorporate the relevant acceptable solutions or meet the performance requirements of the Guidelines.

4.3.2 INFRASTRUCTURE ARRANGEMENTS

An **Engineering Servicing Report** is attached at **Appendix 10** and is summarised in **Section 5.9 of Part Two** of this report.

The engineering investigation has confirmed the land is capable of supporting the proposed development in accordance with the Local Structure Plan with a logical progressive extension of infrastructure and base capacity.

The existing ground conditions and past land uses will not limit the proposed development.

Road access to the development will be provided via existing roads which bound the Precinct.

Sewerage will be provided for the majority of the Precinct by constructing a permanent wastewater pump station on Elliot Road, supplemented by two temporary pump stations at low points on the eastern boundary of the precinct, as development progresses.

There is adequate existing water infrastructure to service the LSP.

Initial power supply can be provided by connection to the existing high voltage (HV) infrastructure in Elliot and Nicholas Roads. Western Power has advised that ultimately the East Wanneroo Precinct 3 residential development will require a new distribution feeder from the Wangara Substation, to provide the required capacity.

Telecommunications and gas are available from existing services on Lenore Road.

4.3.3 DEVELOPMENT CONTRIBUTIONS

The City of Wanneroo and WAPC have commenced preparation of a District Developer Contribution Plan (DCP) for the East Wanneroo DSP Area, inclusive of Precinct 3.

The Draft District DCP was initially intended to be released for public comment in two parts, as follows:

- Part 1, being Amendment No. 214 to District Planning Scheme No. 2 and released for public comment on 20 March 2025 (closing 19 May 2025), relating to infrastructure and land acquisition for regional and district-level infrastructure items, excluding drainage and water management infrastructure requirements; and
- Part 2, to be released in mid-late 2025, relating to the district-level drainage and water management infrastructure network requirements.

Department of Planning, Lands & Heritage (DPLH) planning officers have recently advised that the drainage and water management infrastructure network may be designed and implemented by the Water Corporation as a 'groundwater management scheme' under a separate (non-DCP) mechanism. At the time of submitting this LSP, this was still to be determined.

With Satterley Property Group having assembled significant holdings within Precinct 3, the need for a Local Developer Contribution Plan has not yet been determined. This element of infrastructure provision will be discussed further with the approval agencies during the assessment process.

4.3.4 PROTECTION OR MANAGEMENT OF ENVIRONMENTAL OR LANDSCAPE FEATURES

The coordinated approach taken during the formulation of the Precinct 3 Local Structure Plan has been one to best protect and/or manage environmental and landscape features.

The technical design process for the Local Structure Plan has involved all technical disciplines working collaboratively together to ensure elements of the project are carefully considered and integrated. This includes earthworks designs formulated around vegetation retention objectives, landscaping proposals considering bushfire management and transport engineering collaboration with urban design to create efficient, but also quiet and safe movement systems that respect the local sense of place.

The design of the LSP has also sought to balance the protection of environmental or landscape features with the efficient development of residential housing to meet the needs of the growing population within Wanneroo. The overarching DSP has been specifically conceived to facilitate orderly urban development in this way.

4.3.5 WATER RESOURCE MANAGEMENT

A Local Water Management Strategy (LWMS) has been prepared to demonstrate how the Local Structure Plan will address water management as identified in the District Water Management Strategy (DWMS).

The modelling considered the risks associated with groundwater interaction now and in the future, noting Precinct 3 has considerable depth to groundwater. As such, the LWMS has been prepared on the basis that the Precinct can be fully self-sufficient. No discharge is proposed into any adjoining Precinct, with the clearance to groundwater for the abutting Precinct to the north (Precinct 13), also not required to discharge into Precinct 3.

The LWMS has been prepared to detail how all forms of water, including groundwater, stormwater and potable water, will be managed on-site in accordance with the Better Urban Water Management Guidelines (WAPC, 2008).

The LWMS provides strategies and plans for total water cycle management across the Local Structure Plan area in accordance with the principles of Water Sensitive Urban Design (WSUD).

The LWMS also provides a summary of local and regional environmental data that informs management strategies for stormwater, groundwater, protection of receiving environments a water conservation. A strategy for implementing the total water cycle management during construction and post development is also provided.

The **Local Water Management Strategy** is attached at **Appendix 8**.

4.3.6 LAND FRAGMENTATION

The East Wanneroo District Structure Plan is characterised by areas of highly fragmented land ownership. Precinct 3 includes 38 landholdings (plus a drainage reserve vested with the City of Wanneroo) across almost 135ha of land, with many lots being between 2ha and 4ha in area. Fragmented development of this scale represents a new paradigm for Perth's residential land industry.

At the time of lodgement of this Local Structure Plan, Satterley Property Group has assembled approximately one-third of the Precinct, with land acquisitions ongoing. This assembly process has taken more than 5 years.

5. ADDITIONAL DETAILS

5.1 INFORMATION TO BE SUBMITTED WITH AN APPLICATION

5.1.1 HOMESTEAD LOTS

An application for subdivision approval for a Homestead Lot shall include a plan demonstrating how the proposed lot will integrate with and not prejudice the surrounding planned development (including re-subdivision and/or development of the Homestead Lot).

Where the applicable services cannot be readily connected prior to the future residential development being frontal to the Homestead Lot, a condition of subdivision approval shall be imposed requiring various arrangements being made with the local government for payment of a bond for the following works (as applicable).

The arrangements include:

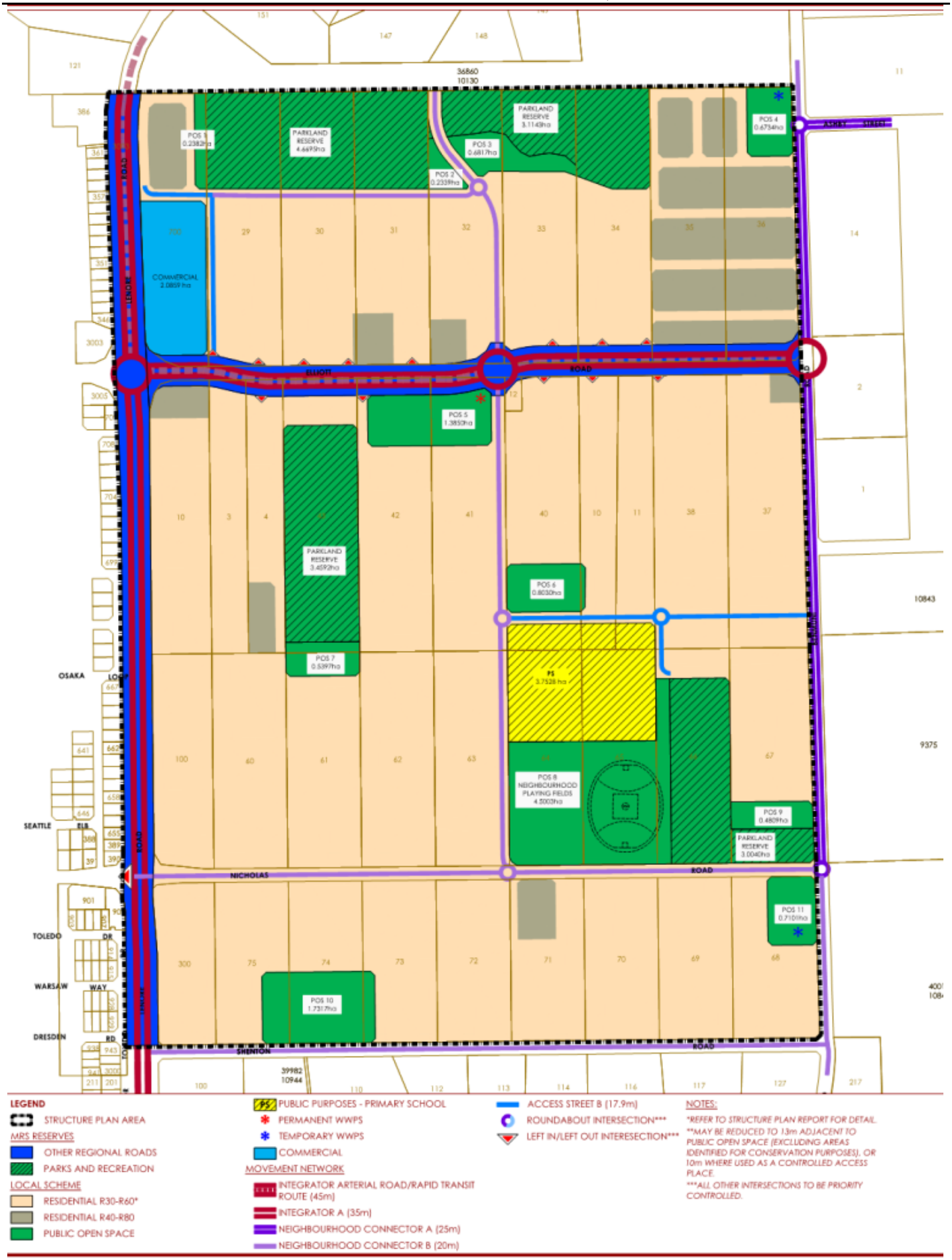
a) Provision of an underground electricity supply service;
b) Provision of a suitable water supply service; and
c) Provision of a sewerage service.

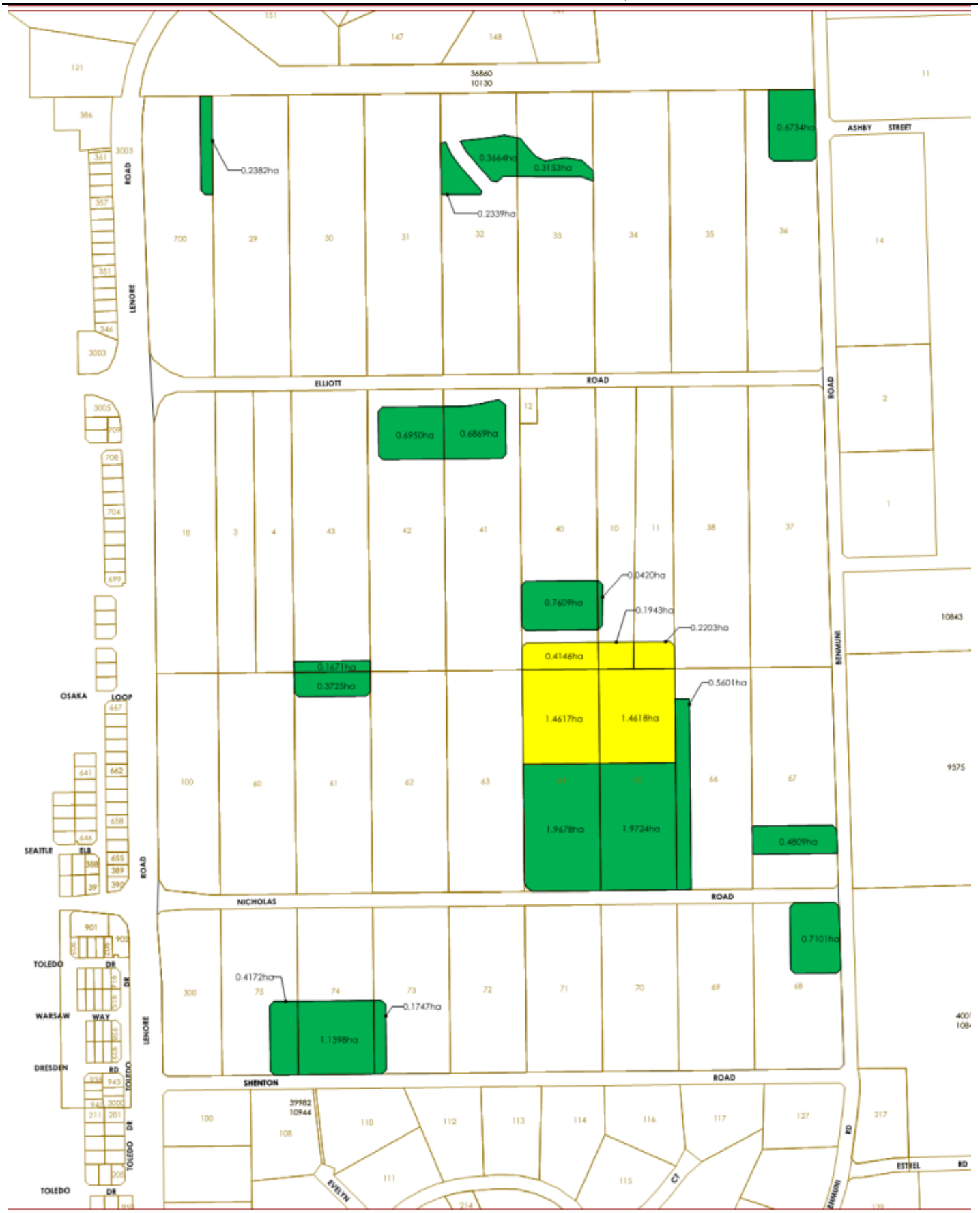
And in such an event, the applicable standard servicing conditions may be omitted, to facilitate early titling of the Homestead Lot.

5.1.2 STUDIES TO BE REQUIRED UNDER CONDITION OF SUBDIVISION AND/OR DEVELOPMENT APPROVAL

The studies to be required under conditions of subdivision approval are outlined in **Table 5** below.

TABLE 5: ADDITIONAL INFORMATION		
ADDITIONAL INFORMATION	APPROVAL STAGE	CONSULTATION REQUIRED
Urban water management plan	Subdivision	City of Wanneroo and Department of Water and Environmental Regulation
Bushfire management plan, as required or as a minimum a 'bushfire statement'	Subdivision	Department of Fire and Emergency Services
Local Development Plans, as required	Post-subdivision (condition of approval)	City of Wanneroo


PARKLAND RESERVE 4.6695ha
POS 1 0.2382ha
POS 2 0.2339ha
POS 3 0.6817ha
PARKLAND RESERVE 3.1143ha
POS 4 0.6734ha
COMMERCIAL 2.0859 ha
ELLIOT ROAD
POS 5 1.3850ha
PARKLAND RESERVE 3.4692ha
POS 6 0.8030ha
POS 7 0.5897ha
PS 3.7528 ha
POS 8 NEIGHBOURHOOD PLAYING FIELDS 4.5003ha
POS 9 0.4809ha
PARKLAND RESERVE 3.0040ha
POS 10 1.7317ha
POS 11 0.7109ha
NICHOLAS ROAD
SHENTON ROAD
OSAKA
SEATTLE
TOLEDO
WARSAW
DRESDEN
LEGEND
STRUCTURE PLAN AREA
MRS RESERVES
OTHER REGIONAL ROADS
PARKS AND RECREATION
LOCAL SCHEME
RESIDENTIAL R30-R60*
RESIDENTIAL R40-R80
PUBLIC OPEN SPACE
PUBLIC PURPOSES - PRIMARY SCHOOL
PERMANENT WWPS
TEMPORARY WWPS
COMMERCIAL
MOVEMENT NETWORK
INTEGRATOR ARTERIAL ROAD/RAPID TRANSIT ROUTE (45m)
INTEGRATOR A (35m)
NEIGHBOURHOOD CONNECTOR A (25m)
NEIGHBOURHOOD CONNECTOR B (20m)
ACCESS STREET B (17.9m)
ROUNDABOUT INTERSECTION***
LEFT IN/LEFT OUT INTERESECTION***
NOTES:
*REFER TO STRUCTURE PLAN REPORT FOR DETAIL.
**MAY BE REDUCED TO 13m ADJACENT TO PUBLIC OPEN SPACE (EXCLUDING AREAS IDENTIFIED FOR CONSERVATION PURPOSES), OR 10m WHERE USED AS A CONTROLLED ACCESS PLACE.
***ALL OTHER INTERSECTIONS TO BE PRIORITY CONTROLLED.
All areas and dimensions are subject to survey, engineering and detailed design and may change without notice.
© Copyright of Burgess Design Group.
NORTH
SCALE 1:5,000 (A3)
PLAN 1. STRUCTURE PLAN MAP
PRECINCT 3 - ELLIOT ROAD
EAST WANNEROO
BURGESS
CITY OF WANNEROO


ELLIOTT ROAD
NICHOLAS ROAD
SHENTON ROAD
LENORE ROAD
BENNION ROAD
ASHBY STREET
OSAKA LOOP
SEATTLE ELB
TOLEDO DR
WARSAW WAY
DRESDEN RD
EVELYN CT
ESTREL RD
0.2382ha
0.3664ha
0.3153ha
0.2339ha
0.6734ha
0.6950ha
0.6869ha
0.7609ha
0.0420ha
0.1943ha
0.2203ha
0.4146ha
0.1671ha
0.3725ha
0.5601ha
1.4617ha
1.4618ha
1.9678ha
1.9724ha
0.4809ha
0.7101ha
0.4172ha
0.1747ha
1.1398ha
LEGEND
PUBLIC OPEN SPACE
PRIMARY SCHOOL
All areas and dimensions are subject to survey, engineering and detailed design and may change without notice.
© Copyright of Burgess Design Group
NORTH
SCALE 1:5,000 (A3)
PLAN 2. PUBLIC OPEN SPACE & SCHOOLS
PRECINCT 3 - ELLIOT ROAD
EAST WANNEROO
CITY OF WANNEROO

PART TWO | EXPLANATORY SECTION

1. PLANNING BACKGROUND

1.1 INTRODUCTION AND PURPOSE

This Local Structure Plan has been prepared on behalf of Satterley Property Group in accordance with the WAPC's *WA Planning Manual – Guidance for Structure Plans (August 2023)* and the deemed provisions of the City of Wanneroo *District Planning Scheme No. 2*, to guide the subdivision and development of land in 'Precinct 3 – Elliot Road' as identified in the *East Wanneroo District Structure Plan (2021)* (District Structure Plan – DSP).

The Local Structure Plan has been prepared by Burgess Design Group with inputs from a multidisciplinary team comprising:

▪ Coterra Environment	Environmental Assessment Report
▪ Emerge	Bushfire Management Plan
	Landscape Masterplan
▪ Transcore	Transport Impact Assessment
▪ Hyd2o Hydrology	Local Water Management Strategy
▪ Cossill & Webley	Engineering Servicing Report
▪ Llyod George	Transportation Noise Assessment
▪ Taktics4	Retail Needs Assessment

This Local Structure Plan provides a synthesis of all available information and sets out a planning framework to guide the future development of Precinct 3 – Elliot Road.

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1.2 LAND DESCRIPTION

1.2.1 LOCATION

The site is located approximately 3 kilometres south-east of the City of Wanneroo and 21 km north of the Perth Central Business District.

The site is generally bound by Bush Forever Site: 471 to the north, Benmuni Road to the east, Lenore Road to the west and Shenton Road to the south (refer **Figure 1 – Location Plan**).

1.2.2 AREA AND LAND USE

The Local Structure Plan encompasses 141.0216ha of land.

Existing uses are predominantly rural residential/lifestyle living, with various rural pursuits, and market gardens. There are also areas of remnant vegetation known to have environmental values (refer **Figure 2 – Aerial Photograph**).

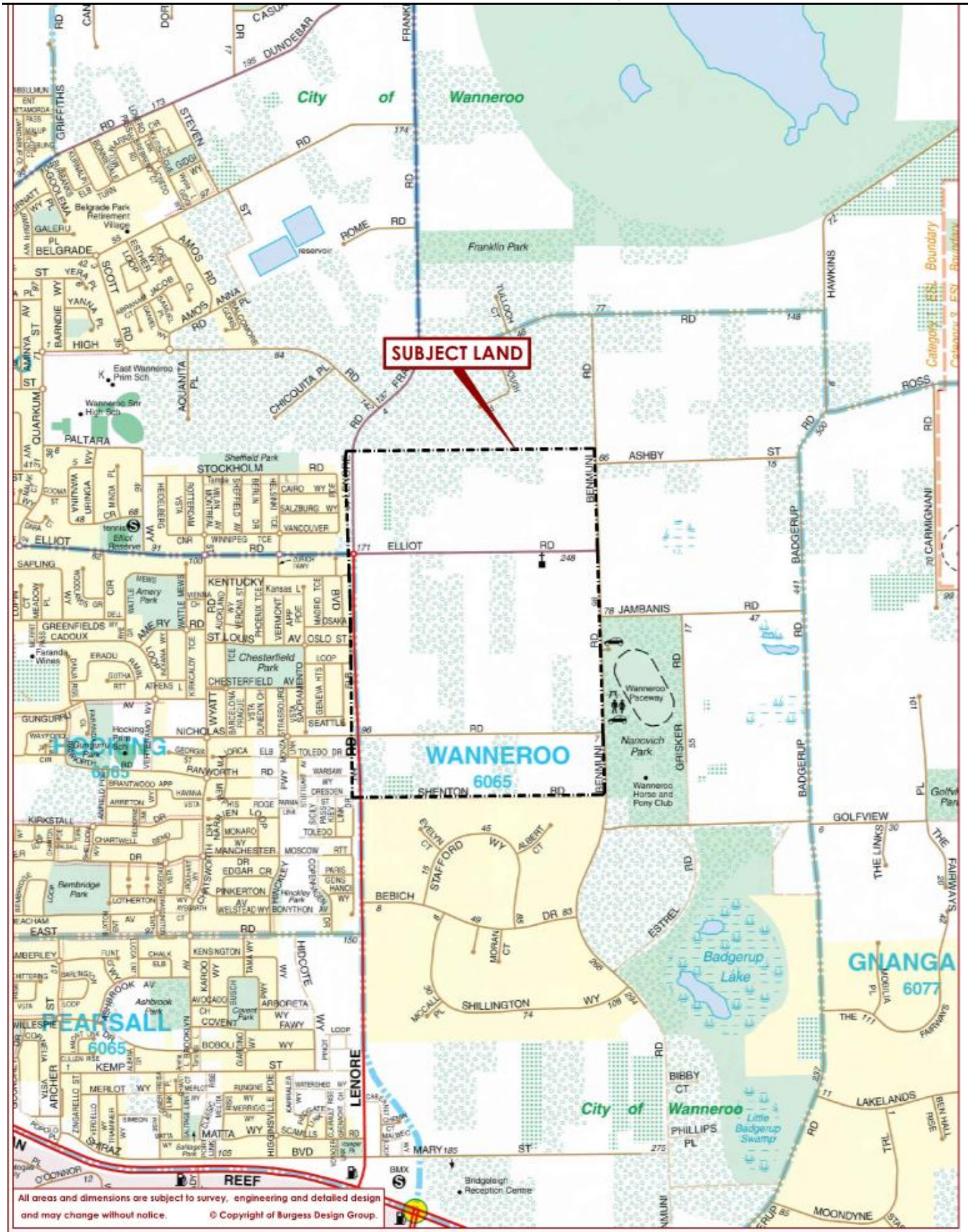
1.2.3 LEGAL DESCRIPTION AND OWNERSHIP

This structure plan applies to 38 individual lots, being those contained within the inner edge of the line denoting the structure plan boundary on the **Structure Plan Map (Plan 1)**.

A **Legal Description and Ownership** schedule is provided at **Appendix 1** to show current landownership within the Local Structure Plan area, as at the time of LSP preparation in March, 2025.

1.2.4 PROPONENT

This Local Structure Plan has been prepared by Burgess Design Group and the technical consulting team listed in section 1.1, on behalf of Satterley Property Group.



NORTH

0 200 400 600 800 1000m

SCALE 1:20,000 (A4)

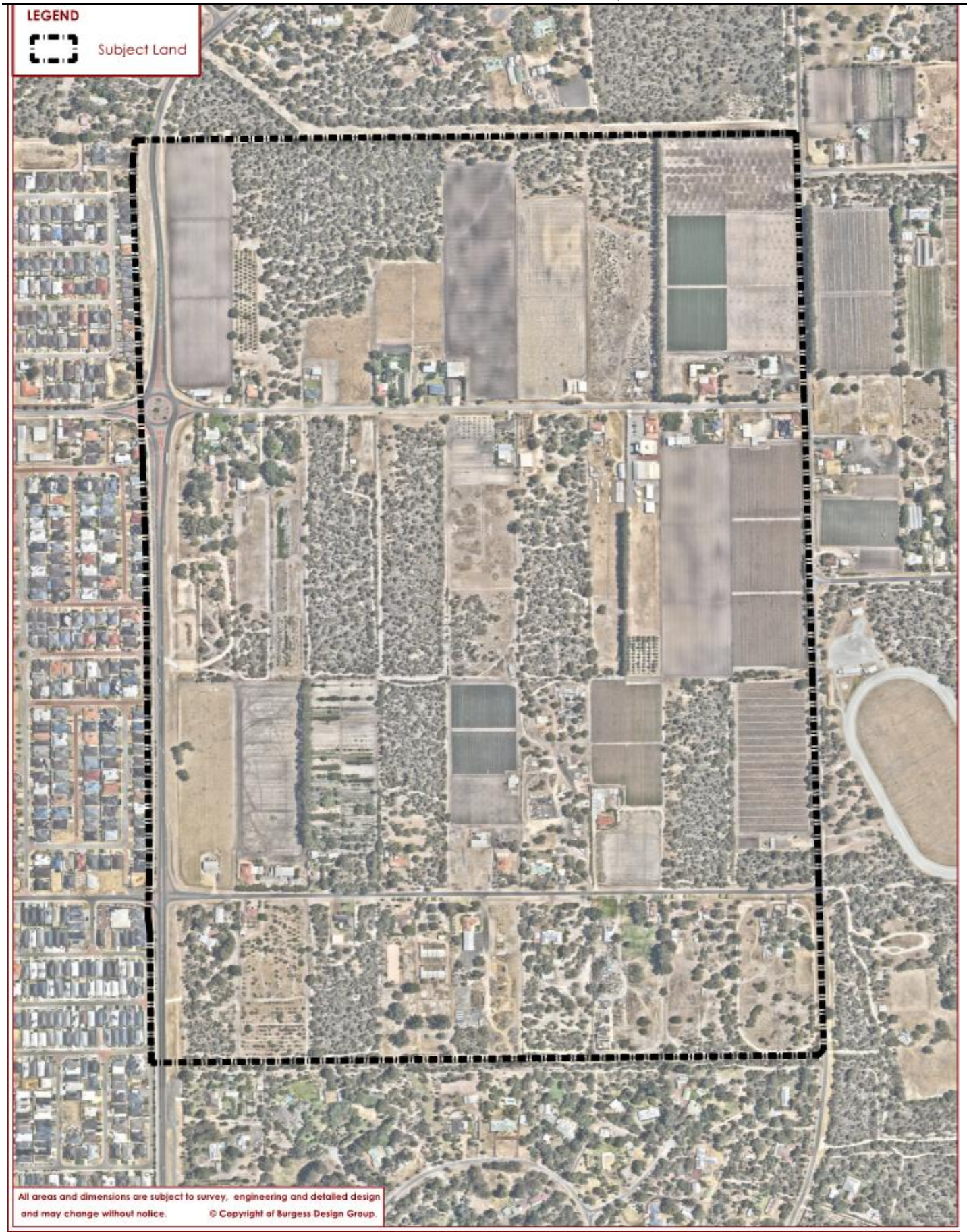
FIGURE 1. LOCATION PLAN

PRECINCT 3 - ELLIOT ROAD

EAST WANNEROO

BURGESS DESIGN GROUP PO Box 8779, Perth Business Centre 6849 P (08) 9328 6411 Plan No: SAT PR3 07-01a-01 Client: SAT

CITY OF WANNEROO



NORTH

0 25 50 100 200 300m

SCALE 1:7,500 (A4)

FIGURE 2. AERIAL PHOTO
PRECINCT 3 - ELLIOT ROAD
EAST WANNEROO

BURGESS DESIGN GROUP PO Box 8779, Perth Business Centre 6849 P (08) 9328 6411 Plan No: SAT PR3 07-01a-02 Client: SAT CITY OF WANNEROO

2. PLANNING FRAMEWORK

2.1 ZONING AND RESERVATIONS

2.1.1 METROPOLITAN REGION SCHEME

The site is predominantly zoned 'Urban Deferred' under the *Metropolitan Region Scheme* (MRS) (refer **Figure 3 – Metropolitan Region Scheme Zoning**). Portions of the site are zoned 'Rural' and designated as 'Bush Forever Sites'. These areas are generally located abutting the northern boundary of Precinct 3 and within Lots 66 and 67 on Nicholas Road.

Lodgement of this Local Structure Plan facilitates submission of an amendment to the Western Australian Planning Commission to lift the urban deferment and thus put an Urban Zone in place across the Precinct. The future 'Urban' zoning will then facilitate development, as outlined in Section 2.2.6 of the East Wanneroo District Structure Plan.

In accordance with both the WAPC's *Lifting of Urban Deferment Guidelines* and the DSP, this Local Structure Plan provides:

- A Local Structure Plan to guide development of the Precinct;
- Confirmation of availability of water and wastewater services; and
- Other technical information relevant to support the future subdivision and development of the area.

2.1.2 CITY OF WANNEROO DISTRICT PLANNING SCHEME NO. 2

The entirety of the land is zoned 'Rural' under the City of Wanneroo *District Planning Scheme No. 2* (refer **Figure 4 – District Planning Scheme No. 2 Zoning**).

As above, this Local Structure Plan is expected to facilitate the lifting of urban deferment process and, pursuant to the intent and provisions of the District Structure Plan, also concurrently rezone the land to 'Urban Development' under the City's Scheme.

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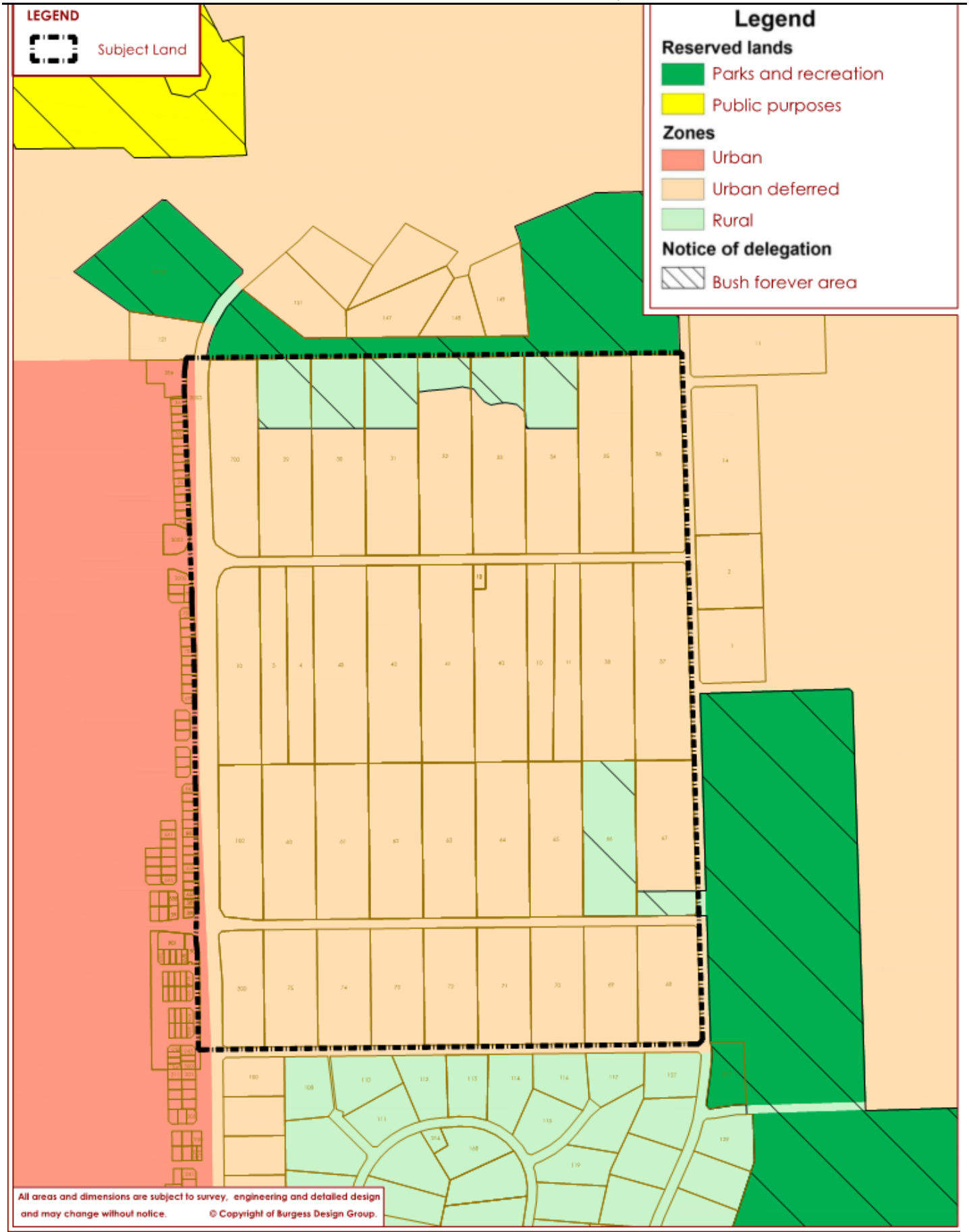


NORTH

0 50 100 150 200 250m

SCALE 1:10,000 (A4)

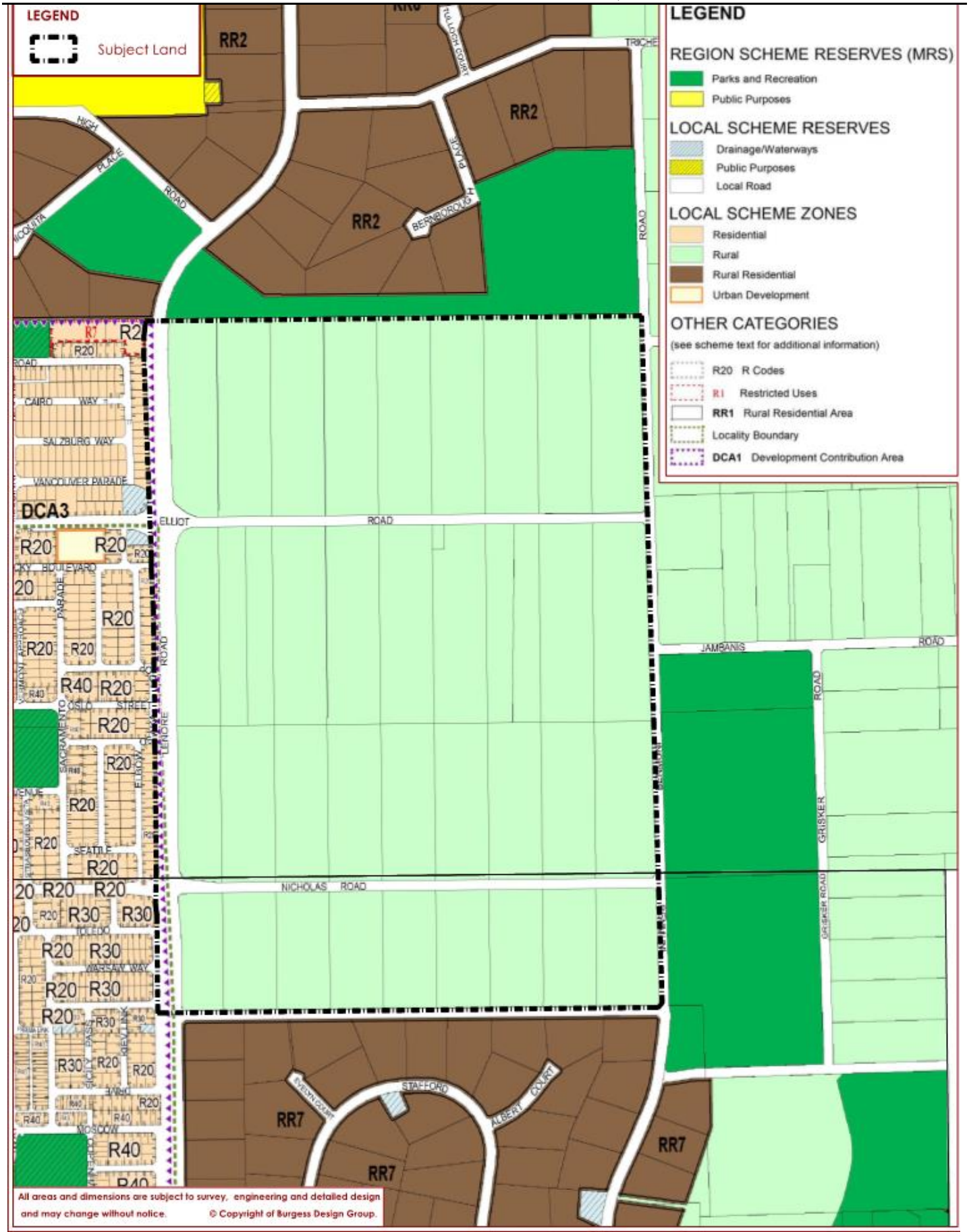
FIGURE 3. METROPOLITAN REGION SCHEME ZONING

PRECINCT 3 - ELLIOT ROAD

EAST WANNEROO

BURGESS DESIGN GROUP PO Box 8779, Perth Business Centre 6849 P (08) 9328 6411 Plan No: SAT PR3 07-01a-03 Client: SAT

CITY OF WANNEROO



NORTH

0 50 100 150 200 250m

SCALE 1:10,000 (A4)

FIGURE 4. DISTRICT PLANNING SCHEME NO. 2 ZONING

PRECINCT 3 - ELLIOT ROAD

EAST WANNEROO

BURGESS DESIGN GROUP PO Box 8779, Perth Business Centre 6849 P (08) 9328 6411 Plan No: SAT PR3 07-01a-04 Client: SAT CITY OF WANNEROO

The 'Urban Development' zone would then facilitate the implementation of the Local Structure Plan.

The objectives of the 'Urban Development' zone are to:

a) Designate land for future urban development;

b) Provide for the orderly planning of large areas of land for residential and associated urban purposes through a comprehensive structure planning process; and

c) Enable planning to be flexible and responsive to changing circumstances throughout the developmental stages of the area.

2.2 DISTRICT STRUCTURE PLAN

2.2.1 EAST WANNEROO DISTRICT STRUCTURE PLAN (2021)

The District Structure Plan (DSP) guides the development of 8.300 hectares of urban land within the broader East Wanneroo locality (refer **Figure 5 – East Wanneroo District Structure Plan** and **Figure 6 – District Structure Plan Extract**, which shows how Precinct 3 is depicted within the DSP).

This Local Structure Plan (LSP) responds to the District Structure plan as follows:

- The proposed land uses are consistent with those set out in the District Structure Plan, including environmental considerations such as the parkland reserves, and infrastructure such as the north-south neighbourhood connector road
- The Primary School has been located south of Elliot Road and centrally within the LSP, in accordance with the DSP. It abuts the north-south neighbourhood connector road reserve to allow for greater connectivity both within the Precinct and to neighbouring precincts.
- The Local Structure Plan depicts densities that are consistent with the objectives of the District Structure Plan and the planned character of Precinct 3; and
- The Local Structure Plan designates a 45-metre-wide Integrator Arterial Road/Rapid Transit Route running east west through the Precinct, along the alignment of Elliot Road, connecting from Lenore Road. It is noted that this alignment is generally consistent with the DSP, although continues along the entire length of Elliot Road (within the Precinct) to avoid existing infrastructure, such as the Church on Lot 11.

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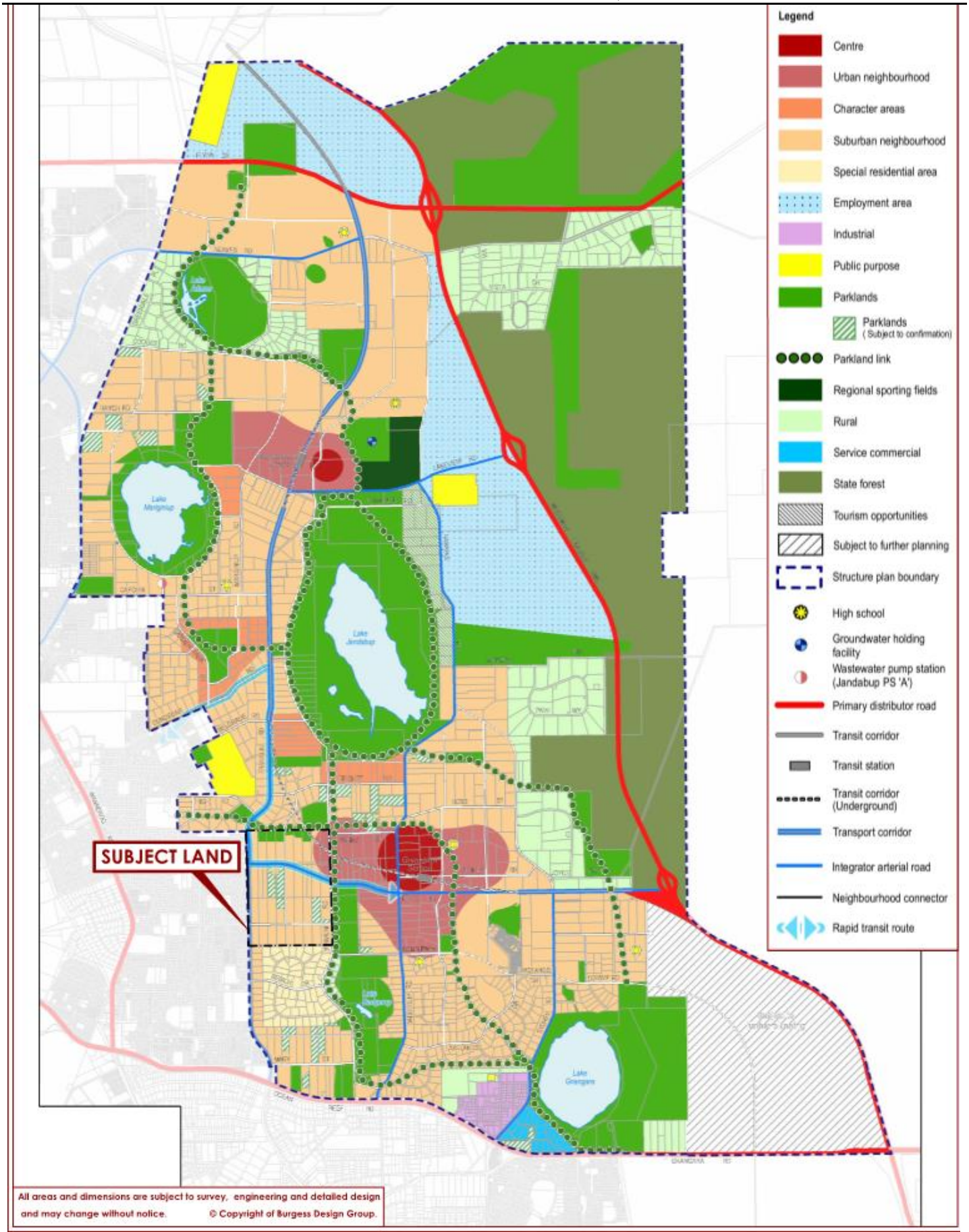

NORTH
(NOT TO SCALE)

FIGURE 5. EAST WANNEROO DISTRICT STRUCTURE PLAN
PRECINCT 3 - ELLIOT ROAD
EAST WANNEROO

BURGESS DESIGN GROUP PO Box 8779, Perth Business Centre 6849 P (08) 9328 6411 Plan No: SAT PR3 07-01a-06 Client: SAT CITY OF WANNEROO

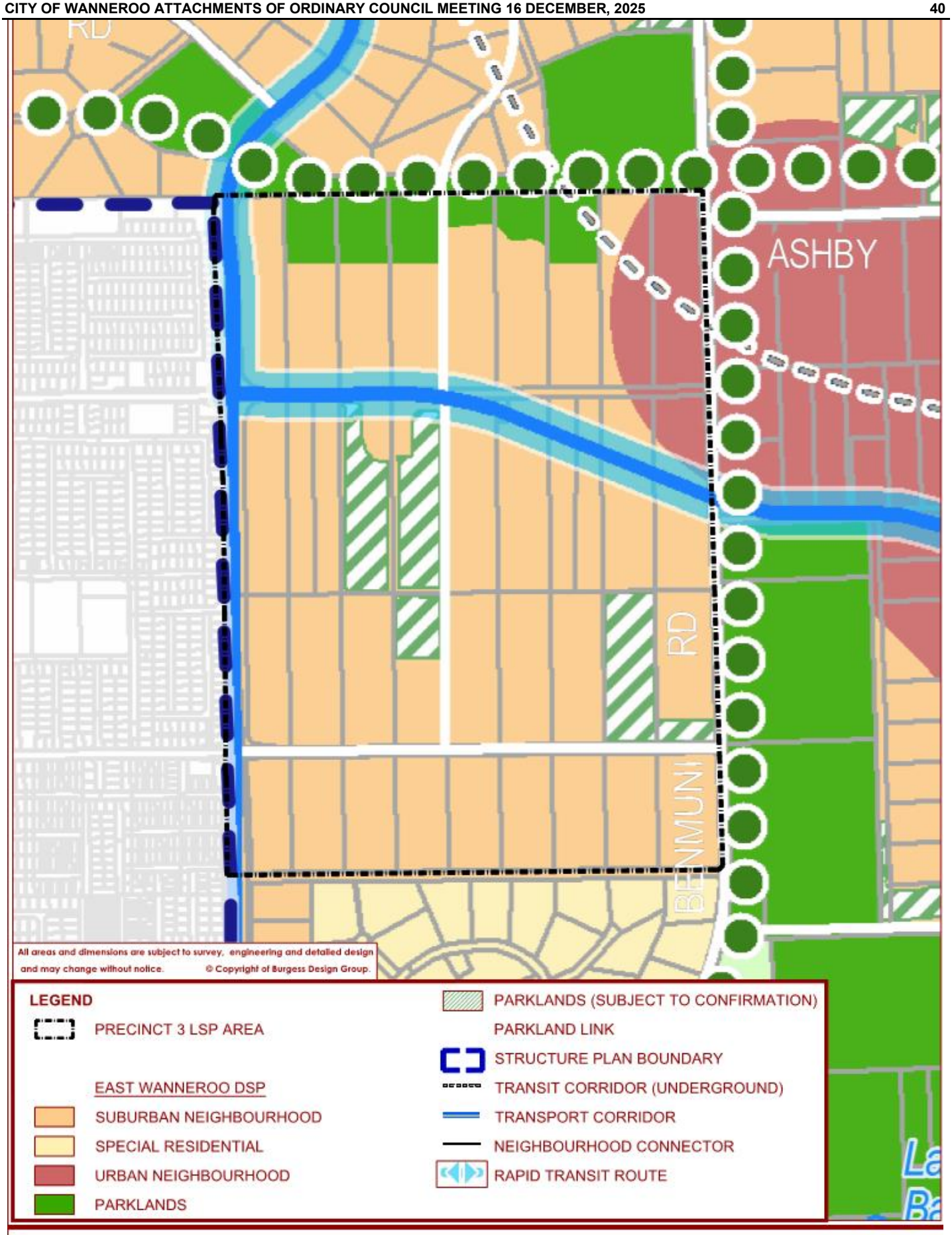

FIGURE 6. DISTRICT STRUCTURE PLAN EXTRACT
PRECINCT 3 - ELLIOT ROAD
EAST WANNEROO

A summary of the outputs identified in the District Structure Plan that need to be addressed in the Local Structure Plan is provided in **Table 6** below:

TABLE 6: STRUCTURE PLAN OUTPUTS		
STRUCTURE PLAN OUTPUTS	PROVIDED	REFERENCE
MOVEMENT NETWORK		
Integrator Arterial Landscape Response	✓	5.5 and Appendix 7
Integrator Arterial Noise Management Response	✓	5.10 and Appendix 11
OPEN SPACE		
Bushland Interface	✓	5.2, Appendices 3, 5 and 6
Stormwater Drainage basin – Major Events	✓	LWMS Appendix 8
SCHOOLS AND COMMUNITY FACILITIES		
Primary Schools	✓	5.7 and Figure 8
ACTIVITY CENTRES		
Neighbourhood Centre	✓	5.8 and Appendix 9

2.3 PLANNING STRATEGIES

2.3.1 DIRECTIONS 2031 (2010)

Directions 2031 (2010) establishes the vision for future growth of the Perth Metropolitan and Peel regions. It envisages 'a world class liveable city; green, vibrant, more compact and accessible with a unique sense of place'.

The Local Structure Plan satisfies the objectives of *Directions 2031* in the following ways:

- The Local Structure Plan facilitates urban development that is efficient and equitable in its design and use of resources
- The Local Structure Plan satisfies the density target of 15 dwellings per gross urban zoned hectare
- The proposed development forms part of a planned and integrated growth corridor, and
- The development will help to support the creation and ongoing sustainability and patronage of major public transport and road infrastructure planned for the area

2.3.2 NORTH WEST SUB-REGIONAL PLANNING FRAMEWORK (2018)

The *North West Sub-Regional Planning Framework* (2018) sets out an integrated planning framework for land use and infrastructure in this sub-region.

The Local Structure Plan complies with the key objectives of the framework, as follows:

- The Local Structure Plan facilitates urban development consistent with the 'Urban Expansion' classification in the Framework
- The Local Structure Plan responds directly to the ecological values of the site through comprehensive technical analysis and planning that provides opportunities for recreation, landscape retention and management
- The Local Structure Plan promotes a consolidated urban form predicated on the designation of medium density residential uses in a manner that is sympathetic to the suburban character of its surrounds and the existing and proposed services and amenities, and
- The sustainable use and balanced management of resources, infrastructure, bushfire risk, public transport, and other services and amenities

2.3.3 EAST WANNEROO COMMUNITY INFRASTRUCTURE PLAN (2023)

The *East Wanneroo Community Infrastructure Plan (2023)* outlines the extent of community infrastructure required within the DSP area to meet the needs of future populations as urban development expands.

The Local Structure Plan generally complies with the key objectives of the plan, such as the co-location and integration of facilities and the creation of community hubs.

A Neighbourhood Playing Field has been provided abutting the southern boundary of the proposed Primary School site and as central as possible to its catchment area. The field covers an area of 4.5ha and will contribute to the LSP's creditable public open space. This facility is anticipated to meet the needs of the immediate surrounding community in accordance with Table 2 of the East Wanneroo Community Infrastructure Plan (2023).

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2.4 PLANNING POLICIES

2.4.1 STATE PLANNING POLICY 3.6: INFRASTRUCTURE CONTRIBUTIONS (2021)

State Planning Policy 3.6: Infrastructure Contributions (2021) sets out the principles underlying development contributions and the form, content, and process for the preparation of development contribution plans.

A district level contribution plan (District DCP) is currently being prepared and assessed (it is being advertised for comment at the time of submission of this LSP) by the City of Wanneroo and the Western Australian Planning Commission, to consider major infrastructure items across the District Structure Plan area. This process and anticipated timing is outlined further in **Section 5.12**.

Given the extent of the proponent's ongoing land assembly within Precinct 3, the need for a Local Developer Contribution Plan (Local DCP) has not yet been determined. This will be subject to further discussion with approval agencies during the LSP assessment process.

2.4.2 STATE PLANNING POLICY 3.7: PLANNING IN BUSHFIRE PRONE AREAS (2015)

State Planning Policy 3.7: Planning in Bushfire Prone Areas (2015) aims to preserve life and reduce the impact of bushfire on property and infrastructure.

Portions of the site and its surrounds are located within a designated bushfire prone area. As such, a **Bushfire Management Plan** has been prepared to address the objectives of the policy and respond appropriately and pro-actively to the bushfire risk, as set out in **Section 3.3** of this report and attached at **Appendix 3**.

2.4.3 CITY OF WANNEROO LOCAL PLANNING POLICY 5.3: EAST WANNEROO (2023)

The purpose of *Local Planning Policy 5.3: East* Wanneroo (2023), as adopted by the City of Wanneroo in November 2023, is to:

1. Provide guidance on the consideration of planning proposals within the East Wanneroo District Structure Plan (EWDSP) area
2. Ensure East Wanneroo is developed in a manner and standard which optimises the development of the public realm, and
3. Supplement the Western Australian Planning Commission's Liveable Neighbourhoods Operational Policy

The objectives of the Local Planning Policy are stated as follows:

1. To ensure any subdivision and development within the EWDSP area will not compromise the progression of development in accordance with the EWDSP
2. Enable the continued lawful use of land in a manner that will not compromise development in accordance with the EWDSP
3. Ensure the vision of the EWDSP and the City's Place Framework is achieved
4. To provide guidelines on road design, including minimum reserve widths and requirements for footpaths and shared paths
5. To provide details for landscaping standards, including street tree selection and landscaping species to be planted within road reserves
6. To develop design standards for parkland links and public open space
7. To outline development standards for works within the public realm
8. To outline information to be submitted to support local structure plans, and
9. To provide local interpretation of the Western Australian Planning Commission's Liveable Neighbourhoods Operational Policy.

This Local Structure Plan complies with the Local Structure Plan requirements of the policy, as follows:

- The District Developer Contribution Plan (District DCP) is currently being prepared in two parts. Part 1 was released for advertising on 20 March 2025 with the comment period closing on 19 May 2025. Part 2 is anticipated to be advertised in mid to late 2025 (refer to **Section 4.3.1 at Part 1** and **Section 5.12 at Part 2**). Formal lodgement and assessment of this Local Structure Plan has been specifically coordinated to be concurrent with the District DCP formulation and advertising processes

- The Local Structure Plan is submitted to help inform the MRS Amendment for regional reserves, specifically as minor variations to some of these elements are proposed

- Precinct 3 will not prejudice development of the broader East Wanneroo District Structure Plan area and development is proposed generally in accordance with the DSP

- The Local Structure Plan is consistent with the requirements of the East Wanneroo District Structure Plan and the Deemed Provisions as demonstrated in **Sections 2.2.1 & 5**.

- A Sense of Place Statement is included in **Section 4** and attached at **Appendix 4**. The Sense of Place statement has been prepared in consultation with the City and addresses the criteria set out in the policy.

- Prior to formal lodgement of this Local Structure Plan informal consultation has continued with the City to progress the resolution of any planning issues identified in the East Wanneroo District Structure Plan, LPP 5.3 and this Local Structure Plan.

2.5 OTHER APPROVALS AND DECISIONS

2.5.1 REQUIREMENTS TO LIFT THE URBAN DEFERMENT

Metropolitan Region Scheme Amendment 1308/41 specified the following items must be addressed prior to lifting the urban deferment across East Wanneroo:

- A District Structure Plan being approved
- Confirmation of the provision of water and wastewater infrastructure
- A District Water Management Strategy being approved by the Department of Water
- The completion of sand extraction activities affecting land within a 500m buffer in the north-eastern portion of the East Wanneroo area, as applicable (note: this is not relevant to the Precinct 3 Local Structure Plan), and
- A bushfire hazard assessment being undertaken to the satisfaction of the Department of Fire and Emergency Services

The requirements to lift the urban deferment have been satisfied as follows:

- The District Structure Plan has been approved by the Western Australian Planning Commission (WAPC);
- Planning for district-level infrastructure is being progressed by the Western Australian Planning Commission, which is supplemented by an **Engineering Servicing Report** (Cossill Webley, 2025 – refer **Appendix 10**) prepared to support the Local Structure Plan
- The District Water Management Strategy (Urbaqua, 2021) has been approved by the Department of Water and Environmental Regulation and is supplemented by a **Local Water Management Strategy** (Hyd2o Hydrology, 2025 – refer **Appendix 8**) prepared to support the Local Structure Plan
- The Local Structure Plan is not affected by the 500-metre buffer for sand resources, and

- A Bushfire Management Plan (Emerge, 2025 – refer **Appendix 3**) has been prepared to support future development within the Local Structure Plan area.

2.6 COMMUNITY AND PRE-LODGEMENT CONSULTATION

The intensive coordinated assembly of land within Precinct 3 has been ongoing for more than 5 years, however Burgess Design Group first made contact with the landowner group in June 2011. At that early time, the broader district structure planning framework had not been resolved and notwithstanding keen interest from a number of landowners, a structure plan process could not be progressed.

Informal discussions continued from 2018, with the first formal landowner group meeting occurring in April 2021. The landowner consultation process is highly collaborative, transparent and engaging to ensure every landowner has the opportunity to be involved in, or at least be aware of, the project.

The collaboration process has involved a number of whole of precinct landowner meetings and many individual landowner meetings. The process will continue throughout the assessment of the Local Structure Plan.

In addition to consultation with landowners, the preparation of this Local Structure Plan has included numerous meetings with government agencies and other relevant groups to discuss the various technical elements of the proposals, as outlined in **Table 7**. These agencies and groups have included:

- Department of Planning, Lands & Heritage
- City of Wanneroo
- Water Corporation
- Department of Water & Environmental Regulation
- Department of Education
- Department of Biodiversity, Conservation and Attractions
- Non-government school providers (Association of Independent Schools WA – AISWA)

The consultation process has been, and will continue to be, highly collaborative and inclusive, giving landowners, key stakeholders and government agencies every opportunity to be engaged in discussion as land assembly/acquisition and planning/technical assessment and approval processes continue.

Ongoing liaison and meeting with DPLH, the City of Wanneroo, Department of Education and Water Corporation have been instrumental in shaping the Local Structure Plan and will continue to do so during the assessment period.

TABLE 7: PRE-LODGEMENT CONSULTATION			
AGENCY	DATE	METHOD	OUTCOME
Landowners	March 2021	Direct personal correspondence	Background to planning and land assembly processes
	April 2021	Landowner Group Mtg 1	First whole group meeting
	July 2021	Landowner Group Mtg 2	Second whole group meeting
	September 2021	Landowner Group Mtg 3	Third whole group meeting
	September 2021	Direct personal correspondence	Update on progress and next steps
	August 2022	Direct personal correspondence	Flora and vegetation survey visits
	September 2024	Direct personal correspondence	Spring survey work and update
	December 2024	Landowner Group Mtg 4	Fourth whole group meeting and update
Community groups			None identified
Local Government	2021 onwards	Phone, emails and meetings	Various communications with City of Wanneroo regarding LSP progress
Dept. of Planning, Lands & Heritage	2021 onwards	Phone, emails and meetings	Various communications with DPLH officers regarding LSP progress
Dept. of Water & Environmental Regulation	2023 onwards	Phone, emails and meetings	Coterra and Hyd2o regarding LSP elements
Dept. of Education	2023 onwards	Phone, emails and meetings	Various communications with DoE offers regarding LSP progress

Environmental Protection Agency	2023 onwards	Phone, emails and meetings	Coterra various communications with EPA regarding LSP progress
Western Power	2024	Investigations	Data base search to confirm power supply
Alinta Gas	2024	Investigations	Data base search to confirm gas supply
Water Corporation	2023 onwards	Phone, emails and meetings	Various communications with City of Wanneroo regarding LSP progress
Telstra and NBN	2024	Investigations	Data base search to confirm available services
Non-government school providers (AISWA)	4 March 2025	Meeting	Meeting with AISWA to discuss school provision within overall EWDSP

3. SITE CONDITIONS AND CONSTRAINTS

The following is an overview of the various site conditions and constraints for Precinct 3. Overall the Precinct is elevated with a depth to groundwater ranging between approximately 10m to 44m, which means, unlike a number of other Precincts within the DSP area, the hydrological impacts on development are minimal.

The primary site constraint to development of the Precinct is bushland, with significant areas of vegetation being retained as both Parks & Recreation and local open space reserves. To facilitate urbanisation of the site and meet the density targets contemplated by the DSP, some of the remaining bushland areas will be developed as shown on the LSP. The final design of the residential areas has been carefully considered to balance planning, engineering, hydrological and transport requirements with environmental values.

3.1 BIODIVERSITY AND NATURAL AREA ASSETS

An **Environmental Assessment Report** (2025) (EAR) has been prepared by Coterra Environment (refer **Appendix 2**) to support the preparation and implementation of the Local Structure Plan. The EAR considers the following environmental factors which have been identified as being relevant to the environmental impact assessment of the Local Structure Plan:

- Terrestrial Environmental Quality
- Inland Waters
- Flora and Vegetation
- Terrestrial Fauna
- Social Surroundings

The main findings of these reports are summarised further below.

3.1.1 TERRESTRIAL ENVIRONMENTAL QUALITY

The following key elements of Terrestrial Environmental Quality include:

- Topography at the site ranges between 52m Australian Height Datum (metres AHD) in the northeastern corner to 84m AHD to the southwestern corner of the site.
- Soils within the site are mapped as comprising Sand derived from Tamala Limestone (Unit: S7).
- Soils at the site are predominantly identified as posing no known Acid Sulphate Soils (ASS) risk. A small area within the northeastern corner of the site is mapped as overlapping a moderate to high ASS risk area.
- The site is mapped by the City of Wanneroo as having a low cave risk.
- No known contaminated sites are located within the site or in the surrounding area.
- Precinct 3 is a rural area which is used for purposes including rural lifestyle living, market gardening, equestrian activities, etc. There is potential that soil and/or groundwater quality could be impacted by current and historical land uses.
- Development of the site can be managed to ensure potential contamination is appropriately assessed and remediated, if required, prior to development. Potential dust generation can be managed through the preparation and implementation of Construction Environmental Management Plan or similar, which will include best practice construction techniques and management practices.

3.1.2 INLAND WATERS

The following key elements of the consideration of Inland Waters are described over page.

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- Regional mapping by the Department of Water and Environmental Regulation (DWER) indicates that the maximum groundwater level in this location is ranges from approximately 40 to 42m AHD, with superficial aquifer groundwater flow direction being westerly towards the coast (DWER, 2024a).
- Based on topographic elevations this indicates that depth to groundwater varies from approximately 10m below ground level (BGL) to 44m BGL (DWER, 2024a).
- There are no Public Drinking Water Source Areas (PDWSAs) located within the site.
- There are no surface water features present within the site.
- There are no geomorphic wetlands mapped within the site, with the closest wetland being located approximately 280m east of the site (Badgerup Lake to the south-east and Jandabup Lake to the north-east)
- In comparison to the current rural land uses, implementation of the LSP to facilitate future urban development will result in the following predicted outcomes for inland waters:
    - Reduction in nutrient inputs and groundwater abstraction across the site
    - Avoidance of impacts to groundwater quality
    - Maintenance of pre-development hydrological regimes.

3.1.3 FLORA AND VEGETATION

The following key elements of Flora and Vegetation include:

- The site is located within the mapped extent of vegetation association's Spearwood 6 and Bassendean 949, and Karrakatta Complex- Central and South. The site contains approximately 32.9 ha of native vegetation.

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- The detailed flora and vegetation survey undertaken in spring 2024 by Ecoscape (2025) for the site identified two vegetation types:
    - BaLOF: Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open forest, occupying 14.8%
    - EmmLW: Eucalyptus marginata subsp. marginata, Banksia prionotes and Allocasuarina fraseriana low woodland, occupying 9.6%
- The condition of the vegetation ranged from Completely Degraded to Very Good condition, with the majority of native vegetation in Good or Very Good condition.
- No threatened flora species listed under the Biodiversity Conservation Act 2016 (BC Act) and/or under the Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) were recorded during the field survey.
- One Priority 2 flora, Poranthera moorokatta, was recorded during the field survey.
- The floristic community type (FCT) analysis indicated that both vegetation types are most likely FCT 28 - Spearwood Banksia attenuata or B. attenuata-Eucalyptus woodlands.
- One federally listed Threatened Ecological Community (TEC), the Banksia Woodlands of the Swan Coastal Plain ecological community (Banksia WL SCP ecological community) was mapped within site, totalling 17.9 ha (13.3%).
- The LSP proposes to retain 13.0 ha (39.5%) of native vegetation within Parks and Recreation reserve, which comprises 5.8 ha of the EmmLW vegetation unit and 7.2 ha of the BaLOF vegetation unit. The portion of this vegetation which is representative of the Banksia WL SCP ecological community is 9.4 ha (52.2%).
- Areas of retained vegetation in identified Parks and Recreation reserve will be subject to vegetation management, including weed control and targeted revegetation. The details of these works will be outlined within a

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Conservation Area Management Plan, or similar, proposed to be prepared at the subdivision stage of development.

- Based on the extent of clearing of Banksia WL SCP vegetation onsite, development proposals would be referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). The EPBC Act referral review and assessment process will allow for further assessment of impacts to Banksia WL SCP vegetation and for environmental offsets to be provide, where required.

3.1.4 TERRESTRIAL FAUNA

The following key elements of Terrestrial Fauna include:

- The fauna survey undertaken in February 2025 by Ecoscape (2025) recorded the following conservation listed species:
    - Carnaby's Cockatoo (Zanda latirostris; Endangered under the BC Act and EPBC Act)
    - Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso; Vulnerable under the BC Act and EPBC Act)
    - Quenda (Isoodon fusciventer; Priority 4 as listed by the DBCA).
- One fauna habitat occurs within the survey area, described as Banksia Woodland (occupying 24.4% or 32.9 ha) with the remainder not native vegetation or cleared for rural/rural residential land uses.
- The Banksia Woodland habitat type is high-quality foraging habitat for Carnaby's Cockatoos and moderate quality foraging habitat for Forest Red-tailed Black Cockatoos, according to the Bamford scale, and high quality habitat for both species according to the Commonwealth Black Cockatoo referral guidelines habitat scoring tool.

- 95 Black Cockatoo habitat trees were recorded to have suitable diameters (>500 mm), of which 84 were Jarah (Eucalyptus marginata), 5 were Tuart (Eucalyptus gomphocephala), 7 were dead and 2 were other.
- No trees were identified within the site as having hollows with active nests or showing previous use as a Black Cockatoo nest.
- One Jarrah was recorded within the eastern extent of Lot 40 as having potentially suitable hollows without evidence of use.
- 30 trees were classified as trees with large hollows that weren't suitable for Black Cockatoos and 64 as trees currently without large hollows.
- No known roost locations are registered within the site, with the closest recorded roost being approximately 530 m east of the site.
- The LSP proposed to retain approximately 13.0 ha (39.5%) of Black Cockatoo habitat within Parks and Recreation, which comprise of:
    - high value Carnaby's Cockatoo foraging habitat
    - moderate value Forest Red-tailed Black Cockatoo foraging habitat
    - 38 Black Cockatoo habitat trees with suitable diameter.
- Areas of retained fauna and Black Cockatoo habitat in identified Parks and Recreation reserve, will be subject to vegetation management including weed control and targeted revegetation. The details of these works will be outlined within a Conservation Area Management Plan, or similar, proposed to be prepared at subdivision stage.
- A Vegetation and Fauna Management Plan will be prepared and implemented at subdivision stage to prevent damage to fauna habitats being retained, and ensure fauna is appropriately trapped and relocate. It will also include protocols for dealing with displaced/injured animals during clearing and subdivisional works.

- Future development proposals proposing to clear Black Cockatoo habitat will require referral under the Commonwealth EBPC Act. The EPBC Act referral and assessment process will require further evaluation of impacts to Black Cockatoo and for environmental offsets to be provided, where required.

3.1.5 SOCIAL SURROUNDINGS

The following key elements of Social Surroundings include:

- There are no known registered Aboriginal cultural heritage sites or other heritage places within or in proximity to the site.
- There are no known European heritage sites within the site.
- The Department of Mines, Industry, Regulation and Safety (DMIRS) GeoView database does not indicate the presence of any SPP 2.4 Basic Raw Materials extraction sites or exclusions areas within the landholdings.
- The site is not mapped within any strategic freight and/or major traffic routes as identified by State Planning Policy 5.4 Road and Rail Noise.
- Temporary market gardening and other intensive primary industry activities exist within the site and surrounding areas. A number of these gardens have been acquired by the proponent and will remain active, under agreement with the operators, until the time of development. An appropriate interface to those continuing and adjoining gardens will be applied during development, including screen fencing along boundaries and the planting of screening vegetation along adjacent road reserves. Given the developing nature of the precinct, long term continuation of the remaining gardens is considered unlikely.
- Preparation and implementation of a Construction Environmental Management Plan or similar for future subdivisional works, which will include key obligations under the Aboriginal Heritage Act 1972 (AH Act) regarding potential finds of cultural significance, and dust management requirements to prevent loss of surface soils and soil stabilisation requirements.

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3.1.6 SUMMARY AND FUTURE ACTIONS

This Local Structure Plan for Precinct 3 – Elliot Road will inform future subdivision plans through detailed engineering and planning design phases, as the environmental and planning approvals processes progress. Key features of the Local Structure Plan include:

- Retention of 13.0ha of vegetation within Parks and Recreation reserves
- Development of 19.9ha of land within Urban Development and POS areas
- Retention of Banksia Woodlands TEC where shown
- Retention of Black Cockatoo foraging habitat and habitat trees where shown

To ensure the detailed project design and implementation achieves appropriate environmental outcomes, the following reports and management plans will be prepared at future subdivision and/or development stages:

- Urban Water Management Plan(s)
- Bushfire Management Plan(s)
- Conservation Area Management Plan(s) (if required)
- Vegetation and Fauna Management Plan(s)
- Construction Environmental Management Plan
- ASS Assessment and Dewatering Management Plan, if required

3.2 LANDFORM AND SOILS

The site has an easterly aspect, falling from generally 75m Australian Height Datum (AHD) along the western boundary with Lenore Road (with a peak of 84m at the intersection of Lenore Road with Nicholas Road) , to approximately 52m AHD adjacent to the eastern boundary of Lot 68 Nicholas Road at the south-eastern corner of the site and 52m AHD on Lot 36 Elliot Road at the north-eastern corner of the LSP. A natural low of 55m AHD occurs in the central north of the site adjacent to Elliot Road.

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Soils within the site are mapped as comprising Sand derived from Tamala Limestone, which is described as 'Sand - pale and olive yellow, medium to coarse-grained, sub-angular quartz with a trace of feldspar, moderately sorted, of residual origin'.

The Department of Primary Industries and Regional Development (DPIRD) soil landscape mapping identifies that the site comprises the Karrakatta Sand Yellow Phase.

3.2.1 ACID SULPHATE SOILS

Acid sulphate soils (ASS) contain iron sulphide materials and are generally present in waterlogged anoxic conditions. In its natural state, ASS do not present any risk to the environment. However, when oxidised (such as when disturbed by excavation for earthworks), ASS produce sulphuric acid, which can pose risks to the surrounding environment, infrastructure, and human health.

Soils at the site are predominantly identified as posing no known Acid Sulphate Soils (ASS) risk. A small area within the northeastern corner of the site is mapped as overlapping a moderate to high ASS risk area.

3.3 BUSHFIRE HAZARD

The majority of Precinct 3 is mapped as being within a designated 'Bushfire Prone Area' under the state-wide '*Map of Bushfire Prone Areas*'.

As such, a **Bushfire Management Plan** has been prepared by Emerge Associates to satisfy the requirements of State Planning Policy 3.7: *Planning in Bushfire Prone Areas (2015)* (refer **Appendix 3**).

The Bushfire Management Plan demonstrates that the Local Structure Plan responds to the bushfire protection criteria in the following ways:

- **Location**

  A landscape assessment determined that the site is a 'Broader Landscape Type A' and therefore satisfies BCP 5 A1.1a. Access roads proposed within the site will provide a legible road network and the site is within close proximity of a suitable destination. The proposal complies with A1.1a.

- **Siting and design**

All proposed development cells intended to support habitable buildings can accommodate lots that provide sufficient separation from classified vegetation to achieve developable areas of BAL-29 or below.

Overall the development cells within the LSP are suitably sized , in combination with the public road network, to meet the minimum separation distances required.

The proposal can comply with A2.1.

Lots included within future development stages will be required to be managed in a low threat standard. The proposal can comply with A2.2.

The majority of the LSP is currently cleared, with several remnant or regrowth patches of native vegetation present within the site. The proponent aims to maximise vegetation retention within Parks & Recreation reserves, within public open space and within road reserves, as far as practicable.

All landscaping outside of the Parks & Recreation reserves will be maintained to a low-threat standard and on this basis, such retention would not change the assumptions within the BMP.

The proposal complies with A2.3.

- **Vehicular access**

The existing public roads surrounding the site as well as the proposed public roads can satisfy the requirements of the guidelines and thus the proposal complies with A3.2.

The proposed interconnected road network ensures the LSP complies with A3.2, although it is noted that the construction of Shenton Road, located at the southern boundary of the LSP area, may be required to satisfy access requirements. This is also important for the existing homes located within adjacent Precinct 2.

Given the anticipated staging of development, consideration will be given to ensure that all residents and visitors have at least two vehicular access routes during all phases of development. As such the proposal complies with A3.3a.

The proposed road network has one no-through road located at the north-western corner of the LSP.

This is due to this part of the site being bound by Parks & Recreation reserve to the north and east, with no direct access to Lenore Road to the west. The road at this location has been designed as a loop and meets the minimum technical standards of the guidelines, thus complying with A3.3b.

Given the LSP has perimeter roads for all residential and commercial areas where they abut identified or proposed bushland and the primary school is provided with a managed POS interface which provides separation to the proposed Parks & Recreation reserve, compliance with A3.5a is achieved. Neither A3.5b nor A3.6 are applicable.

- **Water**

The LSP will be serviced by a reticulated water supply and will thus comply with A4.1. Neither A4.2 nor A4.3 apply.

Updated Bushfire Management Plans, or as a minimum a 'Bushfire Statement' will be required to support applications for subdivision approval within bushfire prone areas of the site and give due consideration to the **Bushfire Management Plan** contained at **Appendix 3** together with applicable policy requirements.

These management plans will also detail appropriate responses to any temporary bushfire risks as development progresses throughout the site.

In the interim, all landowners are required to comply with the requirements of the City of Wanneroo's annual firebreak notice to maintain fuel loads at minimal/appropriate levels.

3.4 HERITAGE

The Local Structure Plan area does not include any registered Aboriginal Heritage Sites per advice received from officers of the Department of Planning, Lands and Heritage (dated 10 September 2024), nor does it contain any registered European Heritage Sites.

3.5 LAND OWNERSHIP

The Structure Plan encompasses a little over 140ha of land spread across 38 separate lots (plus a drainage reserve vested with the City of Wanneroo) and dissected by two existing roads, Elliot Road and Nicholas Road. Fragmented land ownership can pose a constraint to the efficient and effective implementation of a Local Structure Plan, however, the proposed LSP has been specifically designed to address this important consideration.

Details of the current landownership are provided at **Appendix 1 – 'Legal Description and Ownership'**.

It should be noted, the total number of landholdings under the control of Satterley Property Group extends well beyond those listed under their ownership, with numerous additional properties being subject to acquisition agreements that have not yet settled.

The Local Structure Plan has been carefully designed to facilitate orderly development as land assembly continues, with primary connecting roads specifically incorporated into land held by the proponent.

Where possible, and efficient, the design has adopted existing lot boundaries to minimise development impacts on landholdings not yet acquired. This also applies to Lot 61 Nicholas Road, the design of which remains completely independent of the abutting properties, given the aspirations of that landowner to stay living in the area for the longer term.

Similarly, the design of the LSP has carefully integrated the existing Church on Lot 11 Elliot Road. The LSP proposes a private rear boundary interface to the western side of the Church property, with a road interface along the site's eastern boundary, providing ample opportunity for the Church to further develop their site and consider their long term access and parking. The design also ensures the LSP doesn't prejudice the future redevelopment of the site for residential housing.

Importantly, the central north-south Neighbourhood Connector B road has been designed to sit within landholdings controlled by the proponent to ensure it can be delivered to provide suitable connectivity through the site, particularly to the local Primary School.

The LSP design also utilises the existing local roads to provide a legible network of higher-order connectivity, sets out residential cells in an orderly manner and retains significant vegetation and natural landscape assets (such as tree avenues) to provide an overall net benefit to the community.

Importantly, the technical assessment of the site and preparation of the Local Structure Plan has been undertaken in a fair and equitable manner in accordance with residential development policy guidance, with land uses placed to respond specifically to technical requirements. For instance, the Primary School is located south of Elliot Road abutting the proposed north-south neighbourhood connector and as central as possible to its catchment. Its position allows for greater circulation around the school and connections to neighbouring precincts. The primary school is shared across a number of land parcels and on one of the flatter, yet slightly elevated, portions of the site.

Parks & Recreation reserves have been proposed generally in accordance with the DSP, with areas of local public open space positioned to protect other local bushland or environmental assets and to provide for drainage. The Neighbourhood Playing Fields have been positioned centrally, adjacent to the Primary School (to facilitate shared use) and abutting the north-south neighbourhood connector road in order to provide a high-level of access.

The LSP aims to provide for efficient and equitable development across the site for all landowners, whilst also reflecting the objectives (including environmental) of the DSP.

4. LOCAL SENSE OF PLACE STATEMENT

4.1 LOCAL PLANNING POLICY 5.3

The City of Wanneroo's Local Planning Policy No. 5.3 provides guidance for the consideration of planning proposals within the East Wanneroo District Structure Plan (DSP) area. One of its key objectives is to "*ensure the vision of the EWDSP and the City's Place Framework is achieved*".

The Policy also contains a District Sense of Place Statement (DSoPS), which suggests

"Places are defined by their location and the era they were created, which evolves over time as people interact with and change that place. Great places evolve without losing their unique character or sense of place."

The DSoPS comprises five components

1. **Principles**: critical factors that the community want to see reflected throughout the development.
2. **Themes**: the key categories that define sense of place in East Wanneroo.
3. **Elements**: distinguishing places, locations, or design features that need to be capitalised on, planned for, or realised through the planning process for sense of place to be retained or enhanced as urbanisation progresses.
4. **DSoPS Map**: Illustrates the key aspects and elements that are unique to East Wanneroo that contribute to sense of place and require consideration.
5. **Guidance for Local Sense of Place Statements**: provides context and direction to inform the subsequent preparation of Local Sense of Place Statements (LSoPS) by development proponents.

The DSoPS concludes with the following statement and response:

"You know you're in East Wanneroo because...

...you are surrounded by mature trees and native vegetation that connects you to a network of wetlands through discrete pedestrian links. Local Aboriginal, pioneer, market gardening and equestrian heritage is evident in park and open space design and new development is integrated into and respects the landscape...

... future development will feature consistent design outcomes for landscaping, streetscapes, parkland links, public open space, and community facilities that reflect the culture and history of the area ..."

The Policy requires proponents to prepare a local Sense of Place statement, in consultation with the City, as part of the Local Structure Plan. Much of the information to be provided within the statement is already required (and has been included) under Part Two of the Local Structure Plan, however, additional elements include:

1. Local Sense of Place Statement Overview

    a. Local Structure Plan Area
    b. Overview of LSP Characteristics
    c. History and Heritage
    d. Key links to Regional Locations
    e. Overview of Sense of Place Intent

2. Principles, Themes and Elements & Local Structure Plan Response

A Local Sense of Place Statement has been prepared for the Local Structure Plan, as included at **Appendix 4**. A summary of the key elements of which is provided below. These elements are summarised in the Local Sense of Place Statement to focus on place outcomes, notwithstanding being included in detail within both Part 1 and Part 2 of the LSP. An overview of the various elements of LSoPS is provided below.

4.2 LOCAL SENSE OF PLACE STATEMENT OVERVIEW

4.2.1 LOCAL STRUCTURE PLAN AREA

The Local Sense of Place Statement (LSoPS) provides context for the Local Structure Plan area with regard to its physical location, overall area/boundaries and access points.

4.2.2 OVERVIEW OF LSP CHARACTERISTICS

This part of the LSoPS includes a description of the relevant demographic characteristics of the place, it's environmental features, topography, vegetation, flora & fauna, points of difference and existing features to be retained. The demographic overview includes profiles of age, income, house typologies, population density and household sizes.

4.2.3 HISTORY AND HERITAGE

The LSoPS also considers the history and heritage of the area, including the historical ownership of the land parcels (where known), Indigenous and European characteristics and any significant historical events.

4.2.4 KEY LINKS TO REGIONAL LOCATIONS

In this part of the LSoPS the points of interest, activity centres, transit nodes, important landforms, parkland link routes and points of integration across LSP boundaries are considered.

4.2.5 OVERVIEW OF SENSE OF PLACE INTENT

This part of the LSoPS considers relevant place outcomes, as identified in the DSP that are specific to Precinct 3, including elements such as:

- Evidence of understanding of local community values
- identification of place principles, themes and elements additional to those outlined in the DSP
- an outline of the local place vision for Precinct 3

4.3 PRINCIPLES, THEMES AND ELEMENTS & LSP RESPONSE

The information included in this part of the Local Sense of Place Statement is generally reflected in Part 1 of the LSP and provides a basis for the design and development response proposed for the Precinct. It includes:

- Demonstration of how the various principles, themes and elements set out in the DSoPS are addressed within Precinct 3
- How the LSP has been designed and implemented to protect the key sense of place elements
- How the design response contributes to the local sense of place where place elements can't be protected through development
- How the design response contributes to achieving the DSP's vision for East Wanneroo
- A description of any unique design elements, public art, materials and colours (overall project theming) for Precinct 3

Refer **Appendix 4** for full details of the **Local Sense of Place Statement**.

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5. LAND USE AND SUBDIVISION REQUIREMENTS

5.1 DESIGN AND LAND USE

The proposed land uses within the Precinct 3 Local Structure Plan area include low and medium density residential uses, a commercial centre, a primary school, public open space/drainage, reserves to accommodate areas of Parks & Recreation (as indicated on the DSP) and Neighbourhood Playing Fields, the latter as required under the City of Wanneroo's Community Infrastructure Plan (refer **Figure 7 – Local Structure Plan Map (with roads)**.

5.2 PUBLIC OPEN SPACE

The Local Structure Plan proposes 11 parcels of public open space; encompassing 11.9779ha of land, representing 8.49% of the gross site area of which 10.7479ha is creditable, being 10.03% of the Net Subdivisible Area (refer **Appendix 5 – Public Open Space Schedule**).

Public open space is to be provided generally in accordance with **Plan 1 – Structure Plan Map** and **Appendix 5 – Public Open Space Schedule**. In addition, **Plan 2 – Public Open Space and Schools Map** has been provided to illustrate the distribution of the various areas of public open space across the different landholdings within the LSP area to simplify its implementation.

5.2.1 DESIGN RATIONALE & FUNCTION

Public Open Space (POS) has been designed to provide for both active recreation spaces and passive nature parks.

As such, the POS distribution proposed within the LSP preserves existing vegetation, provides active play spaces to maximise accessibility and social amenity for future residents, and integrates drainage functions to adhere to water sensitive urban design principles.

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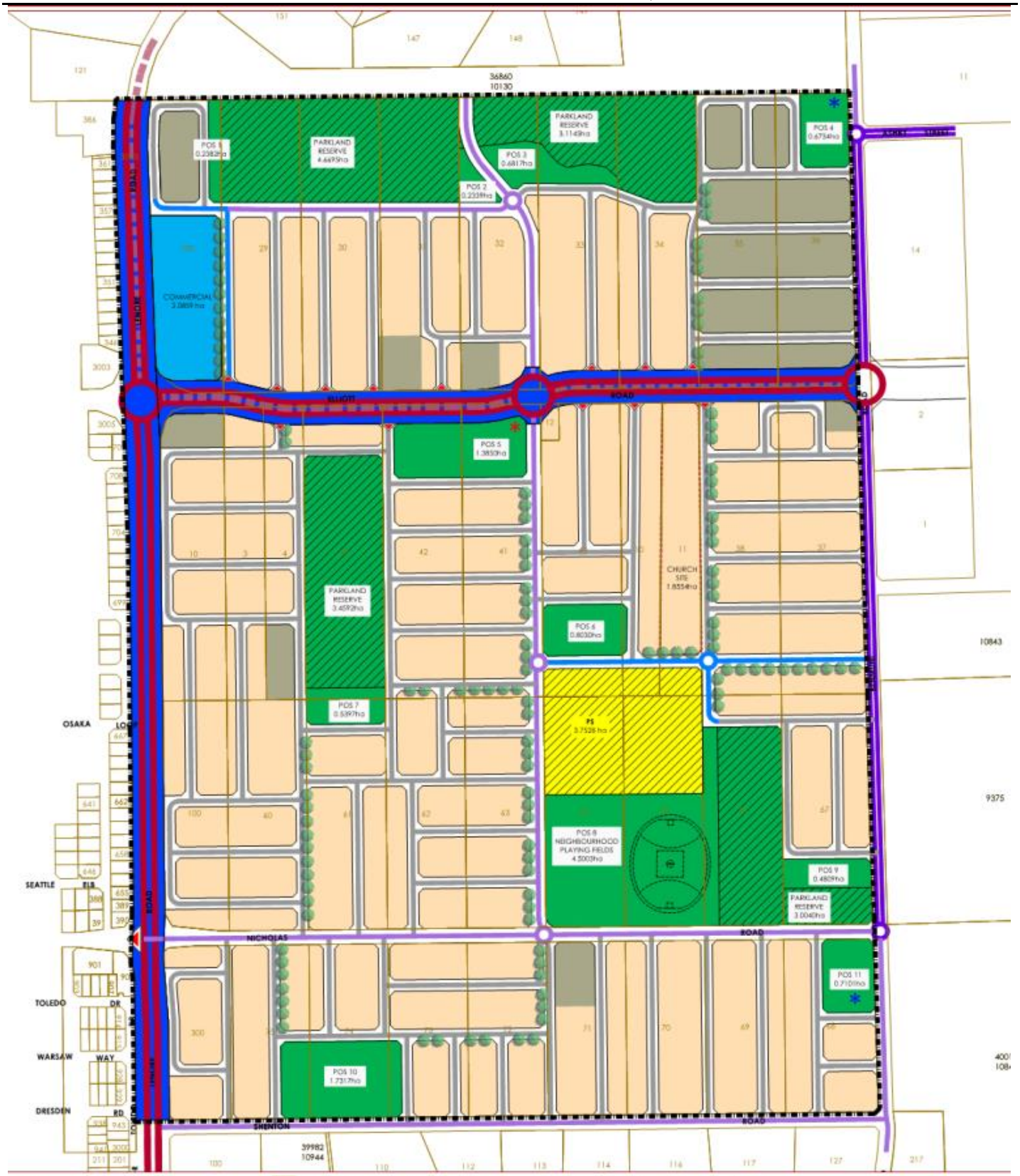

FIGURE 7. STRUCTURE PLAN MAP WITH ROADS
PRECINCT 3 - ELLIOT ROAD
EAST WANNEROO

Portions of the LSP area are also proposed as Parks & Recreation reserves to retain existing bushland as contemplated by the DSP. This includes the vegetation across the northern portions of Lots 29 to 34 Elliot Road and parts of Lots 66 & 67 Nicholas Road, as shown as 'Rural' under the MRS (excluded from the 'Urban Deferred' zone).

Lots 42 & 43 Elliot Road and part of Lot 62 Nicholas Road were also considered for future Parks & Recreation, being shown as 'Parklands – Subject to Confirmation' under the DSP.

Following extensive environmental surveys and in consideration of the significant quantum of bushland being retained within the Precinct (noting the gross area of green space being provided represents some 19.45% of the overall land area of the Precinct), the Local Structure Plan proposes to retain the majority of Lot 43 as Parks & Recreation reserve, with Lots 42 and 62 being primarily developed for residential purposes. The **Environmental Assessment Report** at **Appendix 2** details the environmental considerations that are likely to apply to this proposal.

Table 8 below provides a summary of the size and intended function of each area of public open space: A **Landscape Masterplan** is attached at **Appendix 6** detailing the design and function of each of the public open space areas.

Table 8: POS Classifications

POS No.	Gross Area (ha)	Deductions	Net area (ha)	Category	Function
1	0.2382	-	0.2382	Local	Nature
2	0.2339	-	0.2339	Local	Nature
3	0.6817	-	0.4946	Neighbourhood	Recreation & nature
4	0.6734	-	0.4243	Local	Recreation
5	1.3850	-	0.8595	Neighbourhood	Recreation
6	0.8030	-	0.5322	Local	Recreation
7	0.5397	-	0.5397	Local	Recreation
8	4.5003	-	4.5003	Neighbourhood	Recreation
9	0.4809	-	0.3568	Local	Recreation
10	1.7317		1.5522	Neighbourhood	Nature
11	0.7101		0.3840	Local	Recreation

Parks and Recreation Reserves

The northern Parks & Recreation Reserves have been shown on the LSP to reflect the associated 'Parklands' designation on the DSP, including the location of the southern boundary of the reservation.

The vegetation in this area is a mixture of 'very good', 'good', 'degraded' and 'completely degraded', as shown in the **Environmental Assessment Report** at **Appendix 2**.

Some of the existing vegetation located south of the identified 'Parklands' area is proposed to be cleared to facilitate efficient residential development in order to meet the density objectives of the DSP. Conversely, the 'Parklands' area at the rear of Lots 32, 33 and 34 Elliot Road is degraded or completely degraded and will be rehabilitated.

A series of pathways will be provided through this area to facilitate controlled access, as shown in the **Landscape Masterplan** attached at **Appendix 6**.

Public Open Space

The distribution of Public Open Space throughout the Precinct 3 – Elliot Road Local Structure Plan area has been carefully considered in relation to the objectives of Liveable Neighbourhoods, as outlined below:

1. To ensure that public open space of appropriate quality and quantity is provided in a timely manner to contribute towards the recreational and social needs of the community in appropriate locations
2. To integrate urban water management functions with public open space
3. To facilitate the provision of land for community facilities, such as the Neighbourhood Playing Fields, as part of land ceded for public open space
4. To provide public open space that is safe and overlooked by nearby dwellings

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5. To facilitate the provision of the public open space contribution and its development as part of the subdivision process and to enhance local amenity
6. To ensure that public open space is integrated into the urban structure to produce both land use efficiency and long-term sustainability
7. To provide for public open space that best reflects local community requirements

Further, the proposed distribution of Public Open Space also meets relevant requirements such as to:

- Provide a balance between conservation and active and passive recreational uses in district, neighbourhood and local open spaces;
- Support legibility of the urban environment and the establishment of neighbourhood identity by incorporating natural and cultural features and landmarks
- Incorporate land for connected or linear open space for walking and cycling
- Provide parks for a combination of passive (informal play areas) and active (formal playing fields)
- Provide for neighbourhood parks for active (informal sports/play areas) and passive use
- Provide for local parks in a safe walking distance from all dwellings
- Take into account shared use of open space (such as the Neighbourhood Playing Fields and Primary School)
- Incorporate drainage wherever practicable using contemporary urban water management principles
- Accommodate water-sensitive urban design in public parkland areas where usability for recreation purposes has not been compromised or where conservation values are enhanced

The following is an overview of the public open spaces provided within the Local Structure Plan.

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POS 1, POS 2 and POS 3 abut the Parklands area, providing an opportunity to create a landscaped and active edge to the bushland, together with localised drainage. This landscaped edge and the adjacent 20m wide road corridor also provide suitable buffering to the future residential allotments for bushfire management purposes.

POS 4 is located at an edge of the Precinct and to service the residential dwellings in this area that are anticipated to be developed to a higher density given their proximity to the future District Shopping Centre in abutting Precinct 12.

POS 5 is located central to and abutting Elliot Road. This public open space area will be a focus for the first stages of development, creating an active landscaped space, incorporating localised drainage and also containing the permanent waste water pumping station.

POS 6 is located north of and opposite the Primary School. This park will provide for some minor active pursuits and serve a local park function for surrounding residential development.

POS 7 is located at the southern end of the proposed Parkland reservation on Lot 43 Elliot Road. This park will provide a local activity space for residents, together with a managed interface to the Parkland.

POS 8 is the Neighbourhood Playing Fields, provided at an area of 4.5ha to meet the requirements set out in the City of Wanneroo's Community Infrastructure Plan. The playing fields are collocated with the Primary School and also abut the Parks & Recreation reserve proposed on Lot 66. A linear public open space strip extends from the playing fields along the boundary of Lot 65 and past the Primary School. This strip, which is subject to further detailed design at the subdivision and development stage, provides an opportunity for vehicular access and parking to service the playing fields and also acts as a managed buffer to the Parkland for bushfire management purposes.

POS 9 also provides an edge to the Parkland, together with localised drainage, including that associated with abutting Benmuni Road.

POS 10 serves a dual function, retaining some very good quality vegetation together with providing actives spaces for local recreation.

POS 11 provides for local recreation, drainage (as a natural low point in the Precinct) and also accommodates the temporary waste water pumping station.

5.3 RESIDENTIAL

5.3.1 DWELLING TARGET & POPULATION

The Precinct 3 – Elliot Road Local Structure Plan is expected to yield 1,856 dwellings across a total of approximately 63ha of net residential land. This provides a density of 29 dwellings per net residential hectare and 17.3 dwellings per site hectare (net subdivisible area). This satisfies the minimum density targets of 15 dwellings per urban zoned hectare set out in *Directions 2031* and 22 dwellings per site hectare set out in *Liveable Neighbourhoods (2009)*.

An average of 3 persons per household would provide for a total population of approximately 5,568 people within the Local Structure Plan area. This is generally consistent with household sizes within Wanneroo as of the 2021 Census (*Australian Bureau of Statistics*) and is the population density adopted in the **Retail Needs Assessment and Net Benefit Test** report attached herewith at **Appendix 9**.

5.3.2 DENSITY

The Local Structure Plan has been designed to adopt a site-responsive approach to the designation of residential density codes, according to the following criteria:

I. A base code of R30

II. R40 for lots:

   a. at the end of residential street block cells

   b. within 250m of public open space or Parks & Recreation reserves

   c. abutting or directly opposite the primary school

   d. with frontage to a Neighbourhood Connector or Integrator Arterial road; and/or

   e. within 500m of a public transport stop or equivalent

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III. R60 for lots:

a. within 250m of a public transport stop or equivalet; and/or

b. to which II applies that also:

i. have access to a laneway; and/or

ii. are over 600m² in area that are to be developed for grouped or multiple dwellings*.

**Note: Section III b ii is not intended to facilitate the re-subdivision of sites for green-title or survey-strata lots. If this is proposed, a new density code plan shall be submitted that complies with the criteria listed above.*

IV. Up to an R80 density for development on lots within the Urban Neighbourhood residential catchment of the District Shopping Centre as shown on the DSP and designated Residential R40-R80 on the LSP.

This approach, which is also being applied across other East Wanneroo local structure plans, provides flexibility to accommodate changes to the layout and lot typology of the Local Structure Plan without the need for numerous administrative changes and amendments, and allows for the consideration of residential density codes specific to the design and lot layout of subdivision applications as they are made over time.

This is particularly applicable as the District Shopping Centre development progresses within Precinct 12 and provides a catalyst for a broad range of housing typologies.

5.4 HOMESTEAD LOTS

Burgess Design Group and Satterley Property Group are leaders in developing projects which comprise fragmented landownership. This form of development requires land assembly, which involves extensive negotiations and collaboration with a multitude of landowners, normally over long period of time, to realise an opportunity to create a cohesive residential development project.

Similar to the majority of the East Wanneroo DSP area, the land tenure within Precinct 3 is generally characterised by long term ownership, with many landowners having lived on their properties for 20 to 40+ years. Often there are also considerable lifestyle-based improvements together with significant sentimental value.

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Often landowners seek to retain their homes and sell only their residual (or 'balance') land to a developer. In these circumstances the landowners enter into a 'Retained Land' agreement with the developer group.

In many cases, retaining their home is the deciding factor for a family to enter into a sale agreement with a developer. However, it should be acknowledged that the inclusion of Homestead Lots within a Local Structure Plan creates inefficiencies, can have an impact on streetscape, amenity and landform, and should ideally be avoided where possible.

5.4.1 HISTORICAL PRACTICE

Homestead Lots have been incidentally created throughout the Perth Metropolitan Region as areas of fragmented land are subdivided. This has allowed development to progress.

Traditionally, and in accordance with conventional subdivision/development policy, the servicing of these lots (being the connection of reticulated water, sewer, power and communications) would be required as the development front reached the location of the home being retained.

The provision of a new title for the Homestead Lot is very important to the landowner as it gives them the ability to raise funds against the property or transfer/deal on the property if needed (the latter particularly for elderly residents).

It is essential that uncertainty for landowners during the period between selling their property (based on a value for the residual land) to the developer and receiving their title is minimised. As part of the acquisition agreement, the developer agrees to pay for and facilitate connection of necessary services to the Homestead Lot, plus provide the title, at the appropriate time.

5.4.2 PLANNING AND DESIGN CONTEXT

Prior to considering a Homestead Lot, it is essential to identify how the lot will be integrated with the overall development of the area.

There are a number of key considerations, including:

1. Road access and orientation
2. Lot size
3. Improvements
4. Future development opportunities

Road access and orientation is to provide for entry and exit to the site as efficiently as possible, in most circumstances with the orientation (frontage and driveway location) as per its existing configuration.

In some cases, the driveway may connect to a road that is planned to be considerably upgraded as part of the residential development of the area (such as Elliot Road), ultimately carrying volumes that preclude direct access under planning policy. In these circumstances the existing driveway may need to be retained to service the homestead until an alternative access arrangement can be provided as part of the ongoing development of the Precinct.

Importantly, alternative access to a subdivisional road will be required upon future redevelopment of the Homestead Lot.

5.4.3 LOT SIZE

The size of the Homestead Lot should be minimised as far as possible to retain only the existing home and any necessary improvements, ideally between 1,000m^2 and 2,000m^2. It is recognised that the smaller the site the more easily it can be incorporated into the future development area.

In some circumstances, a larger lot may be required, whether due to the location of the existing dwelling or to incorporate specific landscape features. The Retained Land on Lot 31 Elliot Road is an example of a larger Homestead Lot, which is this case is due to the extensively landscaped and maintained gardens.

Where a home has a large setback to an existing street, the size of the Homestead Lot may need to be greater in order to incorporate the frontage, such as on Lot 71 Nicholas Road.

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There are other considerations, such as vegetation or topography that may also influence the design of the Homestead Lot (and/or its ability to be retained).

In some circumstances, the Homestead Lot will be developed at the time of the adjacent subdivision, as landowners decide to move out of the developing area due to conflicting lifestyle aspirations. It is thus important to design the Homestead Lots to be easily integrated into the surrounding residential fabric.

5.4.4 FUTURE DEVELOPMENT

As above and notwithstanding the size of the retained Homestead Lot, it is essential it be carefully integrated into the Local Structure Plan for future redevelopment. The design of Homestead Lots should reflect the dimensions of prevailing street block depths or be located on street corners.

These configurations will allow for the Homestead Lot to be easily subdivided and redeveloped at a future time, which is essential to the efficiency of the Local Structure Plan. Often the Homestead Lots are up-coded such that when redeveloped at a future time, they can provide some alternative housing forms into the developing urban area. This approach has been taken with the six Homestead Lots shown on the Local Structure Plan, each being designated as Residential R40-R80.

It is also important that a Homestead Lot is not configured in any way that would prejudice future development within the Local Structure Plan area, such as restricting the continuation of key roads or infrastructure.

The design of the Precinct 3 Local Structure Plan has been conceived in this way.

5.4.5 INFRASTRUCTURE BOND

The Homestead Lots should be titled as soon as practical after acquisition and settlement of the balance land by the developer. This would normally occur upon Local Structure Plan approval, which ensures an appropriate and integrated design outcome has been achieved and there is certainty for the developer.

For titles to be issued for the Homestead Lots ahead of the development front, the developer could pay an Infrastructure Bond to the Local Government.

This bond is to pay for the future connection of all necessary services (as required under relevant planning policy).

In the interim period, the Homestead Lot remains serviced by its existing water supply, leach drains/septic tank system and power supply.

Although the Homestead Lots proposed on Lots 10, 4, 31 & 32 Elliot Road are likely to be created as part of early stages of development and thus be serviced in the short term, the Retained Land on Lot 37 Elliot Road is likely to be serviced in the longer term. An infrastructure bond may be appropriate for the earlier titling of this Homestead Lot.

A Homestead Lot is not required to be designed to retain all of the existing service locations (such as leach drains/septic systems) within its boundaries, provided an easement is put in place by the developer on the Balance Land that is being acquired, giving access rights to the infrastructure that currently services the Homestead Lot.

Once the ultimate services are connected to the Homestead Lot this redundant infrastructure and any associated easements are removed.

5.5 MOVEMENT NETWORKS

A **Transport Impact Assessment** report has been prepared by Transcore to assess the impacts of development on the existing and proposed movement network (refer **Appendix 7**). This report found that development within the Structure Plan area is expected to generate a total of 20,230 vehicle movements per day (internal to external or external to internal) upon completion.

Planned upgrades to the surrounding road network and the design of the internal road network are sufficient to cater for the development, as set out in the proceeding sections.

5.5.1 EXISTING ROAD NETWORK

Future upgrades and extensions are proposed to the existing regional road network, such as;

- Whiteman Yanchep Highway, a new north-south highway to the east of Precinct 3, is intended to function as a primary distributor road for the north-west traffic. It is proposed to intersect with Gnangara Road, Elliot Road, Lakeview Road and Flynn Drive
- Franklin Road is proposed to be extended from Lenore Road to Flynn Drive
- The Gnangara Road – Ocean Reef Road corridor is proposed to be upgraded to a primary distributor

In addition, the existing internal road network is to be upgraded as set out in **Table 9** below, noting Lenore Road has already been widened and upgraded by the City:

TABLE 9: UPGRADES TO EXISTING ROADS			
ROAD	EXISTING WIDTH	PROPOSED WIDTH	PROPOSED CLASSIFICATION
Elliot Road	20m	45m	Integrator Arterial Road / Rapid Transit Route
Benmuni Road	20m	25m	Neighbourhood Connector A

Road widening should generally be accommodated equally on either side of the road, equidistant from the centreline. It is anticipated the widening of Benmuni Road will occur in this way.

Elliot Road has been designed with minor deviations to the road widening and alignment, both north and south of the existing road corridor, to accommodate for homestead lots which provide significant identity and sense of place to the locality. The alignment of Elliot Road has also been slightly modified from that shown on the DSP, as agreed with DPLH and City of Wanneroo planners. The DSP alignment shows Elliot Road deviating south-east across Lots 40, 41, 10, 11, 37 & 38 Elliot Road, generally lining up with Jambanis Road at the eastern extent of the LSP area.

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This deviation traversed the existing Church site on Lot 11 Elliot Road. The Church has significant existing infrastructure and proposals for additional future development. The proposed realignment of Elliot Road, as shown on the LSP, facilitates the retention of the Church and its associated infrastructure.

5.5.2 PROPOSED ROAD NETWORK

A legible and robust network of higher order 'Integrator' and 'Neighbourhood Connector' roads provide a consistent hierarchy and will convey traffic efficiently throughout the Local Structure Plan area. Local access streets will accommodate relatively low volumes of low-speed local traffic in a pedestrian and cyclist friendly environment within each of the residential precincts.

The main arterial roads within, or directly abutting, the LSP area are Lenore Road running north south within the western boundary and Elliot Road running east west through the middle of the LSP area. Ultimately, traffic volumes in the order of 40,000 to 46,000vpd are forecast on Lenore Road and 15,000 to 18,000vpd on Elliot Road.

Five key intersections along Lenore Road and Elliot Road within the LSP area have been analysed to determine likely future intersection requirements. The LSP shows roundabouts at three of these locations.

The proposed signalised intersection of Lenore Road and Nicholas Road will assist pedestrians and cyclists crossing Lenore Road at that location. Additional pedestrian facilities should be planned across Lenore Road and Elliott Road in the vicinity of the proposed local centre at the timing of development of that site.

5.5.3 PUBLIC TRANSPORT NETWORK

TRANSIT SERVICES

The Local Structure Plan accommodates a future 'Rapid Transit Route' running east-west through the site along Elliot Road.

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As detailed in the East Wanneroo DSP, a transit station is proposed to be provided to the east of the Local Structure Plan area within the District Centre located in the abutting Precinct 12. This is proposed to provide high-quality and frequent public transport access for residents to the METRONET network.

The DSP shows the 'Rapid Transit Route' containing an 'Integrator Arterial Road' for the provision of greater connectivity between the centre and suburban neighbourhood and allows for the implementation of a rapid bus system once the design review is completed by State Government.

Figure 7 – Local Structure Plan Map (with roads) shows the 'Rapid Transit Route' in an alternative alignment to the one specified in the DSP, as described previously above.

It should also be noted that the DSP shows a 'Transit Corridor' cutting across the north-eastern corner of the LSP (across Lots 34, 35 & 36 Elliot Road) in an 'underground' configuration. This was anticipated to be a railway line in tunnel for this section of the Transit Corridor, however, it is understood that the WAPC have reconsidered this proposal and potentially opted for an alternative form of transportation via dedicated rapid bus. The details of this rapid bus proposal are still evolving. The LSP incorporates additional widening (out to 45m) for Elliot Road to accommodate this service if needed.

BUS SERVICES

The closest existing bus route to the subject site is Route 467: Whitfords Station – Joondalup Station. The closest bus stops for route 467 are approximately 600m west of the LSP area along Wyatt Road, as detailed in section 3.5 of **Appendix 7**.

5.5.4 CYCLE NETWORKS

Existing bicycle facilities in the surrounding area are illustrated on the Perth Bike Maps published by the Department of Transport, as shown in Figure 7 of **Appendix 7**. That Bike Map dates back to 2016 and does not show existing facilities on Lenore Road, which has on-road bike lanes and a 2.5m shared path on the western side. There are currently no bicycle facilities on Elliot Road, Nicholas Road and Benmuni Road within the LSP area.

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High-level future planning for cycling facilities is now set out in Western Australia's Long Term Cycle Network (LTCN), which identifies an aspirational blueprint to ensure State and local governments continue to work together towards the delivery of a continuous cycling network providing additional transport options, recreational opportunities and support for tourism and commercial activity. The LTCN identifies the function of a route - primary, secondary or local - rather than the form it should take.

A primary route is planned on Lenore Road on the western side of the LSP area. Elliot Road is planned as a secondary route in this area. A number of local routes are also shown in this area including Nicholas Road and Benmuni Road, refer **Appendix 7**.

An extensive network of on road cycle lanes, shared paths, and pedestrian footpaths will be installed throughout the precinct as development progresses (refer **Table 10** below).

Table 10: Typical Pedestrian and Cyclist Networks		
Road type/area	Cycling facilities	Pedestrian facilities
Integrator A	On-road cycle lanes (x2)	Pedestrian paths (x2)
Neighbourhood connector A	On-road cycle lanes (x2)	Pedestrian paths (x2)
Neighbourhood connector B	Shared path (x1)	Pedestrian path (x1)
Access street A	Shared path (x1)	Pedestrian path (x1)
Access street B	Shared path (x1)	Pedestrian path (x1)
Access street C & D	On-road (shared)	Pedestrian path (x1)
Safe Active Street	On-road (shared)	Pedestrian path (x1)

5.6 WATER MANAGEMENT

A **Local Water Management Strategy** has been prepared by Hyd2o Hydrology that details how all forms of water, including groundwater, stormwater and potable water will be managed in accordance with the Better Urban Water management guidelines – refer **Appendix 8**.

The recommended approach to water management for the structure plan area includes:

Water Efficiency

- Use of water efficient fixtures and fittings
- Use of native plantings in POS / stormwater management areas
- Maximise infiltration of stormwater at source
- Retention of Bushland and native vegetation POS areas

Water Supply

- Water Corporation IWSS for lots with rainwater tanks optional
- POS Irrigation via Superficial Aquifer and existing licences
- No long-term irrigation of conservation areas/Public Open Space

Wastewater

- Water Corporation reticulated sewerage

Ecological Protection/Water Quality

- Implement both structural and non-structural controls
- Use of soakwells at lot scale to retain 15mm on site
- Local centre to retain all stormwater on site up to 1% AEP event
- Total storage volume of 3684 m^3 and area of 1.23 ha required for biofiltration systems to treat and infiltrate 15mm events. representing approximately 0.9 % of total site area
- Local scale street scale measures to be detailed at UWMP stage in consultation the City of Wanneroo and project civil engineers

Serviceability

- Road drainage system designed so roads will be passable in the 20% AEP event
- The total area required for management of the 20% AEP event is approximately 1.86ha or 1.4% of the total site area with a total detention storage volume of approximately 6909 m^3

Flood Protection

- Provide flood paths for overland flows which exceed the capacity of piped drainage
- Establish minimum habitable floor levels at 0.3 m above the 1% AEP event flood level in local drainage network
- The total area within the site required for flood storage up to the 1% AEP event is approximately 2.53 ha or 1.9% of the total site area, with a total detention storage volume of approximately 22103 m^3
- Establish minimum habitable floor levels at 0.5m above the 1% AEP event flood level of stormwater storage areas

Fill & Subsoil Drainage

- Natural surface in excess of 9m above existing groundwater
- No subsoil required and site unaffected by potential future groundwater rise in Urbaqua(2021)
- Earthworks for the site will comprise a cut and fill operation. Some fill may be required to meet gradient requirements, level lots, and interface with existing site boundaries and infrastructure

ASS & Contamination

- No known risk of Contamination nor Acid Sulphate Soils

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The framework set out within the Local Water Management Strategy will be refined through the preparation of urban water management plans, at the subdivision and development stage, as development progresses.

5.7 EDUCATION FACILITIES

The Local Structure Plan incorporates one government Primary School site as shown on the **Local Structure Plan Map (with roads)** at **Figure 7**.

WAPC Operational Policy 2.4 Planning for School Sites requires one government primary school for every 1,500 lots. The Local Structure Plan area is expected to yield in the order of 1,753 lots; and thus requires 1 primary school. The site has been located to respond to the following criteria:

- The site is a minimum of 3.75ha in area, being collocated with the Neighbourhood Playing Fields and including sufficient area to incorporate a childcare facility, consistent with current policy requirements
- Central to the planned catchment
- Located on land with suitable topography/levels
- With easy access to higher order roads (to maximise accessibility by different transport modes) and lower order access streets (to disperse parking)
- To be as regular shape as possible, with due regard to the above
- To minimise any potential bushfire impacts from nearby or adjacent areas

A **School Site Indicative Development Plan** is included at **Figure 8**. This plan shows how the Primary School site may be developed within the Local Structure Plan area, including the intention for the oval facility to be shared with the abutting Neighbourhood Playing Fields.

The Primary School site and abutting Neighbourhood Playing Fields have street access on three sides. Neighbourhood Connector B roads, including Nicholas Road, provide for high level access and traffic circulation as required.

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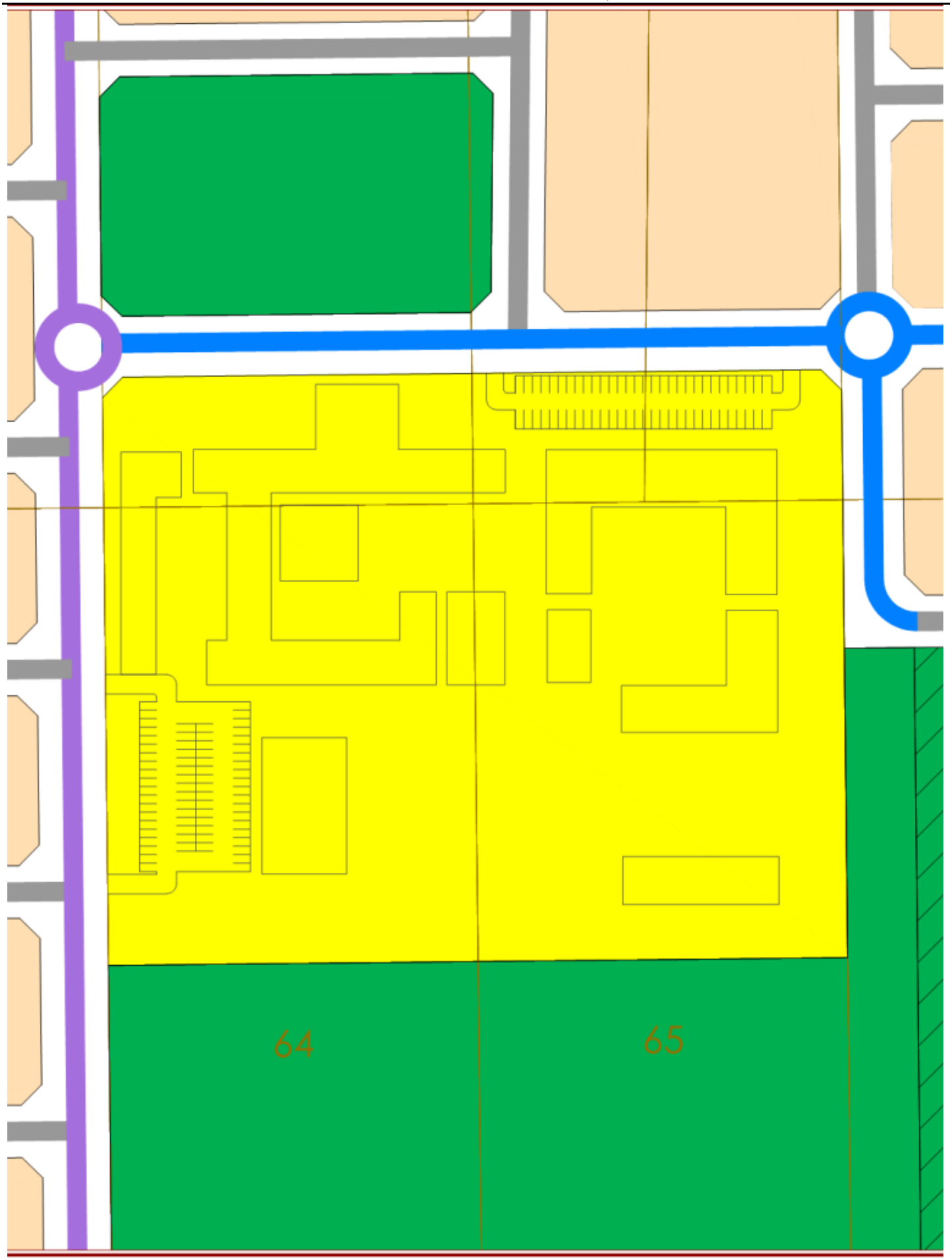
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65
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All areas and dimensions are subject to survey, engineering and detailed design and may change without notice.
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FIGURE 8. SCHOOL SITE INDICATIVE DEVELOPMENT PLAN
PRECINCT 3 - ELLIOT ROAD
EAST WANNEROO
CITY OF WANNEROO

A Parks & Recreation reserve is proposed on Lot 66 Nicholas Road, as depicted on the DSP. A public open space reserve (POS 8) separates the bushland area from the Primary School site to mitigate bushfire risk.

5.8 NEIGHBOURHOOD CENTRE

A **Needs Assessment and Net Benefit Test** report is attached at **Appendix 9** to guide the assessment for a planned Neighbourhood Activity Centre within Precinct 3 of the East Wanneroo District Structure Plan. A summary of the report findings is below.

The Neighbourhood Activity Centre is planned to be located on the north-east corner of the intersection of Lenore and Elliot Roads.

5.8.1 DESIGNATION

The planned centre in Precinct 3 (planned centre) is designated as a:

Planned centre	A local centre is planned in Precinct 3 of the adopted EWDSP
Major development	Any planned centre represents a major development for the purposes of triggering a Needs Assessment and Net Benefit Test

5.8.2 PROPOSED ACTIVITY

The planned centre is proposed to contain:

Retail floor space	5,000 sqm NLA
Non-Retail floorspace	2,950 sqm NLA
Total Activity Centre floor space	7,950 sqm NLA

5.8.3 ACTIVITY CENTRE NETWORK AND TRADE AREA POPULATION

There are 12 existing and/or planned activity centres which are expected to influence or be influenced by the planned centre. The planned centre will:

- represent a 1.7% increase to the planned total retail floor space and 5.7% increase to the total convenience floor space available to the trade area.
- operate within a trade area (including existing and proposed resident areas) which is forecast to grow from 84,000 residents by 2031 to 148,000 by 2046.

5.8.4 RETAIL SPENDING

The current and forecast resident population in the trade area are estimated to generate:

- $728M p.a. in total retail spending by 2026 including $421M p.a. in convenience-based retail spending.
- $1.9B p.a. in total retail spending by 2046 including $1.1B p.a. in convenience-based retail spending.
- An additional $676M p.a. in convenience-based retail spending generated by residents in the trade area over the next 20 years.

5.8.5 NEEDS ASSESSMENT

The Needs Assessment confirms:

- That there is demand for an additional full line supermarket in the trade area by 2026.
- There is an ultimate demand for over 12 additional full line supermarkets in the trade area by 2046.

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Analysis of retail sales potential shows that the planned centre:

- Has the potential to achieve retail market shares within the immediate communities which are consistent with industry expectations.
- Does not require an unrealistic over reliance on retail sales capture from any precincts outside its immediate influence.
- Has the potential to achieve retail sales performance consistent with industry averages for a neighbourhood centre by 2031.
- Has potential for significant retail sales growth over the subsequent 15 years - despite the planned introduction of significant convenience and comparison retail activity at Gnangara District Centre and Mariginiup NC.

5.8.6 IMPACT ASSESSMENT

Analysis of the Impact Assessment shows that the planned centre:

- Is not expected to have any economic impact on the surrounding activity centre network, nor the overall activity centre hierarchy.
- Can be developed sustainably while other existing and planned centres continue to experience significant retail sales growth.

5.8.7 NET BENEFIT TEST

Analysis of the Net Benefit Test shows that the planned centre:

- Will provide the existing residents in Hocking and Pearsall and the planned residents in precinct 3, 4 and 5 with access to a wider range of daily and weekly retail goods and services, without impacting the existing choices available to the residents.
- Has the potential to create up to 259 full time equivalent (FTE) jobs including 200 in the retail sector and 59 in the non-retail sector.

- Will generate a net increase in potential retail and non-retail employment opportunities given that the planned centre is not expected to result in lost retail sales (and employment) at other centres.
- Will provide retail and non-retail employment opportunities to those otherwise underrepresented in the workforce, including:
    - Female employees.
    - Employees looking for part time work.
    - Employees aged 15-19 years.
    - Residents who travel less than 2.5 km to work.
    - Residents who travel to work without a vehicle (car as passenger, bicycle or walking).

5.8.8 STRATEGIC ALIGNMENT

Based on the findings of the assessment, the planned centre is:

- Consistent with the strategic planning for the area.
- To be a size, scale, function, and role that is consistent with and complements the overall activity centre hierarchy as defined by SPP4.2.
- Will not have an impact on any of the activity centres in the network.
- Will not have the potential to result in the loss of or change the role and function of any activity centre in the network.
- Will not have the potential to have any impact or change to the activity centre hierarchy.
- Satisfies the criteria for assessing the benefits and impacts to the community and is therefore consistent with the objectives and outcomes of SPP4.2.

5.9 INFRASTRUCTURE COORDINATION AND SERVICING

An **Infrastructure Servicing Report** has been prepared by Cossill Webley to support the Precinct 3 – Elliot Road Local Structure Plan (refer **Appendix 10**). This report confirms the site is capable of being appropriately developed and provided with all essential services and infrastructure.

The Infrastructure Servicing Report provides details on each major infrastructure type and a servicing strategy for the development of the Precinct, covering:

- Siteworks
- Roadworks
- stormwater drainage
- sewerage
- water supply and utility services.

A summary of the report is provided below.

- The investigation has confirmed the land is capable of supporting development in accordance with the proposed Local Structure Plan, with a logical progressive extension of infrastructure and base capacity.
- The existing ground conditions and past land uses will not limit the proposed development.
- Road access to the development will be provided via existing roads which bound the Precinct.
- Sewerage will be provided for the majority of the Precinct by constructing a permanent wastewater pump station on Elliot Road, supplemented by two temporary pump stations at low points on the eastern boundary, as development progresses.
- There is adequate existing water infrastructure to service the Site.

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- Initial power supply can be provided by connection to the existing high voltage (HV) infrastructure in Elliot and Nicholas Roads. Western Power has advised that ultimately the East Wanneroo Precinct 3 residential development will require a new distribution feeder from the Wangara Substation, to provide the required capacity.

- Telecommunications and gas are available from existing services on Lenore Road.

- The investigations for and preparation of this report are largely based on preliminary advice from the various service authorities. The information is current as of March 2025, and is subject to change as development progresses.

5.9.1 SITEWORKS AND EARTHWORKS

Siteworks and Earthworks for the Site will need to accommodate the existing topography, areas of vegetation identified for conservation, and several existing homesteads.

The primary objective of the earthworks deign is to achieve positive outcomes, which include the following:

- Reduction in total home building cost.

- Rationalisation of retaining wall layouts, consistent with the City of Wanneroo specifications.

- Terrace lots up the natural slopes to maintain natural topography.

- Grading roads to follow the existing topography where possible, while catering for proposed gravity services and meet the standards of the required approval agencies.

- Accommodating drainage swales/basins in areas of local public open space.

- Matching existing levels of existing roads and homesteads, POS, and conservation bushland in the area.

The retention of Homestead Lots will influence the earthworks strategy, and accommodating their existing levels may not necessarily suit the most efficient subdivision earthworks design. This also applies to tying into existing ground levels along neighbouring boundaries of properties. Level differences will require walls, and approval from neighbouring landowners is required to build on the common boundary.

Siteworks and earthworks will generally consist of the following:

- Demolish buildings and hardstands.
- Remove trees including grubbing out roots and stumps.
- Strip the topsoil, all organic material, roots and other unsuitable or deleterious material from the Site. The history of market gardening within the Precinct may require a deeper than average top soil strip.
- Topsoil unsuitable for re-use may be retained for use on-site as non-structural fill (eg in planted areas outside building areas and sports ovals).
- Proof compact the exposed surface to achieve the level of compaction determined by a Geotechnical Engineer. If weak areas are identified during proof compaction, or the level of compaction is not achieved, further compaction or over-excavation and backfilling with compacted, approved fill of these zones will be required.
- Where fill is required to achieve the required levels, place and compact approved free draining granular fill.

5.9.2 STORMWATER DRAINAGE

Stormwater drainage management is a major component of an overall water strategy. Water Sensitive Urban Design (WSUD) techniques are incorporated during planning, design and construction of urban development projects to achieve the desired outcomes.

An Urban Water Management Plan will be required for the site, which will provide the following:

- Defines land area requirements for conveyance of flood flows and protection of future urban development from peak flood events.
- Proposes a drainage strategy appropriate for the local conditions, and outlines potential WSUD initiatives at the inter-allotment and POS scale. The location of areas within Public Open Space (POS) for the WWPS and drainage infrastructure will need to be considered in the subdivision design and POS calculations.
- Prescribes the design criteria for water quantity and quality for each sub-catchment.
- Outlines hydrologic and hydraulic framework parameters and develops the overall drainage network concept.
- Defines an implementation plan for the drainage design strategy.

The sandy soil on Site will allow for onsite storage and dissipation of stormwater. Recharge water quality will be improved through the adoption of 'Best Management Practices' which promote the disposal of runoff via water pollution control facilities (including vegetated swales and basins, detention storages and gross pollutant traps) and the implementation of non-structural source controls (including urban design, street sweeping, community education, low fertiliser landscaping regimes, etc).

Drainage from public roads and lanes would be collected via conventional pit and pipe systems. The drainage collection and conveyance system will be designed to cater for the runoff from storms with up to a 20% annual exceedance probability (AEP) event.

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A series of detention basins would be designed to store runoff for the 20%, 10% and 1% AEP events. In all cases, roads and POS would be designed to cater for the surface overflow for more severe storms with building pad levels set at least 300 millimetres above the 1% AEP flood level in roadways and 500 millimetres above the 1% AEP flood level for storage detention basins.

The dispersion of stormwater disposal throughout the site (via soakwells, swales and basins) will maximise the area of recharge down through the soil profile to the shallow aquifer, thereby maximising the potential for nutrient stripping and water quality improvements. The basins will also assist nutrient removal in conjunction with other measures such as suitable vegetation planting and the use of modified soils with high phosphorous retention capacity.

Hyd2o Hydrology has been engaged as the consulting hydrologist to prepare a **Local Water Management Strategy**, which is attached at **Appendix 8**. This includes the identification of drainage catchments and the location of proposed basins within POS areas.

5.9.3 POWER

Western Power's Network Mapping Tool confirms there is currently limited spare electricity capacity in the East Wanneroo corridor, and a high voltage feeder to the Wangara substation to the west will ultimately be required to increase capacity to service the Site. Based on the proposed zoning and density of development within the LSP, the Site is expected to require approximately 7.9MVA.

There are existing high voltage overhead power lines in Elliot Road, Nicholas Road and Benmuni Road. The lines on Elliot Road and Nicholas Road have been undergrounded under Lenore Road on the western boundary. The remaining overhead lines on Elliot Road and Nicholas Road will require future undergrounding.

5.9.4 TELECOMMUNICATIONS

The Site is within NBN's fixed line footprint, and can be serviced with optic fibre via a headworks extension from their existing network.

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There are existing NBN pit and pipe services within Lenore Road, Nicholas Road, Elliot Road, and Benmuni Road that can serve as connections. Some lot connections will require removal by NBN to allow for subdivision.

The current design practice for road reserves, pavement and verge provisions will make adequate allowance for services including broadband in accordance with the agreed Utilities Service Providers handbook. There will be some local land requirements for telecommunications equipment sites which will be accommodated at detailed subdivision stage.

5.9.5 GAS

There are existing DN160, DN110 and DN63 high pressure steel gas mains located in various segments of Lenore Road adjacent to the Precinct. The DN160 stub at the intersection of Elliot Road and Lenore Road likely can be extended to service the development. Confirmation of gas capacity from ATCO will be required.

5.9.6 SEWER

The Water Corporation has provided advice regarding provision of Wastewater to the Site confirming a permanent wastewater pump station (WWPS) is required adjacent to Elliot Road at the low point, known as Jandabup Pump Station S. This pump station is part of the Jandabup Sewer District Plan. This permanent WWPS will service a significant portion of Precinct 3 and in the ultimate sense will likely discharge via a pressure main and gravity sewer to the south of Ocean Reef Road, once the area is more fully developed. The area that can be served by the Jandabup Pump Station S comprises approximately half of the LSP area in the north-west.

The Water Corporation has indicated that Jandabup WWPS S can discharge into the existing DN305 sewer near the intersection of Prindiville Drive and Hartman Drive south of the development, south of Ocean Reef Road. The alignment of the pressure main is yet to be determined, and will be progressed as development occurs. It is understood the permanent Jandabup WWPS S will be funded by the Water Corporation, although it is not currently on Water Corporation's Capital Investment Program.

The remainder of the site does not fall into the catchment for Jandabup WWPS S and in the ultimate sense is reliant on downstream gravity sewer being constructed by others. The timing of this downstream infrastructure is unknown, and likely to be after development of Precinct 3 has occurred. In this scenario two temporary WWPS will be required in order to serve the balance of the LSP area. The most efficient locations for the WWPS is in the north-east and south-east corners at natural low points as noted below. The discharge for these temporary WWPS is dependent on available sewer infrastructure at the time. The temporary WWPS and pressure mains are likely to be at the Developer's cost.

5.9.7 WATER

The Site has existing water infrastructure available for connection. There is a 610mm steel distribution pipe in the western verge of Lenore Road and a 300mm distribution main in Benmuni Road. In addition, there is a a 100mm main in Nicholas Road.

The Water Corporation has advised that the initial frontal stages of Precinct 3 can be serviced via an extension of reticulation mains from Lenore Road. However, future areas and some areas of elevated land will need to be serviced by extension off the high-level mains. The extent of these areas is not yet confirmed and The Water Corporation will confirm this at a later stage of the development process.

5.9.8 ROADS

Lenore Road forms the western boundary of the Precinct and has direct connection to the Regional Road, Ocean Reef Road (the future Ocean Reef Upper Swan Highway) to the south. Lenore Road has recently been upgraded to four lanes. It has been upgraded to an urban standard from the southern boundary of the Site to the Lenore Road/Elliot Road round-a-bout with kerbs, footpaths, drainage and line markings.

North of the round-a-bout, Lenore Road is constructed to a lower standard, with line markings, but without kerbs, footpaths or drainage.

It is expected that the existing roundabout at the Lenore Road/Elliot Road intersection will ultimately need to be upgraded to accommodate the wider road reserve on Elliot Road.

Benmuni Road on the eastern boundary is a paved two-lane bidirectional road constructed to a rural standard, and is currently classified as a 'Local Distributor'. Benmuni Road will need to be upgraded to a 'Neighbourhood Connector Type A' boulevard road, with a median strip, kerbs, footpaths, drainage and line markings. Round-a-bouts are expected to be required at the Benmuni Road, Ashley St and Nicholas Road intersections.

5.10 TRANSPORT NOISE ASSESSMENT

A **Transport Noise Assessment** reports is attached at **Appendix 11**.

The report confirms, with reference to the predicted noise levels, that it is evident the outdoor noise target will be exceeded on some lots with the LSP area.

Given the early stages of the Local Structure Plan, the noise mitigation is indicative only and would be further refined in detailed design. Outlined below are recommendations for road traffic noise to comply with SPP 5.4:

- Where lots are separated from Lenore Road by a local road and will face Lenore Road (e.g. lots north of the Neighbourhood Centre), Quiet House Packages as per the Policy Guidelines can be adopted. The reason this can be appropriate is the outdoor living areas (OLAs) to these dwellings will naturally be located on the side opposite the road corridor. Noise walls can also be considered in this scenario to reduce the Quiet House Package. For instance, where lots are within Exposure C, a noise wall may reduce this to Exposure B or A, depending on height.

- Where dwellings will be side on to the corridor and separated by a local road, Quiet House Packages will again be required. In this case, noise walls can also be provided to reduce the noise levels and also provide more freedom to the location of the OLA. Where noise walls are not provided as

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part of subdivision, either one would need to be provided by the lot owner on their lot boundary or their OLA is to be located on the east side of the dwelling, so that it is shielded from Lenore Road.

- Where dwellings immediately adjoin the corridor, a minimum 2.4-metre high noise wall is to be provided along with Quiet House Packages.

These elements will be considered as the design progresses and prior to subdivision design, along with noise monitoring to calibrate the noise model and predicting to possible double storey dwellings. However, the analysis shows that compliance can be achieved with SPP 5.4. A preliminary noise mitigation plan is provided at Figure 5-1 of **Appendix 11**.

5.11 STAGING

An **Indicative Early Staging Plan** is included at **Figure 9**. This plan shows the proposed initial development staging for the Local Structure Plan area.

Given Precinct 3 abuts established residential housing to the west, the available road connections through or abutting the Local Structure Plan area, such as Elliot Road, Lenore Road, Nicholas Road and Benmuni Road, facilitate an orderly and logical extension of existing development.

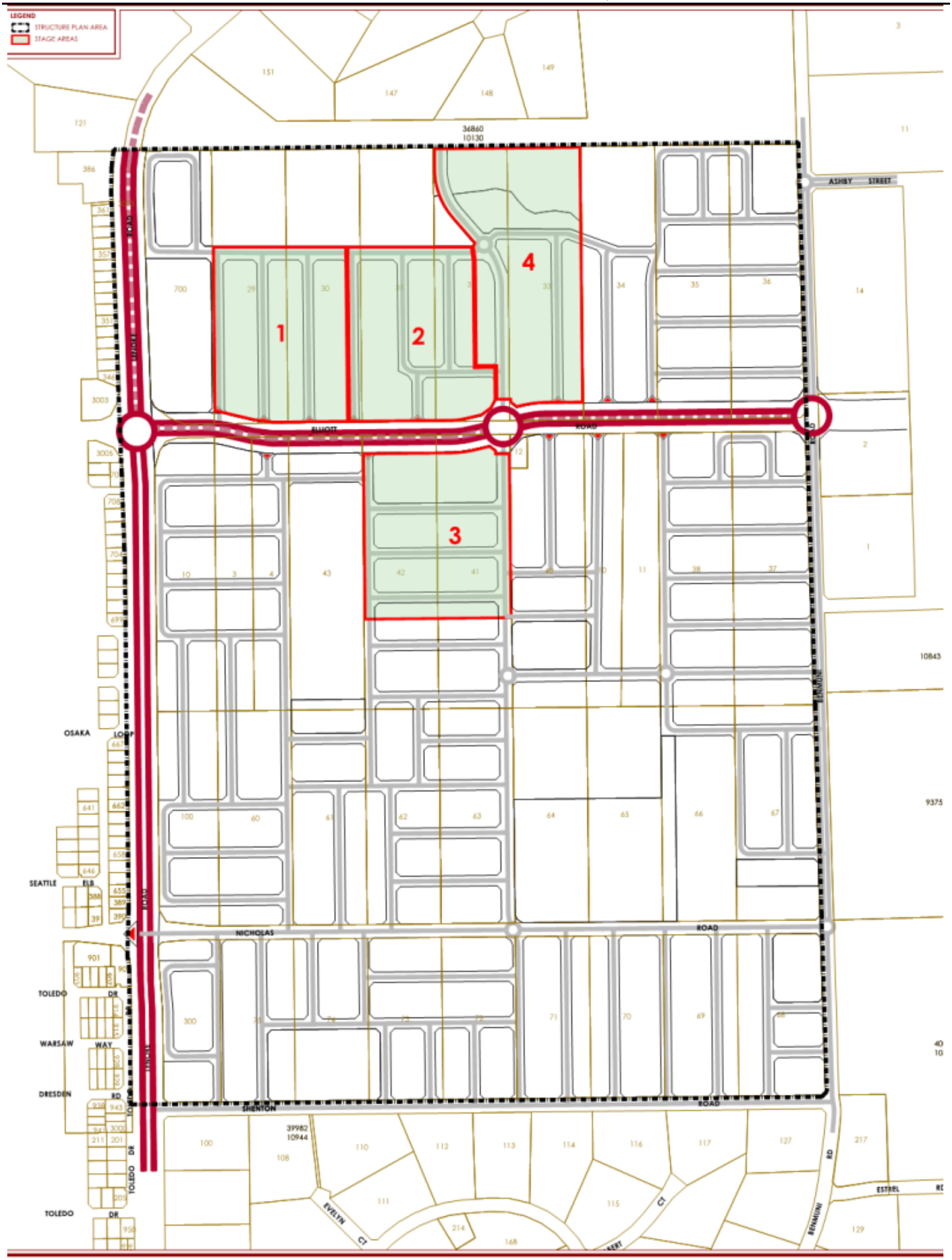
The first stage of development is anticipated to occur on Elliot Road centrally within the Precinct generally within the vicinity of the existing drainage area. This low point within the Precinct is the location of the first wastewater pumping station, it will contain future drainage and it includes a proposed recreation area. This location is also situated at the intersection of Elliot Road and the north-south Neighbourhood Connector road, providing ideal connectivity and access as future stages are developed.

It is anticipated that a total of more than 20 stages of development will be required to deliver the overall Local Structure Plan, spanning an estimated 7 to 10 years.

The **Indicative Early Staging Plan** at **Figure 9** shows the intended location of the initial six stages of development based on servicing and landownership. Given the fragmented land ownership that characterises this area, the location of future stages will be considered as land assembly and development progresses

The timing of development will be guided by the planning approval processes, the ability to secure landholdings through ongoing acquisition and market conditions. It is anticipated development of the initial stages will commence as soon as possible following Local Structure Plan, subdivision and engineering approvals. Subsequent stages will then follow based on market demand.

Development will be progressed in a manner that minimises impacts on residents.


LEGEND
STRUCTURE PLAN AREA
STAGE AREAS
1
2
3
4
ELLIOT ROAD
NICHOLAS ROAD
ASHBY STREET
OSAKA LOOP
SEATTLE ELB
TOLEDO DR
WARSAW WAY
DRESDEN RD
TOLEDO DR
SHENTON ROAD
EVELYN CT
KENT CT
BENHUNI RD
ESTREL RD
All areas and dimensions are subject to survey, engineering and detailed design and may change without notice.
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NORTH
SCALE 1:5,000 (A3)
FIGURE 9. INDICATIVE EARLY STAGING PLAN
PRECINCT 3 - ELLIOT ROAD
EAST WANNEROO
CITY OF WANNEROO

5.12 DEVELOPER CONTRIBUTION ARRANGEMENTS

The City of Wanneroo and WAPC have commenced preparation of a District Developer Contribution Plan (DCP) for the East Wanneroo DSP Area, inclusive of Precinct 3.

The Draft District DCP was initially intended to be released for public comment in two parts, as follows:

- Part 1, being Amendment No. 214 to District Planning Scheme No. 2 and released for public comment on 20 March 2025 (closing 19 May 2025), relating to infrastructure and land acquisition for regional and district-level infrastructure items, excluding drainage and water management infrastructure requirements; and
- Part 2, to be released in mid-late 2025, relating to the district-level drainage and water management infrastructure requirements.

DPLH planning officers have recently advised that the drainage and water management infrastructure network may be designed and implemented by the Water Corporation as a 'groundwater management scheme' under a separate (non-DCP) mechanism. At the time of submitting this LSP, this was still unresolved.

With the proponent having assembled significant holdings within Precinct 3, the need for a Local DCP has not yet been determined. Discussions with approval agencies on this element of infrastructure provision will occur during the assessment process.

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5.13 OTHER REQUIREMENTS

TABLE 10: OTHER REQUIREMENTS				
APPENDIX NO.	DOCUMENT TITLE	APPROVAL REQUIRED	APPROVAL AGENCY	APPROVAL STATUS

6. CONCLUSION

This Local Structure Plan for Precinct 3 – Elliot Road has been prepared in accordance with the planning framework adopted by the City of Wanneroo and the Western Australian Planning Commission for the East Wanneroo growth corridor and reflects the advice received during consultation with various approval agencies.

The Local Structure Plan provides for development of an appropriate urban form in accordance with the outcomes of a comprehensive technical analysis comprising:

- Town planning & urban design
- Civil engineering design and infrastructure servicing
- Transport impact assessment
- Environmental assessment and management
- Local water management strategy
- Bushfire management plan
- Transport noise assessment
- Landscape Masterplan
- Retail Needs Assessment and Net Benefit Test

This Local Structure Plan is thus considered to provide a robust and well considered framework to guide the ongoing development of Precinct 3 – Elliot Road.

The Local Structure Plan has been prepared in accordance with the WA Planning Manual *Guidance for Structure Plans* (August 2023), City of Wanneroo Local Planning Policy 5.3 (LPP 5.3) and generally follows the guidance provided by the East Wanneroo District Structure Plan.

The Local Structure Plan is a key component of the East Wanneroo growth corridor, providing essential major infrastructure (such as the Waste Water Pumping Station) to support development both within and adjacent to Precinct 3. It also represents a logical extension of the existing urban development west of Lenore Road and is located approximately 2 kilometres south of the Wanneroo Town Centre.

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The Local Structure Plan has been prepared in close consultation with the Department of Planning, Lands and Heritage, City of Wanneroo, Department of Education, Water Corporation and other key approval agencies.

Proposals have also been informed from meetings with long term local residents who have provided their local area knowledge and context, telling stories of historical use and enjoyment of the land and the Wanneroo area generally.

The proposals contained herein have been carefully considered to reflect existing sense of place, respect heritage, and embrace environmental assets to create a residential community with high amenity.

The Local Structure Plan has been carefully designed to generally reflect the guidance of the East Wanneroo District Structure Plan, including protecting those areas shown as 'Bushforever' under the Metropolitan Region Scheme, including a Primary School and Neighbourhood Centre and providing for the upgrading of Elliot Road into an Integrator Arterial Road/Rapid Transit Route. The Local Structure Plan also incorporates the Neighbourhood Playing Fields required under the City of Wanneroo Community Facilities Plan.

Development is proposed with regularly shaped north-south and east-west street blocks to maximise solar efficiency, with the layout respecting existing property and ownership boundaries where possible.

Varying residential densities have been shown in accordance with the intent of the DSP (particularly within proximity to the future District Centre in Precinct 12) and performance criteria included to encourage varying housing typologies.

Public open space has been provided to meet local needs and to also protect local environmental features (primary bushland). The Local Structure Plan also interfaces appropriately with Shenton Road at its southern boundary.

Importantly, approval of the Local Structure Plan for Precinct 3 presents an opportunity for the expedited progression of residential development within the East Wanneroo urban corridor due to several favourable factors:

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Strategic Alignment

The whole of Precinct 3 is identified within the East Wanneroo District Structure Plan (DSP) as a short-term 'Stage 1 2021 - 2031' development area, supporting early activation and streamlined approval pathways. This is particularly important given potential delays to Stage 2 areas due to ongoing refinement of the groundwater management scheme.

Servicing Readiness

The precinct benefits from its proximity to existing infrastructure, allowing for the straightforward extension of services and reducing lead times for delivery.

Affordable Housing Outcomes

The Local Structure Plan facilitates the timely provision of affordable and accessible residential lots, aligning with broader government and community housing objectives.

Non-Contingent Delivery

Unlike other Precincts within the East Wanneroo District Structure Plan area, Precinct 3 is not reliant on unresolved matters, such as the groundwater management scheme, enabling its progression as a stand-alone development opportunity.

These factors collectively support a prioritised assessment and approval process for the LSP.

Approval of this carefully resolved Local Structure Plan in one of East Wanneroo's least complex Stage 1 precincts is now sought.

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APPENDIX 1:
LEGAL DESCRIPTION AND OWNERSHIP

APPENDIX 2:
ENVIRONMENTAL ASSESSMENT REPORT

APPENDIX 3:
BUSHFIRE MANAGEMENT PLAN

APPENDIX 4:
LOCAL SENSE OF PLACE STATEMENT

APPENDIX 5:
PUBLIC OPEN SPACE SCHEDULE

APPENDIX 6:
LANDSCAPE MASTERPLAN

APPENDIX 7:
TRANSPORT IMPACT ASSESSMENT

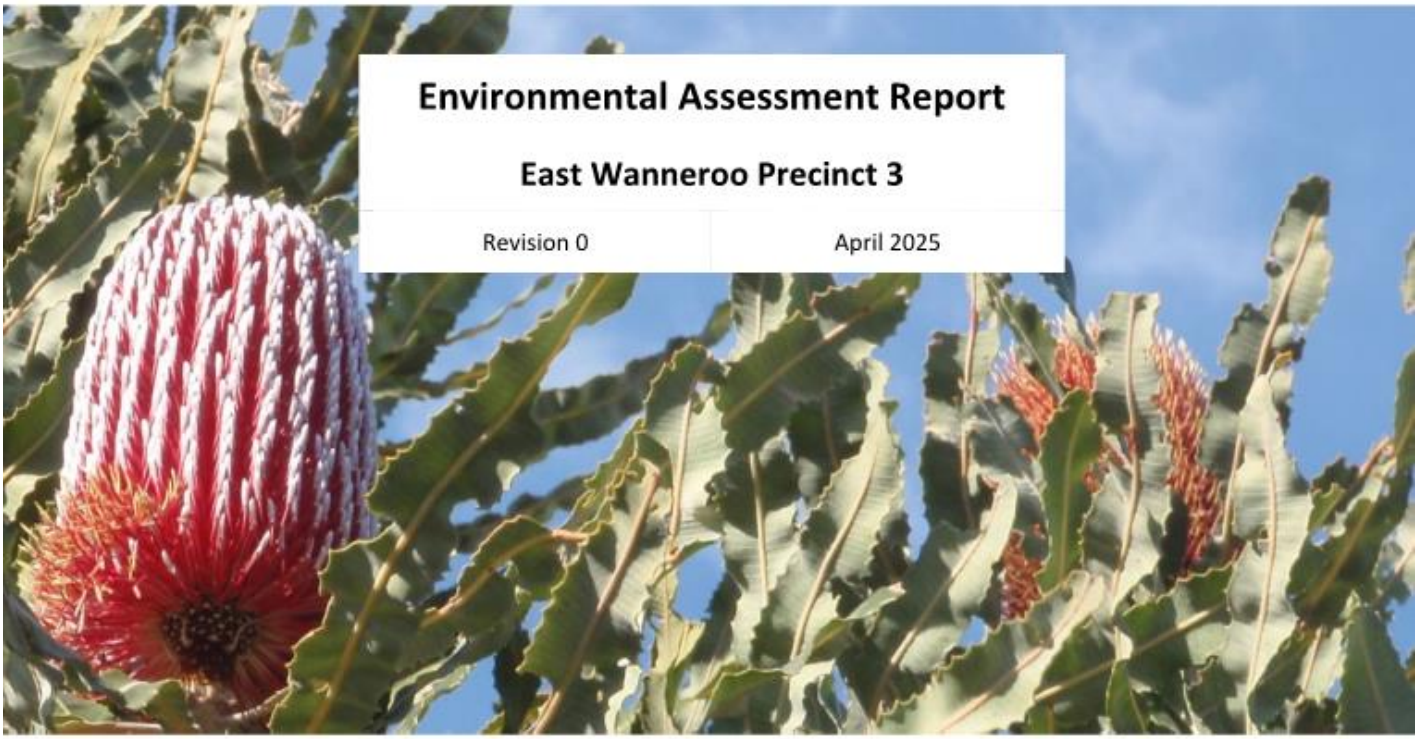
APPENDIX 8:
LOCAL WATER MANAGEMENT STRATEGY

APPENDIX 9:
RETAIL NEEDS ASSESSMENT AND NET BENEFIT TEST

APPENDIX 10:
ENGINEERING SERVICING REPORT

APPENDIX 11:
TRANSPORTATION NOISE ASSESSMENT

COTERRA
ENVIRONMENT



Environmental Assessment Report

East Wanneroo Precinct 3

Revision 0	April 2025

CALIBRE | COMMITMENT | COLLABORATION

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Executive Summary

The East Wanneroo District Structure Plan (DSP) was prepared by the Western Australian Planning Commission (WAPC) to guide the progressive urbanisation of East Wanneroo, with the DSP extending over approximately 8,300 ha, and divided into 28 precincts (Appendix 1).

Satterley Property Group (Satterley) is progressing structure planning within Precinct 3 (the site), which is located in the southwestern portion of the DSP area and extends over approximately 135 ha (Figure 1). This precinct is proposed to be developed as a suburban neighbourhood and is identified to form part of the DSP Stage 1 development area.

The landholdings within Precinct 3 are currently zoned Urban Deferred and Rural under the Metropolitan Region Scheme (MRS) and Rural under the City of Wanneroo District Planning Scheme No 2 (DPLH, 2025a).

A Local Structure Plan (LSP) has been prepared by Burgess Design Group which presents the development layout for the landholdings within Precinct 3 and addresses the requirements of the East Wanneroo DSP (Appendix 2).

Environmental factors which have been identified to be relevant to the environmental impact assessment of the LSP include:

- Terrestrial Environmental Quality
- Inland Waters
- Flora and Vegetation
- Terrestrial Fauna
- Social Surroundings.

Other environmental matters relevant to the proposal include:

- Bushfire.

Key Environmental Values of the Site

Desktop review and site surveys have identified that the site has the following key environmental values:

Terrestrial Environmental Quality

- Topography at the site ranges between 52 metres Australian Height Datum (m AHD) in the northeastern corner to 84 mAHD to the southwestern corner of the site.
- Soils within the site are mapped as comprising Sand derived from Tamala Limestone (Unit: S7).
- Soils at the site are predominantly identified as posing no known Acid Sulfate Soils (ASS) risk. A small area within the north eastern corner of the site is mapped as overlapping a moderate to high ASS risk area.
- The site is mapped by the City of Wanneroo as having a Low cave risk.
- No known contaminated sites are located within the site or in the surrounding area.
- Precinct 3 is a rural area which is used for purposes including rural lifestyle living, market gardening, equestrian activities, etc. There is potential that soil and/or groundwater quality could be impacted by current and historical land uses.
- Development of the site can be managed to ensure potential contamination is appropriately assessed and remediated, if required, prior to development. Potential dust generation can be managed through the preparation and implementation of Construction Environmental Management Plan or similar, which will include best practice construction techniques and management practices.

Inland Waters

- Regional mapping by the Department of Water and Environmental Regulation (DWER) indicates that the maximum groundwater level in this location is ranges from approximately 40 to 42 mAHD, with superficial aquifer groundwater flow direction being westerly towards the coast (DWER, 2024a).
- Based on topographic elevations this indicates that depth to groundwater varies from approximately 10m below ground level (BGL) to 44 mBGL (DWER, 2024a).
- There are no Public Drinking Water Source Areas (PDWSAs) located within the site.
- There are no surface water features present within the site.
- There are no geomorphic wetlands mapped within the site, with the closest wetland being located approximately 280 m east of the site.
- In comparison to the current rural land uses, implementation of the LSP to facilitate future urban development will result in the following predicted outcomes for inland waters:
    - The existing conductions which are conducive the infiltration through the sandy subsurface profile, together with a large separation distance to groundwater will remain
    - Reduction in nutrient inputs and groundwater abstraction across the site
    - Avoidance of impacts to groundwater quality
    - Stormwater can be managed and infiltrated onsite and can operate independently of other surrounding East Wanneroo development precincts.

Flora and Vegetation

- The site is located within the mapped extent of vegetation association's Spearwood 6 and Bassendean 949, and Karrakatta Complex- Central and South. The site contains approximately 32.9 ha of native vegetation.
- The detailed flora and vegetation survey undertaken in spring 2024 by Ecoscape (2025) for the site identified two vegetation types:
    - BaLOF: *Banksia attenuata*, *Allocasuarina fraseriana* and *Banksia menziesii* low open forest, occupying 14.8%
    - EmmLW: *Eucalyptus marginata* subsp. *marginata*, *Banksia prionotes* and *Allocasuarina fraseriana* low woodland, occupying 9.6%
- The condition of the vegetation ranged from Completely Degraded to Very Good condition, with the majority of native vegetation in Good or Very Good condition.
- No threatened flora species listed under the *Biodiversity Conservation Act 2016* (BC Act) and/or under the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act) were recorded during the field survey.
- One Priority 2 flora, *Poranthera moorokatta*, was recorded during the field survey.
- The floristic community type (FCT) analysis indicated that both vegetation types are most likely FCT 28 - Spearwood *Banksia attenuata* or *B. attenuata*-Eucalyptus woodlands.
- One federally listed Threatened Ecological Community (TEC), the Banksia Woodlands of the Swan Coastal Plain ecological community (Banksia WL SCP ecological community) was mapped within site, totalling 17.9 ha (13.3%).
- The LSP proposes to retain 13.0 ha (39.5%) of native vegetation within Parks and Recreation reserve, which comprises 5.8 ha of the EmmLW vegetation unit and 7.2 ha of the BaLOF vegetation unit. The

portion of this vegetation which is representative of the Banksia WL SCP ecological community is 9.4 ha (52.2%).

- Areas of retained vegetation in identified Parks and Recreation reserve will be subject to vegetation management, including weed control and targeted revegetation. The details of these works will be outlined within a Conservation Area Management Plan, or similar, proposed to be prepared at subdivision stage
- Based on the extent of clearing of Banksia WL SCP vegetation onsite, development proposals would be referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act referral review and assessment process will allow for further assessment of impacts to Banksia WL SCP vegetation and for environmental offsets to be provide, where required.

Fauna and Habitat

- The fauna survey undertaken in February 2025 by Ecoscape (2025) recorded the following conservation listed species:
    - Carnaby's Cockatoo (*Zanda latirostris;* Endangered under the BC Act and EPBC Act)
    - Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso;* Vulnerable under the BC Act and EPBC Act)
    - Quenda (*Isoodon fusciventer;* Priority 4 as listed by the DBCA).
- One fauna habitat occurs within the survey area, described as Banksia Woodland (occupying 24.4% or 32.9 ha) with the remainder not native vegetation or cleared for rural/rural residential land uses.
- The Banksia Woodland habitat type is high-quality foraging habitat for Carnaby's Cockatoos and moderate quality foraging habitat for Forest Red-tailed Black Cockatoos, according to the Bamford scale, and high quality habitat for both species according to the Commonwealth Black Cockatoo referral guidelines habitat scoring tool.
- 95 Black Cockatoo habitat trees were recorded to have suitable diameters (>500 mm), of which 84 were Jarah (*Eucalyptus marginata*), 5 were Tuart (*Eucalyptus gomphocephala*), 7 were dead and 2 were other.
- No trees were identified within the site as having hollows with active nests or showing previous use as a Black Cockatoo nest.
- One Jarrah was recorded within the eastern extent of Lot 40 as having potentially suitable hollows without evidence of use.
- 30 trees were classified as trees with large hollows that weren't suitable for Black Cockatoos and 64 as trees currently without large hollows.
- No known roost locations are registered within the site, with the closest recorded roost being approximately 530 m east of the site.
- The LSP proposed to retain approximately 13.0 ha (39.5%) of Black Cockatoo habitat within Parks and Recreation, which comprise of:
    - high value Carnaby's Cockatoo foraging habitat
    - moderate value Forest Red-tailed Black Cockatoo foraging habitat
    - 38 Black Cockatoo habitat trees with suitable diameter.
- Areas of retained fauna and Black Cockatoo habitat in identified Parks and Recreation reserve, will be subject to vegetation management including weed control and targeted revegetation. The details of these works will be outlined within a Conservation Area Management Plan, or similar, proposed to be prepared at subdivision stage.

- A Vegetation and Fauna Management Plan will be prepared and implemented at subdivision stage to prevent damage to fauna habitats being retained, and ensure fauna is appropriately trapped and relocate. It will also include protocols for dealing with displaced/injured animals during clearing and subdivisional works.
- Future development proposals proposing to clear Black Cockatoo habitat will require referral under the Commonwealth EBPC Act. The EPBC Act referral and assessment process will require further evaluation of impacts to Black Cockatoo and for environmental offsets to be provided, where required.

Social Surroundings

- There are no known registered Aboriginal cultural heritage sites or other heritage places within or in proximity to the site.
- There are no known European heritage sites within the site.
- The Department of Mines, Industry, Regulation and Safety (DMIRS) GeoView database does not indicate the presence of any SPP 2.4 Basic Raw Materials extraction sites or exclusions areas within the landholdings.
- The site is not mapped within any strategic freight and/or major traffic routes as identified by State Planning Policy 5.4 Road and Rail Noise.
- Market gardening and other intensive primary industry activities exist with the site and surrounding areas. The interface between these land uses and future development need to take into consideration how these land uses are separated.
- Preparation and implementation of a Construction Environmental Management Plan or similar for future subdivisional works, which will include key obligations under the *Aboriginal Heritage Act 1972* (AH Act) regarding potential finds of cultural significance, and dust management requirements to prevent loss of surface soils and soil stabilisation requirements.

Local Structure Plan

A Local Structure Plan has been prepared for Precinct 3 (Appendix 1). The Local Structure Plan will inform future subdivision plans through detailed engineering and planning design phases, as the environmental and planning approvals processes progress. Key features of the Local Structure Plan include:

- Retention of 13.0 ha of vegetation within Parks and Recreation reserves
- Development of 19.9 ha of land within Urban Development and Public Open Space areas
- Retention of Banksia Woodlands TEC
- Retention of Black Cockatoo foraging habitat and habitat trees.

Future Actions

To ensure the detailed project design and implementation achieves appropriate environmental outcomes, the following reports and management plans will be prepared at future subdivision and/or development stages:

- Urban Water Management Plan(s)
- Bushfire Management Plan(s)
- Conservation Area Management Plan(s)
- Vegetation and Fauna Management Plan(s)
- Construction Environmental Management Plan
- ASS Assessment and Dewatering Management Plan, if required

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1 Introduction

1.1 Background

The East Wanneroo District Structure Plan (DSP) was prepared by the Western Australian Planning Commission (WAPC) to guide the progressive urbanisation of East Wanneroo, with the DSP extending over approximately 8,300 ha, and divided into 28 precincts (Appendix 1).

Satterley Property Group (Satterley) is progressing structure planning within Precinct 3 (the site), which is located in the southwestern portion of the DSP area and extends over approximately 135 ha (Figure 1). Details regarding the landholdings within this precinct are provided in Table 1-1. This precinct is proposed to be developed as a suburban neighbourhood and is identified to form part of the DSP Stage 1 development area.

The landholdings within Precinct 3 are currently zoned Urban Deferred and Rural under the Metropolitan Region Scheme (MRS) and Rural under the City of Wanneroo District Planning Scheme No 2 (DPLH, 2025a).

A Local Structure Plan (LSP) has been prepared by Burgess Design Group which presents the development layout for the landholdings within Precinct 3 and addresses the requirements of the East Wanneroo DSP (Appendix 2).

Table 1-1: Lot identification details

Lot Details	Certificate of Title	Address	Area (ha) [approximate]
Lot 700 Elliott Road	2779/365	171 Elliott Road, Wanneroo	3.828
Lot 29 Elliott Road	1174/500	179 Elliott Road, Wanneroo	4.371
Lot 30 Elliott Road	36/98A	191 Elliott Road, Wanneroo	4.371
Lot 31 Elliott Road	36/99A, 1652/776	207 Elliott Road, Wanneroo	4.371
Lot 32 Elliott Road	1164/832	215 Elliott Road, Wanneroo	4.371
Lot 33 Elliott Road	1168/406	223 Elliott Road, Wanneroo	4.371
Lot 34 Elliott Road	1464/818	239 Elliott Road, Wanneroo	4.371
Lot 35 Elliott Road	1274/190	249 Elliott Road, Wanneroo	4.371
Lot 36 Elliott Road	1274/191	259 Elliott Road, Wanneroo	4.171
Lot 37 Benmuni Road	1158/744	98 Benmuni Road, Wanneroo	4.504
Lot 38 Elliott Road	1934/287	248 Elliott Road, Wanneroo	4.371
Lot 11 Elliott Road	1438/245	238 Elliott Road, Wanneroo	2.185
Lot 10 Elliott Road	1438/244	232 Elliott Road, Wanneroo	2.185
Lot 40 Elliott Road	1335/979	232 Elliott Road, Wanneroo	4.246
Lot 12 Elliott Road	2619/498	224 Elliott Road, Wanneroo	0.125
Lot 41 Elliott Road	2/41A	220 Elliott Road, Wanneroo	4.371
Lot 42 Elliott Road	1277/946	220 Elliott Road, Wanneroo	4.371
Lot 43 Elliott Road	1158/745	194 Elliott Road, Wanneroo	4.371
Lot 4 Elliott Road	1834/1000	186 Elliott Road, Wanneroo	2.186
Lot 3 Elliott Road	1226/524	178 Elliott Road, Wanneroo	2.186
Lot 10 Elliott Road	2759/533	176 Elliott Road, Wanneroo	3.506
Lot 100 Nicholas Road	2760/986	96 Nicholas Road, Wanneroo	2.748
Lot 60 Nicholas Road	1237/861	84 Nicholas Road, Wanneroo	3.436

Lot Details	Certificate of Title	Address	Area (ha) [approximate]
Lot 61 Nicholas Road	1250/943	78 Nicholas Road, Wanneroo	3.436
Lot 62 Nicholas Road	1205/703	62 Nicholas Road, Wanneroo	3.436
Lot 63 Nicholas Road	1237/860	50 Nicholas Road, Wanneroo	3.436
Lot 64 Nicholas Road	1308/931	40 Nicholas Road, Wanneroo	3.436
Lot 65 Nicholas Road	1785/655	30 Nicholas Road, Wanneroo	3.436
Lot 66 Nicholas Road	1225/717	18 Nicholas Road, Wanneroo	3.436
Lot 67 Nicholas Road	1254/578	8 Nicholas Road, Wanneroo	3.762
Lot 68 Nicholas Road	1282/701	7 Nicholas Road, Wanneroo	2.965
Lot 69 Nicholas Road	1827/427	19 Nicholas Road, Wanneroo	2.585
Lot 70 Nicholas Road	1266/118	31 Nicholas Road, Wanneroo	2.586
Lot 71 Nicholas Road	1897/286	39 Nicholas Road, Wanneroo	2.586
Lot 72 Nicholas Road	1639/376	51 Nicholas Road, Wanneroo	2.587
Lot 73 Nicholas Road	2063/354	61 Nicholas Road, Wanneroo	2.588
Lot 74 Nicholas Road	1236/913	73 Nicholas Road, Wanneroo	2.588
Lot 75 Nicholas Road	1299/865	87 Nicholas Road, Wanneroo	2.589
Lot 300 Lenore Road	2762/907	145 Lenore Road, Wanneroo	2.050

1.2 Purpose and scope of this report

This Environmental Assessment Report (EAR) was prepared to accompany the LSP documentation package and address:

- the environmental values of the site
- potential environmental impacts associated with the proposed development
- the design, management and mitigation strategies proposed to address these impacts.

2 Planning and Environmental Assessment Context

2.1 East Wanneroo District Structure Plan

In response to the *North-West Sub-Regional Planning Framework 2018*, the East Wanneroo DSP was developed to guide the progressive urbanisation of the East Wanneroo area (WAPC 2021). The DSP was finalised in July 2021 and approved by the Minister for Planning in August 2021.

The DSP area includes a mix of mainly rural land uses such as market gardens, equestrian activities and rural lifestyle properties surrounding regional parks, state forests and wetlands, many of which have significant environmental values (WAPC, 2021a). Balanced with the elements required to create functional and attractive neighbourhoods that are serviced by high schools, activity centres and future employment opportunities, the DSP seeks to protect the natural, historical and cultural values within the East Wanneroo area (WAPC, 2021a).

The DSP identifies that Precinct 3 is to contain the following land uses:

- Suburban neighbourhood
- Parklands
- Parklands (subject to confirmation)
- Parkland link
- Centre
- Transport corridor
- Service corridor

With regard to the areas designated as Parklands within the DSP, these include the following (WAPC, 2021a):

- Parks and Recreation reserves under the MRS
- Local reserves vested within the City of Wanneroo
- Conservation Category Wetlands.

In addition to the existing reserves listed above, the DSP proposes the creation of new Parks and Recreation reserves from the following two categories (WAPC, 2021a):

1. **New Parks and Recreation reserves**: As the responsible authority the WAPC will prepare and initiate the MRS amendments to create these new reserves
2. **Potential Parks and Recreation reserves subject to confirmation**: Proponents undertaking LSPs for any precincts containing these potential reserves will be responsible for carrying out detailed flora and fauna surveys to confirm the appropriate configuration of these new reserves.

The DSP has identified both of the above categories within Precinct 3, as well as one portion of Bush Forever Site 327 (Lot 66 and Part Lot 67 Nicholas Road) which has been identified as suitable for a negotiated planning outcome in accordance with WAPCs (2008) State Planning Policy (SPP) 2.8 – Bushland Policy for the Perth Metropolitan Region.

2.2 Zonings and Reserves

2.2.1 Metropolitan Region Scheme

As a first step towards the urbanisation of East Wanneroo, the WAPC initiated MRS amendment 1308/41 to rezone 2,099.80 ha in the East Wanneroo DSP area from Rural to Urban Deferred. As part of this MRS

amendment, the majority of Precinct 3 was zoned Urban Deferred under the Metropolitan Region Scheme (MRS) with some vegetated areas remaining within the Rural zone. The areas zoned Rural align with areas designated as Parklands and Parklands (subject to confirmation) under the DSP.

The WAPC will consider lifting of urban deferment for Precinct 3 in line with their Lifting of Urban Deferment Guidelines and the DSP which requires preparation of a LSP, confirmation that water and wastewater services can be provided and any other requirements specific to Precinct 3 (as set out in the DSP).

2.2.2 City of Wanneroo District Planning Scheme No. 2

Under the City of Wanneroo District Planning Scheme No. 2 (DPS 2) the site is zoned Rural, and it is expected that a concurrent amendment to rezone Precinct 3 under the City's DPS 2 will take place.

2.3 Land Use Planning Process

The following sets out the land use planning process that will be applied to facilitate future urban development:

- Submit request to lift urban deferment and rezone the site to Urban
- Reserve Part Lots 29, 30, 31, 32, 33, 34, 43, 66 and 67 to Parks and Recreation under the MRS to ensure the most significant environmental values of the site are conserved and retained for the long term.
- Concurrent LPS amendment to rezone the land from Rural to Residential Development under DPS 2.
- LSP to be prepared and approved for Precinct 3 for the urban area.
- Subdivision and development, including addressing any relevant subdivision conditions (e.g. preparation of management plans as conditions of subdivision).

2.4 Precinct 3 Local Structure Plan

The proposed LSP has been developed for Precinct 3 and comprises the following attributes:

- Suburban neighbourhood residential
- Public Open Space
- Parklands Reserve
- Childcare centre
- Primary School
- Group Dwelling.

2.5 Environmental Assessment

2.5.1 State legislation

The *Planning and Development Act 2005* (PD Act) requires all proposed schemes and scheme amendments to be referred to the Environmental Protection Authority (EPA) by the Responsible Authority (in this instance the WAPC) for the scheme. Following referral of a scheme amendment, and in accordance with Section 48A of the *Environmental Protection Act 1986* (EP Act), the EPA will determine whether the referred scheme amendment:

- should not be assessed (with advice and recommendations potentially provided)
- should be assessed (i.e. environmental review of the scheme with instructions issued by the EPA concerning the scope and content of the environmental review)
- is by its nature incapable of being made environmentally acceptable.

MRS amendment 1308/41 was referred to the EPA for its consideration and in February 2016, the EPA determined that the scheme amendment should not be assessed under Part IV of the EP Act.

2.5.2 Federal legislation

Any proposed action which is likely to result in significant impacts to Matters of National Environmental Significance (MNES) listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is required to be referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) to determine whether it requires assessment under the EPBC Act.

The timing of EPBC Act referrals is not directly linked to the state planning processes. In an urban development context, EPBC Act referrals are typically undertaken once detailed design been undertaken and the development layout has been determined (for example, at the LSP stage).

2.6 Associated Technical Reports

The following technical reports have been prepared to support the LSP. Key information from these documents is referenced in this EAR where relevant:

- Local Water Management Strategy (Hyd2o, 2025)
- Bushfire Management Plan (Emerge Associates, 2025)

3 Terrestrial Environmental Quality

3.1 Key Policies and Guidance

Relevant policy and guidance documents for terrestrial environmental quality, which have been used to assess potential impacts, include:

- Environmental Factor Guideline – Terrestrial Environmental Quality (EPA, 2016e)
- Acid Sulphate Soils Planning Guidelines (WAPC, 2008)
- Managing Urban Development in Acid Sulfate Soil Areas (DER, 2015a)
- Identification and Investigation of Acid Sulfate Soils and Acidic Landscapes (DER, 2015b)
- Treatment and Management of Soil and Water in Acid Sulfate Soil Landscapes (DER, 2015c)
- Identification, Reporting and Classification of Contaminated Sites in Western Australia (DWER, 2025)
- Assessment and Management of Contaminated Sites (DWER, 2021).

3.2 Receiving Environment

3.2.1 Topography

Topography at the site ranges between 52 metres Australian Height Datum (mAHD) in the northeastern corner to 84 mAHD to the southwestern corner of the site (Landgate, 2024b) (Figure 3).

3.2.2 Geology and Soils

Soils within the site are mapped as comprising Sand derived from Tamala Limestone (Unit: S7), which is described as 'Sand - pale and olive yellow, medium to coarse-grained, sub-angular quartz with a trace of feldspar, moderately sorted, of residual origin' (Gozzard, 1982) (Figure 3). A small portion of the site (<0.1% of the site area) is mapped as Peaty Clay (Unit: Cps) which is described as 'dark grey and black soft variable organic content some quartz sand in places of lacustrine origin' (Gozzard, 1982).

The Department of Primary Industries and Regional Development (DPIRD) soil landscape mapping identifies that the site comprises the Karrakatta Sand Yellow Phase (DPIRD, 2024; Landgate, 2024a). This system is described in Table 3-1. Table 3-2 lists the land degradation risk categories for this land system mapping unit.

Table 3-1: Land Systems

Mapping Units	Land System	Description
211Sp__Ky	Karrakatta Sand Yellow phase	Low hilly to gently undulating terrain. Yellow sand over limestone at 1-2 m. Banksia spp. woodland with scattered emergent *Eucalyptus gomphocephala* and *Eucalyptus marginata* and a dense shrub layer

Source: DPIRD, 2024; Landgate, 2024

Table 3-2: Land degradation risk categories

Land Degradation Risk Category	211Sp__Ky
Water Erosion	<3% of map unit has a very high to extreme hazard
Wind Erosion	>70% of map unit has a high to extreme hazard
Flood Hazard	<3% of the map unit has a moderate to high hazard
Salinity Risk	<3% of map unit has a moderate hazard
Waterlogging and Inundation	<3% of map unit has a moderate to very high risk

Source: DPIRD, 2024

Soils at the site are predominantly identified as posing no known Acid Sulfate Soils (ASS) risk. A small area within the north eastern corner if the site (Unit Cps) is mapped as overlapping a moderate to high ASS risk area (Landgate, 2024b) (Figure 3).

The site is mapped by the City of Wanneroo as having a Low cave risk (CoW, 2025).

3.2.3 Land Use

Precinct 3 is a rural area which is used for purposes including rural lifestyle living, market gardening, equestrian activities, place of worship, as well as containing areas of native vegetation (Figure 2). The site is not connected to the Water Corporation sewer network and instead, the existing premises are serviced by septic tanks or Alternative Treatment Units.

Surrounding land uses include:

- Hocking residential area to the west
- Benmuni Park Parks and Recreation reserve to the immediate north
- Rural residential landholdings to the north (beyond the Parks and Recreation reserve) and to the south
- Rural landholdings to the north east
- Nanovich Park Parks and Recreation reserve to the south east.

Review of historical aerial photography (Landgate, 2025b) indicates the following general historical land uses across the site:

- Subdivision of individual lots and clearing of portions of the site commenced prior to 1965. Market gardening and orchard establishment has also commenced on a number of lots.
- Further vegetation clearing and development of the site for predominantly agricultural purposes (including market gardening and potentially poultry farming) continued between 1965 and 2000s, with these land uses continuing to present time on many of the lots.
- The St Mark and St George Coptic Orthodox Church was constructed on Lot 11 Elliot Road in the mid-2000s.

3.2.4 Potential Contamination

A search of the Department of Water and Environmental Regulation (DWER) contaminated sites database did not identify the presence of known contaminated sites within or immediately surrounding Precinct 3 (DWER, 2024b).

The DWER guidance for assessment and management of contaminated sites (DWER, 2021) identifies the land uses which have the potential to result in contamination of the soil or underlying groundwater. Examples of land uses which may be relevant to the site include:

- Asbestos products, manufacture, use or disposal
- Fertiliser manufacture or storage
- Intensive agriculture
- Market gardens, orchards, poly tunnels, plant nurseries and viticulture.

Based on the above, there is potential that soil and/or groundwater quality could be impacted by current and historical land uses.

3.3 Potential Impact Identification and Assessment

3.3.1 Potential Contamination

It is possible that soil or groundwater contamination may have been impacted by current or historical land uses undertaken onsite.

Initial investigations relating to potential contamination have commenced on a number of lots across the site with preliminary findings indicating common rural lot conditions are present including evidence of surface rubbish in some locations, localised surface potential Asbestos Containing Material (ACM) presence in some locations and minor concentrations of pesticides being detected in some soils.

Further investigations are proposed in accordance with the DWER Contaminated Sites Guideline for 'Assessment and management of contaminated sites' (DWER, 2021) at the subdivision stage of the project.

Future site contractors will also be provided with an unexpected finds procedure which will guide notification and management requirements should any areas or sources of potential contamination be identified during the site works program that have not been previously uncovered.

3.3.2 Acid Sulfate Soils

As noted above, the site is not mapped as posing an ASS risk. There is a small area of moderate to high risk ASS mapped generally north of the site, with a small intrusion into Lots 35 and 36 Elliot Road. Table 3-3 outlines the ASS investigation trigger criteria as provided by DWER (DER, 2015b).

Table 3-3: ASS Investigation Trigger Criteria Assessment

Criteria	Comment
Acid sulfate soil disturbing subdivision or development that is subject to conditional approval requiring the investigation and management of acid sulfate soils	No subdivision or development approvals have been granted for Precinct 3 at this time.
Soil or sediment disturbance of 100 m3 or more in an area depicted on an ASS risk map as Class I 'high to moderate risk of ASS occurring within 3 m of natural soil surface' (e.g., construction of roads, foundations, installation of underground infrastructure, drainage works, land forming works, dams and aquaculture ponds or sand or gravel extraction)	Unlikely to occur. To be confirmed once engineering designs for this portion of the site are available.
Soil or sediment disturbance of 100 m3 or more with excavation from below the natural water table in an area depicted on an ASS risk map as Class II 'moderate to low risk of ASS occurring within 3m of natural soil surface but high to moderate risk of ASS beyond 3 m of natural soil surface'	Not Class II areas are present onsite.
Lowering of the water table, whether temporary or permanent (e.g., for groundwater abstraction, dewatering, installation of new drainage, modification to existing drainage), in areas depicted in an ASS risk map as Class I 'high to moderate risk of AASS or PASS occurrence' or Class II 'moderate to low risk of AASS or PASS occurrence within 3m of natural soil surface'	Unlikely to occur given separation distance to groundwater in the Class I area is approximately 9m below ground level.
Any dredging operations	No dredging is proposed.
Extractive industry works (e.g., mineral sand mining) in any of the areas listed in Table 1*	No extractive industries works are proposed.
Flood mitigation works, including construction of levees and flood gates, in any of the areas listed in Table 1*	No flood mitigation works are required.

*Source: DER (2015b); *refer to Table 1 in DER (2015b)*

Based on the above, it is unlikely that assessment of ASS will be required for the site.

3.4 Impact Mitigation

The proposed development will manage impacts to terrestrial environmental quality in accordance with the mitigation hierarchy (Table 3-4).

Table 3-4: Terrestrial Environmental Quality Mitigation Hierarchy

Mitigation Hierarchy	Assessment and Proposed Actions
Impact	
Terrestrial Environmental Quality	• Intercepting areas of potential contamination • Potential disturbance to ASS • Potential loss of surface soil through wind erosion
Mitigation Hierarchy	
Avoidance	• Areas of high to moderate risk ASS are limited in size and are not likely to require dewatering or disturbance of >100m^3 of soil.
Minimisation	• Preliminary Site Investigation (PSI) for potential contamination is to be undertaken in accordance with DWER guidance for the site prior to subdivision works commencing. Depending on the results of this investigation and Detailed Site Investigation and remediation works may be undertaken, if required. • An ASS assessment will be undertaken prior to subdivision works commencing if the following is to occur within the mapped Class I area on site: ▪ Soil or sediment disturbance of 100m^3 or more ▪ Lowering of the water table, whether temporary or permanent. • An unexpected finds procedure will be provided to site contractors in the case of potential contamination being identified. • A Construction Environmental Management Plan will be prepared for the site. This will contain, amongst other items, unexpected finds protocol for potential contaminants, dust management requirements to prevent loss of surface soils and soil stabilisation requirements.

3.5 Predicted Outcome

Development of the site can be managed to ensure potential contamination is appropriately assessed and remediated, if required, prior to development. Potential dust generation can be managed through the preparation and implementation of Construction Environmental Management Plan, which will include standard construction techniques and management practices.

The risk of ASS presence/disturbance has been identified to be low.

4 Inland Waters

4.1 Key Policies and Guidance

Relevant policy and guidance documents for inland waters, which have informed site-specific investigations and/or have been used to assess potential impacts, include:

- Environmental Factor Guideline – Inland Waters (EPA, 2018)
- State Planning Policy 2.9 Water Resources (WAPC, 2006) and Draft State Planning Policy 2.9 Planning for Water (DPLH, 2021)
- Better Urban Water Management (WAPC, 2008a)
- Stormwater Management Manual for Western Australia (DWER, 2004)
- Interim: Developing a local water management strategy (DoW, 2008)
- City of Wanneroo local planning policies including:
  - Local Planning Policy 4.4 - Urban Water Management
  - Local Planning Policy 5.3 - East Wanneroo

4.2 Receiving Environment

4.2.1 Groundwater

The site is underlain by the Superficial Swan Aquifer, the confined Leederville aquifer and the confined Yarragadee North aquifer (DWER, 2024b).

Regional mapping by the DWER indicates that the maximum groundwater level in this location ranges from approximately 40 to 42 mAHD (Figure 4), with superficial aquifer groundwater flow direction being westerly towards the coast (DWER, 2024a). Based on topographic elevations this indicates that depth to groundwater varies from approximately 10 m below ground level (BGL) to 44 mBGL (DWER, 2024a).

Groundwater monitoring at the site undertaken between September 2022 and November 2023 by consultant hydrologists Hyd2o indicated that minimum groundwater levels for the site bores were recorded mainly in March 2022 and ranged from 40.78 mAHD to 41.40 mAHD. Maximum groundwater levels were recorded mainly in October 2022 ranging from 41.23 mAHD to 42.13 mAHD (Hyd2o, 2025).

Groundwater availability is currently limited within this area, with the Lake Gnangara subareas of the Perth Superficial Swan aquifer, the Wanneroo confirmed subarea of the Perth Leederville aquifer, and the Wanneroo confined subarea of the Perth-Yarragadee North aquifer all identified to be fully allocated (DWER, 2025)

The following groundwater licences are held for properties within the site (Table 4-1):

Table 4-1: Current Groundwater Licences

Lot Number	Licence Number	Licence Volume
Lot 700 Elliot Road	53795	35,000 kL/year
Lot 29 Elliot Road	96251	12,950 kL/year
Lot 32 Elliot Road	180006	163,150 kL/year
Lot 33 Elliot Road	169281	42,008 kL/year
Lot 34 Elliot Road	76456	4,150 kL/year
Lot 37 Benmuni Road	207394	60,000 kL/year

Lot Number	Licence Number	Licence Volume
Lot 38 Elliot Road	203361	57,650 kL/year
Lot 11 Elliot Road	153256	9,815 kL/year
Lot 10 Elliot Road	107897	10,270 kL/year
Lot 60 Nicholas Road	98646	48,650 kL/year
Lot 61 Nicholas Road	152615	43,400 kL/year
Lot 62 Nicholas Road	66050	5,000 kL/year
Lot 63 Nicholas Road	76617	49,950 kL/year
Lot 65 Nicholas Road	71195	48,000 kL/year
Lot 70 Nicholas Road	168640	6,420 kL/year
Lot 72 Nicholas Road	95232	5,150 kL/year
Lot 73 Nicholas Road	63494	12,575 kL/year

There are no Public Drinking Water Source Areas (PDWSA) located within the site, with the Priority 3 Perth Coastal and Gwelup Underground Water Pollution Control Area located approximately 1.5km west of the site (DWER, 2024a).

4.2.2 Surface water

There are no surface water features present within the site (Landgate, 2024b).

No external surface water catchments drain into the site. All rainfall and surface runoff currently infiltrates through the sandy subsurface profile. Even in major events any diffuse overland flow which may occur in localised areas would be infiltrated on site (Hyd2o, 2025).

4.2.3 Geomorphic Wetlands

There are no geomorphic wetlands mapped within site (Landgate, 2024b), with the closest wetland located approximately 280m to the east of the site (UFI 8105) (Landgate, 2024b).

4.3 Potential Impact Identification and Assessment

The following potential impacts and management actions are identified in relation to inland waters.

4.3.1 Groundwater

Based on the site's large depth to groundwater, development will not require installation of infrastructure to control groundwater levels, and dewatering is unlikely to be required for service installation.

Groundwater quality will be protected through the drainage system design and associated controls as discussed in Section 4.3.2. The development will be connected to the Water Corporation reticulated sewer network which will replace the use of septic tanks onsite which currently occurs.

The proposed change of land use to residential development as well as the removal of market gardens and other horticultural land uses will result in a reduction of nutrient input to the site as discussed in Section 4.3.3.

Although groundwater availability is currently limited in this location, acquisition of groundwater licences will occur as part of the purchase of properties for development ensuring that the water requirements for future Public Open Space areas can be met.

4.3.2 Stormwater drainage design and management

Stormwater management is proposed to be undertaken consistent with DWER water sensitive design practices, via a combination of lot soakwells and street scale infiltration, and biofiltration areas and multiple

use flood storage areas within POS to capture and infiltrate all events on site up to the 1% AEP event (Hyd2o, 2025).

The overall key components of stormwater management of the site are as follows (Hyd2o, 2025):

- Land use types and densities to considerably reduce nutrient application and export relative to existing land use.
- Lots to have soakwells/on-site systems to provide 15mm infiltration of stormwater at source.
- Road runoff to be conveyed using piped drainage, with bottomless manholes used (subject to CoW approval) to reduce bottom end infrastructure requirements.
- Treatment of road runoff within each catchment via specified biofiltration areas for water quality, with POS areas designed to be occasionally inundated for flood management in major events.

Water quality treatment for small events (15mm) is proposed to include the following 9Hyd2o, 2025):

- Non-Structural Controls
  - Planning: Lot product and sizing, POS and storage locations and configuration
  - Landscape: Native plantings and bushland retention, WSUD integration
  - Maintenance: Storage areas, street sweeping manhole education
  - Monitoring: Post development program and performance review
- Structural Controls
  - Catchment Scale Infrastructure: Bioretention areas
  - Local Scale Infrastructure: Soakwells at lot scale, bottomless manholes with roads

Bioretention areas will be sized to retain treat and infiltrate 15mm in accordance with agency requirements. Biofiltration systems will be designed consistent with the Adoption Guidelines for Stormwater Biofiltration Systems (CRC for Water Sensitive Cities, 2015).

With respect to disease vector and nuisance insect management, modelling shows stormwater management areas will have a maximum duration for standing water following small events (<15mm) of less than 6 hours, well within WAPC (2008) requirement of 96 hours (Hyd2o, 2025).

Given the sandy soils and high clearance to groundwater that stormwater can be managed and infiltrated onsite up to the 1% AEP event, and operate fully independently of other precincts and without any cross boundary transfers in or out of the precinct being required (Hyd20, 2025).

4.3.3 Nutrient input and export pre and post development

The UNDO (Urban Nutrient Decision Outcomes) model is a conceptual decision support tool developed by DWER that evaluates nutrient reduction decisions for urban developments on the Swan Coastal Plain. This model has been used to assess nutrient impacts associated with the propsed development (Hyd2o, 2025).

The modelling results indicate a post-development reduction in nutrient export from the site of 60% Total Nitrogen and 59% Total Phosphorus annually compared to modelled pre-development levels is predicted. It is noted that the pre-development nutrient export calculations consider soil types, groundwater gradients, and depth to groundwater. They do not however consider the impact of horticultural use which UNDO doesn't include. As such estimates for the existing land use are therefore likely to be considerably underestimated, therefore the percentage reduction is likely to be higher than noted above (Hyd2o, 2025).

4.3.4 Surface Water and Wetlands

Given that there are no wetlands or surface water features within the site or in close proximity, impacts in relation to this matter is not considered likely.

4.4 Impact Mitigation

The proposed development will manage impacts to inland waters in accordance with the mitigation hierarchy (Table 4-2).

Table 4-2: Inland Waters Mitigation Hierarchy

Mitigation Hierarchy	Assessment and Proposed Actions
Potential Impact	
Inland Waters	• Potential for abstraction of groundwater to result in altered groundwater levels • Potential for stormwater drainage system to allow contaminants to enter groundwater
Mitigation Hierarchy	
Avoidance	• The existing conduction which are conducive the infiltration through the sandy subsurface profile, together with a large separation distance to groundwater will remain • Connection to Water Corporation reticulated sewer network to replace existing septic tanks • Land use types and densities to considerably reduce nutrient application and export relative to existing land use • No wetlands or surface water features are within or in close proximity to the site • With respect to disease vector and nuisance insect management, modelling shows stormwater management areas will have a maximum duration for standing water following small events (<15mm) of less than 6 hours, well within WAPC (2008) requirement of 96 hours. • Stormwater can be managed and infiltrated onsite and can operate independently of other surrounding East Wanneroo development precincts.
Minimisation	• Lots to have soakwells/on-site systems to provide 15mm infiltration of stormwater at source. • Road runoff to be conveyed using piped drainage, with bottomless manholes used (subject to CoW approval) to reduce bottom end infrastructure requirements. • Treatment of road runoff within each catchment via specified biofiltration areas for water quality, with POS areas designed to be occasionally inundated for flood management in major events. Biofiltration systems will be designed consistent with the Adoption Guidelines for Stormwater Biofiltration Systems (CRC for Water Sensitive Cities, 2015). • Non-Structural Controls to be applied in relation to water quality treatment include: ▪ Planning: Lot product and sizing, POS and storage locations and configuration ▪ Landscape: Native plantings and bushland retention, WSUD integration ▪ Maintenance: Storage areas, street sweeping manhole education ▪ Monitoring: Post development program and performance review • Structural Controls to be applied in relation to water quality treatment include: ▪ Catchment Scale Infrastructure: Bioretention areas ▪ Local Scale Infrastructure: Soakwells at lot scale, bottomless manholes with roads

4.5 Predicted Outcome

Implementation of the LSP to facilitate future urban development will result in the following predicted outcomes for inland waters:

- The existing conductions which are conducive the infiltration through the sandy subsurface profile, together with a large separation distance to groundwater will remain
- Reduction in nutrient inputs and groundwater abstraction across the site
- Avoidance of impacts to groundwater quality

- Stormwater can be managed and infiltrated onsite and can operate independently of other surrounding East Wanneroo development precincts.

5 Flora and Vegetation

5.1 Key Policies and Guidance

Relevant policy and guidance documents for vegetation and flora, which have informed site-specific investigations and/or have been used to assess potential impacts, include:

- Environmental Factor Guideline – Flora and Vegetation (EPA ,2016a)
- EPA Guidance Statement No. 33 – Environmental Guidance for Planning and Development (EPA, 2008)
- Environmental Factor Guideline – Flora and Vegetation (EPA ,2016a)
- Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016b)
- State Planning Policy 2.8 Bushland Policy for the Perth Metropolitan Region (WAPC, 2010)
- State Planning Policy 3.7 Planning in Bushfire Prone Areas (WAPC, 2015)
- City of Wanneroo local planning policies including:
  - Local Planning Policy 1.1 - Conservation Reserves
  - Local Planning Policy 4.8 - Tree Preservation Policy
  - Local Planning Policy 5.3 - East Wanneroo
  - City of Wanneroo- Local Biodiversity Plan 2018/19-2023/24 (CoW, 2018)

5.2 Receiving Environment

5.2.1 IBRA Region

The Interim Biogeographic Regionalisation for Australia (IBRA) defines 89 regions based on climate, geology, landforms and characteristic vegetation and fauna (DCCEEW, 2022). The site lies within the Swan Coastal Plain (SWA) IBRA region and, at a finer scale, within the Perth subregion (SWA2).

5.2.1.1 Vegetation Associations

Broad scale mapping of pre-European vegetation within the Perth region was undertaken by Beard (1976) which recorded major categories of plants. Shepherd et al. (2002) reassessed and digitised Beard's mapping Based on this mapping there are a total of 819 vegetation associations mapped across the state.

The site is mapped containing the following broad vegetation association (Landgate, 2024b):

- Spearwood_6: Jarrah, marri and wandoo *Eucalyptus marginata, Corymbia calophylla, E. wandoo*
- Bassendean_949: Other acacia, banksia, peppermint, cypress pine, casuarina, York gum *Acacia* spp., *Banksia* spp., *Agonis flexuosa, Callitris* spp., *Allocasuarina* spp., *Eucalyptus loxophleba*.

The status of Spearwood_6 vegetation association at the state, regional and local level is presented in

Table 5-1. The remnant native vegetation of the Spearwood_6 association within the Swan Coastal Plain bioregion is approximately 23.7%, with approximately 21.9% remaining within the City of Wanneroo.

Table 5-1: Spearwood 6 - Vegetation Statistics

Area	Pre-European extent	Current Extent	% Remaining
Western Australia	56,343 ha	13,36 2ha	23.72 %
Swan Coastal Plain (SCP)	56,343 ha	13,362 ha	23.72 %
SCP sub-region - Perth	56,343 ha	13,362 ha	23.72 %
City of Wanneroo	12,662 ha	2,777 ha	21.94 %

Source: GoWA, 2019a

The status of Bassendean_949 vegetation association at the state, regional and local level is presented in Table 5-2 The remnant native vegetation of the Bassendean_949 association within the Swan Coastal Plain bioregion is approximately 57.3%, with approximately 46.3% remaining within the City of Wanneroo.

Table 5-2 Bassendean 949 Vegetation Statistics

Area	Pre-European extent	Current Extent	% Remaining
Western Australia	218,194 ha	123,104 ha	56.4 %
Swan Coastal Plain (SCP)	209,983 ha	120,288 ha	57.3 %
SCP sub-region - Perth	184,476 ha	104,129 ha	56.5 %
City of Wanneroo	37,138 ha	17,196 ha	46.3 %

Source: GoWA, 2019a

5.2.1.2 Vegetation Complexes

Vegetation at the site is identified to be part of the Karrakatta Complex-Central and South which is described as "Predominantly open forest of *Eucalyptus gomphocephala* (Tuart) - *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri) and woodland of *Eucalyptus marginata* (Jarrah) - *Banksia* species. *Agonis flexuosa* (Peppermint) is co-dominant south of the Capel River" (Heddle et al., 1980).

Approximately 23.5% of the original extent of the Karrakatta Complex-Central and South remains within the Swan Coastal Plain bioregion with approximately 12.9% remaining within the City of Wanneroo (Table 5-3).

Table 5-3 Karrakatta Complex-Central and South

Area	Pre-European Extent (ha)	Current Extent (ha)	% Remaining
Swan Coastal Plain	53,081 ha	12,467 ha	23.5 %
Perth Metropolitan Region	34,597 ha	4,292 ha	12.4 %
City of Wanneroo	10,539 ha	1,359 ha	12.9 %

Source: GoWA, 2019b

The National Objectives and Targets for Biodiversity Conservation 2001-2005 recognises that retention of 30% or more of the pre-clearing extent of each ecological community is necessary if Australia's biological diversity is to be protected (ANECC, 2000). However, State Planning Policy 2.8 – Bushland policy for the Perth Metropolitan Region (WAPC, 2010) and EPA Guidance Statement 33 (EPA, 2008) recognises the Perth Metropolitan Region as a 'constrained area' and establishes a target of 10% retention for vegetation complexes. The Karrakatta Complex – Central and South has greater than 10% remaining within the Swan Coastal Plain, Perth Metropolitan Region and the City of Wanneroo.

5.2.2 Flora and Vegetation Surveys

Flora and vegetation surveys extending over the site include:

- Preliminary Vegetation Assessment in December 2017 to provide reconnaissance survey level information to inform the DSP. This was undertaken by Emerge Associates (2018).
- Detailed Flora and Vegetation Survey with field work undertaken during spring 2022 by PGV Environmental (2023) of targeted sites over eight lots within Precinct 3 (Lots 3, 11, 29, 30, 40, 42 and 43 Elliott Road and Lot 62 Nicholas Road, Wanneroo).
- Detailed Flora and Vegetation Survey with field work undertaken during spring 2024 by Ecoscape for the entire Precinct 3 area (Ecoscape, 2025).

Key information regarding these surveys is summarised below.

5.2.2.1 Preliminary Vegetation Assessment (2017)

This survey was undertaken to collate available desktop information regarding the flora and vegetation characteristics of the DSP area, with targeted field work undertaken to generally verify the results, where possible. The survey included undertaking targeted investigations to identify vegetation potentially representative of Floristic Community Type 20a which is listed as a Threatened Ecological Community (TEC) under the *Biodiversity Conservation Act 2016* (BC Act) (Emerge Associates, 2018).

Field work for the survey was undertaken between 5-8 December 2017. This included rapid assessment at selected field survey locations. Locations in proximity to Precinct 3 include sites 47, 48, 49, 52 and 53 as shown on Plate 5-1. It is noted that where a sample point was located within public land the botanist could access the vegetation, whereas for sample points in private land the survey was completed from the road reserve (Emerge Associates, 2018).

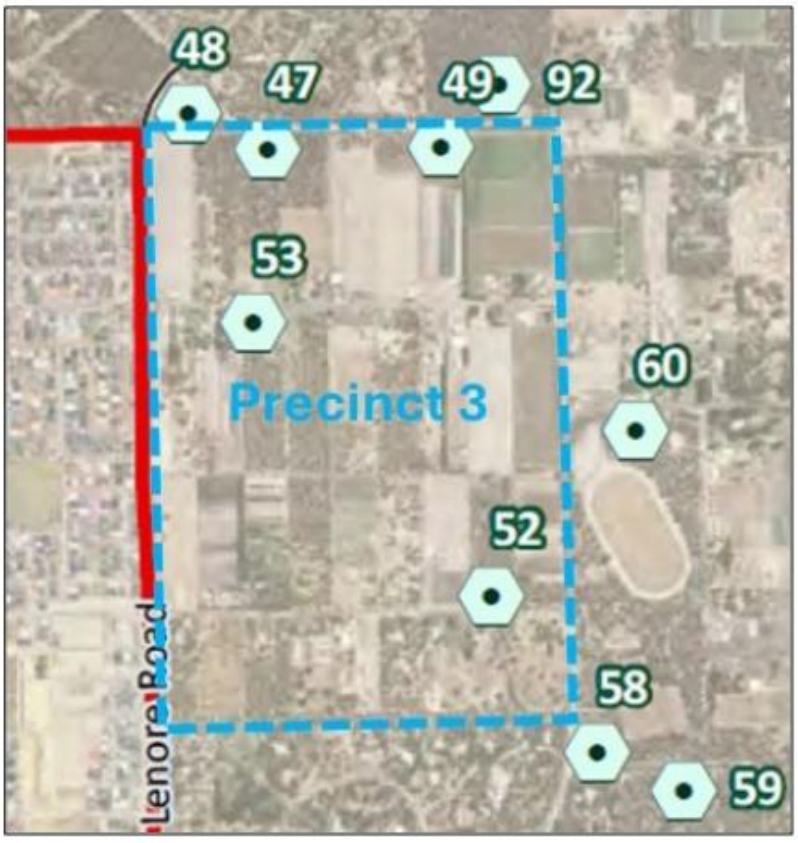

Plate 5-1: Preliminary Vegetation Assessment Survey Locations in Proximity to Precinct 3

Source: Emerge Associates, 2018

5.2.2.2 Detailed Flora and Vegetation Survey (2022)

This survey involved a desktop review, field survey utilising quadrats and a site walkover to record vegetation and flora details, data analysis including floristic community type analysis, and reporting. The field work was undertaken on 26 and 30 September, and 25 October 2022. Landholdings which formed part of this survey included:

- Lots 3, 11, 29, 30, 40, 42 and 43 Elliott Road
- Lot 62 Nicholas Road

Lot locations are highlighted on Plate 5-2. A copy of the PGV Environmental report is provided in Appendix 3.

Plate 5-2: Flora and Vegetation Survey Areas (2022)

Source: PGV Environmental, 2023

5.2.2.3 Detailed Flora and Vegetation Survey (2024)

The field survey was undertaken between 17 to 19 September 2024 which is within the optimal period for a primary survey within the bioregion (EPA, 2016). The survey involved (Ecoscape, 2025):

- Desktop analysis
- Establishment of at least 3 quadrats per vegetation type where there was sufficient extent to do so
- Targeted searches for threatened and Priority flora identified during the desktop analysis
- Recording of introduced species
- Assessment of vegetation type and vegetation condition
- Floristic analysis to identify Floristic Community Types (FCTs)
- Assessment of vegetation potentially representative of the Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (TEC)

A copy of the Ecoscape (2025) biological assessment report for Precinct 3 is provided in Appendix 4..

5.2.3 Vegetation Type

5.2.3.1 Preliminary Vegetation Assessment (2017)

Vegetation type within the East Wanneroo DPS area were identified to broadly comprise banksia and eucalypt woodland communities (Emerge Associates, 2018). Data from the Emerge Associates survey points in proximity to Precinct 3 are summarised on Table 5-4.

Table 5-4: Preliminary Vegetation Assessment Sampling Data

Site ID	Dominant Species	Provisional FCT	Condition
47	Bm, Bi, Af, Ba, Dt, Ah, Js, Cm	?20a	Very Good
48	Em, Af, Bm, Ba, Xspp, Ah, Hh, Mp, Dr, Cf, Hr, Hpu, Dd, Sl, Mp, Dfl, An	?20a	Excellent
49	No data provided	No data provided	No data provided
52	Af, Bm, Ba, Xp, Dt, Dn, Js, Em, Sr, Mp, Ap, Db, Hh	?20a	Very Good
53	Em, Af, Ba, Bm, Xp, Ah, Xspp, Dd, Mp, Sl	?20a	Very Good

Notes:

Af=Allocasuarina fraseriana
Ah=Allocasuarina humilis
An=Alexgeorgea nitens
Ap=Acacia pulchella
Ba=Banksia attenuata,
Bi=Banksia ilicifolia
Bm=Banksia menziesii
Cf=Calytrix flavescens
Cm=Corynotheca micrantha
Db=Dasypogon bromeliifolius
Dd= Daviesia divaricata
Dfl=Desmocladus flexuosus
Dn=Daviesia nudiflora
Dr=Dianella revoluta
Dt=Daviesia triflora
Em=Eucalyptus marginata
Hh=Hibbertia hypericoides
Hr=Hypocalymma robustum
Js=Jacksonia sternbergiana
Mp=Mesomelaena pseudostygia
Sl=Stirlingia latifolia
Sr=Scaevola repens var. repens
Xp=Xanthorrhoea preissii
Xsp=Xanthorrhoea spp

5.2.3.2 Detailed Flora and Vegetation Survey (2022)

The 2022 Detailed Flora and Vegetation Survey (Appendix 3) identified 4 vegetation types to be present onsite, with descriptions provided in Table 5-5. The vegetation type mapping from this survey is provided on Plate 5-3.

It was noted that the vegetation types are similar structurally, with all four types being Low Open Woodlands, differing slightly with the dominant tree species. The understorey composition was also similar between the three vegetation types that were in Very Good condition (PGV Environmental, 2023).

Table 5-5: Vegetation Types (2022)

Type	Description
BaBmAf *Banksia attenuata/B. menziesii/ Allocasuarina fraseriana* Low Open Woodland over *Hibbertia hypericoides* Open Low Heath	Recorded in two separate locations on the site. *Banksia attenuata, B. menziesii* and *Allocasuarina fraseriana* co-dominated the tree canopy and averaged 5m high. Common understorey species included *Hibbertia hypericoides, Eremaea pauciflora, Xanthorrhoea preissii, Calytrix fraseri, Mesomelaena pseudostygia* and *Desmocladus flexuosus.* The soil type is dark grey-brown sand. Quadrats EW 1 and 3 are representative of this vegetation type.
EmAfBaBm *Eucalyptus marginata/ Allocasuarina fraseriana/Banksia menziesii/B. attenuata* Low Open Woodland over *Calytrix fraseri/ Xanthorrhoea preissii/Hibbertia hypericoides/Mesomelaena pseudostygia* Open Low Heath	Recorded in two separate locations on the site. Jarrah (*Eucalyptus marginata*) was common in this vegetation type but was mostly absent from the others. *Banksia attenuata, B. menziesii* and *Allocasuarina fraseriana* were also common with *B. prionotes* present in some areas. Common understorey species included *Calytrix fraseri, Xanthorrhoea preissii, Hibbertia hypericoides, Mesomelaena pseudostygia* and *Trachymene pilosa*. The soil type is dark orange-brown sand. Quadrats EW 2 and 6 are representative of this vegetation type.
AfBaBm *Allocasuarina fraseriana/Banksia attenuata/ B. menziesii* Low Open Woodland over *Calytrix fraseri/ Hibbertia hypericoides/Lyginia barbata/Mesomelaena pseudostygia* Closed Low Heath	Recorded through the central part of the site on three lots and very similar to the BaBmAf except that *Allocasuarina fraseriana* (Sheoak) is usually taller. Common understorey species included *Calytrix fraseri, Hibbertia hypericoides, Lyginia barbata, Mesomelaena pseudostygia* and *Eremaea pauciflora.* The soil type is orange-brown sand. Quadrats EW 4 and 5 are representative of this vegetation type.
Af *Allocasuarina fraseriana* Low Open Woodland over weeds	One small area of this vegetation type was recorded at the southern end of Lot 62. *Allocasuarina fraseriana* trees were up to 6m high with only a few *Banksia attenuata* trees. The understorey was mainly Perennial Veldtgrass (*Ehrharta calycina*). The soil type is light orange-brown sand. No quadrat was sampled in this small Degraded area.

Source: PGV Environmental, 2023

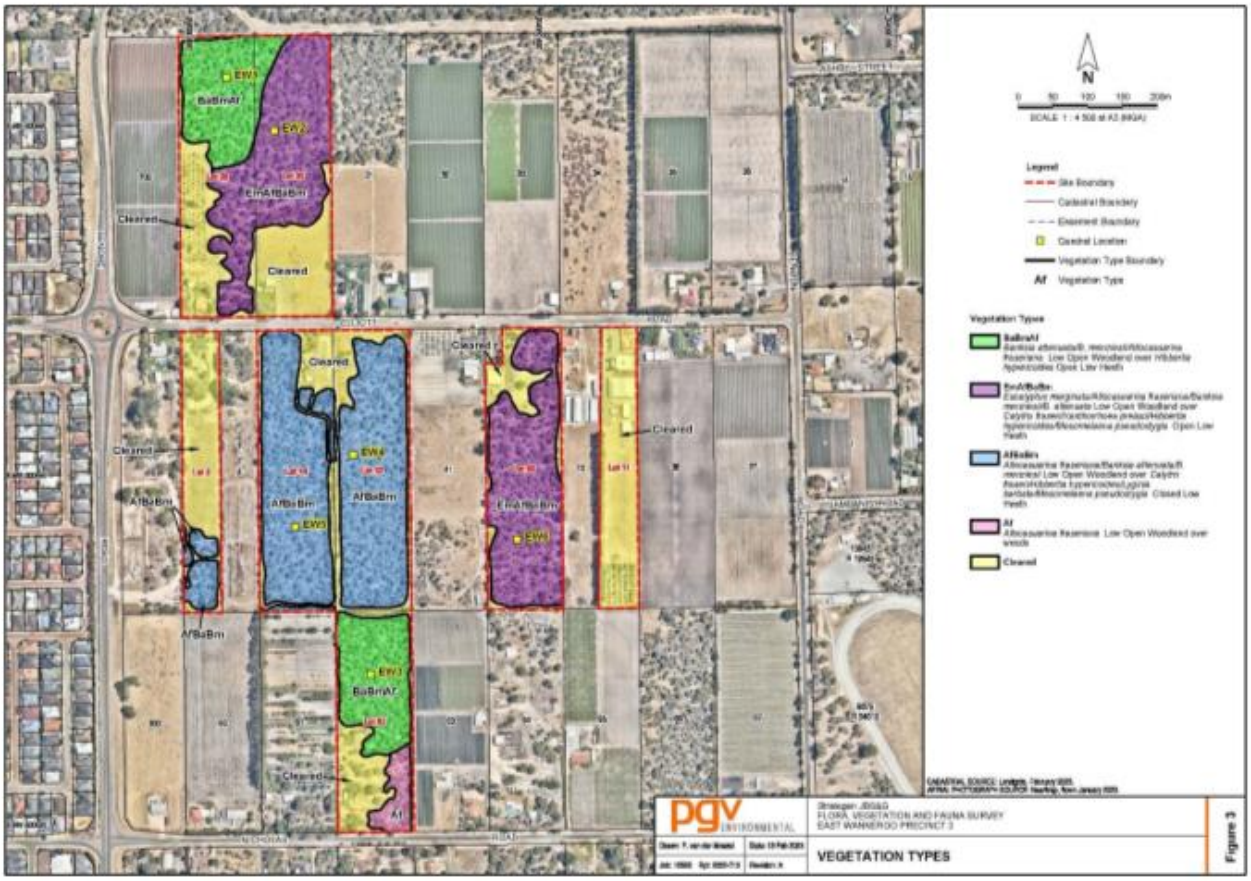

Plate 5-3: Vegetation Units (2022)

Source: PGV Environmental, 2023

5.2.3.3 Detailed Flora and Vegetation Survey (2024)

Two vegetation types were recorded from within the survey area during the 2024 Detailed Flora and Vegetation Survey based on a combination of structural vegetation type as identified in the field, floristic analysis and desktop review (Ecoscape, 2025). The vegetation type descriptions are provided in Table 5-6 with mapping provided on Figure 5.

Table 5-6: Vegetation Types (2024)

Mapping Unit	Description	Area (ha) and extent (%)
BaLOF	*Banksia attenuata, Allocasuarina fraseriana* and *Banksia menziesii* low open forest over *Eremaea pauciflora* var. *pauciflora, Xanthorrhoea brunonis* and *Daviesia divaricata* subsp. *divaricata* mid open shrubland over *Mesomelaena pseudostygia* and *Hibbertia hypericoides* subsp. *hypericoides* low open sedgeland/shrubland on a low undulating sandy plain	19.9 ha (14.8%)
EmmLW	*Eucalyptus marginata* subsp. *marginata, Banksia prionotes* and *Allocasuarina fraseriana* low woodland over *Xanthorrhoea brunonis* and *Daviesia nudiflora* subsp. *nudiflora* mid sparse shrubland over *Hibbertia hypericoides* subsp. *hypericoides* and *Mesomelaena pseudostygia* low sparse shrubland/sedgeland on a low undulating sandy plain	13.0 ha (9.6%)
Not native vegetation/ cleared	Not native vegetation/ cleared	102.0 ha (75.6%)
Total		134.9 ha

The Ecoscape assessment identified 2 vegetation types compared to the 4 mapped by PGV Environmental. This was based on the conclusion that the vegetation was highly similar with slightly different dominant species, but these did not warrant separation.

5.2.4 Vegetation Condition

Vegetation condition within all three surveys was assessed against the Keighery (1994) scale with the vegetation condition description provided as follows (Table 5-7).

Table 5-7: Vegetation Condition Categories

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance or damage caused by human activities since European settlement.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks.
Very Good	Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees and shrubs.

Source: EPA, 2016

5.2.4.1 Preliminary Vegetation Assessment (2017)

Observation made by Emerge Associates (2018) relating to vegetation at targeted locations within this precinct was that condition ranged from Very Good to Excellent (Table 5-4).

5.2.4.2 Detailed Flora and Vegetation Survey (2022)

PGV Environmental (2023) identified vegetation within the survey area to range in condition from Very Good to Completely Degraded, with numerous portions of the survey area being cleared. The PGV Environmental vegetation condition mapping is provided on Plate 5-4.

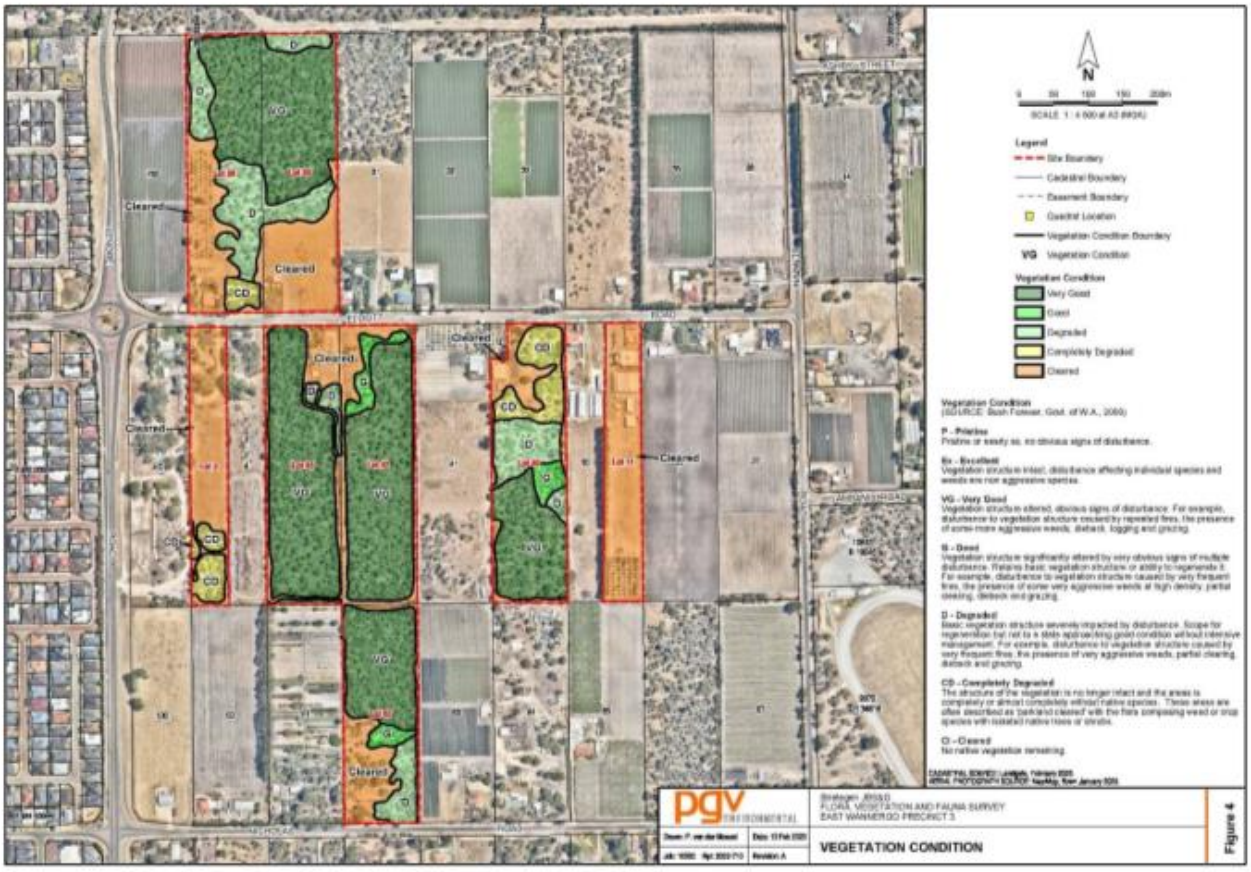

Plate 5-4: Vegetation Condition (2022)

Source: PGV Environmental, 2023

5.2.4.3 Detailed Flora and Vegetation Survey (2024)

The vegetation condition within the survey area was assessed by Ecoscape to range from Completely Degraded to Very Good. The main factors affecting vegetation condition were clearing associated with rural/rural residential land uses and the presence and abundance of weeds. Degraded and Completely Degraded areas mostly occurred adjacent to market gardens, cleared areas or rural dwellings. Cleared areas were also present across the site (Ecoscape, 2025). The mapped vegetation condition extents are presented on Table 5-8.

Table 5-8: Vegetation Condition (2024)

Vegetation Condition	Area (ha)	Extent (%)
Very Good	11.0 ha	8.2%
Good	10.4 ha	7.7%
Degraded	9.1 ha	6.7%
Completely Degraded	2.4 ha	1.8%
Not native vegetation/cleared	102.0 ha	75.6 %
Total	134.9 ha	100%

5.2.5 Floristic Community Types

Desktop review has identified the following Floristic Community Types representing Threatened Ecological Communities (TECs) and Priority Ecological Communities (PECs) as having the potential to occur within the site (Ecoscape, 2025) (Table 5-9).

Table 5-9: FCT Desktop Review Results

Ecological Community	Cth Status	WA Status	Likelihood of occurrence
Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coastal Plain Equivalent to: • Communities of Tumulus Springs (Organic Mound Springs, Swan Coastal Plain)	EN	BCA - CR	Known to occur in 10km buffer area to the site
Banksia Woodlands of the Swan Coastal Plain (Banksia WL SCP) ecological community Incorporates: • *Banksia attenuata* woodlands over species rich dense shrublands (SCP20a as originally described in Gibson *et al.* 1994) • Low lying *Banksia attenuata* woodlands or shrublands (SCP21c) • Swan Coastal Plain *Banksia attenuata - Banksia menziesii* woodlands (SCP23b) • *Banksia ilicifolia* woodlands, southern Swan Coastal Plain (SCP22)	EN	P3 – PEC BCA – CR P3 – PEC P3 – PEC P3 -PEC	Likely
Callitris preissii (or *Melaleuca lanceolata*) forests and woodlands of the Swan Coastal Plain (SCP30a as originally described in Gibson et al. 1994)		BCA - CR	
Coastal shrublands on shallow sands (SCP29a)		P3 - PEC	
Empodisma peatlands of southwestern Australia	EN		May
Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion	CR		Likely to occur in 10km buffer area to the site
Northern Spearwood shrublands and woodlands (SCP24)		P3 – PEC	
Southern *Eucalyptus gomphocephala-Agonis flexuosa* woodlands (SCP25)		P3 – PEC	
Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community Equivalent to: • Tuart (*Eucalyptus gomphocephala*) woodlands of the Swan Coastal Plain	CR	P3 - PEC	Likely

Source: Ecoscape, 2025

Abbreviations:

- *BCA – Biodiversity Conservation Act 2016*
- *CR – Critically Endangered*
- *EN – Endangered*
- *P3-PEC – Priority Ecological Community (Level P3)*

5.2.5.1 Preliminary Vegetation Assessment (2017)

The preliminary vegetation assessment noted that Floristic Community Type (FCT) 20a is a Banksia Woodland community and is considered 'likely' to 'potentially' to occur within the with East Wanneroo DSP area, including within Precinct 3. This FCT is characterised by a dense species rich shrub layer and understorey species such as *Cyathochaeta equitans, Dasypogon obliquifolius* and *Mesomelaena tetragona*. Broadly speaking FCT 20a is known to occur in two broad areas on the Swan Coastal Plain (SCP), including an area in the northern central SCP within the City of Wanneroo and an area on the eastern SCP roughly centred on the localities of Forrestfield and Wattle Grove (Emerge Associates, 2018).

FCT 28 is a Banksia Woodland community which is also considered to potentially occur within the DSP area. Vegetation considered likely to be FCT 28 often included *Eucalyptus gomphocephala* (tuart) in the canopy layer, which was not recorded in any Keighery et al. (2012) sample sites assigned to FCT 20a. However, the transition boundary between FCT 20a and FCT 28 on the western side of the DSP areas is unclear and a portion of 'FCT 20a/28' was mapped to indicate that an intergrade is expected (Emerge Associates, 2018).

An extract of the provisional FCT mapping provided prepared for the DSP is provided in Plate 5-5.

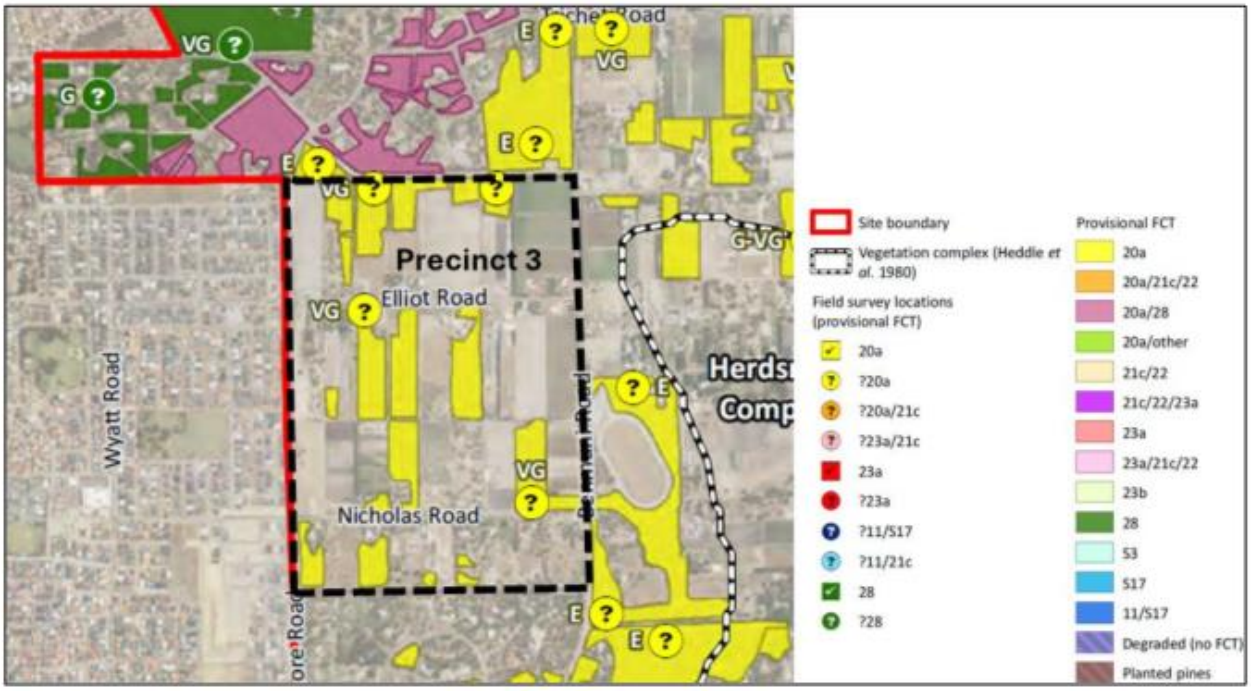

Plate 5-5: East Wanneroo DSP – Provisional FCT mapping

Source: Emerge Associates, 2018

As noted in Table 5-9, FCT 20a is identified as a Threatened Ecological Community (TEC) under the WA BC Act and forms part of the Banksia Woodlands of the Swan Coastal Plain (Banksia WL SCP) TEC under the EPBC Act.

FCT 28 is not listed as a PEC nor a TEC; however, it forms part of the Banksia WL SCP ecological community (TEC under the EPBC Act, and PEC under the BC Act).

5.2.5.2 Detailed Flora and Vegetation Survey (2022)

Six quadrats were analysed to determine the FCT of each quadrat. The details of the analysis are provided in (Appendix 3) with the results described below and summarised on Table 5-10.

- Vegetation on the site most likely corresponds to SCP 28 'Spearwood *Banksia attenuata* or *Banksia attenuata – Eucalyptus marginata* woodlands'.

- It was concluded that is it less likely that SCP 20a occurs on the site.
- The result for Quadrat EW 4 was SCP 6 'Weed dominated wetlands on heavy soils' appears to be an error as the quadrat only contains 6 weeds out of 36 species recorded and the site is not a wetland on heavy soils.

Table 5-10: Floristic Community Type Analysis (2022)

Quadrat	FCT Assigned	Conservation Status State	Conservation Status Cth
EW1, 2, 3, 5 and 6	SCP28 – Spearwood Banksia attenuata or Banksia attenuata – Eucalyptus marginata woodlands	Not listed (Part of Banksia WL SCP – Priority 3	Part of the Endangered Banksia WL SCP
EW4	SCP6 – Weed dominated wetlands on heavy soils	Not Listed	Not Listed

Source: PGV Environmental, 2023

5.2.5.3 Detailed Flora and Vegetation Survey (2024)

FCT analysis was undertaken by Ecoscape (2025) for the vegetation quadrat data from the spring 2024 Detailed Flora and Vegetation Survey. The PGV 2022 survey quadrats were also included in the analysis.

The results indicate that vegetation within the survey area most likely corresponds with SCP28 'Spearwood *Banksia attenuata* or *B. attenuata–Eucalyptus* woodlands'. This concurs with the findings of the 2022 FCT analysis.

5.2.5.4 Floristic Community Type SCP20a

As noted above SCP20a which is listed as a Critically Endangered community under the BC Act and forms part of the Federally listed Banksia WL SCP ecological community listed as Endangered under the EPBC Act was identified through the desktop review undertaken as part of the Preliminary Vegetation Assessment to have the potential to occur in this location.

PATN analysis of vegetation quadrat data from both the 2022 and 2024 detailed flora and vegetation surveys has confirmed that the vegetation appears representative of SCP28 rather than SCP20a. This analysis was performed by 2 separate ecological firms (i.e. Plant Ecology Consulting and Ecoscape) who both came to the same conclusion.

5.2.6 Banksia Woodlands of the Swan Coastal Plain

Banksia WL SCP is identified as a PEC by the DBCA, and a Threatened Ecological Community (TEC) under the Commonwealth EPBC Act. The Banksia WL SCP community is a conglomerate of a number of Banksia-dominated FCTs recognised at the State level.

The 2017 preliminary vegetation assessment identified the potential presence of vegetation representative of the Banksia WL SCP ecological community at the site (Emerge Associates, 2018).

The 2022 Detailed Flora and Vegetation Survey noted that vegetation in Good and Very Good condition would meet the requirements of the Bankia WL SCP community diagnostic criteria (Plate 5-6).

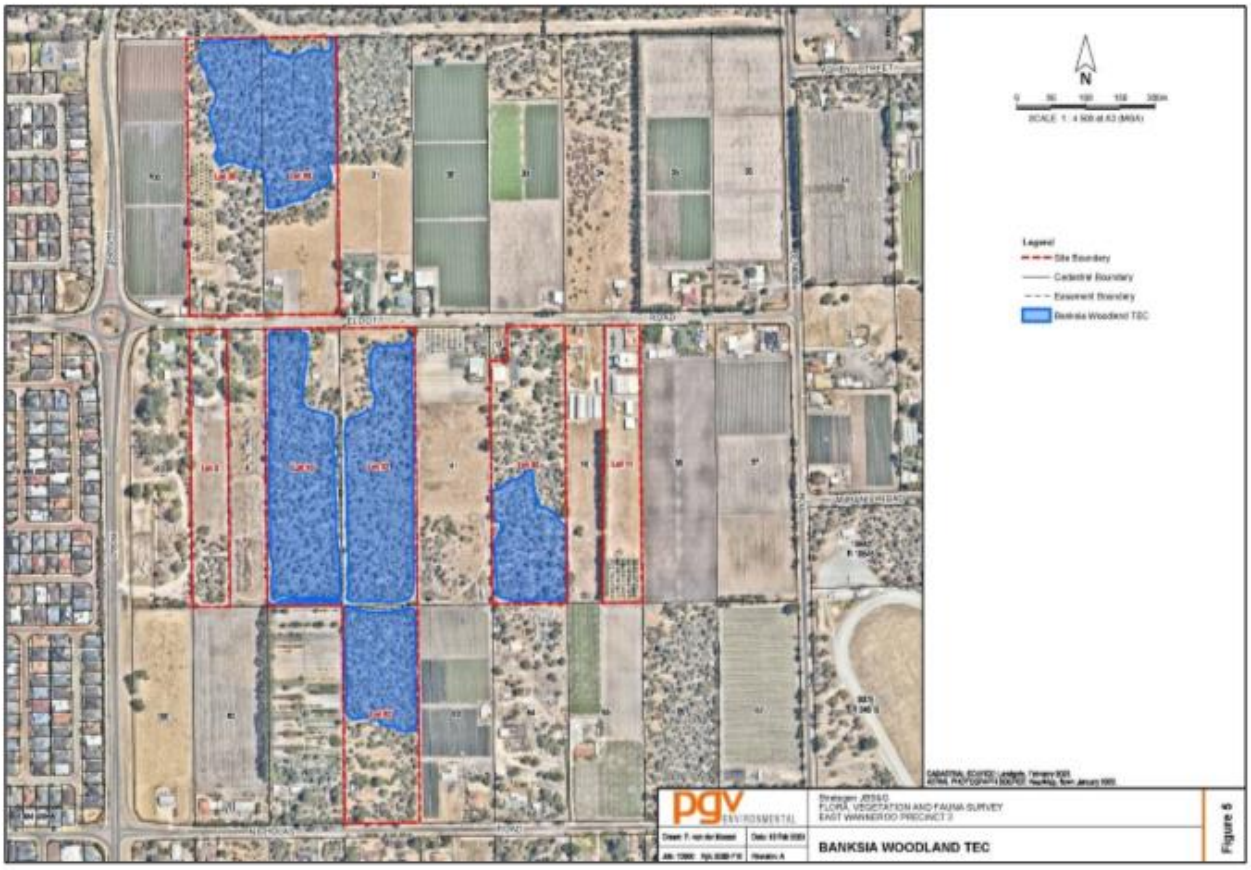

Plate 5-6: Banksia Woodland of the Swan Coastal Plain ecological community – 2022 survey findings

Source: PGV Environmental, 2023

The 2024 Detailed Flora and Vegetation Survey assessed the potential presence of the Banksia WL SCP community across the entire site. The TEC key diagnostic criteria assessment relevant to the site as prepared by Ecoscape (2025) is summarised in Table 5-11.

Table 5-11: TEC Key Diagnostic Criteria Assessment (2024)

Category	Key characteristics (TSSC, 2016)	Assessment
Location and physical environment	The Banksia Woodlands ecological community primarily occurs in the Swan Coastal Plain IBRA bioregion.	Both vegetation types occur in the Swan Coastal Plain IBRA bioregion.
Soils and landform	The Banksia Woodlands ecological community typically occurs on well drained, low nutrient soils on sandplain landforms.	Both vegetation types occur on a low undulating sandy plain with leached grey or pale yellow soil.
Structure and composition	Low woodland to forest with an upper layer dominated or co-dominated by: • *Banksia attenuata* • *Banksia menziesii* • *Banksia prionotes* • *Banksia ilicifolia.*	Vegetation type BaLOF was co-dominated by *Banksia attenuata* and *B. menziesii* in the upper stratum. Vegetation type EmmLW was co-dominated by *Banksia prionotes* in the upper stratum.
	May also include an emergent tree layer with *Corymbia calophylla, Eucalyptus marginata* or less commonly *E. gomphocephala.*	Vegetation type EmmLW was characterised by emergent *Eucalyptus marginata* subsp. *marginata*.

Category	Key characteristics (TSSC, 2016)	Assessment
	Other trees of a medium height may be present and may be codominant with the Banksia species, including: • *Eucalyptus todtiana* • *Nuytsia floribunda* • *Allocasuarina fraseriana* • *Callitris arenaria* • *Callitris pyramidalis* • *Xylomelum occidentale.*	*Allocasuarina fraseriana* was co-dominant with Banksia species in both vegetation types.
	The understorey typically contains a high to very high diversity of shrubs and herbs.	The overall floristic composition was moderate in diversity with an average of 35 understory species per quadrat, including shrubs and herbs. Additional species (particularly ephemerals and herbs) are considered likely to occur during more favourable seasonal conditions.
Vegetation condition	A patch should meet at least the Good Condition category and meet the following minimum patch sizes: • Pristine: no minimum patch size applies • Excellent: 0.5 ha or 5,000 m^2 • Very Good: 1 ha or 10,000 m^2 • Good: 2 ha or 20,000 m^2.	The patches onsite have vegetation in Good or better condition with total extents exceeding the minimum size criteria of 2 ha. Other areas in Good or Very Good condition did not meet the relevant minimum size thresholds and were considered as separate patches due to the distance of separation.

The extent of Banksia WL SCP ecological community mapped onsite is shown on Figure 5 which has a total area of 17.9 ha (7.6 ha EmmLW and 10.3 ha BaLOF).

Patches within both vegetation types are considered to represent the TEC based on floristic composition, structural formation, landform association and vegetation condition. While average floristic diversity was considered moderate (and not high or very high which typically characterises the TEC), high disturbance pressures (particularly from surrounding land uses) combined with decreasing annual rainfall for the region are likely impacting diversity of the native vegetation and, therefore, the floristic diversity of the patches is considered adequate to meet the criteria of the TEC (Ecoscape, 2025).

5.2.7 Conservation Significant Flora

The 2022 Detailed Flora and Vegetation survey recorded a total of 168 flora taxa, including 38 introduced species across the survey area. No Threatened or Priority flora species were recorded (PGV Environmental, 2023).

The Ecoscape desktop review identified 50 conservation significant flora species as having potential to occur at the site. The list of species and a likelihood assessment are provided in Appendix 4.

The 2024 Detailed Flora and Vegetation Survey identified a total of 208 vascular flora taxa from 151 genera and 58 families from the quadrats, opportunistic observations and searches for conservation-listed flora (Ecoscape, 2025).

No Commonwealth EPBC Act nor Western Australian BC Act-listed Threatened Flora were recorded during the 2024 field survey. No taxa that were not identified with certainty resembled any currently described Threatened or Priority Flora (Ecoscape, 2025).

One Priority 2 taxon was recorded during the field survey, *Poranthera moorokatta* (one plant), from Lot 43 (Figure 5) in association with *Allocasuarina fraseriana, Banksia attenuata* and *Eucalyptus marginata* subsp. *marginata* mid woodland vegetation on a low, gently undulating grey sandy plain. This species is a poorly

known herb growing to 2 cm in height. According to Florabase (2024) there are 15 records of this species in the Swan Coastal Plain region with a distribution from Cervantes to Busselton. The majority of known records are located in the Perth metropolitan region (Ecoscape, 2025).

5.2.8 Introduced Flora

64 introduced flora species (weeds) were recorded in the quadrats and opportunistically during traverses through the survey area, representing approximately 31% of the overall flora inventory. Weeds were present in all quadrats and density varied, ranging from a minimum of <1% cover to a maximum of 30% cover. The mean weed cover per quadrat was 10.3% (Ecoscape, 2025).

Two of the weeds recorded (**Asparagus asparagoides* and **Opuntia stricta*) are Weeds of National Significance (WoNS) and Declared Pest plants. **Asparagus asparagoides* (Bridal Creeper) was recorded from Degraded roadside bushland along Nicholas Road (adjacent to Lot 66), totalling one population with three plants. **Opuntia stricta* (Common Prickly Pear) was recorded in Degraded bushland in two plots (within Lots 34 and 40 Elliot Road), totalling two populations with four plants (Ecoscape, 2025).

The Department of Primary Industries and Regional Development (DPIRD) noted that **Asparagus asparagoides* is classified as a s22(2) Declared Pest with the control/keeping category noted to be Exempt. **Opuntia stricta* is classified by DPIRD as s22(2) with the control/keeping category being C3. Based on these DPIRD categories the **Opuntia stricta* require management to prevent the spread of seed or plant parts (DPIRD, 2025).

5.2.9 Bush Forever

Two Bush Forever (BF) sites intersect Precinct 3 being (Landgate, 2024b):

- BF Site 471 – High Road Bushland, Wanneroo
- BF Site 327 – Badgerup Lake and Adjacent Bushland, Wanneroo

The location of these site is shown on Plate 5-7.

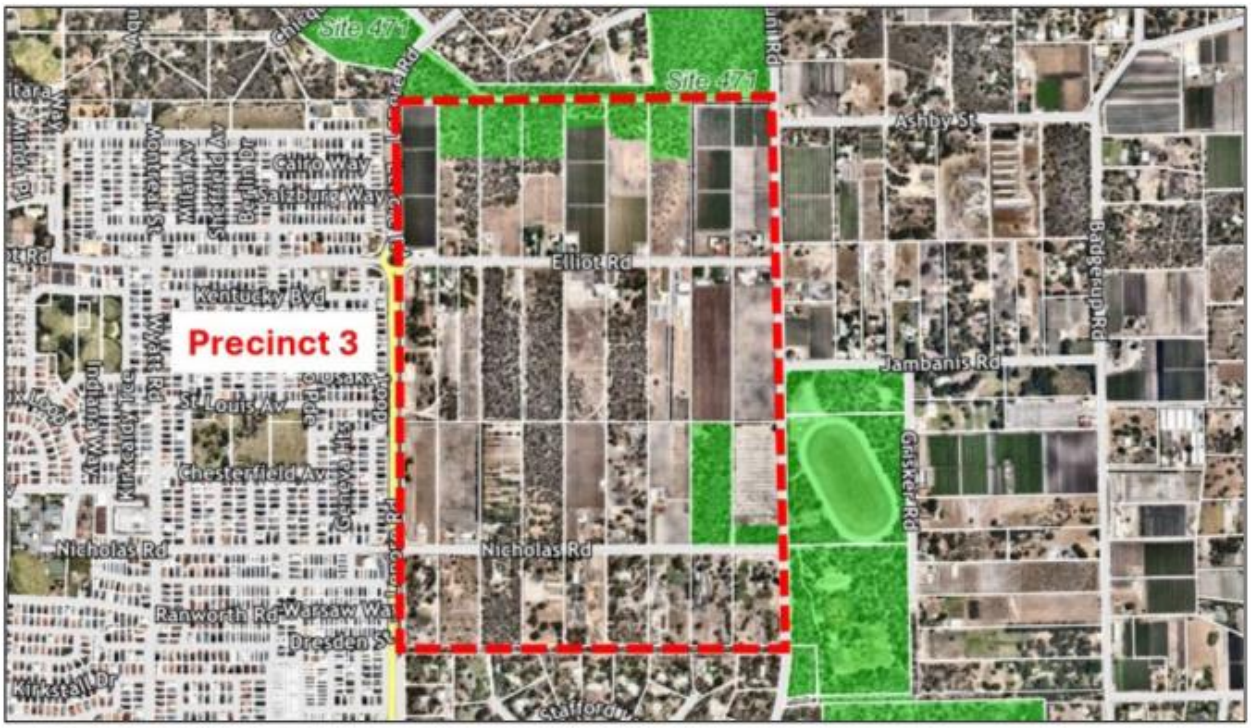

Plate 5-7: Bush Forever sites

Source: MNG, 2025; after GoWA, 2000

BF site 471 is shown as Regional Open Space under the East Wanneroo DSP and BF Site 327 is identified as 'Parklands – Subject to Confirmation' (Appendix 1).

5.2.10 Local Natural Areas and Ecological Linkages

The City of Wanneroo Local Biodiversity Plan identifies that Precinct 3 contains a number of Local Natural Areas (LNAs) associated with remnant vegetation as shown on Plate 5-8. These areas are defined as all unprotected natural areas over which the City of Wanneroo can exercise the most control through its decision-making powers, policies and reserve management. Local Natural Areas include (CoW, 2018):

- Natural areas located on private property, which the City has some control over through Policy and decision making (such as planning approvals)
- Natural areas located in public or regional open space, managed by the City of Wanneroo but not fully recognised as being managed for the purpose of conservation
- State Government freehold land not zoned Parks and Recreation under the Metropolitan Region Scheme.

The Perth Biodiversity Project, supported by the Western Australia Local Government Association, has identified and mapped regional ecological linkages within the Perth Metropolitan Region (PBP, 2007). The intent of these linkages is to provide connectivity across the landscape through protecting existing natural areas as stepping stones within broad bands (linkages) that connect the larger, more viable natural areas (Del Marco et al., 2004). A regional ecological linkage is mapped traversing the site as shown on Plate 5-8 (Emerge Associates, 2018).

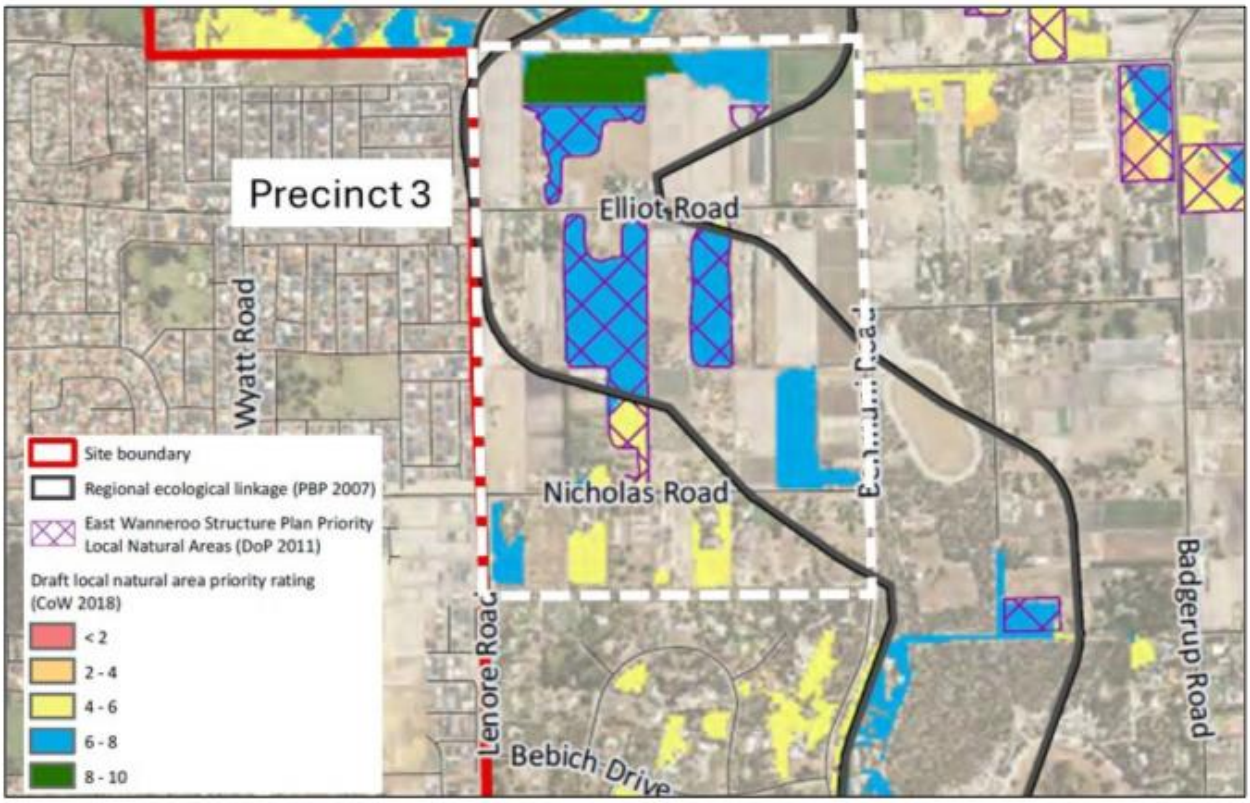

Plate 5-8: Local Natural Areas and Regional Ecological Linkages

Source: Emerge Associates, 2018

It is noted that since the Local Biodiversity Strategy (CoW, 2018) and Perth Biodiversity Project documents (PBP, 2007) were prepared, the DSP was progressed which provides refined 'Parkland' and 'Parkland (subject to confirmation)' areas where vegetation retention is proposed (Appendix 1).

The DSP also identifies a network of linear 'Parkland links' with the DSP proposing integration of ecological and movement functions within these links, in the form of linear parklands or landscape boulevards. The DSP outlines that the specific environmental features to be retained as part of 'Parkland links' will be confirmed at the future local structure planning stage (Emerge Associates, 2018). The EWDSP identifies 'Parkland Links' along the northern and eastern boundary of Precinct 3 (Appendix 1).

5.3 Potential Impact Identification and Assessment

Potential impacts to flora and vegetation associated with future urban development have been identified as follows:

- Direct loss of flora and vegetation through land clearing, including vegetation representative the Banksia WL SCP ecological community
- Increased presence of non-native flora species (i.e. weeds) through disturbance, edge effects, altered fire regimes or hydrological changes
- Altered hydrology impacting existing ecological conditions
- Potential spread of disease-causing organisms (e.g., *Phytophthora cinnamomi*)
- Fragmentation of vegetation.

Potential impacts and the associated design and management response are discussed further below.

5.3.1 Vegetation Retention and Clearing

Implementation of the LSP will result in impacts to native vegetation including clearing for lot creation and infrastructure installation.

The LSP has considered the siting and extent of the Parks and Recreation reserve within Precinct 3 in the context of impact minimisation to significant vegetation, particularly vegetation representative of the Banksia WL SCP ecological community (Figure 9). Vegetation retention may also be possible in other parts of the site i.e. road verges, drainage sumps etc., subject to detailed design.

The LSP proposes to retain 13.0 ha (39.5%) of native vegetation within Parks and Recreation reserve (Table 5-12), which comprises 5.8 ha of the EmmLW vegetation unit and 7.2 ha of the BaLOF vegetation unit. The portion of this vegetation which is representative of the Banksia WL SCP ecological community is 9.4 ha (52.2%).

Retention may also be possible in portions of the Public Open Space areas onsite. The extent of native vegetation in these areas is 3.1 ha (9.4%), with 0.6 ha (3.3%) representative of the Banksia WL SCP ecological community (Table 5-12).

Areas of retained vegetation in identified Parks and Recreation reserve will be subject to vegetation management, including weed control and targeted revegetation. The details of these works will be outlined within a Conservation Area Management Plan, or similar, proposed to be prepared at subdivision stage (Section 9).

The LSP proposes to clear between 16.8 ha (51.1%) to 19.9 ha (60.5%) of native vegetation within the site overall, demarcated by clearing the entirety of the Urban development area plus potential clearing within the Public Open Space (Table 5-12).

Table 5-12: Vegetation type within Parks and Recreation, Public Open Space and Urban Areas

Vegetation Type	Total Extent (ha)	Park and Recreation Area		Public Open Space Areas		Urban Area	
		Area (ha)	% of total	Area (ha)	% of total	Area (ha)	% of total
Native Vegetation							
EmmLW	13.0	5.8	44.6	0.4	3.1	6.8	52.3
BaLOF	19.9	7.2	36.2	2.7	13.6	10.0	50.3
Sub-Total	32.9	13.0	39.5	3.1	9.4	16.8	51.1
Not native vegetation/cleared							
Non-native /cleared	102.0	1.2	1.2	8.8	8.6	92.0	90.2
Precinct 3 Total	134.9	14.2	10.5	11.9	8.8	108.8	80.7
Banksia WL SCP ecological community							
Banksia WL	18.0	9.4	52.2	0.6	3.3	8.0	44.4

The identification of areas for vegetation retention has considered the locations of higher condition vegetation and looked to maximise retention of Very Good and Good condition vegetation, where possible. As can be seen from Table 5-13, a minimum of 47.3% of Very Good condition vegetation, and a minimum of 41.3% of Good condition vegetation is proposed for retention as part of the Parks and Recreation reserves. Additional vegetation retention may be possible in POS areas, subject to detailed design.

Table 5-13: Vegetation condition within Parks and Recreation, Public Open Space and Urban Areas

Vegetation Condition	Total Extent (ha)	Park and Recreation Area		Public Open Space Areas		Urban Area	
		Area (ha)	% of total	Area (ha)	% of total	Area (ha)	% of total
Very Good	11.0	5.2	47.3	1.5	13.6	4.3	39.1
Good	10.4	4.3	41.3	0.7	6.7	5.4	51.9
Degraded	9.1	3.3	36.3	0.8	8.8	5.0	54.9
Completely Degraded	2.4	0.3	12.5	0.1	4.2	2.0	83.3
Sub-total	32.9	13.1	39.8	3.1	9.4	16.7	50.8
Non-native/ cleared	102.0	1.2	1.2	8.8	8.6	92.0	90.2
Precinct 3 Total	134.9	14.3	10.6	11.9	8.8	108.7	80.6

The Priority 2 flora specimens found within Lot 43 Elliot Road will be retained within the Parks and Recreation zone proposed within the area (Figure 9). As such impacts to this P2 flora occurrence will be avoided.

The proposed vegetation retention extent differs slightly from the 'Parklands (subject to confirmation)' areas shown in the DSP, with the key difference being Parks and Recreation reserve not being proposed within Lot 42 Elliot Road and Lot 52 Nicholson Road. The balanced outcome proposed through the LSP design achieves retention of a minimum of 40% of the native vegetation present onsite, including a minimum of 52% of the Banksia WL SCP ecological community. The northern Parks and Recreation reserve connects to Benmuni Park, increasing the size of this protected vegetation patch. The eastern Parks and Recreation reserve will also provide a link to Nanovich Park to the east of the site.

5.3.2 Threatened Ecological Communities

5.3.2.1 Floristic Community Type SCP20a

Based on the potential presence of FCT SCP20a as identified in the DSP environmental reporting (Emerge Associates, 2018) the botanical surveys undertaken for the site included specific review of the potential presence of this FCT.

PATN analysis undertaken on plot data from both Detailed Flora and Vegetation surveys undertaken within the site, as assessed by 2 separate specialists, identified that the banksia vegetation onsite appears most likely to be representative of FCT SCP28 and not FCT SCP20a.

5.3.2.2 Banksia Woodlands of the Swan Coastal Plain Ecological Community

The mapped extent of Banksia WL SCP ecological community was similar between the spring 2022 survey (PGV Environmental, 2023; Plate 5-6) and the spring 2024 survey (Ecoscape, 2025; Figure 5). The key difference in mapping extent are noted as follows:

- Lot 40 Elliot Road – presence of Banksia WL TEC was identified as occurring in the 2022 survey , but not the 2024 survey. The reason for this not being included in the more recent 2024 survey is due to a decline in the vegetation condition, which resulted in the patch not meeting the relevant minimum size thresholds.
- Lots 29 and 30 Elliot Road – presence of Banksia WL TEC was identified in the 2022 survey, but the 2024 survey mapped a larger extent on these two sites. This reason for this is due to the extent of Good condition vegetation increasing , which resulted in the extent of the patch area increasing.

As noted above, the LSP design provides for a minimum of 9.4 ha (52%) of the vegetation representing the Banksia WL SCP ecological community present onsite. This vegetation will be retained within Parks and Recreation reserves, therefore providing greater protection than may occur within Public Open Space areas.

Based on the extent of clearing of Banksia WL SCP vegetation onsite, development proposals would be referred to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) under the EBPC Act. The EPBC Act referral review and assessment process will allow for further assessment of impacts to Banksia WL SCP vegetation and for environmental offsets to be provide, where required.

5.3.3 Regional Context Analysis

At a regional level clearing of 19.9 ha (worst case clearing scenario based on vegetation retention in the Parks and Recreation reserves only) of native vegetation represents approximately 0.16% of the current extent of the Karrakatta Complex – central and south vegetation complex remaining on the Swan Coastal Plain. The proposed clearing will not reduce the extent of this vegetation complex below EPAs modified objective retain at least 10% of the preclearing extent within defined constrained areas including the Perth Metropolitan Region (EPA 2015).

The current extent of the Banksia Woodlands TEC is not known; however, it was estimated at the time of its listing under the EPBC Act in 2016 that approximately 336,490 ha was present, with 81,800 ha (24%) located within reserves (TSSC 2016; Ecoscape, 2025). The occurrence of approximately 18 ha of vegetation representing the Banksia WL SCP ecological community onsite would represent approximately 0.005% of the estimated 2016 occurrence and 0.02% of the extent within reserves.

In the context of the surrounding environment, it is noted that there is 1,526 ha of native vegetation present within 5 km of the site and 17,387 ha present within 15 km of the site. This includes the following nearby reserves and regional parks:

- Benmuni Park local reserve (part of Bush Forever Site 471) – immediately north of the site

- Jambanis Park/Nanovich Park/Estrel Park (part of Bush Forever Site 327) – immediately east of the site
- Badgerup Reserve (part of Bush Forever Site 327) – approximately 400m south east of the site
- Jandabup Nature Reserve (Bush Forever Site 324) – approximately 900m north east
- Yellagonga Regional Park, including Lake Joondalup Nature Reserve (Bush Forever Site 299) – approximately 2.4km west
- Lake Gnangara Park (Bush Forever Site 193) – approximately 2.8km south east of the site
- State Forest 65 (Gnangara-Moore River State Forest) – approximately 3km east
- Neerabup National Park (Bush Forever Site 383) – approximately 7.5km north west of the site

The vegetation present onsite is therefore not an isolated remnant, but rather a small portion of the existing local vegetation.

5.3.4 Additional Considerations

The Bushfire Management Plan prepared as part of the LSP technical documents identifies that appropriate bushfire protection can be achieved without the need to impact any proposed areas of vegetation retention or revegetation (see Section 8.1).

Stormwater infiltration is incorporated into a number of the open space areas which has the potential to result in clearing of vegetation. The proposed 15 mm biofiltration/1% AEP storage area locations are shown on Plate 5-9. Where possible, these areas have been located in cleared portions of the site. In locations where this has not been able to be achieved, the configuration of these areas at detailed design stage will aim to minimise impacts to higher quality vegetation patches.

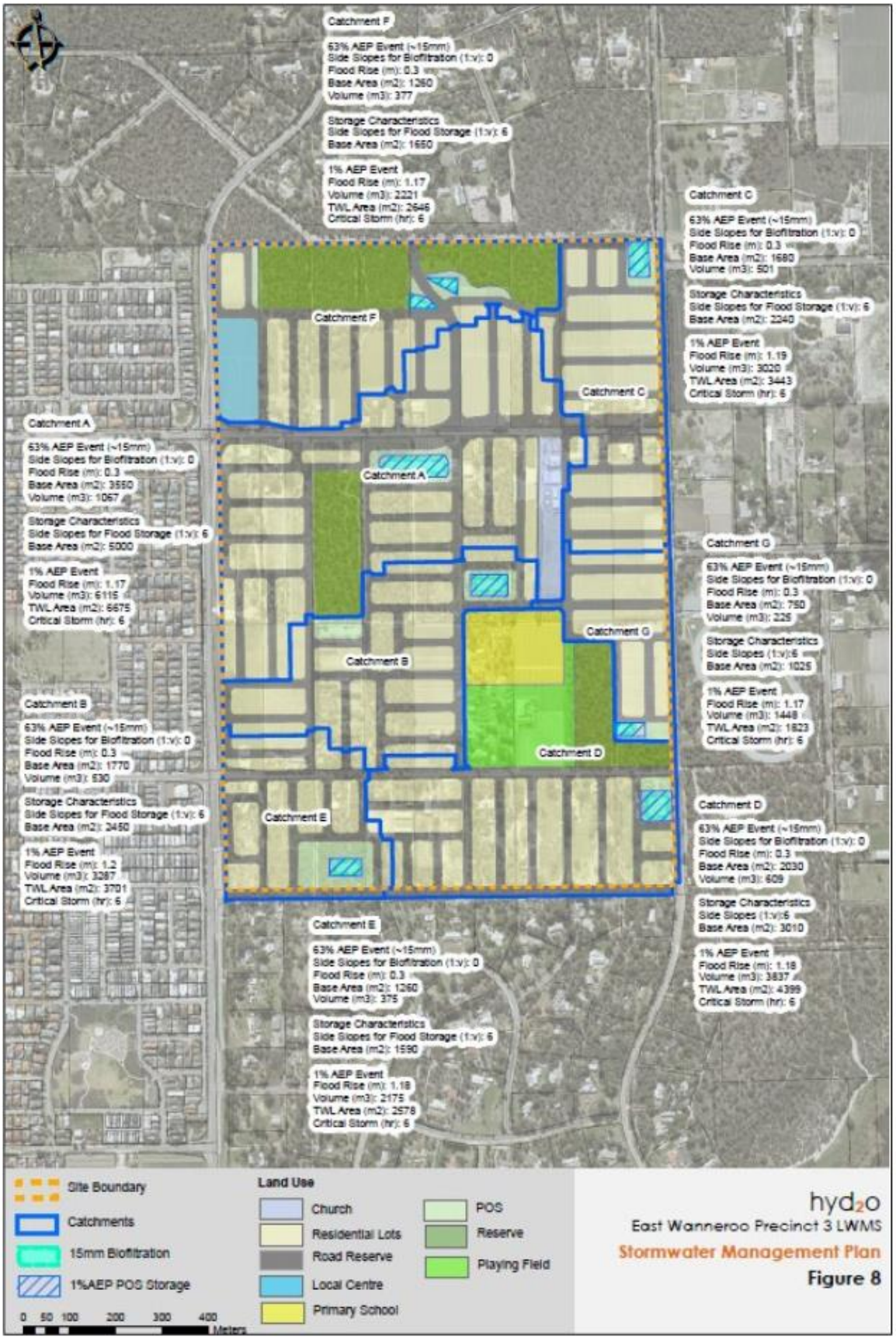

Plate 5-9: Indicative Stormwater Infiltration Areas

Source: Hyd2o, 2025

Further detail on the proposed stormwater drainage is provided within the Local Water Management Strategy (Hyd2o, 2025) with additional design detail to be presented within the future Urban Water Management Plans (UWMPs) prepared at subdivision stage.

Site hydrology considerations are discussed in Section 4. The key conclusions in relation to this matter and potential impact to vegetation within and surrounding the site are:

- The existing conductions which are conducive the infiltration through the sandy subsurface profile, together with a large separation distance to groundwater will remain
- Land use types, densities, and water quality treatment areas will be managed to considerably reduce nutrient application and output, and improve water quality relative to current conditions

If not appropriately managed, weeds can spread into and within areas of retained vegetation onsite and adjacent to the development. Weed spread can be facilitated by inappropriate access into native vegetation, dumping of waste such as organic matter into areas of native vegetation, weed ingress from private properties, weed movement in drainage infrastructure and soil disturbance allowing the growth/colonisation of weed species in the disturbed area. Interface management and weed control can be an effective tool to minimise weed spread.

The presence of Declared Weed species onsite, particularly **Opuntia stricta* (Common Prickly Pear), will require management. Recommended control actions as advised by DBCA (2025) for these species include (Table 5-14):

Table 5-14: Declared Weed Management

Species	Suggested Method of Control	Timing
*Opuntia stricta	Spray 0.2 g metsulfuron methyl + Pulse® in 15 L water (or 2.5 - 5g /ha + Pulse®). Best results achieved when flowering.	Flowing occurs during August and September
*Asparagus asparagoides	Spray 0.2 g metsulfuron methyl + Pulse® in 15 L water (or 2.5 - 5g /ha + Pulse®). Best results achieved when flowering.	Floring occurs during August and September

Source: DBCA, 2025

The observed locations of **Opuntia stricta* and **Asparagus asparagoides* are in proximity to areas of future Parks and Recreation reserve retained vegetation as well as potential POS vegetation retention areas. The current owners of these lots will be advised of the presence of this species onsite and the need for control to be undertaken. Once ownership of these lots transfers to property developers, additional searches for the presence of these species will be undertaken and control undertaken, as required.

The potential presence of these weeds onsite will be noted in the proposed Conservation Area Management Plan(s) and/or Construction Environmental Management Plan(s), to ensure ongoing review for potential presence and control, if found onsite, is undertaken.

5.4 Impact Mitigation

The proposed development will manage impacts to flora and vegetation in accordance with the mitigation hierarchy (Table 5-15).

Table 5-15: Flora and Vegetation Mitigation Hierarchy

Mitigation Hierarchy	Assessment and Proposed Actions
Potential Impact	
Flora and Vegetation	• Clearing of between 16.8 ha (51.1%) to 19.9 ha (60.5%) of the native vegetation present within the LSP area. This includes clearing of between: ▪ 6.8 ha (52.3%) to 7.2 ha (55.4%) of the EmmLW vegetation unit ▪ 10.0 ha (50.3%) to 12.7 ha (63.9%) of the BaLOF vegetation unit ▪ 4.3 ha (39.1%) to 5.8 ha (52.7%) of vegetation in Very Good condition ▪ 5.4 ha (51.9%) to 6.1 ha (58.6%) of vegetation in Good condition • Clearing of between 8.0 ha (44.4% and 8.6 ha (47.7%) of vegetation representing Banksia WL SCP ecological community. • Potential for increased weed invasion • Potential for altered hydrology to impact existing ecological conditions and associated vegetation health • Potential for spread of disease causing organisms • Potential for fragmentation of vegetation
Mitigation Hierarchy	
Avoidance	• Identification of key vegetation retention areas as Parks and Recreation reserve to afford greater protection to the retained vegetation. • The LSP has been designed to avoid vegetation disturbance within the Parks and Recreation Areas proposed onsite. This allows for retention of 13 ha (29.5%) of the native vegetation onsite comprising: ▪ 5.8 ha (44.6%) vegetation from the EmmLW vegetation unit ▪ 7.2 ha (36.2%) of vegetation from the BaLOF vegetation unit ▪ 9.4 ha (52.2%) of vegetation representing the Banksia WL SCP ecological community ▪ 5.2 ha (47.3%) vegetation in Very Good condition ▪ 4.3 ha (41.3%) vegetation in Good condition • Retention of the Priority 2 flora occurrence within proposed Parks and Recreation reserve located within Lot 43 Elliot Road. • Bushfire risk management can be undertaken without impact to areas of retained vegetation • Vegetation retention in general Public Open Space areas and within road reserve will be undertaken where possible. • Avoidance of spread of Declared Weed species through targeted removal and management
Minimisation	• Approximately 3.1ha (9.4%) of native vegetation is located within Public Open Space areas, separate to the Parks and Recreation reserves. Vegetation retention in these areas will be maximised, where possible. • Clearing boundaries will be clearly demarcated on the ground to avoid unauthorised clearing to protect the retained vegetation. • Areas of native vegetation are separated from development areas by a road interface to provide a hard edge which will assist with environmental management, including minimisation of weed spread. • Undertake weed control along the boundary of the Parks and Recreation reserve and Urban Development Areas, to avoid ingress into areas of retained vegetation. These

Mitigation Hierarchy	Assessment and Proposed Actions
	management measures will be detailed in the Conservation Area Management Plan, or similar. • Vegetation and Fauna Management Plan(s), or similar will be prepared in accordance with the City of Wanneroo Environmental Management Plan Guidelines and LPP 3.3 to ensure best practice management is undertaken during clearing and subdivision works, prevent damage to vegetation retention areas and appropriately trap and relocate fauna prior to and during clearing. • Conservation Area Management Plan(s), or similar, will be prepared in accordance with the City of Wanneroo Environmental Management Plan Guidelines for areas of retained vegetation onsite. These plans will provide guidance relating to vegetation retention, revegetation zones, revegetation species and density, weed and disease control, drainage and nutrient management, access control, signage and bushfire prevention/risk management. • Construction Environmental Management Plan(s) will be prepared for the site. This will contain, amongst other items, hygiene protocols to prevent the spread of disease or weeds to retained and adjoining native vegetation areas.
Revegetation	• Native vegetation retained onsite will be subject to management and revegetation including weed control and targeted revegetation planting, where appropriate, to improve the condition and ecological value of these areas. The details of the weed control and revegetation works will be outlined within Conservation Area Management Plan(s), or similar.
Offsets	• Future development proposals proposing to clear Banksia WL SCP vegetation will require referral under the Commonwealth EBPC Act. The EPBC Act referral and assessment process will require further evaluation of impacts to Banksia WL SCP vegetation and for environmental offsets to be provided, where required.

5.5 Predicted Outcome

The predicated outcomes for flora and vegetation include:

- Retention of a minimum of 13.0 ha (39.5%) of native vegetation onsite, including 9.4 ha (52.2%) of vegetation representative of the Banksia WL SCP ecological community.
- Key areas of vegetation retention are to be located within Parks and Recreation reserves, which will provide additional security of tenure.
- Loss of up to 19.9 ha (60.5%) of native vegetation onsite, including 8.6 ha (47.7%) of vegetation representative of the Banksia WL SCP ecological community.
- Retention of all Priority 2 flora occurrences present onsite.
- Improvement in condition of the retained vegetation areas onsite through implementation of weed control and revegetation actions which will be detailed in the proposed Conservation Area Management Plan(s).
- Environmental offsets for clearing of vegetation representative of the Banksia WL SCP ecological community to be addressed through the DCCEEW EPBC Act referral and assessment process.

6 Terrestrial Fauna

6.1 Key Policies and Guidance

Relevant policy and guidance documents for terrestrial fauna, which have informed site-specific investigations and/or have been used to assess potential impacts, include:

- Environmental Factor Guideline – Terrestrial Fauna (EPA, 2016c)
- Technical Guidance – Sampling Methods for Terrestrial Vertebrate Fauna (EPA, 2016d)
- Technical Guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA, 2020)
- Referral Guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo *(Zanda latirostris*), Baudin's Cockatoo (*Zanda baudinii*) and the Forest Red-tailed Black-cockatoo (*Calyptorhynchus banksii naso*) (DAWE, 2022).
- City of Wanneroo local planning policies including:
  - Local Planning Policy 1.1 - Conservation Reserves
  - Local Planning Policy 4.8 - Tree Preservation Policy
  - Local Planning Policy 5.3 - East Wanneroo
  - City of Wanneroo- Local Biodiversity Plan 2018/19-2023/24 (CoW, 2018)

6.2 Receiving Environment

6.2.1 Fauna surveys

Fauna surveys extending over the site include:

- Fauna Survey and Black Cockatoo Assessment with field work undertaken during spring 2022 by PGV Environmental (2023), including targeted sites over eight lots within Precinct 3 (Lots 3, 11, 29, 30, 40, 42 and 43 Elliott Road and Lot 62 Nicholas Road, Wanneroo) (Plate 5-2) (Appendix 3)
- Fauna Survey and Black Cockatoo Assessment with field work undertaken during February 2025 by Ecoscape for the entire Precinct 3 area (Ecoscape, 2025) (Appendix 4)

6.2.1.1 Fauna Survey and Black Cockatoo Habitat Assessment (2022)

6.2.1.1.1 Fauna Survey

This basic fauna survey was done in accordance with EPA Technical Guidance *Fauna Surveys for Environmental Impact Assessment* (EPA, 2020). It involved a desktop review and field survey involving a site walkover to record and assess fauna habitats. The field work was undertaken on 26 and 30 September 2022. Landholdings which formed part of this survey are highlighted on Plate 6-1.

6.2.1.1.2 Black Cockatoo Habitat Assessment

The Black Cockatoo habitat assessment was done in accordance with *Referral guideline for 3 WA threatened black cockatoo species Carnaby's Cockatoo (Zanda latirostris), Baudin's Cockatoo (Zanda baudinii) and the Forest Red-tailed Black-cockatoo (Calyptorhynchus banksii naso)* (DAWE, 2022) (Black Cockatoo Referral Guidelines) and the methodology that is outlined in the SPRAT Database for each of the Black Cockatoo species for Black Cockatoo Habitat Assessments.

The assessment involved (PGV Environmental, 2023):

- traversing the site on foot and assessing information on Black Cockatoo foraging, roosting and breeding habitat
- investigating the extent, type and quality of the vegetation present, which included the presence and extent of plants known to be used by Black Cockatoos.

6.2.1.2 Fauna Survey and Black Cockatoo Habitat Assessment (2025)

6.2.1.2.1 Fauna Survey

This basic fauna survey was done in accordance with EPA Technical Guidance *Fauna Surveys for Environmental Impact Assessment* (EPA, 2020). The survey was conducted on 3, 10 and 12 February 2025, and involved (Ecoscape 2025):

- Desktop analysis
- Field work which incorporated a number of survey techniques, including habitat assessment, active searches, raking of spoil heaps and leaf litter, searches for secondary evidence such as scats and tracks, as well as opportunistic searches
- Targeted searches for conservation listed fauna identified during desktop analysis
- Bird surveys conducted as 20-minute point searches by an experienced ornithologist during peak periods of bird activity (early morning, as per Birdlife Australia standard methodology)
- Assessment and mapping of fauna habitats.

6.2.1.2.2 Black Cockatoo Habitat Assessment

Potential and active (actual) Black Cockatoo breeding trees were assessed by Ecoscape on 3, 10 and 12 February 2025 as per *Black Cockatoo Referral Guidelines* (DAWE, 2022), Bamford Consulting Ecologist (BCE) (2016) tree classification methods, and BCE (2020) habitat value scoring method.

The suitability of the survey area for breeding (additional to the specific tree survey), roosting and foraging was also assessed and mapped.

6.2.2 Fauna habitats

6.2.2.1 Fauna Survey (2022)

Within the lots that were surveyed, PGV Environmental (2023) recorded two fauna habitat types, described as Open Woodland Habitat and Cleared/Developed Habitat (Appendix 3).

6.2.2.2 Fauna Survey (2025)

One fauna habitat type, Banksia Woodland, was recorded within survey area from six habitat assessment points and covers 32.09 ha (24.40%) (Figure 7); however, due to the remaining areas of rural/rural residential land (including market gardens) lacking vegetative structure and frequent disturbance from human activity these were not considered as habitat (Ecoscape, 2023). The remaining area mapped as cleared/not native vegetation covers 101.95 ha (75.6%) (Figure 7).

The Banksia Woodland fauna habitat is described as open woodland dominated by Banksia species with *Allocasuarina fraseriana* (Sheoak), emergent *Eucalyptus marginata* subsp. *marginata* (Jarrah), and occasional *Eucalyptus gomphocephala* (Tuart) over mid-level shrubs with low grass trees on a grey sandy plain. This habitat provides suitable shelter and foraging resources for a common assemblage of vertebrate fauna species, reptiles and bush birds. It provides foraging resources for the conservation-listed Carnaby's and Forest Red-tailed Black Cockatoos and Quenda.

6.2.3 Fauna Assemblage

6.2.3.1 Fauna Survey (2025)

Ecoscape (2025) recorded 33 vertebrate fauna species during the survey, from two ornithological surveys and opportunistic observations, consisting of:

- mammals, of which two are introduced
- 29 birds, of which 4 are introduced
- 2 reptiles.

Ornithological survey sites and locations of conservation-listed fauna, including evidence of presence including foraging observations, are shown on Figure 7.

6.2.4 Conservation Significant Fauna

6.2.4.1 Fauna Survey (2022)

PGV Environmental (2023) identified the areas surveyed may provide habitat for two marine bird species, Cattle Egret (*Ardea* (*Bubulcus*) *ibis*) and the Rainbow Bee-eater (*Merops ornatus*), the Spiny Katydid (Swan Coastal Plain) (*Austrosagaspinifer*) (Priority 2) and the Woolybush Bee (*Hylaeus globuliferus*) (Priority 3). The Quenda (*Isoodon fusciventer*) (Priority 4) could potentially occur on the site.

Habitat on the site was identified for three listed species of Black Cockatoos being:

- Carnaby's cockatoo
- Forest Red-tailed Black Cockatoo
- Baudin's cockatoo

It is worth noting that PGV Environmental (2023) stated that the site is just outside the modelled 'Predicted Breeding Area' distribution for Baudin's Black Cockatoo.

6.2.4.2 Fauna Survey (2025)

Ecoscape (2025) identified survey area may provide habitat for the Peregrine falcon (*Falco peregrinus*), and Black-striped snake (*Neelaps calonotos*) (Priority 3). Further, the Quenda (Priority 4) is known to occur within the survey area along with Carnaby's Cockatoo and Forest Red-tailed Black Cockatoo.

It is worth noting that Ecoscape (2025) determined Baudin's cockatoo as being unlikely to occur within the survey area, given it is located outside of their mapped distribution (DAWE 2020).

6.2.4.2.1 Quenda (Priority 4)

The Banksia Woodland habitat contains low shrubs, grass trees and grassy understorey that are used by Quenda for shelter along with the presence of sandy soils for foraging (Ecoscape, 2025). Whilst no live individual were observed during Ecoscape's (2025) survey, evidence of Quenda was found in the form of diggings and apparent tunnelling in long grass. The Quenda diggings ranged in age which suggests persistence in the survey area over time.

6.2.5 Black Cockatoo Habitat

6.2.5.1 Black Cockatoo Habitat Assessment (2022)

6.2.5.1.1 Potential Breeding Habitat

Within the lots that were surveyed by PGV Environmental (2023), a total of 16 Jarrah trees were recorded that had a DBH of greater than 500mm, however one tree had a large base but was sheared and coppiced

and would not form a suitable hollow so a total of fifteen trees on the site meet the definition of potential breeding habitat (Plate 6-1). None of the trees had suitable hollows for breeding (PGV Environmental, 2023).

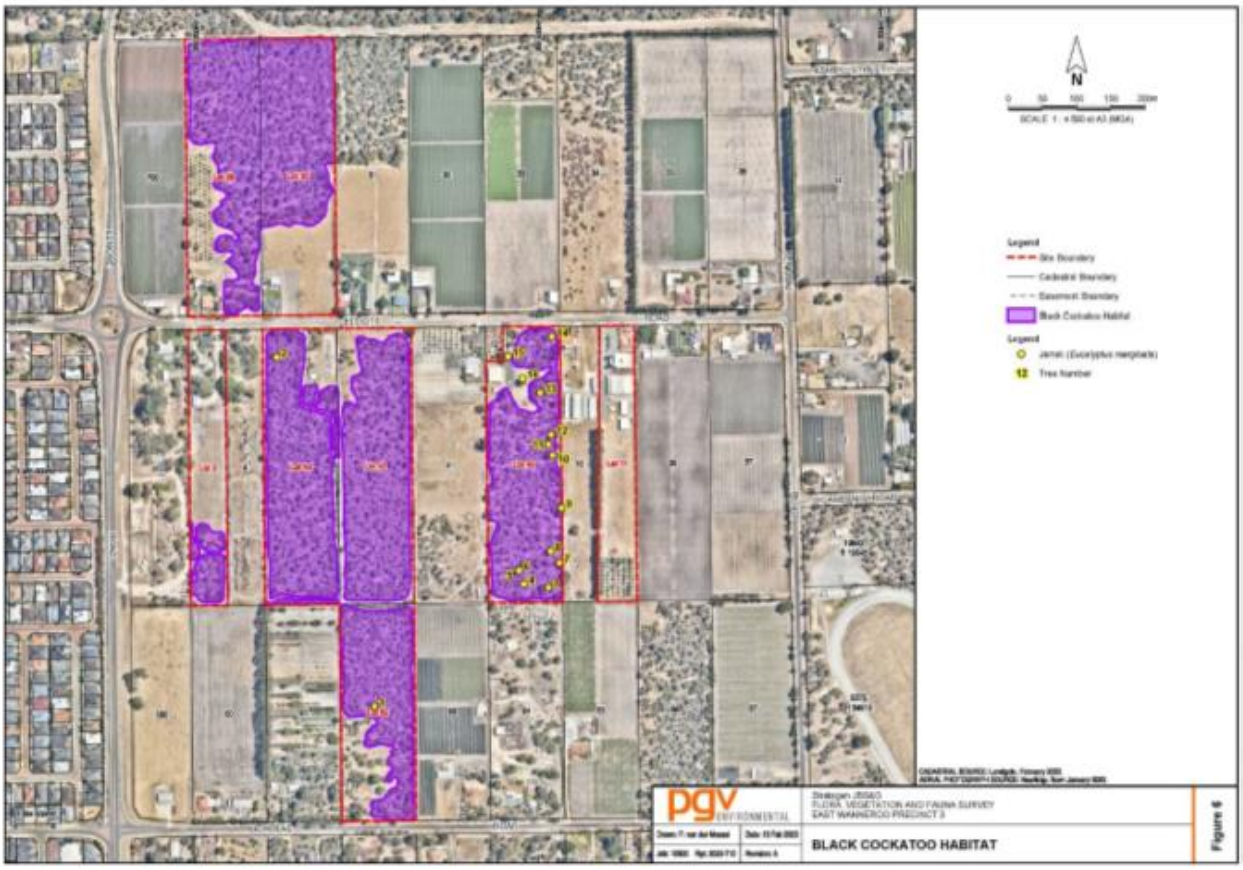

Plate 6-1: Black Cockatoo Habitat – 2022 survey findings

6.2.5.1.2 Roosting Habitat

PGV Environmental (2023) did not record any roosting within the survey area and determined the survey area had limited roosting habitat for Black Cockatoos. Further, roosting has not been recorded within the survey area (DoP, 2011; Peck *et al.,* 2019; National Map, 2022, as cited in PGV Environmental, 2023). The nearest roosting sites are reported to be from around 700 m to the north-east (National Map, 2022), and a number of roost sites are reported within 20km (PGV Environmental, 2023).

6.2.5.1.3 Foraging Habitat

PGV Environmental (2023) recorded thirteen species that are recognised as foraging habitat for Black Cockatoos within the survey area (Table 6-1).

Table 6-1: Forage species for Black Cockatoos

Tree Species	Common Name	Carnaby's Cockatoo	Forest Red-tailed Black Cockatoo	Baudin's Cockatoo
Acacia saligna	Orange Wattle	✓		
Allocasuarina fraseriana	Sheoak		✓	✓
Banksia attenuata	Candlestick Banksia	✓		
Banksia dallanneyi	Couch Honeypot	✓		
Banksia menziesii	Firewood Banksia	✓		

Tree Species	Common Name	Carnaby's Cockatoo	Forest Red-tailed Black Cockatoo	Baudin's Cockatoo
Bankia prionotes	Acorn Banksia	✓		
Banksia sessilis	Parrot Bush	✓		✓
Callitris preissii	Rottnest Island Pine	✓		
Eucalyptus marginata	Jarrah	✓	✓	✓
Hakea prostrata	Harsh Hakea	✓		✓
Hakea ruscifolia	Candle Hakea	✓		✓
Melia azedarach	Cape Lilac	✓	✓	
Xanthorrhoea preissii	Balga	✓	✓	

Source: (Davies, 1966; Saunders, 1980; Johnstone and Storr, 1998; Johnstone and Kirkby, 1999; Valentine and Stock,2008; Groom, 2011; Johnstone et al., 2011; SEWPaC, 2012; Bamford, 2013; Johnstone, et al., 2013; Johnstone et al., 2016 as cited in PGV Environmental, 2023)

The Black Cockatoo foraging habitat values was determined by PGV Environmental (2023) using the habitat scoring tool in the Commonwealth Black Cockatoo referral guideline (DAWE, 2022).

Table 6-2: Foraging habitat scoring tool (DAWE, 2022)

Attribute	Context Adjustor	Carnaby's Cockatoo	Forest Red-tailed Black Cockatoo	Baudin's Cockatoo
Starting score:		**10**	**10**	**10**
Foraging potential	**Subtract 2** from your score if there is no evidence of feeding debris on your site.	0	0	-2
Connectivity	**Subtract 2** from your score if you have evidence to conclude that there is no other foraging habitat within 12 km of your site.	0	0	0
Proximity to breeding	**Subtract 2** if you have evidence to conclude that your site is more than 12 km from breeding habitat.	0	0	0
Proximity to roosting	**Subtract 1** if you have evidence to conclude that your site is more than 20 km from a known night roosting habitat.	0	0	0
Impact from significant plant disease	**Subtract 1** if your site has disease present (e.g. Phytophthora spp. or Marri canker) and the disease is affecting more than 50% of the preferred food plants present.	0	0	0
Final Score		10	10	8

Source: (PGV Environmental, 2023)

6.2.5.2 Black Cockatoo Habitat Assessment (2025)

6.2.5.2.1 Potential Breeding Habitat

Ecoscape (2025) assessed potential breeding habitat in accordance with the criteria outlined in the Commonwealth Black Cockatoo referral guideline (DAWE, 2022), with additional information recorded using the grading classifications outlined by BCE (2016) when determining the potential suitability of trees to be used for nesting based on the presence, size and orientation of hollows.

A total of 95 trees were recorded to have suitable diameters (>500 mm) to be Black Cockatoo habitat trees, of which 84 were Jarah (Eucalyptus marginata), 5 were Tuart (*Eucalyptus gomphocephala*), 7 were dead and

2 were other (Figure 8) (Ecoscape, 2025). Photographs of all trees are provided in Appendix 9 of Ecoscape's (2025) report (Appendix 4).

Based on BCE's grading classifications, no trees were identified within the site as Class 1 (trees having hollows with active nests) or Class 2 (trees having hollows showing previous use as a Black Cockatoo nest but not currently occupied). One Jarrah was recorded within the eastern extent of Lot 40 as being Class 3 (trees having potentially suitable hollows without evidence of use) (Figure 8) (Ecoscape, 2025).

Class 4 and 5 trees do not have hollows suitable for Black Cockatoos but are of sufficient size that they may develop them in the future. 30 trees were classified as Class 4 (trees with large hollows that weren't suitable for Black Cockatoos) and 64 as Class 5 (trees currently without large hollows) (Figure 8) (Ecoscape, 2025).

6.2.5.3 Roosting Habitat

No known roost locations are registered within the site (Ecoscape, 2025). The closest recorded roost is approximately 530 m east of the site, which was last documented as being used in 2022 during the Great Cocky Count (Pryor, Barrett and Williams, 2023 as cited in Ecoscape 2025).

Whilst Ecoscape (2025) did note that the Banksia Woodland habitat type, which is mapped across the site, includes emergent Eucalyptus species that is mostly Jarrah with occasional Tuart that have potential as roosting habitat, no evidence of roosting was found during the survey. Ecoscape (2025) did observe one pair and one single Carnaby's Cockatoo perching in the site.

6.2.5.4 Foraging Habitat

The foraging habitat within the site is comprised of mixed Banksia species (*Banksia attenuata*, *Banksia prionotes*, *Banksia menziesii*) utilised by Carnaby's, *Allocasuarina fraseriana* utilised by Forest Red-tailed Black Cockatoos and *Eucalyptus marginata* subsp. marginata (Jarrah) utilised by both Black Cockatoo species (Ecoscape, 2025).

Ecoscape (2025) found evidence of previous foraging in the form of chewed Banksia cones. Two Forest Red-tailed Black Cockatoos were observed foraging in *Allocasuarina* trees. Based on field observations and detailed flora quadrat data, it was estimated that the Black Cockatoo foraging species ranged from approximately 20-40% coverage (Ecoscape, 2025).

The total extent of suitable foraging habitat within the site is 32.90 ha. To determine the habitat quality scores for Carnaby's Cockatoo and Forest Red-tailed Black Cockatoo, Ecoscape (2025) utilised the DAWE (2022) foraging habitat scoring tool (Table 6-3).

Table 6-3: Foraging habitat scoring tool (DAWE, 2022)

Habitat Summary for Black Cockatoo Foraging Habitat		Score
Carnaby's Cockatoo		
Starting Score	10 if the site is >1 ha in extent, is within the usual range of the species, and is: • native shrubland, kwongan heathland or woodland dominated by proteaceous species • native woodland or forest containing foraging species, including roadsides, parkland cleared areas and planted native vegetation.	+10
Context adjustor (subtractions)	None applicable.	0
Final Score		**10 (High Quality)**
Forest Red-tailed Black Cockatoo		
Starting Score	10 if the site is >1 ha in extent, is within the usual range of the species, and is: • Jarrah or Marri woodland and/or forest • on the edge of Karri forest • Wandoo and Blackbutt occur on the site • includes the above if along roadsides and parkland cleared areas.	+10
Context adjustor (subtractions)	No known breeding areas are within 12 km of the survey area	-2
Final Score		**8 (High Quality)**

Source: Ecoscape (2025)

Ecoscape (2025) also applied the BCE (2020) scoring system, which takes into consideration the following components:

- site condition (vegetation composition, condition and structure)
- site context (the site in relation to other native vegetation within a 15 km radius of the site)
- species density (stocking rate: frequency and abundance of Black Cockatoos at the site)
- modification, if needed, for vegetation with little or no foraging value and for pine plantations that provide valuable food sources.

Table 6-4 presents the foraging values calculated for Carnaby's Cockatoo and Forest Red-tailed Black Cockatoo using BCE (2020) scoring system.

Table 6-4: Black cockatoo foraging value (BCE, 2020)

Component	Carnaby's Cockatoo	Forest Red-tailed Black Cockatoo
Site condition	**4**: 20-40% *Banksia*	**3**: 5-20% foraging
Site context	**3**: in vicinity of known breeding area, >5% native habitat in 15 km radius	**2**: Breeding site unlikely, 5-10% native habitat within 15 km radius
Species density/ stocking rate	**1**: foraging evidence	**1**: sightings, foraging
Total Score	8	6

Source: Ecoscape (2025)

The areas mapped as Banksia Woodland within the site (Figure 7 and Figure 8), scored an 8 out of a possible 10 for Carnaby's Cockatoo (which represents potentially high value foraging habitat), and 6 out of a possible 10 for Forest Red-tailed Black Cockatoo (which represents potentially moderate value foraging habitat).

It is worth noting, the BCE scoring tool is considered to be a more accurate depiction of the foraging habitat value and it's predicted distribution across the site. One of the primary aims of the DAWE (2022) foraging quality scoring tool is to assist proponents with determining whether or not a proposed action requires referral to DCCEEW. Given the 2022 black cockatoo referral guidelines also acknowledges that the scoring tool does not include or require consideration of vegetation quality (i.e Keighery condition scale or other similar methodologies) and that this kind of information may become important when environmental assessment of the proposed action is required, the BCE scoring tool was considered to be more a more appropriate scoring tool to be utilised for the environmental impact assessment of foraging habitat within the site.

6.2.6 Introduced Fauna

The following introduced vertebrate fauna were identified as occurring on site from observations and secondary evidence (Ecoscape, 2025):

- Rainbow Lorikeet (*Trichoglossus moluccanus*); one record, observed at BS01
- Rabbit (*Oryctolagus cuniculus*); one record of deceased remains
- Red Fox (*Vulpes vulpes*); two records of a burrow and deceased remains
- Laughing Kookaburra (*Dacelo novaeguineae*); one record, observed opportunistically
- Laughing Turtle-dove (*Spilopelia senegalensis*); two records, observed at BS01 and BS04
- Spotted Turtle-dove (*Spilopelia chinensis*) one record, observed opportunistically.

In addition to the Red Fox and Rabbit identified above, PGV Environmental (2023) also identified the Feral cat (*Felis catus*), House Mouse (*Mus musculus*) and Black Rat (*Rattus rattus*) as being likely to occur within the site.

6.3 Potential Impact Identification and Assessment

Potential impacts to terrestrial fauna associated with future urban development have been identified as follows:

- Direct loss of habitat through land clearing
- Mortality or displacement of individuals or populations
- Degradation and fragmentation of habitat
- Increased presence of invasive species (i.e., fauna, weeds and diseases)
- Increased frequency of fires.

Implementation of the LSP will result in impacts to some areas of native vegetation which may provide fauna habitat opportunities. The location of Parks and Recreation reserves and public open space areas are shown in Appendix 2.

The proposed development will manage impacts to fauna and fauna habitat in accordance with the mitigation hierarchy (Section 5.4.1).

6.3.1 Black Cockatoo Habitat Retention and Clearing

Implementation of the proposal will result in impacts to some areas of native vegetation which may provide fauna habitat opportunities for lot creation and infrastructure installation.

As previously stated, the development has considered the siting and extent of the Parks and Recreation reserve within Precinct 3 in the context of impact minimisation to Black Cockatoo foraging habitat and habitat trees (Figure 9). Tree retention may also be possible in other parts of the site i.e. road verges, public open space, drainage sumps etc., subject to detailed design.

Approximately 13 ha (39.51%) of Black Cockatoo foraging habitat, which is of moderate value for Forest Red-tailed Black Cockatoos and high value for Carnaby's Black Cockatoo, is proposed for retention in the Parks and Recreation reserve (Table 6-5). Approximately 19.90 ha (60.49%) is proposed to be cleared for development within the Urban Development and Public Open Space areas (Table 6-5).

Table 6-5: Black Cockatoo foraging habitat values within Parks and Recreation, Public Open Space and Urban Development

	Black Cockatoo Foraging Habitat		Cleared/ Not native vegetation	
	Area (ha)	% of Value	Area (ha)	% of Value
Parks and Recreation	13.00	39.51%	1.25	1.22%
Public Open Space	3.15	9.58%	8.82	8.66%
Urban Development	16.75	50.91%	91.88	90.12%
Total	**32.90**	**100.00%**	**101.95**	**100.00%**

A total of 38 Black Cockatoo habitat trees are proposed for retention in the Parks and Recreation reserve (Table 6-6). Of these, 35 are Jarrah and 3 are dead. There are 8 trees within Public Open Space (7 are Jarrah and 1 is Tuart) and 49 within the proposed Urban Development (39 are Jarrah, 4 are Tuart, 4 are dead and 2 are other). As previously stated, tree retention may also be possible in other parts of the site i.e. road verges, public open space, drainage sumps etc., subject to detailed design.

Table 6-6: Black cockatoo habitat trees within Parks and Recreation, Public Open Space and Urban Development

	Jarrah	Tuart	Dead	Other	Total
Parks and Recreation	35	0	3	0	38
Public Open Space	7	1	0	0	8
Urban Development Area	39	4	4	2	49
Total	81	5	7	2	95

Within the Parks and Recreation reserve, there are 27 Black Cockatoo habitat trees classified as Class 5 (trees currently without large hollows) and 11 as Class 4 (trees with large hollows that are not suitable for Black Cockatoos (Table 6-7). Within public open space there are 4 categorised as Class 5 and another 4 as Class 4. The Urban Development area contains 33 as Class 5, and 15 as Class 4. There is only one Class 3 tree (has potentially suitable hollows without evidence of use) which is located in the Urban Development area; however, based on the location of the tree (Figure 9) there may be potential to retain it within the road reserve as part of future development.

Table 6-7: Black cockatoo tree classes within Parks and Recreation, Public Open Space and Urban Development

	Tree classification			
	Class 5 (without large hollows)	Class 4 (not suitable hollows)	Class 3 (potentially suitable hollows, no evidence of us)	Total
Parks and Recreation	27	11	0	38
Public Open Space	4	4	0	8
Urban Development Area	33	15	1	49
Total	64	30	1	95

6.3.2 Regional Context Analysis

Utilising DBCA mapping, PGV Environmental (2023) determined there is 17,973 ha of Black Cockatoo habitat within 12 km of the site, of which 3,635 ha is in DBCA managed land (PGV Environmental, 2023). This would include the following nearby reserves and regional parks:

- Benmuni Park local reserve (part of Bush Forever Site 471) – immediately north of the site
- Jambanis Park/Nanovich Park/Estrel Park (part of Bush Forever Site 327) – immediately east of the site
- Badgerup Reserve (part of Bush Forever Site 327) – approximately 400m south east of the site
- Jandabup Nature Reserve (Bush Forever Site 324) – approximately 900m north east
- Yellagonga Regional Park, including Lake Joondalup Nature Reserve (Bush Forever Site 299) – approximately 2.4km west
- Lake Gnangara Park (Bush Forever Site 193) – approximately 2.8km south east of the site
- State Forest 65 (Gnangara-Moore River State Forest) – approximately 3km east
- Neerabup National Park (Bush Forever Site 383) – approximately 7.5km north west of the site

At a regional level, clearing of 19.9 ha of native vegetation (worst case clearing scenario based on vegetation retention in the Parks and Recreation reserves only) represents approximately 0.11% of Black Cockatoo foraging habitat within 12 km of the site.

6.3.3 Impact Mitigation

Impacts to fauna and fauna habitat have been considered in the context of the EPA's mitigation hierarchy (Table 5-8).

Table 6-8: Terrestrial Fauna Mitigation Hierarchy

Mitigation Hierarchy	Assessment and Proposed Actions
Impact	

Terrestrial Fauna	• Loss of potential fauna habitat vegetation in Urban Development Area.
	• Loss of approximately 19.90 ha of Banksia Woodland fauna habitat within Public Open Space and Urban Development Area, which comprise of:
	  ▪ 19.90 ha of high value Carnaby's Cockatoo foraging habitat and moderate quality Forest Red-tailed Black Cockatoo foraging habitat
	  ▪ 57 Black cockatoo habitat trees, of which
	• Fragmentation of habitat.

Mitigation Hierarchy	Assessment and Proposed Actions
	• Potential for degradation of habitat including increased presence of invasive species. • Potential increased frequency of fires leading to habitat changes. • Potential mortality or displacement of individuals or populations.
Mitigation Hierarchy	
Avoidance	• Retention of 13 ha of potential Banksia Woodland fauna habitat within Parks and Recreation reserve, which comprise of: ▪ 13 ha of high value Carnaby's Cockatoo foraging habitat and moderate quality Forest Red-tailed Black Cockatoo foraging habitat. ▪ 38 Black Cockatoo habitat trees, including 1 Class 3 tree (has potentially suitable hollows without evidence of use). • Potential retention of Black Cockatoo habitat trees and potential roosting trees within public open space, road reserves and/or detention basins could provide future habitat for Black Cockatoos. • Bushfire management can be undertaken without impact to areas of retained vegetation or revegetation (see Bushfire Management Plan).
Minimisation	• Tree retention in road reserves, public open space and/or drainage basins may be considered once detailed engineering and planning design has been undertaken. This will be done in accordance with City of Wanneroo's LPP 4.8 – Tree Preservation. • Street tree planting will include native species, with potential foraging Black Cockatoo foraging value, which will be approved by the City of Wanneroo. • Landscape planting within the Parks and Recreation reserve will include areas of native species planting that are acceptable from a bushfire management perspective. Detailed landscape design will be prepared at the subdivision stage of the project to be approved by the City of Wanneroo. • Clearing boundaries will be physically/visibly demarcated to avoid unauthorised clearing to protect the retained vegetation which provides fauna habitat opportunities. • Fauna relocation and management will be undertaken prior to- and during construction to avoid impacts to fauna. In accordance with the City of Wanneroo's Environmental Management Plan Guidelines and LPP 3.3 – Fauna Management, a Vegetation and Fauna Management Plan will be prepared and implemented at subdivision stage to prevent damage to fauna habitats being retained, and ensure fauna is appropriately trapped and relocated. It will also include protocols for dealing with displaced/injured animals during clearing and subdivisional works. • Undertake weed control along the boundary of the Parks and Recreation reserve and Urban Development Areas, to avoid ingress into areas of retained vegetation. These management measures will be detailed in the Conservation Area Management Plan, or similar. • Conservation Area Management Plan(s), or similar, will be prepared in accordance with the City of Wanneroo's Environmental Management Plan Guidelines and LPP 1.1 – Conservation Reserves for areas of retained vegetation and fauna habitat onsite. These plans will provide guidance relating to vegetation and fauna habitat retention, revegetation zones, revegetation species and density, weed and disease control, drainage and nutrient management, access control, signage and bushfire prevention/risk management. • The Construction Environmental Management Plan will contain, amongst other items, hygiene protocols to prevent the spread of disease or weeds into the Parks and Recreation reserve and retained fauna habitat areas.

Mitigation Hierarchy	Assessment and Proposed Actions
	• Bushfire management can be undertaken within the site without impact to areas of retained vegetation and fauna habitat (see Bushfire Management Plan).
Rehabilitation	• Revegetation will occur within the Parks and Recreation reserve, subject to measures outlined in the Conservation Area Management Plan, or similar (Table 4-16).
Offsets	• Future development proposals proposing to clear Black Cockatoo habitat will require referral under the Commonwealth EBPC Act. The EPBC Act referral and assessment process will require further evaluation of impacts to Black Cockatoo and for environmental offsets to be provided, where required.

6.4 Predicted Outcome

The LSP will result in the following predicted outcomes to terrestrial fauna:

- Retention of approximately 13.0 ha (39.5%) of Black Cockatoo habitat within Parks and Recreation, which comprise of:
  - high value Carnaby's Cockatoo foraging habitat
  - moderate value Forest Red-tailed Black Cockatoo foraging habitat
  - 38 Black Cockatoo habitat trees with suitable diameter.
- Key areas of Black Cockatoo habitat retention are to be located within Parks and Recreation reserves, which will provide additional security of tenure.
- Loss of up to 19.9 ha (60.5%) of Black Cockatoo habitat onsite, including 57 Black Cockatoo habitat trees with suitable diameter; However, retention of Black Cockatoo habitat trees within road reserves, public open space and/or drainage basins could provide future habitat opportunities, once detailed engineering and planning design has been undertaken.
- Minimisation of impacts to resident fauna through fauna management and relocation measures prior to- and during construction in the Public Open Space and Urban Development areas, as per the Vegetation and Fauna Management Plan, or similar.
- Improvement in ecological condition and associated fauna habitat value in the Parks and Recreation reserve, through implementation of weed control and revegetation, as per the Conservation Area Management Plan(s), or similar.
- Environmental offsets for clearing of Black Cockatoo foraging habitat to be addressed through the DCCEEW EPBC Act referral and assessment process.

7 Social Surroundings

7.1 Key Policies and Guidance

Relevant policy and guidance documents for social surroundings, which have informed site-specific investigations and/or have been used to assess potential impacts, include:

- Environmental Factor Guideline – Social Surroundings (EPA, 2023)
- EPA Guidance Statement No. 3 Separation Distances between Industrial and Sensitive Land Uses (EPA, 2005)
- State Planning Policy 2.4 Basic Raw Materials (SPP 2.4) (WAPC, 2021b)
- State Planning Policy 5.4 Road and Rail Noise (SPP 5.4) (WAPC, 2019)
- *Aboriginal Heritage Act 1972*

7.2 Receiving Environment

A search of the Department of Planning, Lands and Heritage (DPLH) Aboriginal Cultural Heritage (ACH) Inquiry System identified that the site does not contain any registered sites or other heritage places (DPLH, 2025b):

The closest Aboriginal Heritage site noted is Gnangara Site 3 located approximately 1.4 km southwest of the subject site. Gnangara Site 3 is a lodged site associated with a Burial (ID1017) (Landgate, 2025b).

A search of the Heritage Council InHerit database (Heritage Council, 2024) and the City of Wanneroo Heritage List (CoW, 2025) indicates that there are no recorded heritage sites located on the site or within a 1km radius of the site.

The Department of Mines, Industry, Regulation and Safety (DMIRS) GeoView database does not indicate the presence of any SPP 2.4 Basic Raw Materials extraction sites or exclusions areas within the landholdings (DEMIRS, 2025).

The site is not mapped within any strategic freight and/or major traffic routes as identified by State Planning Policy 5.4 Road and Rail Noise (WAPC, 2019).

The closest industrial area to the site is located approximately 1.8km to the south (Wangara Industrial Area, zoned General Industry) (CoW, 2025). Given the presence of sensitive land uses between the industrial area and the site, any associated land use buffer requirements would not be anticipated.

Markets gardening and other intensive primary industry activities exist with the site and surrounding areas. The interface between these land uses and future development needs to take into consideration how these land uses are separated.

The EPA recommends the below generic separation distances (Table 7-1) to sensitive land uses.

Table 7-1: EPA recommended separation distances to sensitive land uses

Land use	Recommended generic separation distance
Market gardening (broad-scale operations)	300-500m, depending on size
Nurseries (no composting)	100m
Greenhouses (using manure or compost)	200-300m
Orchards (broad-scale operations)	500m
Turf farms and lawns (broad-scale turf production)	500m
Extractive industries (sand and limestone extraction)	300-500m, depending on size

Source: EPA, 2005

7.3 Potential Impact Identification and Assessment

There are no known Aboriginal or European heritage sites within the landholdings. There is potential that currently undiscovered matters of Aboriginal cultural significance may be identified during the site construction program. Disturbance of these items without approval is prohibited under the AH Act.

Development planning for the site will take into consideration the presence of active land uses at the time of subdivision which require separation from sensitive land uses.

The use of separation distances and/or other methods to provide adequate treatment and management between residential and agricultural/industrial land uses (which are likely to be for a temporary period of time prior to development progressing across these locations) will be addressed through regulator liaison and subdivision stage approval processes.

Dust generation is a potential impact of the construction program. The potential for dust generation is likely to be the highest in summer afternoon when wind conditions are at their strongest. Actions which can be undertaken to reduce the risk of dust generation and nuisance impacts include:

- Use of dust suppression measures, including application of water to the construction site or placement of hydromulch to stabilise cleared areas once earthworks have been completed
- Limiting stockpile numbers and size onsite
- Limiting vehicle speeds to a maximum of 15 km/hr
- Covering of soil loads transported to and from the site
- Undertake regular cleaning of road and sealed surfaces
- Staging of works to minimise the size of the open/disturbed areas present onsite at any one time
- Have dust fencing available for use, if required
- Undertake dust monitoring
- Maintain a complaints register and investigate/undertake responsive actions to any complaints received

Dust management will be addressed within the proposed Construction Environment Management Plan(s).

7.4 Impact Mitigation

Table 7-2 summarises the impacts and outlines the avoidance and minimisation actions which are proposed in relation to Social Surroundings.

Table 7-2: Social Surroundings Mitigation Hierarchy

Mitigation Hierarchy	Proposed Actions
Impact	
Social Surroundings	• Potential land use conflicts between nearby agricultural land uses and future onsite sensitive land uses • Identification of currently undiscovered areas or materials which have Aboriginal cultural heritage significance and are protected under the AH Act • Dust generation impacting human health and amenity of residents
Mitigation Hierarchy	
Avoidance	• No known Aboriginal or European heritage sites are located within the landholdings
Minimisation	• Ensure all contractors working on the site are aware of the requirements of the AH Act in relation to finding material of potential cultural significance • The use of separation distances and/or other methods to provide adequate treatment and management between residential and agricultural/industrial land uses will be addressed through regulator liaison and subdivision stage approval processes • Address dust management requirements which may include: ▪ Use of dust suppression measures, including application of water to the construction site or placement of hydromulch to stabilise cleared areas once earthworks have been completed ▪ Limiting stockpile numbers and size onsite ▪ Limiting vehicle speeds to a maximum of 15 km/hr ▪ Covering of soil loads transported to and from the site ▪ Undertake regular cleaning of road and sealed surfaces ▪ Staging of works to minimise the size of the open/disturbed areas present onsite at any one time ▪ Have dust fencing available for use, if required ▪ Undertake dust monitoring ▪ Maintain a complaints register and investigate/undertake responsive actions to any complaints received • A Construction Environmental Management Plan or similar will be prepared for the site. This will contain, amongst other items a summary of key obligations under the AH Act regarding potential finds of cultural significance and dust management requirements to prevent loss of surface soils and soil stabilisation requirements

7.5 Predicted Outcome

The LSP will result in the following predicted outcomes to social surroundings:

- The use of separation distances and/or other methods to provide adequate treatment and management between residential and agricultural/industrial land uses (which are likely to be for a temporary period of time prior to development progressing across these locations) will be addressed through regulator liaison and subdivision stage approval processes
- Future construction to address dust management requirements.
- Preparation and implementation of a Construction Environmental Management Plan or similar for future subdivisional works, which will include:
  - key obligations under the AH Act regarding potential finds of cultural significance
  - dust management requirements to prevent loss of surface soils and soil stabilisation requirements.

8 Other Matters

8.1 Bushfire Risk

Much of the site is located in a bushfire prone area by the Department of Fire and Emergency Services (DFES) (Plate 8-1) (Landgate 2025b). These areas are defined as being subject to, or likely to be subject to, bushfire attack, and are identified by the presence of and proximity to bush fire prone vegetation.

Plate 8-1: Bushfire Prone Areas

Source: MNG, 2025

To address the risk of bushfire to the future development proposal within the LSP area, a dedicated Bushfire Management Plan (BMP) has been prepared for the site (Emerge Associates, 2025). This BMP is being submitted in support of the LSP and should be read in conjunction with this Environmental Assessment Report.

Key components of the BMP which are relevant to environmental matters include:

- The BAL assessment conducted as part of the BMP indicates that all future habitable buildings within the proposed development can be sited to achieve BAL-29 or less. A number of the development cells have BAL-40 incursions as result of retained vegetation within the parkland reserves, however, the development cells are sufficiently sized to accommodate appropriately oriented lots at subdivision, allowing for in-lot setbacks to achieve BAL-29.
- Areas designated for parkland reserve purposes have been assumed to retain existing native vegetation and remain unmanaged. These areas area assumed to maintain a forest classification.
- Classified vegetation that has been identified outside of the proponent's landholdings has been assumed to remain in its current state (unless stated otherwise) and will therefore continue to be a bushfire hazard to development within the site.
- The BMP has been prepared under the assumption that the future Shenton Road Reserve area to the south will be developed prior to subdivision commencing within the southern portions of the site. If, at the time of subdivision, this road is not or will not be delivered, a revised approach to development in this area will be required.

An extract of the BAL mapping for the site, identifying retained native vegetation areas, is provide in Plate 8-2.

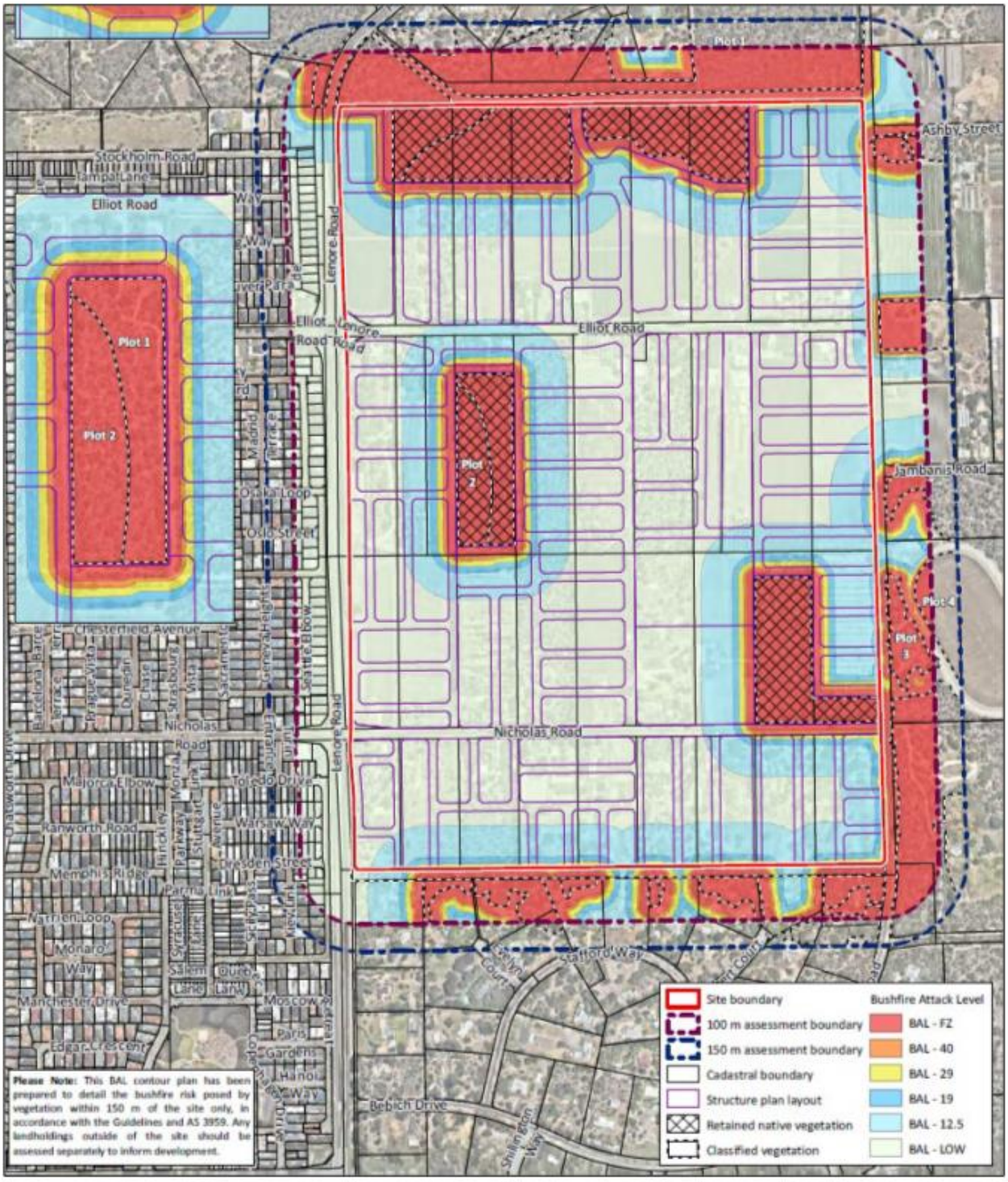

Plate 8-2: Bushfire Attack Level Contour Plan

Source: Emerge Associates, 2025

9 Environmental Management Framework

To ensure the proposed development is appropriately managed, an environmental management framework has been developed to outline the various environmental management plans, as identified as part of the environmental impact assessment and impact mitigations sections of this report, that will be implemented through various decision making authorities and at different stages of the project approval and implementation works (Table 9-1).

Table 9-1: Environmental Management Framework

Report / Management Plan	Timing / Stage of Project	Approval Required	Legislation or Agreement Regulating the Activity	Decision Making Authority	Environmental Management Outcome
Urban Water Management Plan(s)	Subdivision stage	Approval of plan(s) prior to construction commencing	*Planning and Development Act 2005* implemented as a condition of the approval of subdivision	DWER	Implementation of the UWMP will ensure the strategies and goals of the LWMS are archived in relation to water management
Bushfire Management Plan	Subdivision stage	Approval of plan(s) as prior to construction commencing Clearance that subdivision construction has met the requirements of the plan prior to issue of Certificate of Title	*Planning and Development Act 2005* implemented as a condition of the approval of subdivision	DFES / City of Wanneroo	Implementation of the plan will ensure that bushfire risks to the surrounding environment and future residents are addressed in accordance with SPP 3.7 to achieve an acceptable outcome
Conservation Area Management Plan(s) (or similar)	Subdivision stage	Approval of plan(s) prior to commencement of site work in relevant stages of the development	*Planning and Development Act 2005* implemented as a condition of the approval of subdivision	City of Wanneroo, on advice from DBCA, where relevant	Implementation of the plan will prevent and manage impacts of urban development on areas of retained vegetation and fauna habitat. Prepared in accordance with City of Wanneroo Environmental Management Plan Guidelines and LPP 1.1 – Conservation Reserves
Vegetation and Fauna Management Plan	Subdivision stage	Approval of the plan prior to construction (cleaning) commencing	*Planning and Development Act 2005* implemented as a condition of the approval of subdivision	City of Wanneroo	Implementation of the plan will mitigate impacts to native fauna during the clearing and construction phase and ensure that all activities are undertaken in accordance with requirements under the BC Act, and the City of Wanneroo Environmental Management Plan Guidelines and LPP 3.3 – Fauna Management
Construction Environment Management Plan(s)	Subdivision stage	Approval of plan(s) prior to commencement of site work	*Planning and Development Act 2005* implemented as a condition of the approval of subdivision	City of Wanneroo	Implementation of the plan will ensure appropriate management of key environmental factors as discussed in Sections 3 to 7 to mitigate risk to the surrounding environment

Report / Management Plan	Timing / Stage of Project	Approval Required	Legislation or Agreement Regulating the Activity	Decision Making Authority	Environmental Management Outcome
Preliminary Contamination Investigation	Subdivision stage	Approval of PSI, or identification of additional investigation, reporting and/or remediation requirements to be addressed	*Contaminated Site Act 2003*	DWER	The PSI will identify if any additional contamination investigations are required. Should detailed investigation or remediation be required the associated reports would be approved by DWER to ensure potential environmental risks are managed.

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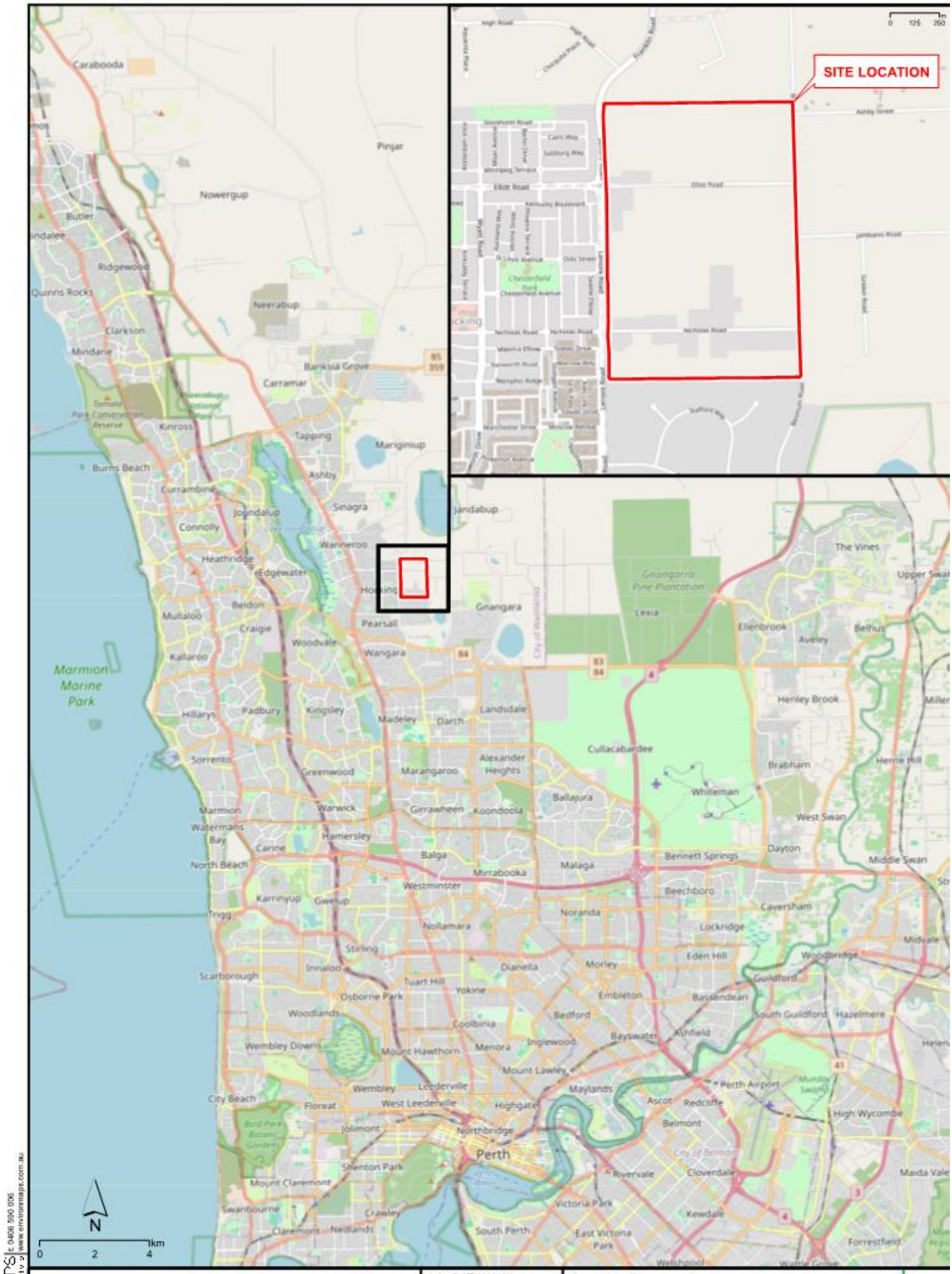
Figures



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Satterley Property Group
ENVIRONMENTAL ASSESSMENT REPORT
EAST WANNEROO PRECINCT 3

SITE LOCATION

Figure 1

Stockholm Rd
Cairo Wy
Salzburg Wy
ancouver Pde
Kentucky Byd
Madrid Tce
Sacramento Pde
Osaka Loop
Oslo St
Geneva Hts
Seattle Elb
Lenore Rd
Turin Ent
Warsaw Wy
Dresden St
Sicily Pass
Kiev Link
Toledo Dr
Elliot Rd
Ashby St
Jambanis Rd
Benmuni Rd
Nicholas Rd
Shenton Rd
Evelyn Ct
Albert Ct
LEGEND
Site Boundary
Cadastre
N
0 25 50 100 150 200 m
Scale: 1:5,000 @ A3
GDA2020 MGA Zone 50
COTERRA
Job: SATWAN01
Doc: 002
Date: 31/03/2025
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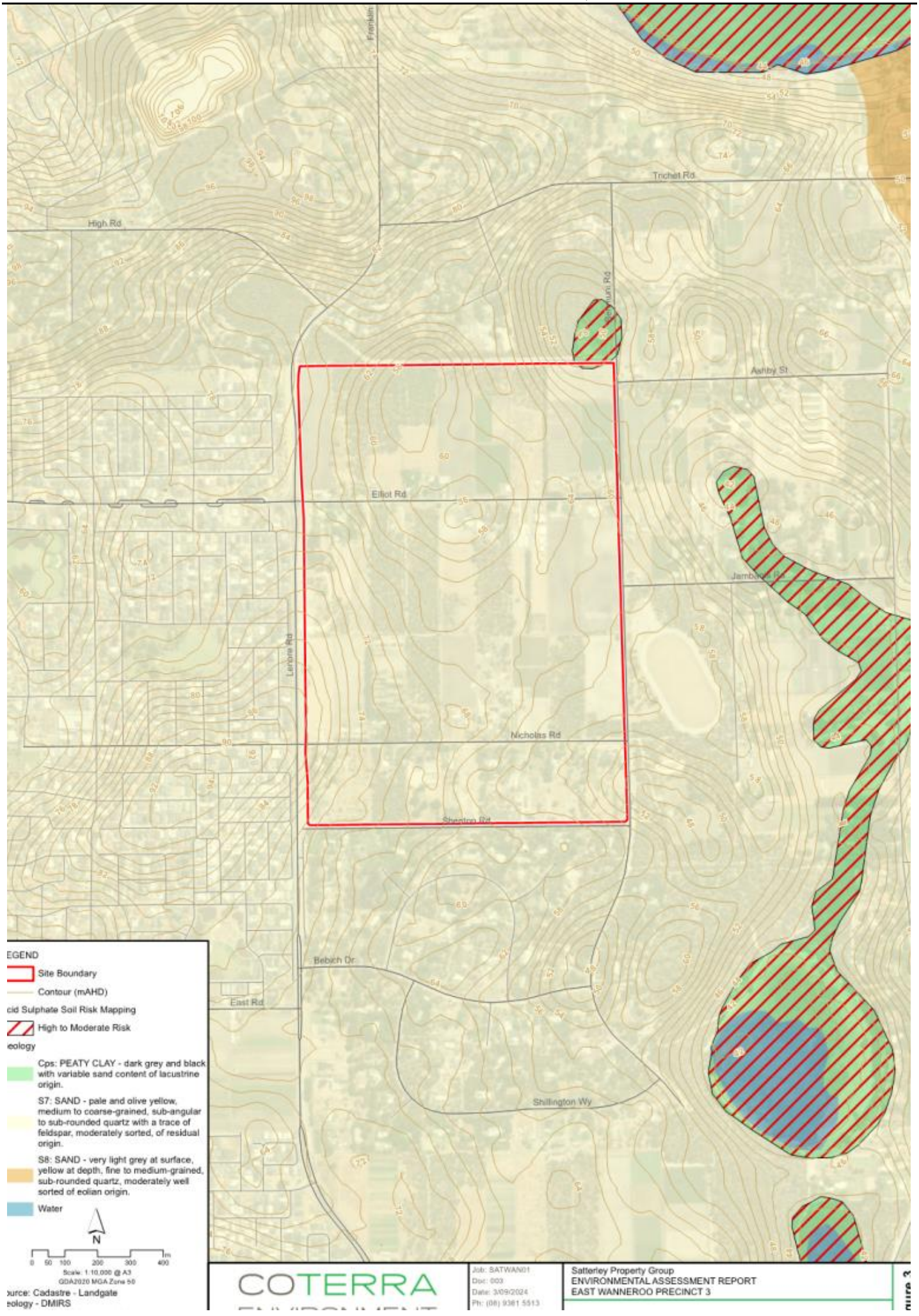
Franklin
Trichet Rd
High Rd
Ashby St
Elliot Rd
Jamboree Rd
Lenore Rd
Nicholas Rd
Sheehan Rd
Bebich Dr
East Rd
Shillington Wy
EGEND
Site Boundary
Contour (mAHD)
cid Sulphate Soil Risk Mapping
High to Moderate Risk
eology
Cps: PEATY CLAY - dark grey and black with variable sand content of lacustrine origin.
S7: SAND - pale and olive yellow, medium to coarse-grained, sub-angular to sub-rounded quartz with a trace of feldspar, moderately sorted, of residual origin.
S8: SAND - very light grey at surface, yellow at depth, fine to medium-grained, sub-rounded quartz, moderately well sorted of eolian origin.
Water
N
0 50 100 200 300 400 m
Scale: 1:10,000 @ A3
GDA2020 MGA Zone 50
ource: Cadastre - Landgate
eology - DMIRS
COTERRA
Job: SATWAN01
Doc: 003
Date: 3/09/2024
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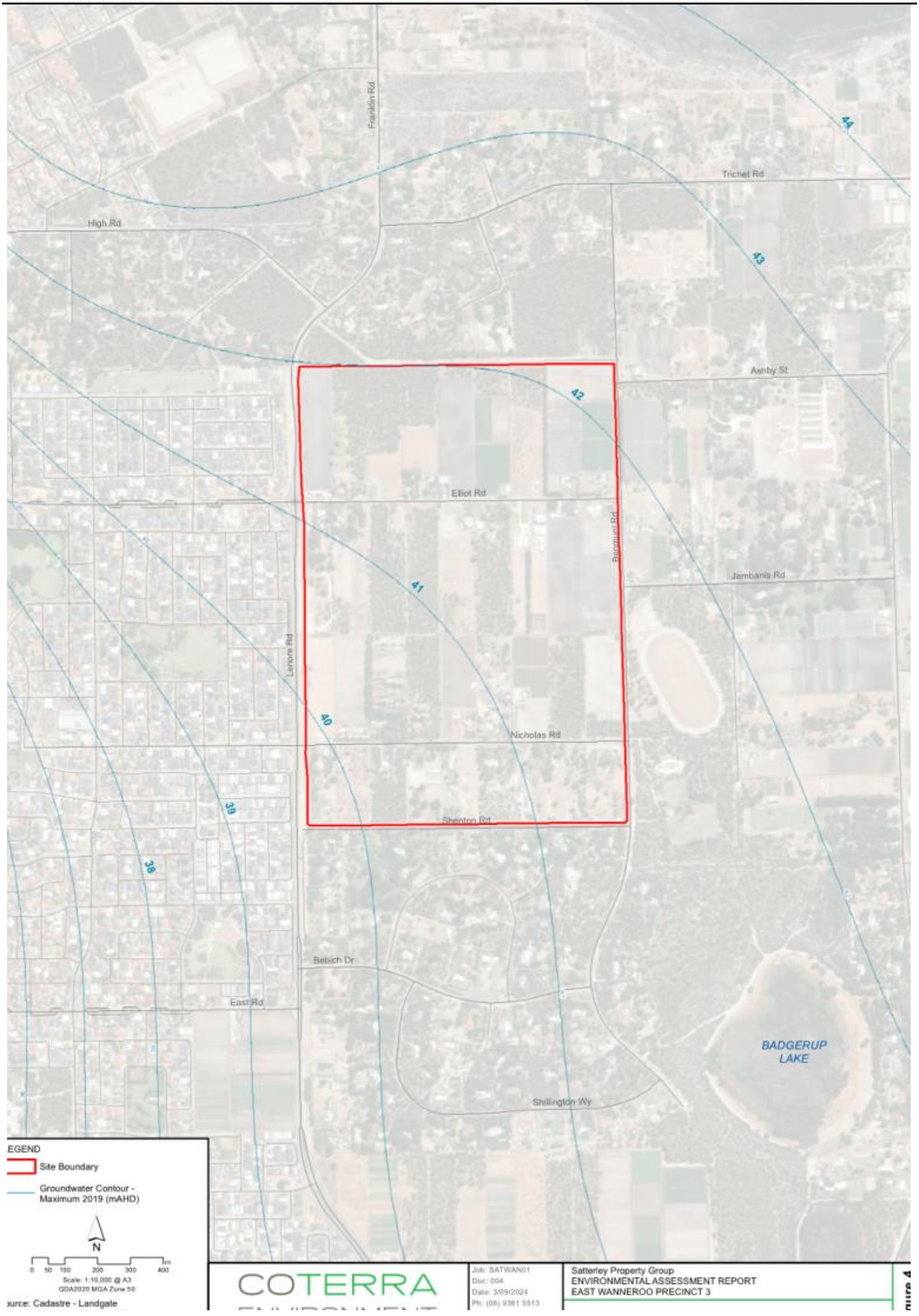
Franklin Rd
Trichet Rd
High Rd
Ashby St
Elliot Rd
Burrowa Rd
Jambanis Rd
Lenore Rd
Nicholas Rd
Sheeton Rd
Bebich Dr
East Rd
BADGERUP LAKE
Shillington Wy
44
43
42
41
40
39
38
EGEND
Site Boundary
Groundwater Contour - Maximum 2019 (mAHD)
N
0 50 100 200 300 400 m
Scale: 1:10,000 @ A3
GDA2020 MGA Zone 50
urce: Cadastre - Landgate
COTERRA
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LEGEND
Site Boundary
Cadastre
Quadrat
Waypoint
Significant Flora
Poranthera moorokatta (P2)
Vegetation Types
Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open forest over Eremaea pauciflora, Xanthorrhoea brunonis and Daviesia divaricata mid open shrubland over Mesomelaena pseudostygia and Hibbertia hypericoides subsp. hypericoides low open sedgeland / shrubland.
Eucalyptus marginata subsp. marginata, Banksia prionotes, Allocasuarina fraseriana low woodland over Xanthorrhoea brunonis, Daviesia nudiflora mid sparse shrubland over Hibbertia hypericoides subsp. hypericoides, Mesomelaena pseudostygia low sparse shrubland / sedgeland.
Not Native Vegetation / Cleared
Ecological Community
Commonwealth TEC, WA P3 PEC 'Banksia Woodlands of the Swan Coastal Plain ecological community'.
WT2405
WT2406
WT2412
Wpt-14
Wpt-15
WT2402
WT2403
WT2408
WT2407
Wpt-13
WT2409
WT2401
WT2411
WT2410
Stockholm Rd
Cairo Wy
Salzburg Wy
Vancouver Pde
Elliot Rd
Ashby St
Kentucky Blvd
Madrid Tce
Oslo St
Osaka Loop
Lenore Rd
Geneva Hts
Seattle Elb
Jambanis Rd
Benmunni Rd
Nicholas Rd
Turin Ent
Warsaw Wy
Dresden St
Sicily Pass
Kiev Link
Toledo Dr
Shenton Rd
Stafford Wy
Evelyn Ct
Albert Ct
Scale: 1:5,000 @ A3
GDA2020 MGA Zone 50
COTERRA
Job: SATWAN01
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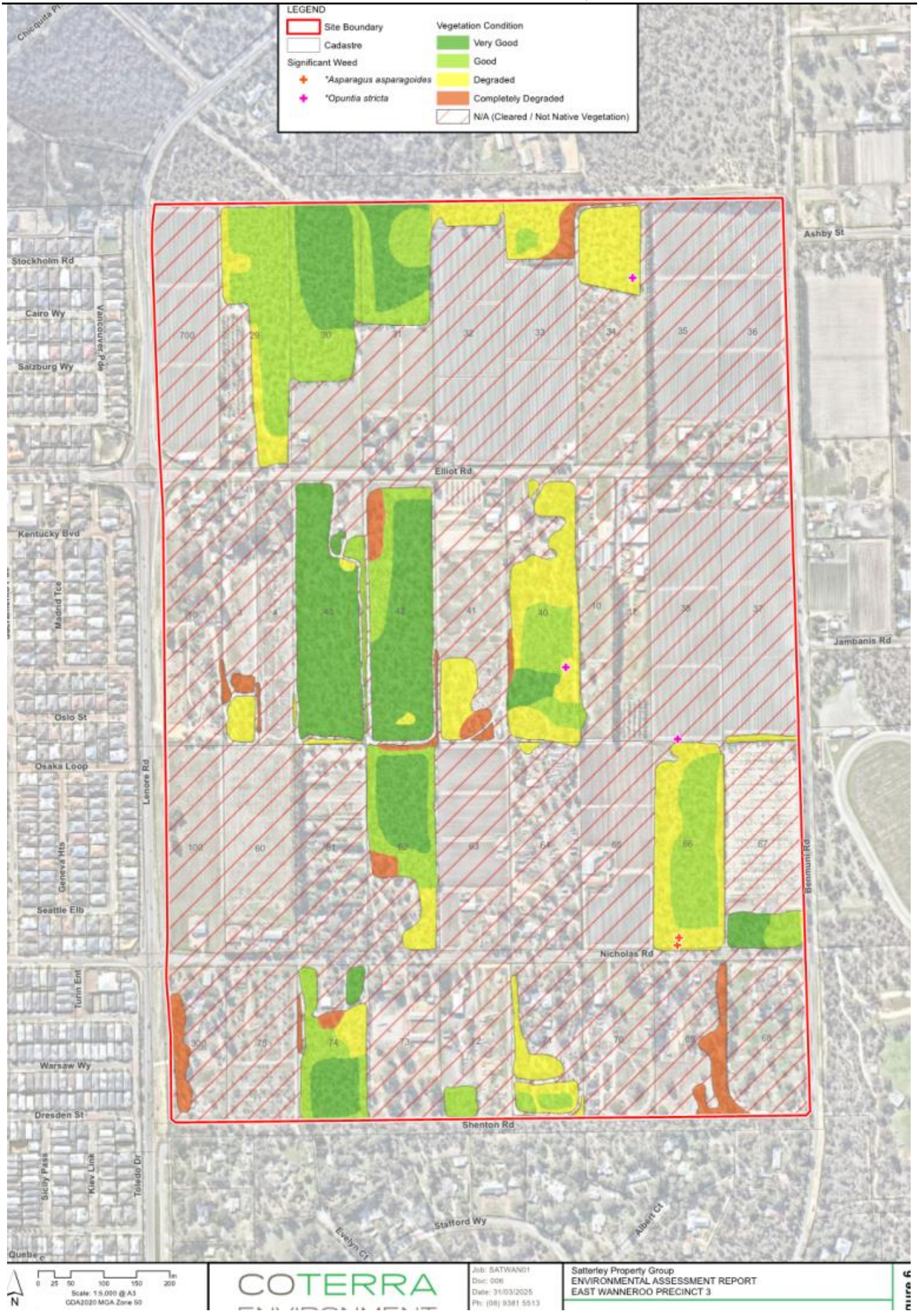
LEGEND
Site Boundary
Cadastre
Significant Weed
*Asparagus asparagoides
*Opuntia stricta
Vegetation Condition
Very Good
Good
Degraded
Completely Degraded
N/A (Cleared / Not Native Vegetation)
Chiquita Pl
Stockholm Rd
Cairo Wy
Salzburg Wy
Vancouver Pde
Ashby St
Elliot Rd
Kentucky Blvd
Madrid Tce
Oslo St
Osaka Loop
Lenore Rd
Geneva Hts
Seattle Elb
Turin Ent
Warsaw Wy
Dresden St
Sicily Pass
Kiev Link
Toledo Dr
Jambanis Rd
Benmunni Rd
Nicholas Rd
Shenton Rd
Stafford Wy
Evelyn Ct
Albert Ct
Quebec
Scale: 1:5,000 @ A3
GDA2020 MGA Zone 50
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ENVIRONMENTAL ASSESSMENT REPORT
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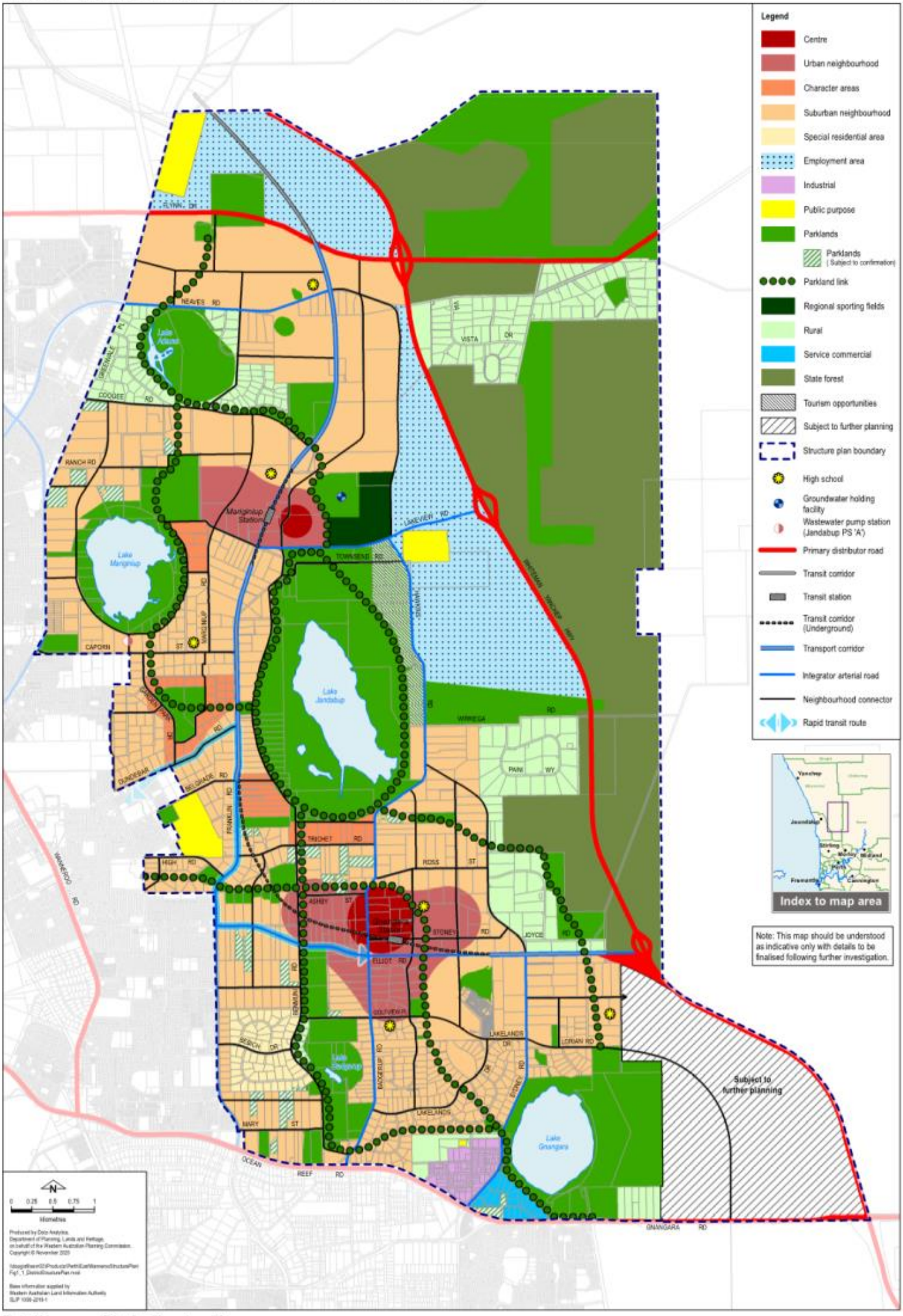
LEGEND
Site Boundary
Cadastre
Bird Survey
Habitat Assessment
Significant Fauna
Zanda latirostris (EN)
Isoodon fusciventer (P4)
Calyptorhynchus banksii subsp. naso (VU)
Merops ornatus (IA)
Fauna Habitat
Banksia Woodland
Cleared / Not Native Vegetation
HAB06
HAB01
BS01
HAB05
HAB07
HAB04
BS04
HAB02
BS02
HAB03
BS03
Elliot Rd
Nicholas Rd
Shenton Rd
Stockholm Rd
Cairo Wy
Salzburg Wy
Vancouver Pde
Kentucky Blvd
Madrid Tce
Oslo St
Osaka Loop
Lenore Rd
Geneva Hts
Seattle Elb
Turin Ent
Warsaw Wy
Dresden St
Sicily Pass
Kiev Link
Toledo Dr
Ashby St
Jambanis Rd
Benmunni Rd
Stafford Wy
Evelyn Ct
Albert Ct
Scale: 1:5,000 @ A3
GDA2020 MGA Zone 50
COTERRA
Job: SATWAN01
Doc: 007
Date: 31/03/2025
Ph: (08) 9381 5513
Satterley Property Group
ENVIRONMENTAL ASSESSMENT REPORT
EAST WANNEROO PRECINCT 3

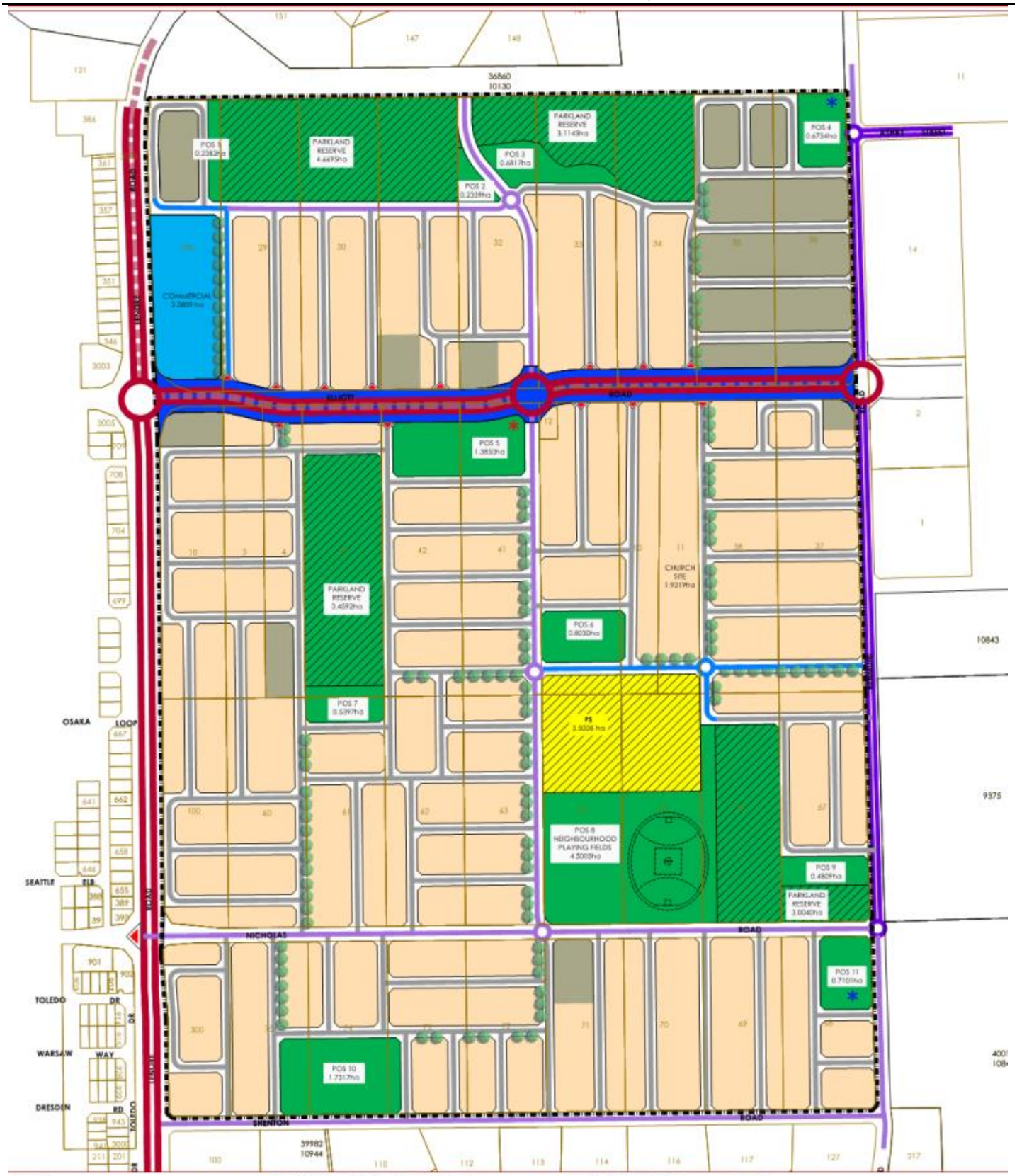
LEGEND
Site Boundary
Cadastre
Fauna Habitat
Banksia Woodland
Cleared / Not Native Vegetation
Black Cockatoo Habitat Trees
Eucalyptus marginata
Class 3
Class 4
Class 5
Eucalyptus gomphocephala
Class 4
Class 5
Other
Dead; Class 4
Dead; Class 5
Chiquita Pl
Stockholm Rd
Cairo Wy
Salzburg Wy
Vancouver Pde
Kentucky Blvd
Madrid Tce
Oslo St
Osaka Loop
Geneva Hts
Seattle Elb
Turin Ent
Warsaw Wy
Dresden St
Sicily Pass
Kiev Link
Toledo Dr
Quebec
Lenore Rd
Elliot Rd
Ashby St
Jambanis Rd
Benmunni Rd
Nicholas Rd
Shenton Rd
Stafford Wy
Evelyn Ct
Albert Ct
0 25 50 100 150 200 m
Scale: 1:5,000 @ A3
GDA2020 MGA Zone 50
COTERRA
Job: SATWAN01
Doc: 008
Date: 31/03/2025
Ph: (08) 9381 5513
Satterley Property Group
ENVIRONMENTAL ASSESSMENT REPORT
EAST WANNEROO PRECINCT 3

Site Boundary
Cadastre
Ecological Community
Commonwealth TEC, WA P3 PEC 'Banksia Woodlands of the Swan Coastal Plain ecological community'.
Significant Fauna
Zanda latirostris (EN)
Isoodon fusciventer (P4)
Calyptorhynchus banksii subsp. naso (VU)
Merops ornatus (IA)
Significant Flora
Poranthera moorokatta (P2)
MRS Reserve
Parks and Recreation
Local Scheme
Residential R30-R60*
Residential R40-R80
Public Open Space
Local Centre
Public Purpose - Primary School
Black Cockatoo Habitat Trees
Eucalyptus marginata
Class 3
Class 4
Class 5
Eucalyptus gomphocephala
Class 4
Class 5
Other
Dead: Class 4
Dead: Class 5
Elliot Rd
Nicholas Rd
Shenton Rd
Stockholm Rd
Cairo Wy
Salzburg Wy
Kentucky Wyd
Osaka Loop
Seattle Elb
Warsaw Wy
Dresden St
Stafford Wy
Ashby St
Jambanis Rd
Lennore Rd
Vancouver Pde
Scale: 1:5,000 @ A3
GDA2020 MGA Zone 50
COTERRA
Job: SATWAN01
Doc: 009
Date: 8/04/2025
Ph: (08) 9381 5513
Satterley Property Group
ENVIRONMENTAL ASSESSMENT REPORT
EAST WANNEROO PRECINCT 3
KEY ENVIRONMENTAL OPPORTUNITIES

Appendix 1 East Wanneroo District Structure Plan and Precinct Plan


Legend
Centre
Urban neighbourhood
Character areas
Suburban neighbourhood
Special residential area
Employment area
Industrial
Public purpose
Parklands
Parklands (Subject to confirmation)
Parkland link
Regional sporting fields
Rural
Service commercial
State forest
Tourism opportunities
Subject to further planning
Structure plan boundary
High school
Groundwater holding facility
Wastewater pump station (Jandabup PS 'A')
Primary distributor road
Transit corridor
Transit station
Transit corridor (Underground)
Transport corridor
Integrator arterial road
Neighbourhood connector
Rapid transit route
Index to map area
Note: This map should be understood as indicative only with details to be finalised following further investigation.
Subject to further planning
Lake Adams
Lake Mariginiup
Lake Jandabup
Lake Gnangara
Lake Shenton
Mariginiup Station
GNANGARA RD

Appendix 2 Proposed Local Structure Plan



LEGEND

- STRUCTURE PLAN AREA

MRS RESERVES
- PARKS AND RECREATION

LOCAL SCHEME
- RESIDENTIAL R30-R60*
- RESIDENTIAL R40-R80
- PUBLIC OPEN SPACE
- PUBLIC PURPOSES - PRIMARY SCHOOL
- PERMANENT WWPS
- TEMPORARY WWPS
- COMMERCIAL

MOVEMENT NETWORK
- TRANSPORT CORRIDOR (45m)
- INTEGRATOR A (35m)
- NEIGHBOURHOOD CONNECTOR A (25m)
- NEIGHBOURHOOD CONNECTOR B (20m)
- ACCESS STREET B (17.9m)
- ACCESS STREET D (15.4m**)
- ROUNDABOUT INTERSECTION***
- LEFT IN/LEFT OUT INTERESECTION***

OTHER
- GREEN STREET*

NOTES:
*REFER TO STRUCTURE PLAN REPORT FOR DETAIL
**MAY BE REDUCED TO 13m ADJACENT TO PUBLIC OPEN SPACE (EXCLUDING AREAS IDENTIFIED FOR CONSERVATION PURPOSES), OR 10m WHERE USED AS A CONTROLLED ACCESS PLACE
***ALL OTHER INTERSECTIONS TO BE PRIORITY CONTROLLED.

All areas and dimensions are subject to survey, engineering and detailed design and may change without notice. © Copyright of Burgess Design Group

NORTH
SCALE 1:5,000 (A3)

LOCAL STRUCTURE PLAN
EAST WANNEROO PRECINCT 3
WANNEROO

BURGESS PO Box 8779, Perth Business Centre 6849 P (08) 9328 6411 Plan No: SAT PR3.03-07-01 Client: SAT CITY OF WANNEROO

Appendix 3 Detailed Flora and Vegetation Survey (PGV Environmental, 2023)

EAST WANNEROO PRECINCT 3

FLORA, VEGETATION AND FAUNA SURVEY

Prepared for: Strategen JBS&G

Report Date: 15 February 2023

Version: 2

Report No. 2022-710

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1 INTRODUCTION

1.1 Purpose

East Wanneroo Precinct 3 is located in the City of Wanneroo approximately 20km north of the Perth Central Business District (Figure 1). The Precinct is bound by Lenore Road to the west, a fire break, Benmuni Park and large residential lots to the north, Benmuni Road to the east and an unmade road reserve and large residential lots to the south (Figure 2).

PGV Environmental was commissioned by Strategen-JBS&G to undertake a Flora, Vegetation and Fauna Survey of the native vegetation on eight lots within Precinct 3.

1.2 Survey Area

The lots included in the survey are listed in Table 1 and shown on Figure 2.

Table 1: Lots Included in the Study

Lot	Street Number	Area (ha)	Area of native Vegetation approx. (ha)
Lot 29 Elliott Road	179	4.4	3.0
Lot 30 Elliott Road	191	4.4	2.4
Lot 3 Elliott Road	178	2.2	0.4
Lot 43 Elliott Road	194	4.4	3.7
Lot 42 Elliott Road	206	4.4	3.3
Lot 40 Elliott Road	226	4.2	3.7
Lot 11 Elliott Road	238	2.2	0
Lot 62 Nicholas Road	62	3.4	2.3
TOTAL			**18.8**

1.3 Scope of Works

A Detailed Flora and Vegetation survey was undertaken in accordance with *EPA Technical Guidance: Flora and Vegetation Surveys* (EPA, 2016). The survey included the following:

- Desktop search and review of the Department of Biodiversity, Conservation and Attractions (DBCA) Threatened flora databases;
- A search of Atlas of Living Australia (ALA, 2022) database;
- A search of the Commonwealth Government's Protected Matters Search Tool to identify species potentially occurring within the area that are protected under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act);
- Examination of historic and recent aerial photography and contour and soil maps to provisionally identify vegetation types and condition;
- Field survey using quadrats to record native and introduced species as well as a thorough site walkover of any areas of native vegetation;
- Recording of any significant plant species using a hand-held GPS;

- Description and mapping of vegetation types and vegetation condition; and
- Compilation of a flora list.

A Basic Fauna Survey was undertaken in accordance with EPA Technical Guidance *Fauna Surveys for Environmental Impact Assessment* (EPA, 2020). The survey included the following:

- A search of the DBCA Database for the general area for Threatened and Priority Species;
- A search of Atlas of Living Australia for records in the area (ALA, 2022);
- A search of the Commonwealth Government's Protected Matters Search Tool to identify species potentially occurring within the area that are protected under the Environment Protection and Biodiversity Conservation (EPBC) Act 1999 or international migratory bird agreements (JAMBA/CAMBA);
- A review of studies previously undertaken in the vicinity of the site;
- A description of the fauna habitats present on the site from field surveys; and
- An assessment of the significance of the site for conservation significant species in a local and regional context.

The Black Cockatoo Habitat Assessment was undertaken to:

- Describe the Black Cockatoo habitat on the site;
- Searching for evidence of foraging on any trees such as chewed Banksia, Jarrah and Marri nuts;
- Looking for evidence of roosting or breeding;
- Measuring and assessing the breeding habitat potential for all Jarrah, Marri and Tuart (if present) trees with a diameter of at least 50cm at breast height;
- Mapping the location of any potential breeding habitat trees;
- Determine the impact of potential development on Black Cockatoos if the site was to be cleared; and
- Assess the clearing in the context of the significance of the impact on Black Cockatoos.

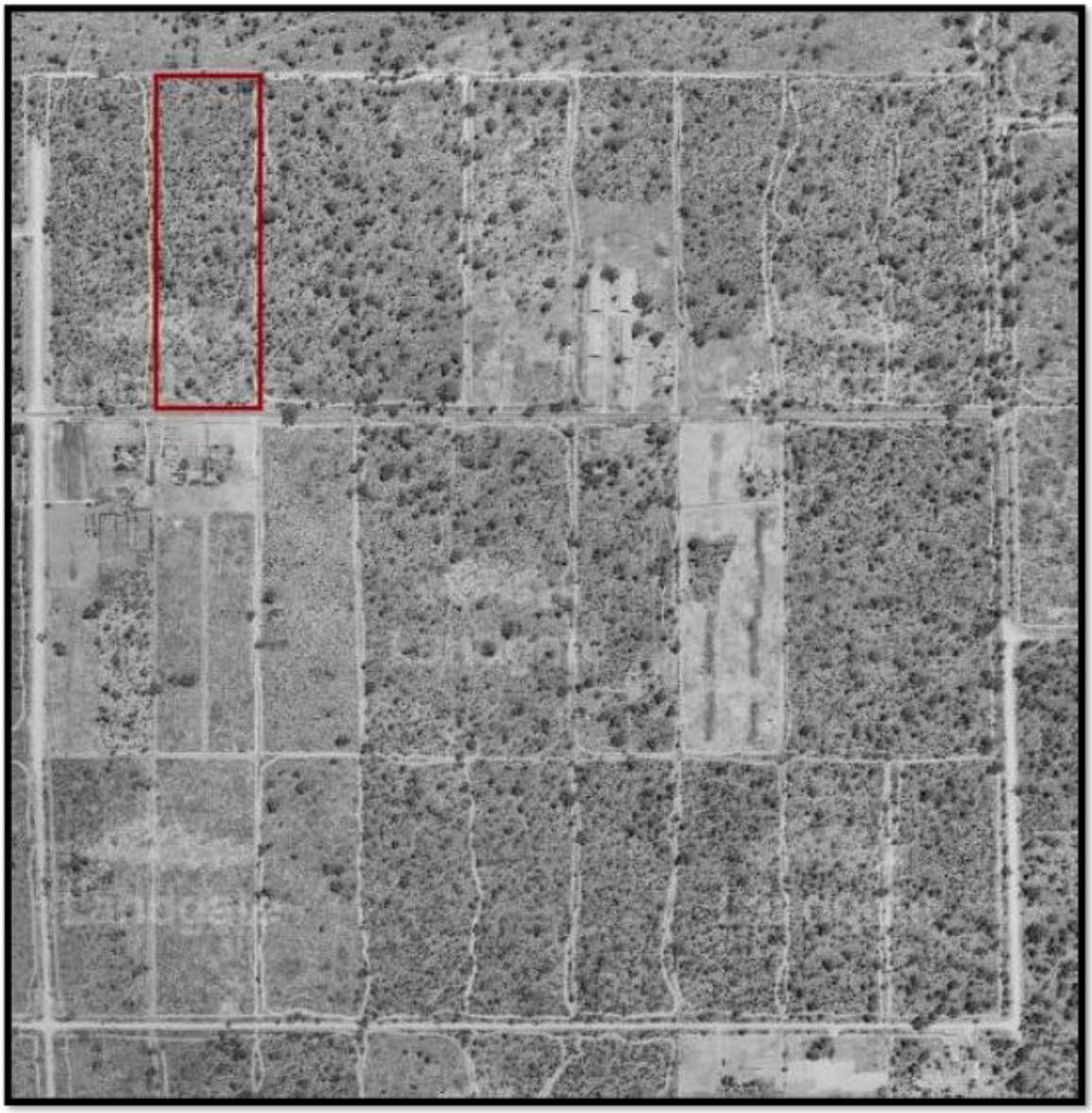
2 EXISTING ENVIRONMENT

2.1 Land Use

Historical aerial photography shows that that most of the lots were largely vegetated in 1965 (the oldest historical aerial photography available) (Plate 1). Lot 3 Elliot Road appears to have been mostly cleared and a house has been established on the lot. The trees on Lot 43 Elliot Road appear to have been cleared. Lot 11 Elliot Road is almost completely cleared (Plate 1).

The alignment of Benmuni Road to the east and Lenore Street to the west is evident and firebreaks have been cleared around each lot.

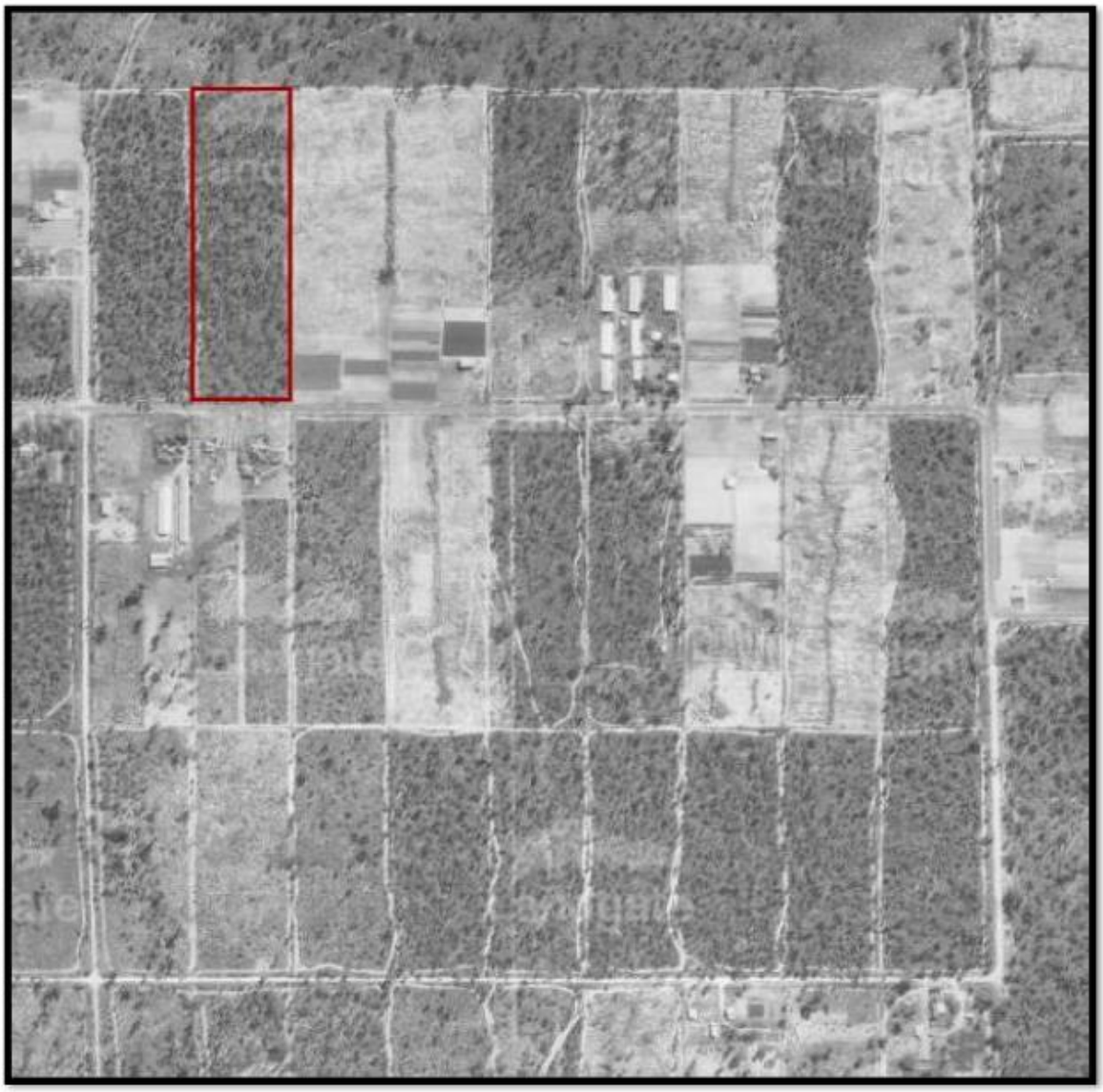
Plate 1: Aerial Photograph from 1965 (Landgate, 2022)



By 1970 Lot 30, Lot 42 and Lot 11 Elliot Road have been completely cleared (Plate 2). A market garden has been established on the southern part of Lot 30 Elliot Road. The vegetation on Lot

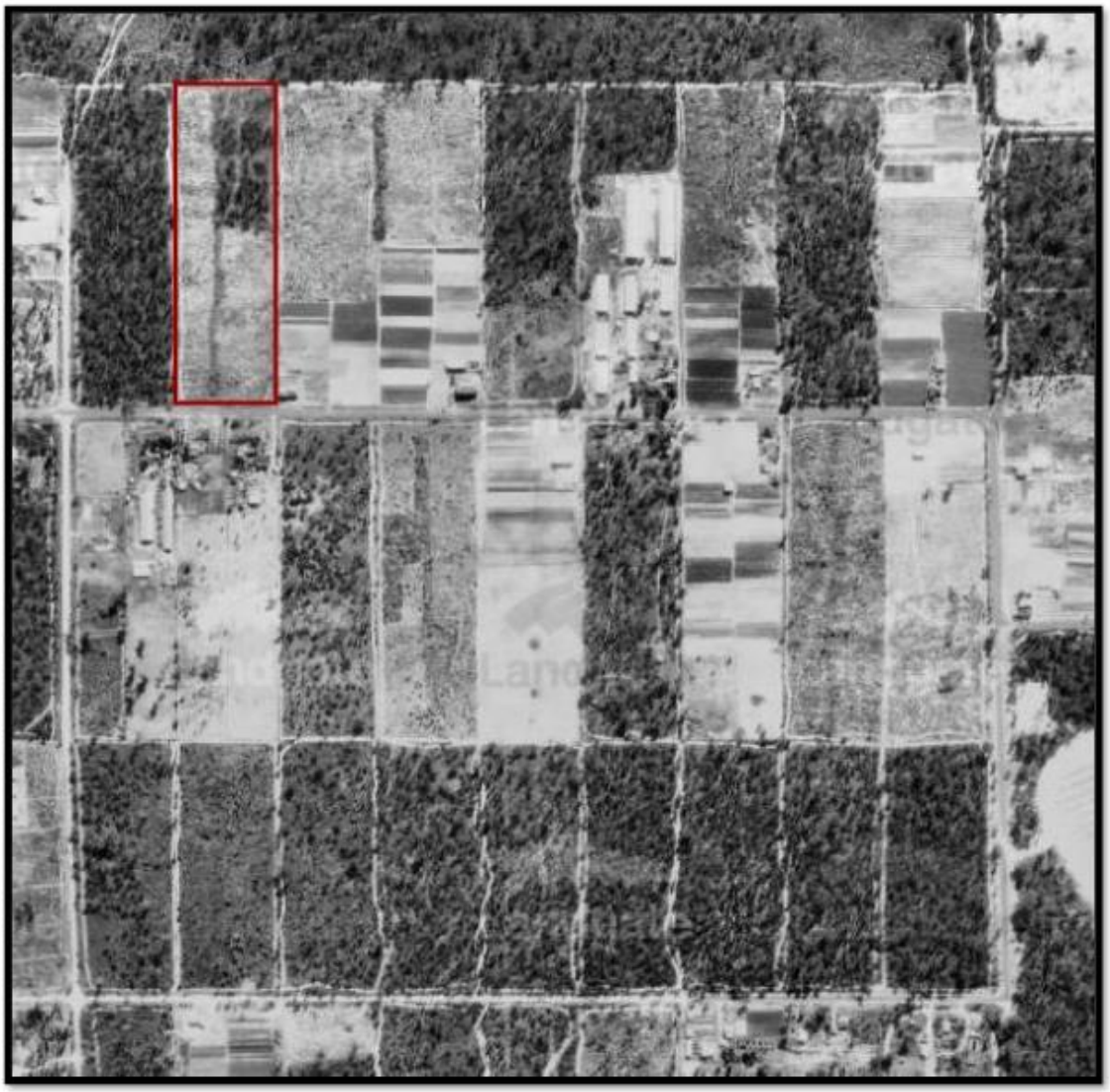
43 Elliot Road appears to be regenerating. Lot 29 Elliot Road and Lot 62 Nicholas Road remain vegetated.

Plate 2: Aerial Photograph from 1970 (Landgate, 2022)



In the photograph from 1974 (Plate 3) Lot 29 Elliot Road has been largely cleared. Lot 40 Elliot Road and Lot 62 Nicholas Road remain vegetated.

Plate 3: Aerial Photograph from 1974 (Landgate, 2022)

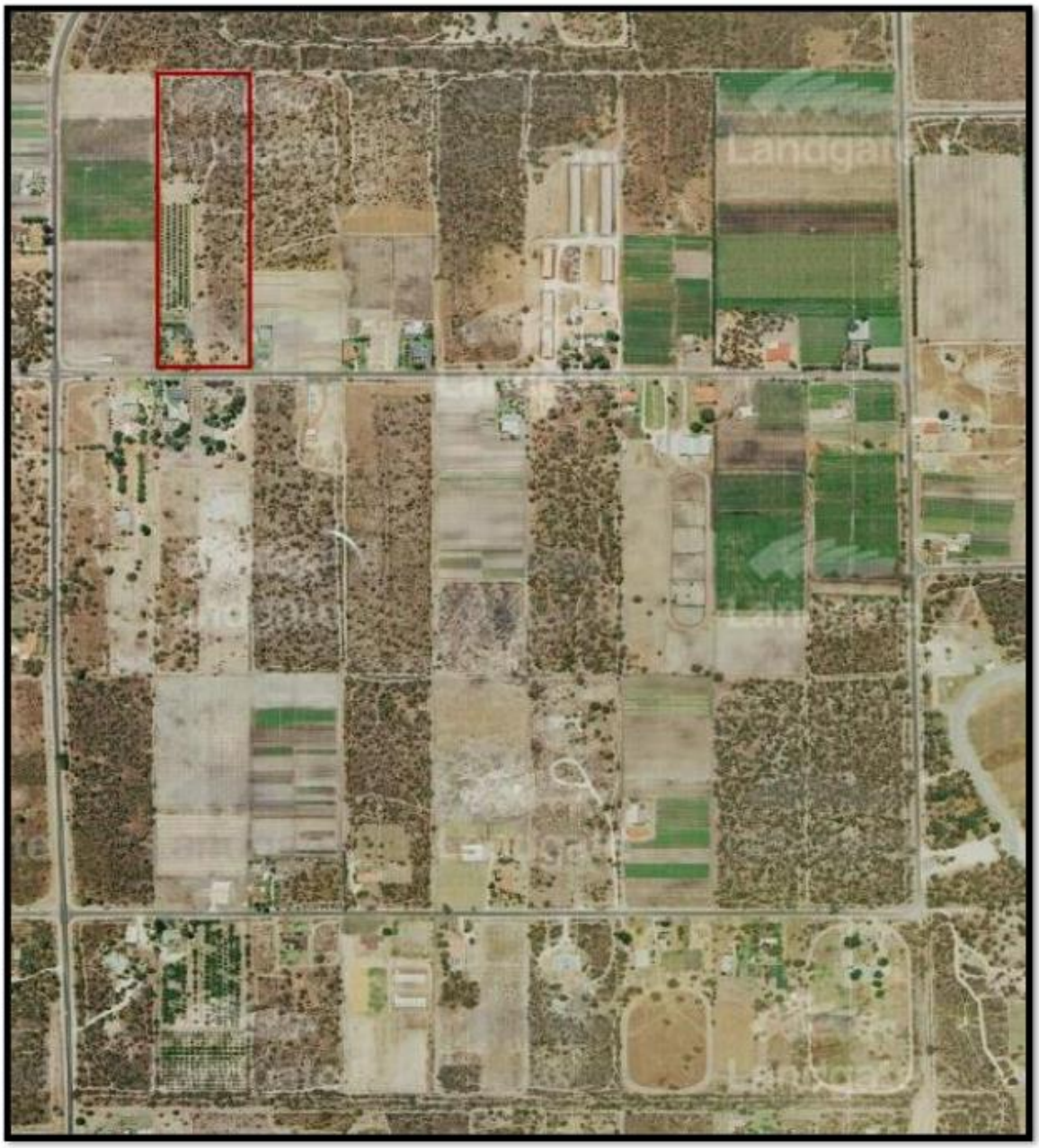


In the aerial photograph from 1981 the vegetation on Lot 43 Elliot Road is partially cleared in the south-western corner (Plate 4). There appears to be regrowth vegetation establishing on Lot 29, Lot 30 and Lot 42 Elliot Road.

Plate 4: Aerial Photograph from 1981 (Landgate, 2022)

The aerial photograph from 1995 shows Lot 43 Elliot Road and Lot 62 Nicholas Road partially cleared (Plate 5).

Plate 5: Aerial Photograph from 1995 (Landgate, 2022)



The review of historic aerial photographs shows that the native vegetation on most of the lots has had some degree of disturbance but many areas have regenerated. Only the north-eastern corner of Lot 29 Elliot Road, the northern part of Lot 62 Nicholas Road and most of Lot 40 Elliot Road have not been cleared in the past.

2.2 Topography

The survey area is undulating with elevations ranging from around 56m to 70 m AHD.

2.3 Geology and Soils

The site is mapped as part of the Spearwood System which has the highest relief of the dune systems on the Swan Coastal Plain (Bolland, 1998). The Spearwood system consists of slightly calcareous Aeolian sand remnant from leaching of the underlying Pleistocene Tamala limestone (Davidson, 1995).

The soil on the site has been mapped and described as Karrakatta Sand Yellow Phase (211Sp_Ky) which are undulating dunes on Aeolian sand over limestone in the Swan Coastal Plain between Wanneroo and Lancelin and are yellow deep sands.

2.4 Hydrology

The Perth Groundwater Map (DWER, 2022) indicates the historical maximum groundwater level under the site has an elevation of around 40 to 41m AHD. The direction of groundwater flow is to the west-south-west.

The depth to the historical maximum groundwater ranges from 16 to 29m. Accordingly, there are no wetlands on the site.

3 FLORA AND VEGETATION

3.1 Methodology

3.1.1 Desktop Searches

Searches of the following databases were undertaken prior to the site survey:

- DBCA Threatened and Priority Flora Databases including the WA Herbarium database (WAHerb) and Threatened (Declared Rare) and Priority Flora Species List (TFPL) (Appendix 1) for a radius of 20 km that provides a list of Threatened and Priority species recorded in the area;
- Atlas of Living Australia (ALA, 2022) (Appendix 2) which shows all species that have been recorded within a 10km radius of the site.
- The EPBC Act Protected Matters Search Tool (DCCEEW, 2022) (Appendix 3) which identifies species that are listed as Endangered, Threatened or Priority under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) could potentially have habitat within a 5km radius of the site.

3.1.2 Site Survey

A flora and vegetation survey of the site was conducted by Dr Paul van der Moezel on 26 and 30 September and 25 October 2022. The survey included sampling from quadrats as well as a thorough walk over the area along west-east transects spaced about 20m apart. The quadrats were sampled on two occasions, one on 26 or 30 September 2022 and a follow-up on 25 October 2022. Track logs for the September surveys are shown in Plate 6.

A total of six permanently marked 10m x 10m quadrats were sampled for species presence, height and density. The quadrats were pegged in the north-west corner. The number of quadrats was considered appropriate given the similarity of the vegetation types and the size of the area to be surveyed. Site coverage was very high due to the ease of access through the open understorey and the size of the site.

Most plant species were identified in the field. Some specimens were photographed or taken for identification at the Perth Reference Herbarium or office using standard reference guides.

Plate 6: Track Log

3.1.3 Survey Conditions

The conditions that the survey was undertaken in are presented in Table 2 in order to assess the adequacy of the survey. Rainfall for Perth (Measured at Perth Airport, Site Number 009021) was slightly below average in July being 124.2 mm compared to an average of 155.2 mm, above average for August in 2022 being 172.6 mm and September being 101.4 mm compared to mean values of 118.5 mm and 72.6 mm (BOM, 2022).Rainfall in October was lower than average at 26.4 mm compared to an average of 40.4 mm The above average rainfall in August and September and below average rainfall in October is not considered to be a constraint on the survey.

In summary there were no constraints to the survey.

Table 2: Statement of Botanical Survey Conditions

Issue	Constraints (Y/N)*	Comment
Competency/experience of the consultant conducting the survey	No	Dr Paul van der Moezel has extensive botanical survey experience on the Swan Coastal Plain.
Proportion of the flora identified^	No	The timing of the survey in mid-September and mid-October was optimal to record most of the native species.
Sources of information (historic/recent or new data)	No	The flora of the Swan Coastal Plain is fairly well documented.
Proportion of the task achieved and further work that may need to be undertaken	No	No follow-up survey required as no Threatened Flora expected to occur in other seasons.
Timing/weather/season/cycle	No	The spring survey was optimal for most flora species. 2022 was a good year for ephemeral species.
Disturbances (Fire)	No	The fire age of the vegetation was greater than 5 years
Intensity of survey (e.g. In retrospect was the intensity adequate)	No	Approximately 22 hours spent on the site. The open understorey made for easy site access.
Completeness (e.g. was relevant area fully surveyed)	No	
Resources (e.g. degree of expertise available for plant identification)	No	Experienced botanist undertook most plant identifications on site.
Remoteness and/or access problems	No	Accessible site in the Perth Metropolitan Region
Availability of contextual (e.g. bioregional) information for the study area.	No	Bush Forever, Gibson *et al.* (1994)

*Constraints have been rated as Significant, Moderate or No constraints
^Fungi and nonvascular flora (e.g. algae, mosses and liverworts) were not specifically surveyed for during the survey.

3.2 Desktop Studies

3.2.1 Flora Database Searches

The results from the database searches are shown in Table 3. There were 99 species identified in the database searches including 23 Threatened species and 76 Priority species. Table 3 also lists the likelihood that any of the conservation significant species identified in the database searches could occur on the site based on the soil types and vegetation condition. None of the species identified in the database searches have been recoded from the site.

Table 3: Identified Significant Flora Species and Likelihood of Occurring on the Site

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Caladenia huegelii	King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid	Critically Endangered	Endangered	The Grand Spider-orchid prefers deep grey-white sand usually associated with the Bassendean sand-dune system, however, rare plants have been known to extend into the Spearwood system (in which calcareous yellow sands dominate) in some areas (DEC, 2009a). This species generally does not survive in disturbed areas.	Possible in areas that have not been cleared in the past
Calectasia cyanea	Blue Tinsel Lily	Critically Endangered	Critically Endangered	The Blue Tinsel Lily prefers white, grey or yellow sand or gravel. This species is restricted to Torndirrup National Park and Albany region of the South West Botanical Province (Barrett and Dixon, 2001).	No – outside of species range
Drakaea elastica	Glossy-leafed Hammer Orchid	Critically Endangered	Endangered	The Glossy-leafed Hammer Orchid prefers low-lying situations adjoining winter-wet swamps and grows on bare patches of sand within otherwise dense vegetation in low-lying areas alongside winter-wet swamps, typically in banksia (*Banksia menziesii, B. attenuata* and *B. ilicifolia*) woodland or spearwood (*Kunzea glabrescens*) thicket vegetation (DEC, 2009b).	Highly Unlikely – no winter-wet habitat
Grevillea curviloba subsp. curviloba	Narrow curved-leaf Grevillea	Critically Endangered	Endangered	Narrow curved-leaf Grevillea occurs in grey sand in winter-wet heath. There are 17 known populations in an area between Muchea and Badgingarra (Phillimore and English, 2000).	Highly Unlikely – no winter-wet heath habitat
Synaphea sp. Fairbridge Farm (D Papenfus 696)	Selena's Synaphea	Critically Endangered	Critically Endangered	Selena's Synaphea occurs in sandy soils with lateritic pebbles near winter-wet flats, in low woodland with weedy grasses.	Highly Unlikely – not lateritic habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Thelymitra dedmaniarum	Cinnamon Sun-orchid	Critically Endangered	Endangered	Cinnamon Sun-orchid is known from only two locations in the Gidgegannup area. It is confined to open wandoo woodland on red-brown sandy loam associated with dolerite and granite outcropping (DEC, 2012a).	Highly Unlikely – no dolerite habitat
Trithuria occidentalis	Swan Hydatella	Critically Endangered	Endangered	Swan Hydatella grows partly submerged on the edge of shallow, winter-wet claypans in very open shrubland of Robin Redbreast Bush (*Melaleuca lateritica*) and numerous annual herbs.	No -no suitable habitat
Darwinia foetida	Muchea Bell	Endangered	Critically Endangered	The Muchea Bell is found in grey-white sand on swampy, seasonally wet sites.	Highly Unlikely – no swampy habitat
Diuris purdiei	Purdie's Donkey-orchid	Endangered	Endangered	Purdie's Donkey Orchid occurs in grey-black sand in moist winter-wet swamps with winter inundation in dense heath with scattered trees and amongst native sedges and dense heath with scattered emergent *Melaleuca preissiana*, *Eucalyptus calophylla*, *E. marginata* and *Nuytsia floribunda*.	Highly Unlikely – no winter-wet habitat
Drakaea micrantha	Dwarf Hammer-orchid	Endangered	Vulnerable	Dwarf Hammer-orchid usually occurs on cleared fire breaks or open sandy patches in Banksia, Jarrah and Sheoak woodlands or forest and often found under Spearwood thickets.	Highly Unlikely – not typical habitat and has not been recorded within 20km of the site
Grevillea curviloba subsp. *incurva*	Narrow curved-leaf Grevillea	Endangered	Endangered	Narrow curved-leaf Grevillea prefers sand, sandy loam in winter-wet heath.	Highly Unlikely – no winter-wet heath habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Macarthuria keigheryi	Keighery's Macarthuria	Endangered	Endangered	Keighery's Macarthuria prefers white or grey sand on low-lying winter-wet damp sands growing among heathland, Jarrah and Sheoak/Banksia woodland and Banksia/Eucalypt Woodland (DEC, 2008).	Highly Unlikely – no winter-wet habitat
Marianthus paralius		Endangered	Endangered	*Marianthus paralius* occurs in white sand and brown loam amongst heath on coastal limestone cliffs (DEC, 2009c).	Highly Unlikely – not coastal limestone habitat
Melaleuca sp. Wanneroo (G.J. Keighery 16705)		Endangered	Endangered	*Melaleuca* sp. Wanneroo occurs in very shallow soils over limestone 'caprock' on ridges.	Highly Unlikely – no limestone caprock habitat
Acacia anomala	Grass Wattle, Chittering Grass Wattle	Vulnerable	Vulnerable	The Grass Wattle prefers lateritic soils and slopes.	Highly Unlikely – not lateritic habitat
Andersonia gracilis	Slender Andersonia	Vulnerable	Endangered	Slender Andersonia occurs in white/grey sand, sandy clay, gravelly loam in winter-wet areas, near swamps. Vegetation type is low open heath with shrubs over sedges (DEC, 2006).	Highly Unlikely – no winter-wet habitat
Anigozanthos viridis subsp. *terraspectans*	Dwarf Green Kangaroo Paw	Vulnerable	Vulnerable	The Dwarf Green Kangaroo Paw occurs on grey sand, clay loam in winter-wet depressions.	Highly Unlikely – no winter-wet habitat
Banksia mimica	Summer Honeypot	Vulnerable	Endangered	Summer Honeypot prefers white or grey sand over laterite, sandy loam.	Highly Unlikely – not lateritic habitat
Diuris drummondii	Tall Donkey Orchid	Vulnerable	Vulnerable	The Tall Donkey Orchid grows in low-lying depressions, swamps, in areas that contain surface water well into summer (Brown *et al.*, 2013).	Highly Unlikely – no swamp habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Diuris micrantha	Dwarf Bee-orchid	Vulnerable	Vulnerable	The Dwarf Bee-orchid is usually found on brown loamy clay in winter-wet swamps, in shallow water.	Highly Unlikely – no winter-wet habitat
Eleocharis keigheryi	Keighery's Eleocharis	Vulnerable	Vulnerable	Keighery's Eleocharis occurs in clay, sandy loam and is emergent in freshwater: creeks, claypans.	No -no suitable habitat
Eucalyptus argutifolia	Yanchep Mallee, Wabling Hill Mallee	Vulnerable	Vulnerable	The Yanchep Mallee occurs in shallow soils over limestone on slopes or gullies of limestone ridges, outcrops.	Highly Unlikely – no limestone habitat
Paracaleana dixonii	Sandplain Duck Orchid	Vulnerable	Endangered	Sandplain Duck Orchid occurs in grey sand over granite.	Highly Unlikely – not granitic habitat and outside of the species range
Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)		Priority 1		*Baeckea* sp. Limestone is recorded from limestone outcrop/ridge in yellow sand derived from Tamala Limestone - Spearwood Dune System in bushland burnt 5+ years (Western Australian Herbarium, 2012).	Highly Unlikely – no limestone habitat
Bolboschoenus fluviatilis	River Bulrush	Priority 1		River Bulrush occurs on the margins of wetlands and rivers.	No – not suitable habitat
Calandrinia sp. Bayswater (C. Andrews s.n. 11/1902)		Priority 1		*Calandrinia* sp. Bayswater is known from Bayswater only record was in 1902.	Highly Unlikely due to lack of any records
Drosera paleacea	Dwarf Sundew	Priority 1		Dwarf Sundew occurs in white sand, sandy clay.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Drosera patens		Priority 1		*Drosera patens* occurs in sandy soils on the margins of winter-wet depressions, swamps and lakes.	Highly Unlikely – no winter-wet habitat
Drosera x sidjamesii		Priority 1		*Drosera x sidjamesii* grows in peaty sand along lake margins, close to winter high-water line.	Highly Unlikely – no lake side habitat
Grevillea sp. Ocean Reef (D. Pike Joon 4)		Priority 1		*Grevillea* sp. Ocean Reef (D. Pike Joon 4) occurs in dry brown/grey sand, yellow brown sand on sandy dune, gully in coastal scrub.	Highly Unlikely – not coastal dune habitat
Hydrocotyle striata		Priority 1		*Hydrocotyle striata* occurs in clay near springs.	No – no suitable habitat
Lepidium pseudohyssopifolium	Peppercress	Priority 1		Peppercress occurs on swampy ground.	Highly Unlikely – no swamp habitat
Leucopogon maritimus		Priority 1		*Leucopogon maritimus* occurs in Quindalup deep, calcareous sands, on the mid to upper slopes of dunes or in shallow sand over limestone, but avoiding the thicker vegetation of the swale (Hislop, 2011)	Highly Unlikely – not Quindalup habitat
Levenhookia preissii	Preiss's Stylewort	Priority 1		Preiss's Stylewort occurs in grey or black peaty sands in swamps.	Highly Unlikely – no swamp habitat
Neotysonia phyllostegia		Priority 1		*Neotysonia phyllostegia* is recorded near pools (National Herbarium of Victoria, 1890)	Highly Unlikely – no pool habitat
Stachystemon exilis		Priority 1		*Stachystemon exilis* grows in grey sand with thin litter layer (Western Australian Herbarium, 1999) and is generally in association with open, low-lying Banksia woodland in which *B. ilicifolia* is a significant component of the upper canopy (Hislop and Davies, 2020).	Highly Unlikely – no low-lying habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Acacia benthamii		Priority 2		*Acacia benthamii* grows on sand, typically on limestone breakaways	Highly Unlikely – no limestone breakaway habitat
Calectasia elegans	Elegant Tinsel Lily	Priority 2		Elegant Tinsel Lily occurs in deep grey quartz soils on gentle slopes, above damplands.	Highly Unlikely – no dampland habitat
Calectasia grandiflora	Blue Tinsel Lily	Priority 2		Blue Tinsel Lily occurs in white, grey or yellow sand, sandy clay, gravel, laterite and granite in swampy areas, rock outcrops, flats, slopes and ridges.	Highly Unlikely – not suitable habitat
Calymperastrum latifolium		Priority 2		*Calymperastrum latifolium* is recorded from a shaded Macrozamia stem on a large rocky outcrop (Western Australian Herbarium, 1994).	Possible – *Macrozamia* occurs on the site
Fabronia hampeana		Priority 2		*Fabronia hampeana* occurs on sheltered wet trunk of *Macrozamia dyeri* in shrub layer (Western Australian Herbarium, 2005).	No – *Macrozamia dyeri* does not occur on the site
Lecania turicensis var. *turicensis*		Priority 2		*Lecania turicensis* var. *turicensis* occurs on coastal rocks, limestone (Western Australian Herbarium, 1988).	Highly Unlikely – no limestone habitat
Millotia tenuifolia var. *laevis*		Priority 2		*Millotia tenuifolia* var. *laevis* grows in granite or laterite soils.	Highly Unlikely – not lateritic habitat
Phyllangium palustre		Priority 2		*Phyllangium palustre* occurs in clay on winter-wet claypans, low-lying seasonal wetlands.	Highly Unlikely – no claypan habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Poranthera moorokatta		Priority 2		*Poranthera moorokatta* grows in white silica sand and has been recorded in Banksia woodland and in a shallow dampland (Barrett, 2012).	Highly Unlikely – not suitable habitat
Ricinocarpos tuberculatus		Priority 2		*Ricinocarpos tuberculatus* grows in white/grey sand on coastal dunes.	Highly Unlikely – not coastal dune habitat
Scaevola paludosa		Priority 2		*Scaevola paludosa* prefers sandy soils.	No – this species is found on the Esperance Plains
Schoenus sp. Bullsbrook (J.J. Alford 915)		Priority 2		*Schoenus* sp. Bullsbrook grows in grey peaty sand on low-lying flats.	Highly Unlikely – no peaty habitat
Stenanthemum sublineare		Priority 2		*Stenanthemum sublineare* grows in littered white sand on coastal plain (Rye, 2001).	Highly Unlikely – not suitable habitat
Thelymitra variegata	Queen of Sheba	Priority 2		The Queen of Sheba orchid grows on sandy clay, sand and laterite. The orchid is found in banksia and Jarrah woodland (Brown *et al.*, 2013)	Highly Unlikely – not suitable habitat
Thysanotus sp. Badgingarra (E.A. Griffin 2511)		Priority 2		*Thysanotus* sp. Badgingarra grows in grey sand with lateritic gravel.	Highly Unlikely – not lateritic habitat
Acacia oncinophylla subsp. *oncinophylla*		Priority 3		*Acacia oncinophylla* subsp. *oncinophylla* occurs in granitic soils	Highly Unlikely – not granitic habitat
Adenanthos cygnorum subsp. *chamaephyton*		Priority 3		*Adenanthos cygnorum* subsp. *chamaephyton* occurs in grey sand, lateritic gravel.	Highly Unlikely – not lateritic habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Amanita carneiphylla	Miller's Pink-Gilled Lepidella	Priority 3		Miller's Pink-Gilled Lepidella is a deeply rooting species and grows in sandy soil with *Eucalyptus*, *Banksia*, and *Allocasuarina* and at one site, Mediterranean pine (*Pinus*) was also found (Tulloss, 2022).	Possible – may have habitat on the site
Amanita drummondii	Drummond's Grisette	Priority 3		Drummond's Grisette is solitary to gregarious in leaf litter in association with *Agonis flexuosa, A. theiformis, Allocasuarina fraseriana, Corymbia calophylla, Eucalyptus marginata, E. patens, E. staeri, Jacksonia furcellata, Kunzea glabrescens, Melaleuca sp., Podocarpus drouynianus, Taxandria parviceps*. (Davidson *et al.*, 2015) growing in sandy soil (Amanitaceae Org, 2015).	Unlikely – not typical habitat
Amanita fibrillopes	Peach Amanita	Priority 3		Peach Amanita is recorded from sandy or gravelly soil in dry sclerophyll forest and Banksia woodland, or in humus rich soil in seasonally wet eucalypt and paperbark woodland, often associated with *Eucalyptus marginata, E. jacksonii, Allocasuarina fraseriana, Corymbia calophylla, Melaleuca preissiana* and *Agonis* sp. (Davison *et al.*, 2013).	Highly Unlikely – no gravelly habitat
Amanita preissii	Cinnamon-ring Lepidella	Priority 3		Cinnamon-ring Lepidella is found under shrubs and Eucalyptus in West Australia (Amanitaceae Org, 2015) in sandy soil and lateritic gravel, associated with *Allocasuarina fraseriana, Acacia pulchella, Corymbia calophylla, Callitris sp., Eucalyptus gomphocephala, E. marginata, Macrozamia fraseri* and *Pinus pinaster* (Davidson *et al.*, 2017).	Highly Unlikely – not lateritic habitat
Austrostipa mundula	Neat Spear Grass	Priority 3		Neat Spear Grass occurs on plains in grey sand (Western Australian Herbarium, 2001) in coastal areas (Williams, 2022).	Highly Unlikely – not coastal habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Beyeria cinerea subsp. *cinerea*		Priority 3		*Beyeria cinerea* subsp. *cinerea* grows in sand over limestone on road verges, gullies.	Highly Unlikely – no limestone habitat
Carex tereticaulis		Priority 3		*Carex tereticaulis* prefers black peaty sand.	Highly Unlikely – no peaty habitat
Conostylis bracteata		Priority 3		*Conostylis bracteata* occurs in sand, limestone on consolidated sand dunes.	Highly Unlikely – no limestone habitat
Cyathochaeta teretifolia		Priority 3		*Cyathochaeta teretifolia* occurs in grey sand, sandy clay on swamps, creek edges.	Highly Unlikely – no swamp habitat
Dampiera triloba		Priority 3		*Dampiera triloba* grows in loamy sand (Australian National Herbarium, 2009) in lower lying areas.	Highly Unlikely – no low-lying habitat
Eryngium pinnatifidum subsp. *Palustre* (G.J. Keighery 13459)		Priority 3		*Eryngium pinnatifidum* subsp. *Palustre* is recorded from a winter wet claypan, water to 20 cm deep in grey-brown clay (Western Australian Herbarium, 1989)	Highly Unlikely – no claypan habitat
Guichenotia tuberculata		Priority 3		*Guichenotia tuberculata* grows in sand clay over laterite, sand.	Highly Unlikely – not lateritic habitat
Haemodorum loratum		Priority 3		*Haemodorum loratum* prefers grey or yellow sand, gravel.	Highly Unlikely – not suitable habitat
Hibbertia leptotheca		Priority 3		*Hibbertia leptotheca* grows near-coastal limestone ridges, outcrops and cliffs in coastal heaths and thickets usually dominated by species of *Melaleuca* and *Acacia* (Thiele, 2019).	Highly Unlikely – no coastal limestone habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Isopogon autumnalis		Priority 3		*Isopogon autumnalis* occurs in white, grey or yellow sand, often over laterite.	Highly Unlikely – no lateritic habitat
Jacksonia gracillima		Priority 3		*Jacksonia gracillima* occurs in grey and brown sand in winter-wet areas.	Highly Unlikely – no winter-wet habitat
Lasiopetalum membranaceum		Priority 3		*Lasiopetalum membranaceum* grows in sand over limestone.	Highly Unlikely – no limestone habitat
Leucopogon sp. Yanchep (M. Hislop 1986)		Priority 3		*Leucopogon* sp. Yanchep occurs in light grey-yellow sand, brown loam, limestone, laterite, granite on coastal plain, breakaways, valley slopes, low hills.	Highly Unlikely – not coastal habitat
Meionectes tenuifolia		Priority 3		*Meionectes tenuifolia* occurs on swamp margins on seasonally wet poorly drained flats or granite flats in shallow soils.	Highly Unlikely – no swamp habitat
Phlebocarya pilosissima subsp. *pilosissima*		Priority 3		*Phlebocarya pilosissima* subsp. *pilosissima* grows in white or grey sand, lateritic gravel.	Highly Unlikely – not lateritic habitat
Pimelea calcicola		Priority 3		*Pimelea calcicola* occurs in sand on coastal limestone ridges.	Highly Unlikely – not limestone habitat
Pithocarpa corymbulosa		Priority 3		*Pithocarpa corymbulosa* occurs in gravelly or sandy loam amongst granite outcrops.	Highly Unlikely – not suitable habitat
Sarcozona bicarinata	Ridged Noon-flower	Priority 3		Ridged Noon-flower is found in white sand.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Schoenus capillifolius		Priority 3		*Schoenus capillifolius* grows in brown mud on claypans.	Highly Unlikely – no claypan habitat
Schoenus sp. Waroona (G.J. Keighery 12235)		Priority 3		*Schoenus* sp. Waroona occurs in clay or sandy clay on winter-wet flats.	Highly Unlikely – no winter-wet habitat
Stylidium maritimum		Priority 3		*Stylidium maritimum* occurs in sand over limestone on dune slopes and flats in coastal heath and shrubland, open Banksia woodland.	Highly Unlikely – no limestone habitat
Stylidium paludicola		Priority 3		*Stylidium paludicola* prefers peaty sand over clay in winter wet habitats in Marri and Melaleuca woodland, Melaleuca shrubland.	Highly Unlikely – no winter-wet habitat
Stylidium trudgenii		Priority 3		*Stylidium trudgenii* grows in grey sand, dark grey to black sandy peat on the margins of winter-wet swamps, depressions.	Highly Unlikely – no swamp habitat
Styphelia filifolia		Priority 3		*Styphelia filifolia* occurs in sandy soils of the coastal plain (with one known occurrence from the northern Darling Scarp), usually in Banksia or Jarrah woodland and in low-lying situations (Hislop and Lelièvre, 2017).	Highly Unlikely – no low-lying habitat
Tetratheca pilifera		Priority 3		*Tetratheca pilifera* occurs in gravelly soils.	Highly Unlikely – no gravel habitat
Verticordia serrata var. *linearis*		Priority 3		*Verticordia serrata* var. *linearis* grows in white sand, gravel in open woodland.	Highly Unlikely – no suitable habitat
Anigozanthos humilis subsp. *chrysanthus*	Golden Cats Paw	Priority 4		Golden Cats Paw grows in grey or yellow sand.	Possible – may have habitat on the site

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Cyanicula ixioides subsp. *ixioides*		Priority 4		*Cyanicula ixioides* subsp. *ixioides* grows in laterite, gravel.	Highly Unlikely – not lateritic habitat
Darwinia pimelioides		Priority 4		*Darwinia pimelioides* prefers loam, sandy loam on granite outcrops.	Highly Unlikely – no granite outcrop habitat
Drosera occidentalis	Western Sundew	Priority 4		The Western Sundew occurs in sandy and clayey soils in swamps and wet depressions.	Highly Unlikely – no swamp habitat
Eucalyptus foecunda subsp. *foecunda*		Priority 4		*Eucalyptus foecunda* subsp. *foecunda* grows on yellowish coastal sands overlying limestone, often on limestony hills and dunes, in shrubland or very open woodland (Nicolle and French, 2021).	Highly Unlikely – not coastal habitat
Hibbertia helianthemoides		Priority 4		*Hibbertia helianthemoides* grows in clayey sand over sandstone or loam over quartzite on hills and scree slopes.	Highly Unlikely – no suitable habitat
Hydrocotyle lemnoides	Aquatic Pennywort	Priority 4		Aquatic Pennywort occurs in swamps	No – no swamp habitat
Hypolaena robusta		Priority 4		*Hypolaena robusta* grows in white sand on sandplains in poorly drained areas.	Highly Unlikely – no suitable habitat
Jacksonia sericea	Waldjumi	Priority 4		Waldjumi grows in calcareous and sandy soils.	Highly Unlikely – no calcareous habitat
Persoonia sulcata		Priority 4		*Persoonia sulcata* occurs in lateritic or granitic soils.	Highly Unlikely – no suitable habitat

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act	Habitat*	Likelihood to occur on the site
Schoenus griffinianus		Priority 4		*Schoenus griffinianus* grows in white sand in low heath (Wilson, 1997).	Highly Unlikely – not heath habitat
Schoenus natans	Floating Bog-rush	Priority 4		Floating Bog-rush is an aquatic species that occurs in winter-wet depressions.	No – no suitable aquatic habitat
Stylidium longitubum	Jumping Jacks	Priority 4		Jumping Jacks prefer sandy clay, clay in seasonal wetlands.	Highly Unlikely – no wetland habitat
Tripterococcus sp. *Brachylobus* (A.S. George 14234)		Priority 4		*Tripterococcus* sp. *Brachylobus* occurs in grey, black or peaty sand winter-wet flats.	Highly Unlikely – no suitable habitat
Verticordia lindleyi subsp. *lindleyi*		Priority 4		*Verticordia lindleyi* subsp. *lindleyi* prefers sand, sandy clay in winter-wet depressions.	Highly Unlikely – no winter-wet habitat

* sourced from Florabase as well as the DBCA database searches unless otherwise denoted

3.3 TEC/PEC Database Searches

A search of DBCA's Threatened (TEC) and Priority Ecological Communities (PEC) database was conducted within a radius of 5km around the site (09-0822EC) (Appendix 5). An additional TEC was identified in the Protected Matters Search Tool Report (Appendix 3). The communities identified in the database searches are outlined in Table 4.

Table 4: Threatened and Priority Ecological Communities Identified in Database Searches

Number	Description	Conservation Status in Western Australia	Status under the EPBC Act
SCP20a	*Banksia attenuata* woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson *et al*. (1994))	Endangered	Endangered as part of the Banksia WL SCP
SCP30a	*Callitris preissii* (or *Melaleuca lanceolata*) forests and woodlands, Swan Coastal Plain (floristic community type 30a as originally described in Gibson *et al.* (1994))	Vulnerable	
SCP21c	Low lying *Banksia attenuata* woodlands or shrublands	Priority 3	Endangered as part of the Banksia WL SCP
SCP22	*Banksia ilicifolia* woodlands	Priority 3	Endangered as part of the Banksia WL SCP
SCP23b	Swan Coastal Plain *Banksia attenuata* - *Banksia menziesii* woodlands	Priority 3	Endangered as part of the Banksia WL SCP
SCP24	Northern Spearwood shrublands and woodlands	Priority 3	
SCP25	Southern *Eucalyptus gomphocephala-Agonis flexuosa* woodlands	Priority 3	Critically Endangered as part of the Tuart Woodlands
SCP29a	Coastal shrublands on shallow sands	Priority 3	
Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered
Tuart woodlands	Tuart (*Eucalyptus gomphocephala*) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered

The Banksia Woodlands of the Swan Coastal Plain ecological community is mapped in the DBCA database as occurring on some of the lots.

3.4 Flora

A total of 168 species were recorded during the flora survey (Appendix 6). This total consisted of 130 native species and 38 introduced species (22.6%).

No Threatened or Priority plant species were recorded on the site.

Plant families with the greatest number of species were the Fabaceae (Wattle and Pea family – 21 species including 17 native and 4 introduced), Asteraceae (Daisy family – 14 species, 5 native, 9 introduced), Proteaceae (Banksia family – 13 species, all native), Orchidaceae (Orchid family – 13 species, all native), Myrtaceae (Myrtle family – 10 species, 7 native, 3 introduced) and the Cyperaceae (Sedge family – 9 species, all native).

The total number of species recorded in the six quadrats sampled ranged from 36-61 (av. 52.1) (Appendix 7). The vegetation in all six quadrats was in Very Good to Excellent condition.

3.5 Vegetation

3.5.1 Vegetation Complexes

Vegetation Complexes are a broad level of vegetation description which is based on the underlying geomorphology and rainfall (Heddle *et al.*, 1980). The vegetation on the site is part of the Karrakatta – Central and South Vegetation Complex (Heddle *et al.,* 1980) which is described as an open forest of Tuart-Jarrah-Marri, with Jarrah and Marri replacing Tuart while progressing eastwards. *Banksia attenuata, B. menziesii, B. grandis* and *Allocasuarina fraseriana* are also common tree species.

3.5.2 Vegetation Types

Vegetation Types are a finer level of vegetation mapping than the Vegetation Complex and are defined by the composition and structure of the dominant vegetation.

Four vegetation types were described and mapped on the site (Figure 3). A description of each type is provided in Table 5.

The vegetation types are similar structurally, with all four types being Low Open Woodlands, differing slightly with the dominant tree species. The understorey composition was also similar between the three vegetation types that were in Very Good condition.

Table 5: Vegetation Type Descriptions

Vegetation Type	Description	Photographs
BaBmAf *Banksia attenuata/B. menziesii/ Allocasuarina fraseriana* Low Open Woodland over *Hibbertia hypericoides* Open Low Heath	Recorded in two separate locations on the site. *Banksia attenuata, B. menziesii* and *Allocasuarina fraseriana* co-dominated the tree canopy and averaged 5m high. Common understorey species included *Hibbertia hypericoides, Eremaea pauciflora, Xanthorrhoea preissii, Calytrix fraseri, Mesomelaena pseudostygia* and *Desmocladus flexuosus.* The soil type is dark grey-brown sand. Quadrats EW 1 and 3 are representative of this vegetation type. The total area on site is 3.859ha	
EmAfBaBm *Eucalyptus marginata/ Allocasuarina fraseriana/Banksia menziesii/B. attenuata* Low Open Woodland over *Calytrix fraseri/ Xanthorrhoea preissii/Hibbertia hypericoides/Mesomelaena pseudostygia* Open Low Heath	Recorded in two separate locations on the site. Jarrah (*Eucalyptus marginata*) was common in this vegetation type but was mostly absent from the others. *Banksia attenuata, B. menziesii* and *Allocasuarina fraseriana* were also common with *B. prionotes* present in some areas. Common understorey species included *Calytrix fraseri, Xanthorrhoea preissii, Hibbertia hypericoides, Mesomelaena pseudostygia* and *Trachymene pilosa.* The soil type is dark orange-brown sand. Quadrats EW 2 and 6 are representative of this vegetation type. The total area on site is 7.090ha	

Vegetation Type	Description	Photographs
AfBaBm *Allocasuarina fraseriana/Banksia attenuata/B. menziesii* Low Open Woodland over *Calytrix fraseri/ Hibbertia hypericoides/Lyginia barbata/Mesomelaena pseudostygia* Closed Low Heath	Recorded through the central part of the site on three lots and very similar to the BaBmAf except that *Allocasuarina fraseriana* (Sheoak) is usually taller. Common understorey species included *Calytrix fraseri, Hibbertia hypericoides, Lyginia barbata, Mesomelaena pseudostygia* and *Eremaea pauciflora.* The soil type is orange-brown sand. Quadrats EW 4 and 5 are representative of this vegetation type. The total area on site is 7.428ha	
Af *Allocasuarina fraseriana* Low Open Woodland over weeds	One small area of this vegetation type was recorded at the southern end of Lot 62. *Allocasuarina fraseriana* trees were up to 6m high with only a few *Banksia attenuata* trees. The understorey was mainly Perennial Veldtgrass (*Ehrharta calycina*). The soil type is light orange-brown sand. No quadrat was sampled in this small Degraded area. The total area on site is 0.457ha	

3.5.3 Floristic Community Type

Floristic Community Types (FCT) are based on the whole floristic composition of the vegetation rather than being determined by soil type and geomorphology (Vegetation Complexes) or the nature of the dominant species (Vegetation Association). Many of the Threatened and Priority Ecological Community Types on the Swan Coastal Plain are based on FCTs.

The six quadrats were provided to Plantecology Consulting for computer analysis to determine the FCT of each quadrat. The location of the quadrats is shown in Figure 3. The results of the analysis are provided in Table 6 and the full report is in Appendix 8.

The results of the numerical analysis indicated that the vegetation on the site is most likely corresponds to SCP 28 'Spearwood *Banksia attenuata* or *Banksia attenuata – Eucalyptus marginata* woodlands'. Plantecology concluded that is it less likely that SCP 20a occurs on the site. The result for Quadrat EW 4 was SCP 6 'Weed dominated wetlands on heavy soils' which appears to be an error as the quadrat only contains 6 weeds out of 36 species recorded and the site is not a wetland on heavy soils.

Table 6: Floristic Community Type Analysis

Quadrat	FCT Assigned	Conservation Status State	Conservation Status EPBC Act
EW1, 2, 3, 5 and 6	SCP28 – Spearwood *Banksia attenuata* or *Banksia attenuata – Eucalyptus marginata* woodlands	Not listed (Part of Banksia WL SCP – Priority 3	Part of the Endangered Banksia WL SCP
EW4	SCP6 – Weed dominated wetlands on heavy soils	Not Listed	Not Listed

3.5.4 Vegetation Condition

The condition of the vegetation was assessed according to the system of Keighery as described in Bush Forever (Government of Western Australia, 2000) (Table 7).

Table 7: Vegetation Condition Rating Scale

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate to it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.

Condition	Description
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Source: Government of Western Australia, 2000

The vegetation condition was mostly rated as Very Good with areas of Good and Degraded (Figure 4). Some parkland cleared areas with native trees over weeds were rated as Completely Degraded.

3.6 Conservation Significance of Flora and Vegetation

3.6.1 Flora

No Threatened or Priority flora species were recorded on the site.

3.6.2 Vegetation

Vegetation Complex

The vegetation on the site is part of the Karrakatta Complex Central and South. There is approximately 23.49% of the Karrakatta Complex Central and South remaining on the Swan Coastal Plain based on the pre-European extent with 3.87% in secure tenure (DBCA, 2018).

The vegetation complex is above the EPA's objective of retaining at least 10% of each vegetation complex within the Perth Metropolitan Region. However, the amount of the vegetation complex in secure reserves is very low.

Threatened and Priority Ecological Communities

Threatened and Priority Ecological Communities (TECs and PECs) on the Swan Coastal Plain portion of the Perth Metropolitan Region are predominantly based on Floristic Community Types (FCTs). FCTs were initially described by Gibson *et al.* (1994) and subsequently assessed by others as either common or of some conservation significance such as a TEC or PEC.

The FCT analysis concluded that SCP 28 is the most likely FCT on the site. SCP 28 is not itself a TEC or PEC. However, FCT 28 is part of the Banksia Woodlands of the Swan Coastal Plain ecological community which is Priority 3 in Western Australia and an Endangered TEC at the Federal level.

Banksia Woodlands of the Swan Coastal Plain TEC

The Banksia Woodlands of the Swan Coastal Plain Threatened Ecological Community (Banksia WL SCP TEC) is listed as an Endangered TEC under the Commonwealth EPBC Act. The Banksia Woodland community is a conglomerate of a number of Banksia-dominated FCTs recognised at State level. FCT 28 is one of the FCTs that form part of the Banksia Woodland TEC. However, the identification of one

of the relevant FCTs on a site is not of itself sufficient to assign the vegetation to the Banksia Woodland TEC. The vegetation needs to meet specific criteria to be considered the TEC as follows.

The *Approved Conservation Advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community* (Conservation Advice) describes the Banksia Woodland TEC as follows:

> *The ecological community is a woodland associated with the Swan Coastal Plain of southwest Western Australia. A key diagnostic feature is a prominent tree layer of Banksia, with scattered eucalypts and other tree species often present among or emerging above the Banksia canopy. The understorey is a species rich mix of sclerophyllous shrubs, graminoids and forbs. The ecological community is characterised by a high endemism and considerable localised variation in species composition across its range*.

Table 8 assesses the vegetation type on the site against the Banksia Woodland TEC criteria contained in the Conservation Advice.

In summary, the vegetation types in Good and Very Good condition meet the requirements of the Banksia Woodland TEC. The location of the Banksia Woodland TEC is shown in Figure 5. The total area of Banksia Woodland TEC is 13.352ha.

Table 8: Assessment of the Banksia Woodland of the Swan Coastal Plain TEC.

Feature	Characteristic	Vegetation Type BaBmAf, AfBaBm and EmAfBaBm
Banksia Species	The patch must include at least one of the following diagnostic species: • *Banksia attenuata* (Candlestick Banksia) • *Banksia menziesii* (Firewood Banksia) • *Banksia prionotes* (Acorn Banksia) • *Banksia ilicifolia* (Holly-Leaved Banksia).	All three vegetation types contain at least *Banksia attenuata, B. menziesii* and/or *B. prionotes*.
Vegetation Structure	• A distinctive upper sclerophyllous layer of low trees (occasionally large shrubs more than 2 m tall), typically dominated or codominated[3] by one or more of the *Banksia* species (*B. attenuata, B. menziesii, B. ilicifolia, B. prionotes*); • An emergent tree layer of medium or tall (>10 m) height *Eucalyptus* or *Allocasuarina* (Sheoak) species may sometimes be present above the *Banksia* canopy. • An understory that is often highly species-rich consists of: – A layer of sclerophyllous shrubs of various heights; and, – A herbaceous ground layer of cord rushes, sedges and perennial and ephemeral forbs, that sometimes includes grasses. The development of a ground layer may vary depending on the density of the shrub layer and disturbance history.	• Banksia trees form a distinctive upper layer of low trees on the site. • Jarrah and Sheoak are present and are co-dominant in all vegetation types. • Understorey of shrubs, sedges, herbs, mostly in Very Good condition with a moderate to high diversity of native species • Some patches are in Good or Degraded condition.
Vegetation Condition	An area of Banksia woodland needs to be at least in Good condition to be considered the TEC.	Most of the vegetation is in Good and Very Good condition with a small areas of Degraded. The Degraded areas do not form part of the Banksia Woodland TEC
Patch Size	The Banksia woodland TEC needs to meet a minimum 'patch' size depending on its condition to qualify as the TEC, as follows: • 'Pristine' – no minimum patch size • 'Excellent' – 0.5ha • 'Very Good' – 1ha • 'Good' – 2ha	Three patches of Banksia Woodland are mapped on the site. The size of each patch is: – Northern – 3.1ha – Central – 8.6ha – Eastern – 1.7ha Based on the average condition of each patch being Very Good, all patches are above the minimum size criteria.
Conclusion		Areas shown on Figure 5 on Lots 29, 30, 40, 42 and 43 Elliott Road and Lot 62 Nicholas Road are representative of the Banksia Woodland TEC

4 FAUNA

4.1 Methodology

A Basic Fauna Survey was undertaken in accordance with EPA Technical Guidance *Fauna Surveys for Environmental Impact Assessment* (EPA, 2020). Desktop studies were undertaken to identify habitats and potential threatened species that may occur on the site. Searches of the following databases were undertaken prior to the site survey:

- DBCA Threatened and Priority Fauna Database (Appendix 9) for a radius of 20 km that provides a list of Threatened and Priority species recorded in the area;
- Atlas of Living Australia (ALA, 2022) (Appendix 2) which shows all species that have been recorded within a 10km radius of the site.
- The EPBC Act Protected Matters Search Tool (DCCEEW, 2022) (Appendix 3) which identifies species that are listed as Endangered, Threatened or Priority under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) could potentially have habitat within a 5km radius of the site.

A site reconnaissance survey was conducted by PGV Environmental on 26 and 30 September 2022. The inspection included traversing the site on foot.

4.2 Desktop Studies

The fauna species identified in the DBCA Database (Appendix 9), Atlas of Living Australia database (Appendix 2) and the EPBC Act Protected Matters Search Tool (Appendix 3) are listed in Table 9.

Table 9: List of Fauna Species Identified from Fauna Database Searches

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Bettongia penicillata ogilbyi (Listed as *Bettongia penicillata* under the EPBC Act)	Woylie, Brush-tailed Bettong	Schedule 1 - CR	Endangered
Calidris ferruginea	Curlew Sandpiper	Schedule 1 - CR	Critically Endangered
Calidris tenuirostris	Great Knot	Schedule 1 - CR	Marine/ Migratory
Hesperocolletes douglasi	Douglas's Broad-headed Bee	Schedule 1 - CR	Critically Endangered
Numenius madagascariensis	Eastern Curlew	Schedule 1 - CR	Critically Endangered
Pseudemydura umbrina	Western Swamp Tortoise	Schedule 1 - CR	Critically Endangered
Botaurus poiciloptilus	Australasian bittern	Schedule 2 - EN	Endangered
Calidris canutus	Red Knot	Schedule 2 - EN	Marine/ Migratory
Calyptorhynchus (Zanda) baudinii	Baudin's Black Cockatoo	Schedule 2 - EN	Endangered
Calyptorhynchus (Zanda) latirostris	Carnaby's Black Cockatoo	Schedule 2 - EN	Endangered

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Myrmecobius fasciatus	Numbat, Walpurti	Schedule 2 - EN	Endangered
Petrogale lateralis lateralis	Black-flanked Rock-wallaby, Black-footed Rock-wallaby, Moororong	Schedule 2 - EN	Vulnerable
Rostratula australis (Rostratula benghalensis australis)	Australian Painted Snipe	Schedule 2 - EN	Endangered Marine/ Migratory
Thalassarche carteri (Thalassarche chlororhynchos carteri)	Indian yellow-nosed Albatross	Schedule 2 - EN Schedule 5 - IA	Marine/Migratory
Calyptorhynchus banksii naso	Forest Red-tailed Black-Cockatoo	Schedule 3 - VU	Vulnerable
Dasyurus geoffroii	Chuditch, Western Quoll	Schedule 3 - VU	Vulnerable
Falco hypoleucos	Grey Falcon	Schedule 3 - VU	Vulnerable
Leipoa ocellata	Mallee Fowl	Schedule 3 - VU	Vulnerable
Macroderma gigas	Ghost Bat	Schedule 3 - VU	Vulnerable
Macrotis lagotis	Bilby, Dalgyte, Ninu	Schedule 3 - VU	Vulnerable
Phascogale tapoatafa kimberleyensis	Kimberley brush-tailed phascogale	Schedule 3 - VU	
Procellaria aequinoctialis	White-chinned Petrel	Schedule 3 - VU	
Sternula nereis nereis (Sterna nereis nereis)	Australian Fairy Tern	Schedule 3 - VU	Vulnerable
Westralunio carteri	Carter's Freshwater Mussel	Schedule 3 - VU	Vulnerable
Charadrius leschenaultii	Greater Sand Plover	Schedule 3 - VU Schedule 5 - IA	Marine/ Migratory
Thalassarche cauta	Shy Albatross	Schedule 3 - VU Schedule 5 - IA	Endangered
Bettongia lesueur graii	Boodie (inland), Burrowing Bettong (inland)	Schedule 4 - EX	Extinct
Actitis hypoleucos	Common Sandpiper	Schedule 5 - IA	Marine/ Migratory
Apus pacificus	Fork-tailed Swift	Schedule 5 - IA	Marine/Migratory
Calidris acuminata	Sharp-tailed Sandpiper	Schedule 5 - IA	Marine/ Migratory
Calidris alba	Sanderling	Schedule 5 - IA	Marine/ Migratory
Calidris melanotos	Pectoral Sandpiper	Schedule 5 - IA	Marine/ Migratory
Calidris ruficollis	Red-necked Stint	Schedule 5 - IA	Marine/ Migratory
Calidris subminuta	Long-toed Stint	Schedule 5 - IA	Marine/ Migratory
Calonectris leucomelas	Streaked Shearwater	Schedule 5 - IA	Marine/ Migratory
Chlidonias leucopterus (Sterna leucoptera)	White-winged Black tern, White-winged Tern	Schedule 5 - IA	Marine/ Migratory

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Glareola maldivarum	Oriental Pratincole	Schedule 5 - IA	Marine/ Migratory
Hydroprogne caspia (Sterna caspia)	Caspian Tern	Schedule 5 - IA	Marine/ Migratory
Limosa lapponica	Bar-tailed Godwit	Schedule 5 - IA	Marine/ Migratory
Limosa limosa	Black-tailed Godwit	Schedule 5 - IA	Migratory/ Marine
Macronectes giganteus	Southern Giant Petrel	Schedule 5 - IA	Endangered/ Migratory/ Marine
Motacilla cinerea	Grey Wagtail	Schedule 5 - IA	Migratory/ Marine
Pandion cristatus (Pandion haliaetus)	Osprey	Schedule 5 - IA	Marine/ Migratory
Plegadis falcinellus	Glossy Ibis	Schedule 5 - IA	Marine/Migratory
Pluvialis fulva	Pacific Golden Plover	Schedule 5 - IA	Marine/ Migratory
Pluvialis squatarola	Grey Plover	Schedule 5 - IA	Marine/ Migratory
Thalasseus bergii (Sterna bergii)	Crested Tern	Schedule 5 - IA	Marine/ Migratory
Tringa glareola	Wood Sandpiper	Schedule 5 - IA	Marine/ Migratory
Tringa nebularia	Common Greenshank	Schedule 5 - IA	Marine/ Migratory
Tringa stagnatilis	Marsh Sandpiper, Little Greenshank	Schedule 5 - IA	Marine/ Migratory
Cacatua pastinator pastinator	Muir's Corella	Schedule 6 - CD	Vulnerable
Phascogale calura	Red-tailed Phascogale, Kenngoor	Schedule 6 - CD	Endangered
Phascogale tapoatafa wambenger	South-western Brush-tailed Phascogale, Wambenger	Schedule 6 - CD	
Falco peregrinus	Peregrine Falcon	Schedule 7 - OS	Marine/ Migratory
Ardea alba	Great Egret, White Egret		Marine
Ardea ibis (Bubulcus ibis)	Cattle Egret		Marine
Charadrius ruficapillus	Red-capped Plover		Marine
Egretta sacra	Eastern Reef Egret, Eastern Reef Heron		Marine
Haliaeetus leucogaster	White-bellied Sea-eagle		Marine
Halobaena caerulea	Blue Petrel		Vulnerable/ Marine
Himantopus himantopus	Black-winged Stilt		Marine
Larus pacificus	Pacific Gull		Marine
Merops ornatus	Rainbow Bee-eater		Marine
Pterodroma mollis	Soft-plumaged Petrel		Vulnerable /Marine
Raillus philippensis Gallirallus philippensis)	Buff banded rail		Marine

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Recurvirostra novaehollandiae	Red-necked Avocet		Marine/ Migratory
Ixobrychus flavicollis australis (southwest subpop.)	Australian Black Bittern (southwest pop)	Priority 1	
Austrosaga spinifer	Spiny Katydid (Swan Coastal Plain)	Priority 2	
Australotomurus morbidus	Cemetery Springtail, Guildford Springtail	Priority 3	
Ctenotus gemmula (Swan Coastal Plain pop)	Jewelled South-west Ctenotus	Priority 3	
Hylaeus globuliferus	Woolybush Bee	Priority 3	
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	Priority 3	
Leioproctus contrarius	A Short-tongued Bee	Priority 3	
Neelaps calonotos	Black-striped Snake	Priority 3	
Ninox connivens connivens	Barking Owl (southwest pop)	Priority 3	
Elanus scriptus	Letter-winged Kite	Priority 4	
Hydromys chrysogaster	Water-rat, Rakali	Priority 4	
Isoodon fusciventer	Southern Brown Bandicoot, Quenda	Priority 4	
Ixobrychus dubius	Australian Little Bittern	Priority 4	
Notamacropus eugenii derbianus	Tammar Wallaby	Priority 4	
Notamacropus irma	Western Brush Wallaby	Priority 4	
Oxyura australis	Blue-billed Duck	Priority 4	
Synemon gratiosa	Graceful Sun-moth	Priority 4	
Thinornis rubricollis (Charadrius rubricollis)	Hooded Plover	Priority 4	Marine

Fauna are classified under five different Priority codes and rare and endangered fauna are classified under the *Wildlife Conservation (Specially Protected Fauna) Notice 2014* into five schedules of taxa. These are outlined in Appendix 4.

4.3 Fauna Habitat

There are two fauna habitat occurs on the Lots, described as Open Woodland Habitat (Plate 7) and Cleared/Developed Habitat (Plate 8).

Plate 7: Open Woodland Fauna Habitat

Plate 8: Cleared/Developed Fauna Habitat

Fauna habitat can be assessed using a number of factors including, the size of the habitat, the level of habitat connectivity, availability of specific resources (e.g. tree hollows) and overall vegetation quality. The habitat was assessed according to the categories outlined in Table 10.

Table 10: Fauna Habitat Quality

Fauna Habitat Quality	Description
High Quality Fauna Habitat	These areas closely approximate the vegetation mix and quality that would have been in the area prior to any disturbance. The habitat has connectivity with other habitats and is likely to contain the most natural vertebrate fauna assemblage.
Very Good Fauna Habitat	These areas show minimal signs of disturbance (e.g. grazing, clearing, fragmentation, weeds) and generally retain many of the characteristics of the habitat if it had not been disturbed. The habitat has connectivity with other habitats and fauna assemblages in these areas are likely to be minimally affected by disturbance.
Good Fauna Habitat	These areas showed signs of disturbance (e.g. grazing, clearing, fragmentation, weeds) but generally retain many of the characteristics of the habitat if it had not been disturbed. The habitat has connectivity with other habitats and fauna assemblages in these areas are likely to be affected by disturbance.
Disturbed Fauna Habitat	These areas showed signs of significant disturbance. Many of the trees, shrubs and undergrowth are cleared. These areas may be in the early succession and regeneration stages. Areas may show signs of significant grazing, contain weeds or have been damaged by vehicle or machinery. Habitats are fragmented or have limited connectivity with other fauna habitats. Fauna assemblages in these areas are likely to differ significantly from what might be expected in the area had the disturbance not occurred.
Highly Degraded Fauna Habitat	These areas often have a significant loss of vegetation, an abundance of weeds, and a large number of vehicle tracks or are completely cleared. Limited or no fauna habitat connectivity. Faunal assemblages in these areas are likely to be significantly different to what might have been in the area pre-disturbance (Coffey Environments, 2009).

The fauna habitats occur over a fragmented landscape. The open Woodland habitat is in varied condition with some larger areas being Very Good and have some connectivity to adjacent lots. However, the surrounding development and presence of feral species would have impacted on the fauna assemblage. These areas are rated as being Good Fauna Habitat.

There is one small, Completely Degraded area that has no connectivity which is Highly Degraded Fauna Habitat in Lot 3 Elliot Road. The Cleared/Developed habitat is also considered to be Highly Degraded Fauna Habitat.

4.4 Conservation Significant Species

Outlined below in Table 11 is a short description of the preferred habitat for each of the species that were identified in the DBCA Database Search (Appendix 8), Atlas of Living Australia Species Report (Appendix 2) and the EPBC Protected Matters Search Tool (Appendix 3) in Table 9. The preferred habitat has been compared to the habitats on the site described above and the likelihood of each species to be present was determined. Species that live in the ocean have not been included.

Table 11: Preferred Habitat of Conservation Significant Fauna Species

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Schedule 1 – Critically Endangered			
Bettongia penicillata ogilbyi (Bettongia penicillata)	Woylie, Brush-tailed Bettong	The Woylie habitat types ranged from forest to grassland, coastal and inland. During the day the Woylie shelters under patches of dense undergrowth, logs and rock-cavities and occasionally in burrows.	Highly Unlikely – the fauna habitat is too disturbed and surrounded by development
Calidris ferruginea	Curlew Sandpiper	Curlew Sandpipers mainly occur on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms.	Highly Unlikely – not suitable habitat
Calidris tenuirostris	Great Knot	The Great Knot winters in Australia, occurring in sheltered coastal habitats such as inlets, bays, harbours, estuaries and lagoons with large intertidal mud and sandflats, oceanic sandy beaches with nearby mudflats, sandy spits and islets, muddy shorelines with mangroves and occasionally exposed reefs or rock platforms. It roosts in refuges such as shallow water in sheltered sites, on coastal dunes or on saltflats amongst mangroves during high tides (BirdLife International, 2015a).	Highly Unlikely – not suitable habitat
Hesperocolletes douglasi	Douglas's Broad-headed Bee	Douglas's Broad-headed Bee was recorded on Rottnest and rediscovered in Pinjar in Banskia Woodland with pollen from *Philotheca spicata*, *Patersonia occidentalis*, two species of *Stylidium*, a species of *Scaevola* and species from Fabaceae and Myrtaceae (DBCA, 2018).	Unlikely – the sites are disturbed and
Numenius madagascariensis	Eastern Curlew	The Eastern Curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass. Occasionally, the species occurs on ocean beaches (often near estuaries), and coral reefs, rock platforms, or rocky islets.	Highly Unlikely – not coastal habitat
Pseudemydura umbrina	Western Swamp Tortoise	The Western Swamp Tortoise is restricted to very few wild populations. During winter and spring, the tortoises live in the water. This species is carnivorous feeding on insects, larvae and tadpoles (Burbidge and Kuchling, 1994). In the drier, hotter months they shelter under leaf litter and in holes and aestivate (sleep).	No – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Botaurus poiciloptilus	Australasian bittern	The Australasian Bittern occurs mainly in densely vegetated freshwater wetlands and, rarely, in estuaries or tidal wetlands.	No – not wetland habitat
Pseudocheirus occidentalis	Western Ringtail Possum, Ngwayir	The Western Ringtail Possum is a medium sized nocturnal marsupial. This species occurs in and near coastal Peppermint Tree (*Agonis flexuosa*) forest and Tuart (*Eucalyptus gomphocephala*) dominated forest with a Peppermint Tree understorey.	Highly Unlikely – not suitable habitat
Schedule 2 – Endangered			
Botaurus poiciloptilus	Australasian bittern	The Australasian Bittern occurs mainly in densely vegetated freshwater wetlands and, rarely, in estuaries or tidal wetlands.	Highly Unlikely – not suitable habitat
Calidris canutus	Red Knot	In Australasia the Red Knot mainly inhabit intertidal mudflats, sandflats and sandy beaches of sheltered coasts, in estuaries, bays, inlets, lagoons and harbours; sometimes on sandy ocean beaches or shallow pools on exposed wave-cut rock platforms or coral reefs.	Highly Unlikely – not suitable habitat
Calyptorhynchus (Zanda) baudinii	Baudin's Black Cockatoo	Baudin's Black-Cockatoo mainly occurs in eucalypt forests, especially Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*), also Karri (*Eucalyptus diversicolor*) forest, often feeding in the understorey on proteaceous trees and shrubs, especially banksias (SEWPaC, 2012).	Possible intermittent visitor to the site
Calyptorhynchus (Zanda) latirostris	Carnaby's Black Cockatoo	Carnaby's Cockatoo is found in the south-west of Australia from Kalbarri through to Ravensthorpe. It has a preference for feeding on the seeds of Banksia, Hakea, Eucalyptus, Grevillea, Pinus and Allocasuarina spp. It is nomadic often moving toward the coast after breeding. It breeds in tree hollows that are 2.5 – 12m above the ground and have an entrance 23-30cm with a depth of 1-2.5m. Nesting mostly occurs in smooth-barked trees (e.g. Salmon Gum, Wandoo, Red Morrell) (SEWPaC, 2012).	Likely to intermittently occur on the site
Myrmecobius fasciatus	Numbat, Walpurti	Numbats occur in eucalypt forests and woodlands dominated by *Eucalyptus marginata, Corymbia calophylla* and *Eucalyptus wandoo*.	Highly Unlikely – the site is too disturbed
Petrogale lateralis lateralis	Black-flanked Rock-wallaby, Black-footed Rock-wallaby, Moororong	The preferred habitat of the Black-flanked Rock-wallaby varies between colonies but always involves grassland feeding habitat for feeding in close proximity to cliff, rock-pile, talus or escarpment refuge habitat.	Highly Unlikely – outside of species range

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Rostratula australis (Rostratula benghalensis australis)	Australian Painted Snipe	The Australian Painted Snipe has been recorded at wetlands in all states of Australia but is most common in eastern Australia. It generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. It also uses inundated or waterlogged grassland or saltmarsh, dams, rice crops, sewage farms and bore drains. Typical sites include a cover of vegetation, including grasses.	Highly Unlikely – not suitable habitat
Thalassarche carteri (Thalassarche chlororhynchos carteri)	Indian yellow-nosed Albatross	The Indian Yellow-nosed Albatross is a marine bird that breeds on islands of the southern Indian Ocean on tussock-covered coastal cliffs and slopes, often in rocky situations.	Highly Unlikely – marine and pelagic
Schedule 3 – Vulnerable			
Calyptorhynchus banksii naso	Forest Red-tailed Black-Cockatoo	Forest Red-tailed Black Cockatoos frequent the humid to sub-humid south-west of Western Australia from Gingin in the north, to Albany in the south and west to Cape Leeuwin and Bunbury (SEWPaC, 2012). It nests in tree hollows with a depth of 1-5m, that are predominately Marri (Corymbia calophylla), Jarrah (Eucalyptus marginata) and Karri (Eucalyptus diversicolor) and it feeds primarily on the seeds of Marri.	Likely to be an intermittent visitor to the site
Charadrius leschenaultii	Greater Sand Plover	In Australasia, the Greater Sand Plover is almost entirely coastal, inhabiting littoral and estuarine habitats. They mainly occur on sheltered sandy, shelly or muddy beaches with large intertidal mudflats or sandbanks, as well as sandy estuarine lagoons.	Highly Unlikely – not coastal habitat
Dasyurus geoffroii	Chuditch, Western Quoll	The Chuditch have been known to occupy a wide range of habitats including woodlands, dry sclerophyll forests, riparian vegetation, beaches and deserts. They are opportunistic feeders, and forage on the ground at night, feeding on invertebrates, small mammals, birds and reptiles.	Highly Unlikely – the site is too disturbed and surrounded by development
Falco hypoleucos	Grey Falcon	The Grey Falcon favours timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined watercourses, but frequents other grassland and woodland habitats (Birdlife International, 2014a).	Highly Unlikely – not suitable habitat
Leipoa ocellata	Mallee Fowl	Mallee fowl have been found in mallee regions of southern Australia from approximately the 26th parallel of latitude southwards in mallee bushland.	No – no mallee habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Macroderma gigas	Ghost Bat	Ghost bats occur in a wide range of habitats from rainforest, monsoon and vine scrub, to open woodlands in arid areas. These habitats are used for foraging, while roost habitat is more specific. Favoured roosting sites of the ghost bat are undisturbed caves or mineshafts which have several openings (DEHP, 2015).	No - no cave habitat
Macrotis lagotis	Bilby, Dalgyte, Ninu	The greater Bilby is a nocturnal omnivorous marsupial that shrub species, such as *Acacia kempeana* and *A. hilliana*, which have root-dwelling larvae that provide a constant food source for the Greater Bilby. They also utilise Spinifex hummocks which are quite uniform and discrete, providing runways between hummocks, enabling easier movement and for aging.	Highly Unlikely – not suitable habitat
Phascogale tapoatafa kimberleyensis	Kimberley brush-tailed phascogale	The Kimberley Brush-tailed Phascogale occurs in savanna woodland. It is octurnal and shelters in tree hollows during the day.	No – outside of species range
Procellaria aequinoctialis	White-chinned Petrel	The White Chinned Petrel occurs on the southern coast of Australia and largely forage on open water (Birdlife International, 2016).	Highly Unlikely – marine and pelagic
Sternula nereis nereis (Sterna nereis nereis)	Australian Fairy Tern	The Fairy Tern (Australian) nests on sheltered sandy beaches, spits and banks above the high tide line and below vegetation.	Highly Unlikely – not beach habitat
Westralunio carteri	Carter's Freshwater Mussel	Carter's Feshwater Mussel is South-West Western Australia's only freshwater mussel (Murdoch University & SERCUL, 2012). Carter's Freshwater Mussel occurs in freshwater streams, rivers, reservoirs and lakes (ICUN, 2015b) and is intolerant to dehydration for more than three days and salinity (Murdoch University & SERCUL, 2012).	No – not suitable habitat
Schedule 3 – Vulnerable and Schedule 5 – International Agreement			
Charadrius leschenaultii	Greater Sand Plover	In Australasia, the Greater Sand Plover is almost entirely coastal, inhabiting littoral and estuarine habitats. They mainly occur on sheltered sandy, shelly or muddy beaches with large intertidal mudflats or sandbanks, as well as sandy estuarine lagoons.	Highly Unlikely – not coastal habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Thalassarche cauta	Shy Albatross	The Shy Albatross is a marine species occurring in subantarctic and subtropical waters, reaching the tropics in the cool Humboldt Current off South America. In the southern Indian Ocean the species has been observed over waters of 6.4-13.5°C. It has been noted in shelf-waters around breeding islands and over adjacent rises. During the non-breeding season, it occurs over continental shelves around continents. The species occurs both inshore and offshore and enters harbours and bays. The birds are scarce in pelagic waters. The species flies low to moderately high, using updraft from wave fronts for lift. It nests on level or gently sloping ledges, summits, slopes and caves of rocky islets and stacks, usually in broken terrain with little soil and vegetation.	Highly Unlikely – marine and pelagic
Schedule 4 – Extinct			
Bettongia lesueur graii	Boodie (inland), Burrowing Bettong (inland)	The habitat of the Burrowing Bettong (inland) ranged from open eucalypt or acacia woodland with a grass and shrub understorey to sandridge desert with spinifex hummocks and sparse shrubs.	
Schedule 5 – International Agreement			
Actitis hypoleucos	Common Sandpiper	The Common Sandpiper is mostly found around muddy margins or rocky shores. Generally the species forages in shallow water and on bare soft mud at the edges of wetlands.	Highly Unlikely – not suitable habitat
Apus pacificus	Fork-tailed Swift	The Fork-tailed Swift is almost exclusively aerial and is not known to breed in Australia. They are seen in inland plains but sometimes above foothills or in coastal areas. They often occur over cliffs and beaches and also over islands and sometimes well out to sea. They also occur over settled areas, including towns, urban areas and cities. Apus pacificus subsp. pacificus is the only subspecies to migrate to Australia.	Highly Unlikely – may fly over the site but unlikely to land
Calidris acuminata	Sharp-tailed Sandpiper	The Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Calidris alba	Sanderling	Sanderlings occur on most of the coast from Eyre to Derby, and also around Wyndham. They are more often recorded on the south and southwest coasts, north to around southern Shark Bay, with more sparsely scattered records further north in Gascoyne and Pilbara Regions and the Kimberley Division.	Highly Unlikely – not coastal habitat
Calidris melanotos	Pectoral Sandpiper	The Pectoral Sandpiper prefers shallow fresh to saline wetlands and is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands.	Highly Unlikely – not suitable habitat
Calidris ruficollis	Red-necked Stint	The Red-necked Stint is mostly found in coastal areas, including in sheltered inlets, bays, lagoons and estuaries with intertidal mudflats, often near spits, islets and banks and, sometimes, on protected sandy or coralline shores.	Highly Unlikely – not coastal habitat
Calidris subminuta	Long-toed Stint	The Long-toed Stint prefers shallow freshwater or brackish wetlands including lakes, swamps, river floodplains, streams, lagoons and sewage ponds. The species is also fond of areas of muddy shoreline, growths of short grass, weeds, sedges, low or floating aquatic vegetation, reeds, rushes and occasionally stunted samphire.	Highly Unlikely – not suitable habitat
Calonectris leucomelas	Streaked Shearwater	The Streaked Shearwater is a marine species that can be found over both pelagic and inshore waters (Birdlife International, 2014b).	Highly unlikely – marine and pelagic
Chlidonias leucopterus (Sterna leucoptera)	White-winged Black tern, White-winged Tern	In Australia, the White-winged Black tern mostly inhabits fresh, brackish or saline, and coastal or subcoastal wetlands.	Highly Unlikely – not suitable habitat
Glareola maldivarum	Oriental Pratincole	The Oriental Pratincole usually inhabits open plains, floodplains or short grassland (including farmland or airstrips), often with extensive bare areas. They often occur near terrestrial wetlands, such as billabongs, lakes or creeks, and artificial wetlands such as reservoirs, saltworks and sewage farms, especially around the margins. The species also occurs along the coast, inhabiting beaches, mudflats and islands, or around coastal lagoons.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Hydroprogne caspia (Sterna caspia)	Caspian Tern	The Caspian Tern is mostly found in sheltered coastal embayments (harbours, lagoons, inlets, bays, estuaries and river deltas) and those with sandy or muddy margins are preferred.	Highly Unlikely – not coastal habitat
Limosa lapponica	Bar-tailed Godwit	The Bar-tailed Godwit is found mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays.	Highly Unlikely – not coastal habitat
Limosa limosa	Black-tailed Godwit	The Black-tailed Godwit is found mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays. It is found often around beds of seagrass and, sometimes, in nearby saltmarsh.	Highly Unlikely – not coastal habitat
Macronectes giganteus	Southern Giant Petrel	The Southern Giant-Petrel is a marine bird that occurs in Antarctic to subtropical waters. In summer it mainly occurs over Antarctic waters	Highly Unlikely – marine and pelagic
Motacilla cinerea	Grey Wagtail	The Grey Wagtail is mostly recorded in coastal areas in Western Australia (ALA, 2015) however is widespread. There is non-breeding habitat only in Australia and the species has a strong association with water, particularly rocky substrates along water courses but also lakes and marshes.	Highly Unlikely – not suitable habitat
Numenius phaeopus	Whimbrel	The Whimbrel is often found on the intertidal mudflats of sheltered coasts. It is also found in harbours, lagoons, estuaries and river deltas, often those with mangroves, but also open, un-vegetated mudflats.	Highly Unlikely – not suitable habitat
Pandion cristatus (Pandion haliaetus)	Osprey	Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They feed on fish, especially mullet where available, and rarely take molluscs, crustaceans, insects, reptiles, birds and mammals.	Highly Unlikely – not coastal habitat
Plegadis falcinellus	Glossy Ibis	The Glossy Ibis is the smallest ibis known in Australia. This species preferred habitat for foraging and breeding are fresh water marshes at the edges of lakes and rivers, lagoons, flood-plains, wet meadows, swamps, reservoirs, sewage ponds, rice-fields and cultivated areas under irrigation but do not breed in South-west Western Australia.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Pluvialis fulva	Pacific Golden Plover	Pacific Golden Plovers usually occur on beaches, mudflats and sandflats (sometimes in vegetation such as mangroves, low saltmarsh such as Sarcocornia, or beds of seagrass) in sheltered areas including harbours, estuaries and lagoons, and also in evaporation ponds in salt works.	Highly Unlikely – not suitable habitat
Pluvialis squatarola	Grey Plover	Grey Plovers occur almost entirely in coastal areas, where they usually inhabit sheltered embayments, estuaries and lagoons with mudflats and sandflats, and occasionally on rocky coasts with wave-cut platforms or reef-flats, or on reefs within muddy lagoons.	Highly Unlikely – not coastal habitat
Thalasseus bergii (Sterna bergii)	Crested Tern	The Crested Tern occurs in coastal areas (Birdlife Australia, 2018).	Highly Unlikely – not coastal habitat
Tringa glareola	Wood Sandpiper	The Wood Sandpiper uses well-vegetated, shallow, freshwater wetlands, such as swamps, billabongs, lakes, pools and waterholes. They are typically associated with emergent, aquatic plants or grass, and dominated by taller fringing vegetation, such as dense stands of rushes or reeds, shrubs, or dead or live trees, especially Melaleuca and River Red Gums Eucalyptus camaldulensis and often with fallen timber.	Highly Unlikely – not suitable habitat
Tringa nebularia	Common Greenshank	The Common Greenshank is a wader and does not breed in Australia. This species can be found in many types of wetlands and has the widest distribution of any shorebird in Australia. This species typically feeds on molluscs, crustaceans, insects, and occasionally fish and frogs.	Highly Unlikely – not suitable habitat
Tringa stagnatilis	Marsh Sandpiper, Little Greenshank	The Marsh Sandpiper lives in permanent or ephemeral wetlands of varying salinity, including swamps, lagoons, billabongs, saltpans, saltmarshes, estuaries, pools on inundated floodplains, and intertidal mudflats and also regularly at sewage farms and saltworks.	Highly Unlikely – not suitable habitat
Schedule 6 – Conservation Dependent			
Cacatua pastinator pastinator	Muir's Corella	Muir's Corella occurs in eucalyptus woodlands that are dominated by White Gum (*Eucalyptus wandoo*), Marri (*Corymbia calophylla*), or Jarrah (*Eucalyptus marginata*). The subspecies often occurs in farmland, especially in croplands and sometimes pasture, where there are ample watering points and some nearby large trees for roosting or breeding.	Highly Unlikely – generally occurs in the wheatbelt

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Phascogale calura	Red-tailed Phascogale, Kenngoor	The Red-tailed Phascogale is a small, arboreal, carnivorous marsupial. The preferred habitats for this species are *Allocasuarina* woodlands with hollow-containing eucalypts (e.g. *Eucalyptus wandoo*) and *Gastrolobium* spp..	Highly Unlikely – not suitable habitat and the site is too disturbed and outside of the species range
Phascogale tapoatafa wambenger	South-western Brush-tailed Phascogale, Wambenger	Southern Brush-tailed Phascogales are arboreal marsupials which require tree hollows in suitable woodland or forest and rely on abundant invertebrate prey to sustain populations (Pescott, 2012).	Highly Unlikely – not suitable habitat and the site is too disturbed
Schedule 7 – Other Specially Protected Species			
Falco peregrinus	Peregrine Falcon	The Peregrine Falcon is found in a variety of habitats but nests on high cliff ledges or artificial structures. It feeds primarily on small-medium sized birds, but occasionally taking insects, such as moths, cicadas and locusts (Birdlife Australia, 2012).	Highly Unlikely – may fly over but unlikely to land
Marine			
Ardea alba	Great Egret, White Egret	The Eastern Great Egret has been reported in a wide range of wetland habitats and usually frequents shallow waters. This species feeds on fish, insects, crustaceans, molluscs, frogs, lizards, snakes and small birds and mammals.	Highly Unlikely – not suitable habitat
Ardea ibis (Bubulcus ibis)	Cattle Egret	The Cattle Egret occurs in tropical and temperate grasslands, wooded lands and terrestrial wetlands with breeding in Western Australia recorded in the far north in Wyndham in colonies in wooded swamps such as mangrove forest. This species forages away from water on low lying grasslands, improved pastures and croplands generally in areas that have livestock eating insects, frog, lizards and small mammals.	Possible – habitat may occur on the site
Charadrius ruficapillus	Red-capped Plover	The Red-capped Plover is found in wetlands, especially in arid areas, and prefers saline and brackish waters (Birdlife Australia, 2014a).	Highly Unlikely – not suitable habitat
Egretta sacra	Eastern Reef Egret, Eastern Reef Heron	The Eastern Reef Egret nests in trees in island woodlands, or on the ground under shrubs or rock ledges and feeds on small fish, crustaceans and insects (Birdlife Australia, 2014b).	Highly Unlikely – not suitable habitat
Haliaeetus leucogaster	White-bellied Sea-eagle	The White-bellied Sea-Eagle is found in coastal habitats with large areas of open water, especially those close to the sea-shore. This species feeds opportunistically on a variety of fish, birds, reptiles, mammals and crustaceans, and on carrion and offal.	Highly Unlikely – not coastal habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Halobaena caerulea	Blue Petrel	The Blue Petrel breeds around MacQuarie Island and forages in Antarctic and subantarctic waters for pelagic crustaceans, fish, cephalopods and insects.	Highly Unlikely – marine and pelagic
Himantopus himantopus	Black-winged Stilt	The Black-winged Stilt is found near coastal lagoons and shallow freshwater or brackish pools with extensive areas of mudflats, salt meadows, saltpans, coastal marshes and swamps (Birdlife International, 2014c).	Highly Unlikely – not suitable habitat
Larus pacificus	Pacific Gull	Australia's largest gull, the Pacific Gull occurs only along the coasts of southern Australia. Despite its name, the species is seldom seen on the Pacific coastline, and is far more common on the beaches bordering the Southern and Indian Oceans. They breed in colonies on islands, extending from the Furneaux Group in eastern Bass Strait, west to Shark Bay. Their nests may consist of either a scrape in the ground, sometimes lined with gravel, or a neat nest made from grass, sticks or seaweed (Birdlife Australia, 2015).	Highly Unlikely – not suitable habitat
Merops ornatus	Rainbow Bee-eater	Populations of the Rainbow Bee-eater that breed in northern Australia are considered to be resident, and in many northern localities the Rainbow Bee-eater is present throughout the year. The Rainbow Bee-eater nests in a burrow dug in the ground. It is found across the better-watered parts of WA including islands preferring lightly wooded, sandy country near water.	Possible – habitat may occur on the site
Pterodroma mollis	Soft-plumaged Petrel	The Soft-plumaged Petrel is a marine, oceanic species that breed on islands off Tasmania, in the New Zealand region, and in the Indian and South Atlantic Oceans.	Highly Unlikely – marine and pelagic
Raillus philippensis (Gallirallus philippensis)	Buff banded rail	The Buff Banded Rail occupies a wide range of terrestrial wetlands, as well as coastal beaches, reef flats, sandbanks, and mangroves, where it forages on the ground, pecking and probing in mud to catch crustaceans, worms and other invertebrates, and rails on beaches may scavenge along the strandline (Birdlife Australia, 2017).	Highly Unlikely – not suitable habitat
Recurvirostra novaehollandiae	Red-necked Avocet	The Red-necked Avocet occurs in wetland areas including bogs, marshes, swamps and Permanent Saline, Brackish or Alkaline Lakes (Birdlife International, 2014d).	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Priority 1			
Ixobrychus flavicollis australis (southwest subpop.)	Australian Black Bittern (southwest pop)	The bittern sub-species prefer wetland habitats with dense fringing vegetation. They are found in reed beds along water bodies. They inhabit ponds, lakes, streams and marshes. Their breeding habitat is mostly reed beds. The subspecies I. f. australis is distributed in New Guinea, Bismarck Archipelago and Australia (BirdLife International, 2015b).	Highly Unlikely – not wetland habitat
Priority 2			
Austrosaga spinifer	Spiny Katydid (Swan Coastal Plain)	The *Austrosaga spinifer* species of cricket is recorcded from Cervantes (Rentz, 1996) and Neerabup National Park.	Possible – habitat may occur on the site
Priority 3			
Australotomurus morbidus	Cemetery Springtail, Guildford Springtail	The Cemetery Springtail is known from four locations in Perth in relatively undisturbed bushland in pale soils in *Banksia* and *Eucalyptus* woodland (Greenslade and Jordan, 2014).	Highly Unlikely – the site is too disturbed
Ctenotus gemmula (Swan Coastal Plain pop)	Jewelled South-west Ctenotus	The Jewelled south-west Ctenotus inhabits sand plains with heaths. It is also found in Banksia or Mallee woodlands (ICUN, 2015).	Unlikely – not typical habitat
Euoplos inornatus	Inornate Trapdoor Spider (northern Jarrah Forest)	The Inornate Trapdoor Spider is recorded from clay creek banks (ALA, 2019).	Highly Unlikely – not suitable habitat
Hylaeus globuliferus	Woolybush Bee	The Woolybush Bee is thought to favour flowers of *Adenanthos cygnorum* for feeding, but has also been recorded on *Banksia attenuata*.	Possible – habitat occurs on the site
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	The Swan Coastal Plain Shield-backed Trapdoor Spider arranges fallen twigs from the sheoak tree around the rim of its burrow entrance, enabling it to feel the vibrations of unsuspecting prey that wander by (Curtin, 2018).	Highly Unlikely – no Sheoak habitat
Leioproctus contrarius	A Short-tongued Bee	Leioproctus contrarius is apparently dependent on flowers of Goodeniaceae and possibly Lechenaultia stenosepala. It was found at Forrestdale Lake in 1952 and 1954 (PES, 2011).	Highly Unlikely – not suitable habitat
Neelaps calonotos	Black-striped Snake	The Black-striped snake has a limited distribution, inhabiting areas with sandy soils that support heathlands and Banksia/Eucalypt Woodlands (Nevill, 2005) on the Swan Coastal Plain generally in the lower west coast from Lancelin to Mandurah (Storr *et al*, 1999).	Highly Unlikely – not on the Swan Coastal Plain

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Ninox connivens connivens	Barking Owl (southwest pop)	Barking Owls are usually found in habitats that are dominated by eucalyptus species, particularly red gum, and, in the tropics, paperbark species. They prefer woodlands and forests with a high density of large trees and particularly sites with hollows that are used by the owls as well as their prey. Roost sites are often located near waterways or wetlands (Birds in Backyards, 2014).	Unlikely – not typical habitat
Priority 4			
Elanus scriptus	Letter-winged Kite	The Letter-winged Kite is found in open or sparsely wooded country (Johnstone and Storr, 1998).	Highly Unlikely – not suitable habitat
Hydromys chrysogaster	Water-rat, Rakali	The Water Rat generally prefers wetland habitats characterised by dense, low-lying vegetation (0–30 cm from ground), low-density canopy cover and shallow, narrow water bodies (Speldewinde *et al.*, 2013).	Highly Unlikely – not suitable habitat
Isoodon fusciventer	Southern Brown Bandicoot, Quenda	Southern Brown Bandicoots are small grey marsupials that prefer dense scrub (up to one metre high). Their diet includes invertebrates (including earthworms, adult beetles and their larvae), underground fungi, subterranean plant material, and very occasionally, small vertebrates (DEC, 2012b).	Possible intermittent visitor to the site
Ixobrychus dubius	Australian Little Bittern	The Australian Little Bittern is mainly found in freshwater wetlands, where they inhabit dense emergent vegetation of reeds and sedges, and inundated shrub thickets. They are also occasionally found in brackish and saline wetlands such as mangrove swamps, Juncus-dominated salt marsh and the wooded margins of coastal lagoons (Naturewatch NZ, 2014).	Highly Unlikely – not suitable habitat
Notamacropus eugenii derbianus	Tammar Wallaby	The Tammar Wallaby prefers dense, low vegetation for daytime shelter and open grassy areas for feeding. This species inhabits coastal scrub, heath, dry sclerophyll forest and thickets in mallee and woodland (DEC, 2012c).	Highly Unlikely – the site is too disturbed
Notamacropus irma	Western Brush Wallaby	The Western Brush Wallaby is a medium sized marsupial and its optimum habitat is open forest or woodland, particularly favouring open, seasonally wet flats with low grasses and open scrubby thickets (DEC, 2012d).	Highly Unlikely – the site surrounds are too developed

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Oxyura australis	Blue-billed Duck	The Blue-billed Duck is found on terrestrial wetlands in temperate regions, that are freshwater to saline, and may be natural or artificial. It nests in rushes, sedges, Lignum Muehlenbeckia cunninghamii and paperbark Melaleuca (Birdlife International, 2015c). The species is almost completely aquatic, and is seldom seen on land. Non-breeding flocks, often with several hundred individuals, congregate on large, deep open freshwater dams and lakes in autumn. The daylight hours are spent alone in small concealed bays within vegetation or communally in large exposed rafts far from the shore (Birds in Backyards, 2015).	No – not suitable habitat
Synemon gratiosa	Graceful Sun-moth	The Graceful Sun-moth is a diurnal moth with dull coloured brown to black forewings and brightly coloured orange hind wings. The larvae burrow into the rhizomes of Lomandra maritima and Lomandra hermaphrodita exclusively and therefore require the presence of one or both of these species to be present in an area (Bishop *et al.*, 2011).	No – no suitable habitat occurs on the site
Thinornis rubricollis (Charadrius rubricollis)	Hooded Plover	The Hooded Plover primarily inhabits sandy, ocean beaches, with the highest densities on beaches with large amounts of beach-washed seaweed that are backed by extensive open dunes. In Western Australia the species also inhabits inland and coastal salt lakes (Birdlife International, 2014e).	Highly Unlikely – not beach habitat

* Habitat descriptions from DoEE (2016) SPRAT Database unless otherwise denoted

Habitat on the site was identified for three listed species of Black Cockatoos being:

- Carnaby's Black Cockatoo (*Calyptorhynchus* (*Zanda*) *latirostris*)
- Baudin's Black Cockatoo (*Calyptorhynchus* (*Zanda*) *baudinii*)
- Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*)

Detailed analysis of the Black Cockatoo habitat on the site is provided in Section 5.

Two marine species, Cattle Egret (*Ardea* (*Bubulcus*) *ibis*) and the Rainbow Bee-eater (*Merops ornatus*) may occur on the site but are unlikely to rely on it for survival. The site may also contain habitat for the Spiny Katydid (Swan Coastal Plain) (*Austrosaga spinifer*) (Priority 2) and the Woolybush Bee (*Hylaeus globuliferus*) (Priority 3). The Southern Brown Bandicoot, Quenda (*Isoodon fusciventer*) (Priority 4) could potentially occur on the site.

4.5 Pest Fauna

There are several pest species that may be present on the site outlined in Table 8.

Table 8: Pest Species Likely to Occur on the Site

Taxa	Family	Species Name	Common Name
Mammalia	Canidae	*Vulpes vulpes*	Red fox
	Felidae	*Felis catus*	Feral cat
	Leporidae	*Oryctolagus cuniculus*	European Rabbit
	Muridae	*Mus musculus*	House Mouse
		Rattus rattus	Black Rat

4.6 Biodiversity Value

The EPA's (2002) *Terrestrial Biological Surveys as an Element of Biodiversity Protection Position Statement No. 3* indicates an ecological assessment of a site must consider its biodiversity value at the genetic, species and ecosystem levels; and its ecological functional value at the ecosystem level. The vegetation on the site is disturbed and fragmented and there is likely to be introduced feral species such as foxes, cats and rabbits which would have modified the fauna assemblage from pre-European settlement. The biodiversity value therefore is considered to be low.

Areas of remnant vegetation in Very Good condition are rated as Good Fauna habitat as most are linked to other areas of vegetation even though there is a high proportion of weeds in the understorey.

Completely Degraded areas are rated as Highly Degraded as these areas are fragmented from areas of remnant vegetation.

5 BLACK COCKATOO HABITAT ASSESSMENT

5.1 Black Cockatoo Species

5.1.1 Baudin's Black Cockatoo (*Calyptorhynchus* (*Zanda*) *baudinii*)

Baudin's Black Cockatoo is most common in the far south-west of Western Australia. It is known to breed from the southern forests north to Collie and east to near Kojonup. Baudin's Black Cockatoo is typically found in vagrant flocks and utilises the taller, more open Jarrah (*Eucalyptus marginata*) and Marri (*Corymbia calophylla*) woodlands where it feeds mainly on Marri seeds and various Proteaceous species (Johnstone, Johnstone and Kirkby, 2011).

The site is just outside the modelled 'Predicted Breeding Area' distribution for Baudin's Black Cockatoos (DAWE, 2022).

5.1.2 Carnaby's Black Cockatoo (*Calyptorhynchus* (*Zanda*) *latirostris*)

Carnaby's Black Cockatoo is found in the south-west of Australia from Kalbarri through to Ravensthorpe. It has a preference for feeding on the seeds of *Banksia, Hakea, Eucalyptus, Grevillea, Pinus* and *Allocasuarina* spp. It is nomadic, often moving toward the coast after breeding. It breeds in tree hollows that are 2.5 – 12m above the ground and have an entrance of 23-30cm with a depth of 1-2.5m. Nesting mostly occurs in smooth-barked trees (e.g. Salmon Gum, Wandoo, Red Morrell). Eggs are laid from July to October, with incubation lasting 29 days (DoE, 2014).

The site is inside the boundary of the modelled distribution for Carnaby's Black Cockatoos (DAWE, 2022).

5.1.3 Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*)

Forest Red-tailed Black Cockatoos are endemic to the humid to sub-humid south-west of Western Australia (SEWPaC, 2012). The range of Forest Red-tailed Black Cockatoos is bound by Gingin in the north to Mt Helena, Christmas Tree Well, West Dale, North Bannister, Mt Saddleback, Kojonup, Rocky Gully, upper King River and Green Range (east of Albany) (SEWPaC, 2012; DoE, 2014). It nests in tree hollows with a depth of 1-5m, that are predominately Marri, Jarrah and Karri (*E. diversicolor*) and it feeds primarily on the seeds of Marri and Jarrah (Johnstone, Johnstone and Kirkby, 2011).

The site is inside the modelled distribution for Forest Red-tailed Black Cockatoos (DAWE, 2022).

5.2 Habitat Survey

PGV Environmental undertook a Black Cockatoo habitat assessment on 26 and 30 September and 25 October 2022 in accordance with the *Referral guideline for 3 WA threatened black cockatoo species Carnaby's Cockatoo (Zanda latirostris), Baudin's Cockatoo (Zanda baudinii) and the Forest Red-tailed Black-cockatoo (Calyptorhynchus banksii naso)* (DAWE, 2022) (Black Cockatoo Referral Guidelines) and the methodology that is outlined in the SPRAT Database for each of the Black Cockatoo species for Black Cockatoo Habitat Assessments.

The survey area was traversed on foot and information on Black Cockatoo foraging, roosting and breeding habitat was assessed. The extent, type and quality of the vegetation present, including the presence and extent of plants known to be used by Black Cockatoos was investigated.

5.3 Habitat definitions

5.3.1 Breeding Habitat

'Breeding habitat' is defined as trees of species known to support breeding within the range of the species which either have a suitable nest hollow OR have a DBH of 500mm or greater (SEWPaC, 2012). Past studies have found that on average hollow openings are 25 cm x 27 cm (Saunders *et al.*, 1982, Saunders and Dawson, 2017) and 30 cm x 34 cm (Johnstone *et al.*, 2013). The height of a hollow entrance off the ground is on average 14.49 m (Johnstone *et al.*, 2013). Nearly all hollows that are used for nesting by Black Cockatoos are located in the main trunk and have a vertical aspect (Johnstone *et al.*, 2013, Saunders and Dawson, 2017). Black Cockatoos are large birds with shoulders that are about 100 mm wide, therefore they require hollows with an entrance bigger than this (as shown above they are typically much larger), but the internal dimensions (depth and floor base) need to be much larger in order for it to be suitable to lay eggs in and for adults to be able to move around.

Previous research has found for Carnaby's Black Cockatoo a mean depth of 1.2 m and a floor diameter of 40 cm is required in order for it to be suitable to lay eggs in and for adults to be able to move around (Johnstone *et al.*, 2013, Saunders and Dawson 2017).

5.3.2 Roosting Habitat

'Roosting habitat' is usually evident due to the presence of Black Cockatoos in the survey area in the evening and early morning and if there are scats or moulted feathers under the roosting area. Black Cockatoos utilise a wide range of native and non-native trees, situated within a variety of land-use types. Roosting habitat is generally in tall (average of > 25 m) tree species that have relatively thick trunks (average DBH of 1 m) and medium foliage density (average of 50 %), and that are not too densely forested amongst other trees (average tree crown connectivity of 20 %) (Le Roux, 2017). Black cockatoos rely upon the availability of suitable night roosting sites in proximity to foraging resources, and particularly on access to water, which are usually within 2 km of the roost (SEWPaC, 2012).

5.3.3 Foraging Habitat

'Foraging habitat' for Black Cockatoos is determined from the plant species that are present in the survey area and evidence of feeding such as direct observation of birds or by chewed nuts and cones. Foraging plants utilised by each species of Black Cockatoo varies, with Carnaby's Black Cockatoo foraging on Eucalypts, pines and proteaceous species, whereas Forest Red-tailed Cockatoos prefer Eucalypts and Allocasuarina and many exotic species and Baudin's prefer mostly seeds of marri and jarrah, also Allocasuarina cones (SEWPaC, 2012).

Foraging habitat was identified by comparing the literature on plant species known to be foraged upon by black cockatoos against the vegetation within the site.

5.4 Breeding

Black Cockatoos are known to breed in hollows of large eucalypts, including Jarrah trees. The site is not known as a breeding site for Black Cockatoos (DoP, 2011; National Map, 2022).

The Black Cockatoo Referral Guidelines define trees of certain species with a DBH of 300 to 500mm or greater, dependent on the tree species, as breeding habitat regardless of the presence or not of hollows. The theory behind this definition is the concept that while the trees may not currently contain hollows, they are mature enough that in the next 50 years or so a hollow might form and be of use to Black Cockatoos for the purposes of breeding.

Sixteen Jarrah trees were recorded on the site that had a DBH of greater than 500mm, however one tree had a large base but was sheared and coppiced and would not form a suitable hollow so a total of fifteen trees on the site meet the definition potential breeding habitat (Figure 6). Details of each tree is provided as Appendix 10. None of the trees had suitable hollows for breeding.

5.5 Roosting

Black Cockatoos are known to roost overnight in tall trees including native and introduced eucalypts and pine trees generally in close proximity to a fresh water source. The site contains limited roosting habitat for Black Cockatoos and roosting has not been recorded on the site (DoP, 2011; Peck *et al.*, 2018; National Map, 2022). The nearest roosting sites are reported to be from around 700m to the north-east (National Map, 2022) with a number of roost sites within 20km (Figure xx).

5.6 Foraging

All the tree species in the areas mapped as having native vegetation are foraging habitat for Black Cockatoos. In addition, some of the understorey species also provide foraging value. In total the site contains thirteen species that are recognised as foraging habitat for Black Cockatoos (Table 12) (Davies 1966; Saunders 1980; Johnstone and Storr 1998; Johnstone and Kirkby 1999; Valentine and Stock, 2008; Groom 2011; Johnstone *et al.*, 2011; SEWPaC, 2012; Bamford, 2013; Johnstone, *et al.*, 2013; Johnstone *et al.*, 2016) as shown in Table 3 (Figure 4). The total area of foraging habitat is 18.835ha (Figure 4).

Table 12: Foraging Species for Black Cockatoos

Species	Common Name	Baudin's Black Cockatoo	Carnaby's Black Cockatoo	Forest red-tailed Black Cockatoo
Acacia saligna	Orange Wattle		✓	
Allocasuarina fraseriana	Sheoak	✓		✓
Banksia attenuata	Candlestick Banksia		✓	
Banksia dallanneyi	Couch Honeypot		✓	
Banksia menziesii	Firewood Banksia		✓	
Bankia prionotes	Acorn Banksia		✓	
Banksia sessilis	Parrot Bush	✓	✓	
Callitris preissii	Rottnest Island Pine		✓	
Eucalyptus marginata	Jarrah	✓	✓	✓
Hakea prostrata	Harsh Hakea	✓	✓	
Hakea ruscifolia	Candle Hakea	✓	✓	
Melia azedarach	Cape Lilac		✓	✓
Xanthorrhoea preissii	Balga		✓	✓

The foraging habitat value for Carnaby's Black Cockatoos was determined using the scoring tool in the revised Black Cockatoo Referral Guidelines (DAWE, 2022). The tool gives a result of 8 for Baudin's Black Cockatoo and 10 for Carnaby's Black Cockatoo and Forest Red-tailed Black Cockatoos which is considered High quality foraging habitat.

Table 13: Scoring Tool for Foraging Habitat for Black Cockatoos

Attribute	Context Adjustor	Baudin's Black Cockatoo	Carnaby's Black Cockatoo	Forest red-tailed Black Cockatoo
Foraging potential	**Subtract 2** from your score if there is no evidence of feeding debris on your site.	-2	0	0
Connectivity	**Subtract 2** from your score if you have evidence to conclude that there is no other foraging habitat within 12 km of your site.	0	0	0
Proximity to breeding	**Subtract 2** if you have evidence to conclude that your site is more than 12 km from breeding habitat.	0	0	0
Proximity to roosting	**Subtract 1** if you have evidence to conclude that your site is more than 20 km from a known night roosting habitat.	0	0	0
Impact from significant plant disease	**Subtract 1** if your site has disease present (e.g. *Phytophthora* spp. or Marri canker) and the disease is affecting more than 50% of the preferred food plants present.	0	0	0
Score		**8**	**10**	**10**

5.7 Regional Context

To assist in determining the significance of any impact on Black Cockatoo habitat on the site an assessment of Black Cockatoo habitat within the vicinity of the site was undertaken using DBCA mapping information (Figure 7). There is 17,973ha of Black Cockatoo habitat within 12km of the site, including 3,635ha in DBCA managed land and 9,911ha outside of DBCA managed land as shown in Table 15.

Table 15: Black Cockatoo Habitat within 12km

Reserve Type	Area (ha)
Conservation Park	2.816
Crown Freehold - Dept Managed	84.303
Marine Park	0.017
National Park	388.305
Nature Reserve	25.451
Section 5(1)(h) Reserve	32.662
State Forest	3,101.572
TOTAL	**3,635.126**

6 SUMMARY

6.1 Flora and Vegetation

The flora and vegetation survey of eight lots in the East Wanneroo Precinct 8 area resulted in the following findings:

- Approximately 18.835ha of native vegetation occurs in the survey area and 10.683ha is cleared;
- A total of 160 plant species were recorded in the spring survey, including 130 native and 38 introduced species (22.6);
- None of the plant species is a Threatened or Priority species;
- Four native vegetation types were described and mapped on the site. All vegetation types were Low Open Woodlands with various coverage of *Eucalyptus marginata, Allocasuarina fraseriana, Banksia attenuata* and *B. menziesii*;
- The condition of the native vegetation was mostly Very Good with some Good areas as well as Degraded and Completely Degraded;
- The vegetation belongs to the Karrakatta Central and South vegetation complex which has approximately 29.5% of its original extent remaining on the Southern Swan Coastal Plain but only 2.5% protected. The amount remaining is above the EPA's target for retaining at least 10% of each vegetation complex. The amount protected is under the criteria in the *Urban Bushland Strategy* of protecting at least 10% of each vegetation complex;
- Computer analysis of quadrat data resulted in the vegetation on the site being representative of Floristic Community Type ACP 28 'Spearwood *Banksia attenuata* or *Banksia attenuata – Eucalyptus marginata* woodlands'. SCP 28 is not of itself a TEC or PEC at State or Commonwealth level; and
- Three patches of vegetation in Good and Very Good condition were large enough to meet the requirements of the Commonwealth listed Banksia Woodlands of the Swan Coastal Plain TEC. A total of 13.352ha of Banksia Woodland TEC was mapped on the site.

6.2 Fauna

The fauna survey of eight lots in the East Wanneroo Precinct 8 area resulted in the following findings:

- The Open Woodland vegetation is habitat for three species of Black Cockatoo:
  - Carnaby's Black Cockatoo (*Calyptorhynchus* (*Zanda*) *latirostris*);
  - Baudin's Black Cockatoo (*Calyptorhynchus* (*Zanda*) *baudinii*); and
  - Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*).
- The site may provide habitat for two marine species, Cattle Egret (*Ardea* (*Bubulcus*) *ibis*) and the Rainbow Bee-eater (*Merops ornatus*), the Spiny Katydid (Swan Coastal Plain) (*Austrosaga spinifer*) (Priority 2) and the Woolybush Bee (*Hylaeus globuliferus*) (Priority 3). The Southern Brown Bandicoot, Quenda (*Isoodon fusciventer*) (Priority 4) could potentially occur on the site.
- The site contains 18.835ha of foraging habitat for all three species of Black Cockatoo and 15 potential breeding trees (all Jarrah).
- There is 17,973ha of Black Cockatoo habitat within 12km of the site, including 8,062ha in DBCA managed land and 9,911ha outside of DBCA managed land.

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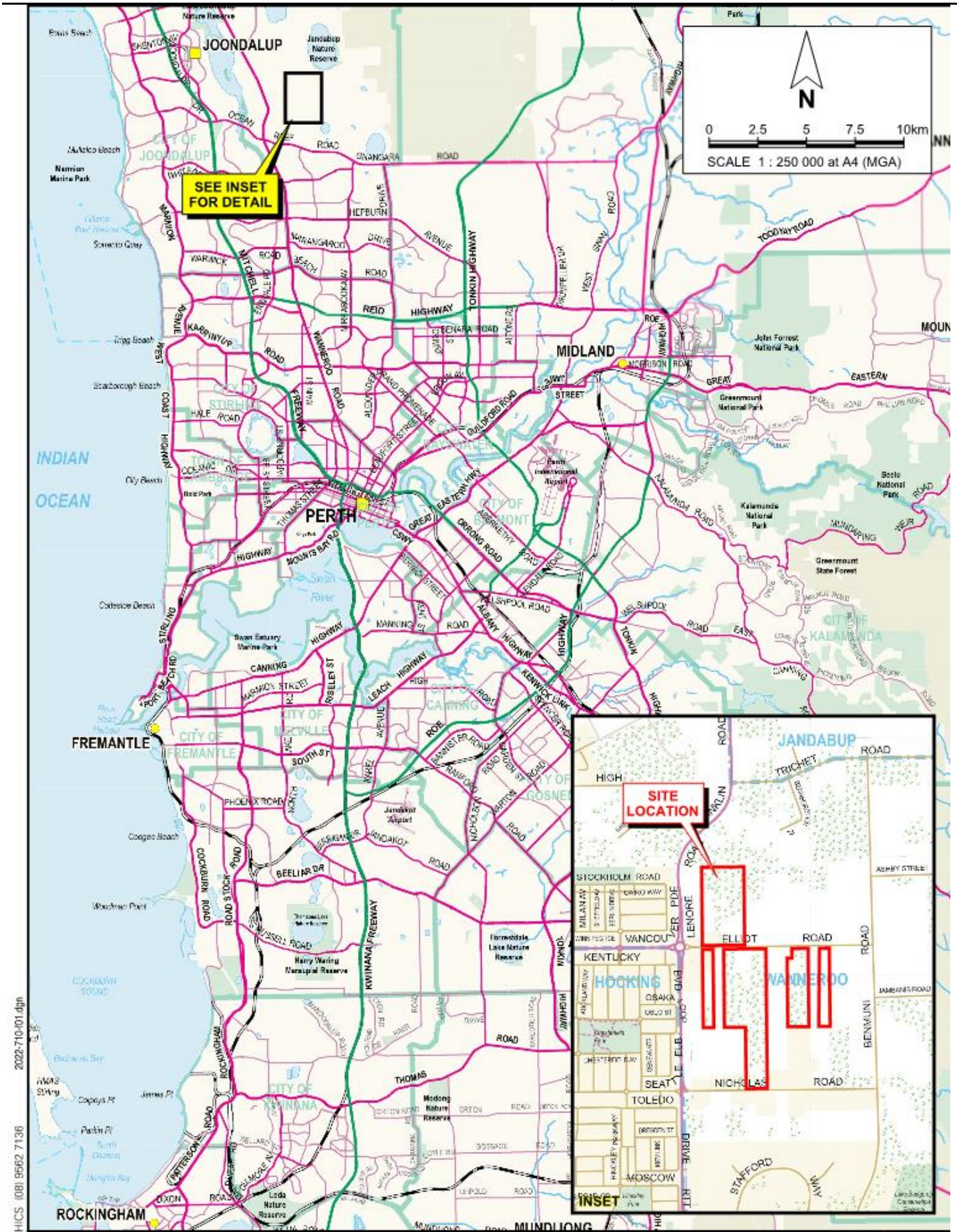
FIGURES



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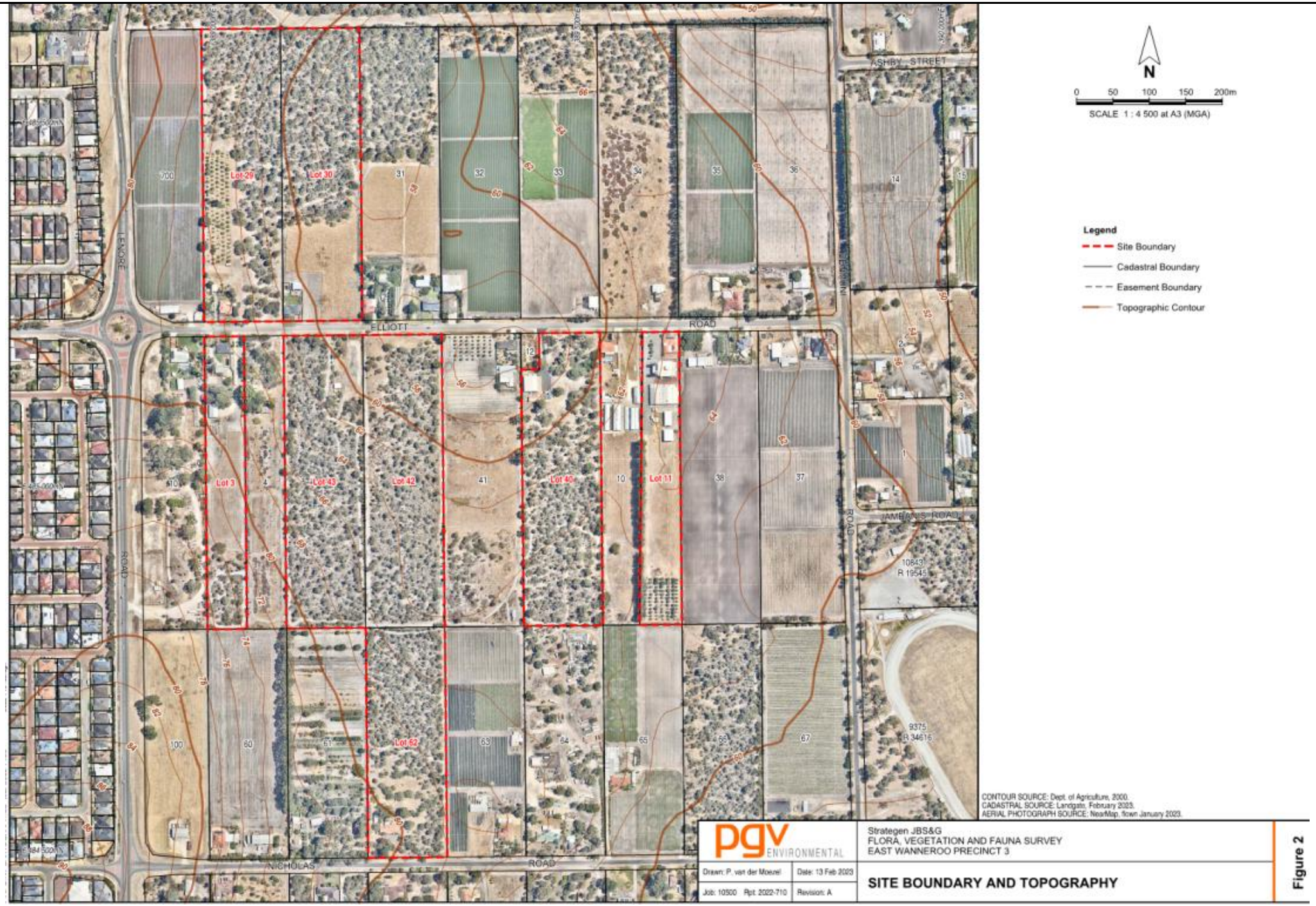
pgv ENVIRONMENTAL

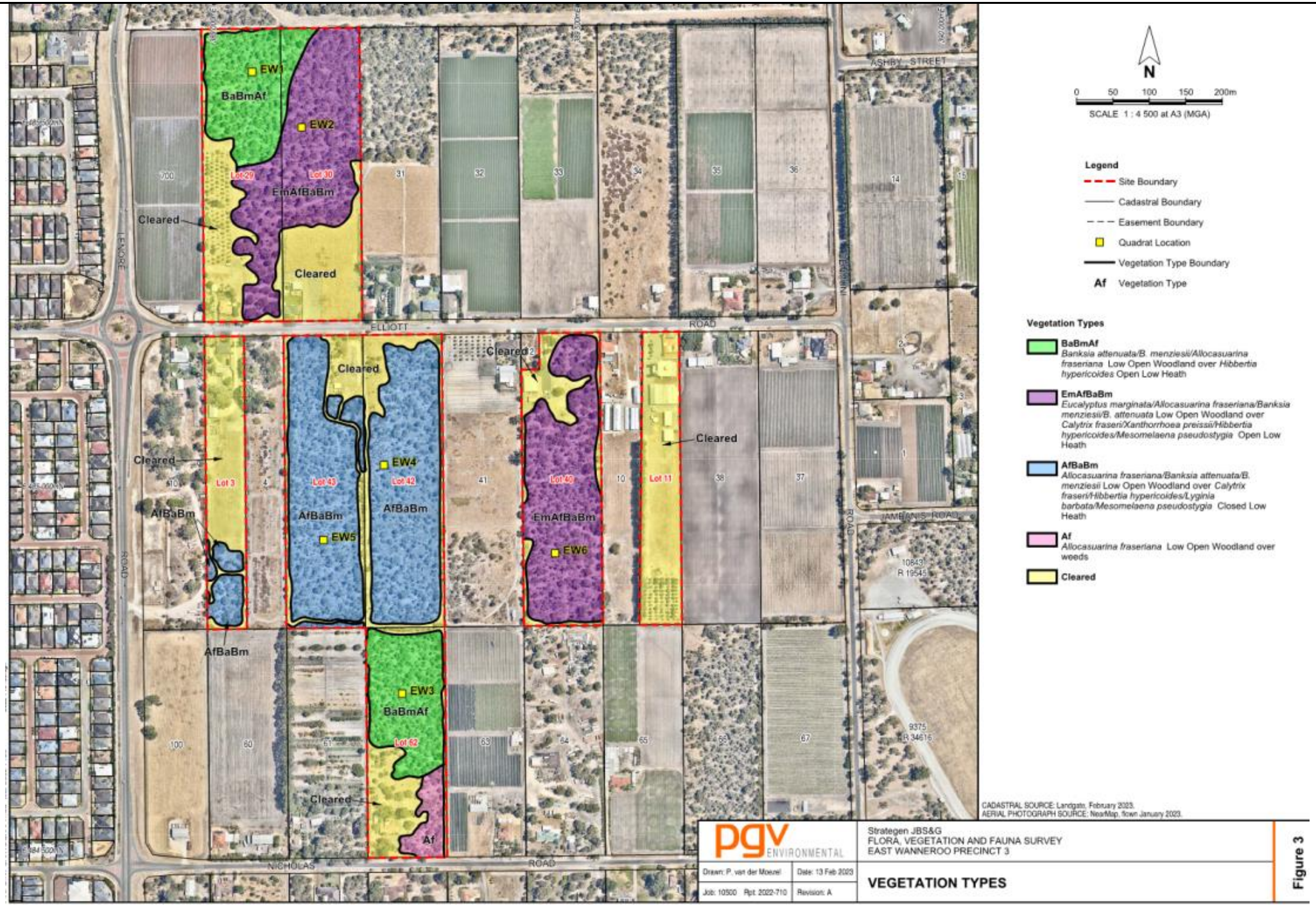
Strategen JBS&G
FLORA, VEGETATION AND FAUNA SURVEY
EAST WANNEROO PRECINCT 3

Drawn: P. van der Moezel	Date: 13 Feb 2023
Job: 10500 Rpt: 2022-710	Revision: A

SITE LOCATION

Figure 1


N
0 50 100 150 200m
SCALE 1 : 4 500 at A3 (MGA)
Legend
Site Boundary
Cadastral Boundary
Easement Boundary
Topographic Contour
ASHBY STREET
ELLIOTT ROAD
LENORE ROAD
NICHOLAS ROAD
JAMES ROAD
Lot 29
Lot 30
Lot 3
Lot 43
Lot 42
Lot 40
Lot 11
Lot 62
10849
R 19545
9375
R 34615
CONTOUR SOURCE: Dept. of Agriculture, 2000.
CADASTRAL SOURCE: Landgate, February 2023.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown January 2023.
pgv ENVIRONMENTAL
Drawn: P. van der Moezel
Date: 13 Feb 2023
Job: 10500 Rpt: 2022-710
Revision: A
Strategen JBS&G
FLORA, VEGETATION AND FAUNA SURVEY
EAST WANNEROO PRECINCT 3
SITE BOUNDARY AND TOPOGRAPHY
Figure 2


EW1
BaBmAf
EW2
Lot 29
Lot 30
EmAfBaBm
Cleared
Cleared
ELLIOTT ROAD
LENORE ROAD
ASHBY STREET
JAMBANIS ROAD
NICHOLAS ROAD
Cleared
Cleared
Cleared
Cleared
EW4
Lot 3
Lot 43
Lot 42
Lot 40
Lot 11
AfBaBm
AfBaBm
AfBaBm
EW5
EmAfBaBm
EW6
AfBaBm
EW3
BaBmAf
Lot 62
Cleared
Af
N
0 50 100 150 200m
SCALE 1 : 4 500 at A3 (MGA)
Legend
Site Boundary
Cadastral Boundary
Easement Boundary
Quadrat Location
Vegetation Type Boundary
Af Vegetation Type
Vegetation Types
BaBmAf
Banksia attenuata/B. menziesii/Allocasuarina fraseriana Low Open Woodland over Hibbertia hypericoides Open Low Heath
EmAfBaBm
Eucalyptus marginata/Allocasuarina fraseriana/Banksia menziesii/B. attenuata Low Open Woodland over Calytrix fraseri/Xanthorrhoea preissii/Hibbertia hypericoides/Mesomelaena pseudostygia Open Low Heath
AfBaBm
Allocasuarina fraseriana/Banksia attenuata/B. menziesii Low Open Woodland over Calytrix fraseri/Hibbertia hypericoides/Lyginia barbata/Mesomelaena pseudostygia Closed Low Heath
Af
Allocasuarina fraseriana Low Open Woodland over weeds
Cleared
CADASTRAL SOURCE: Landgate, February 2023.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown January 2023.
pgv ENVIRONMENTAL
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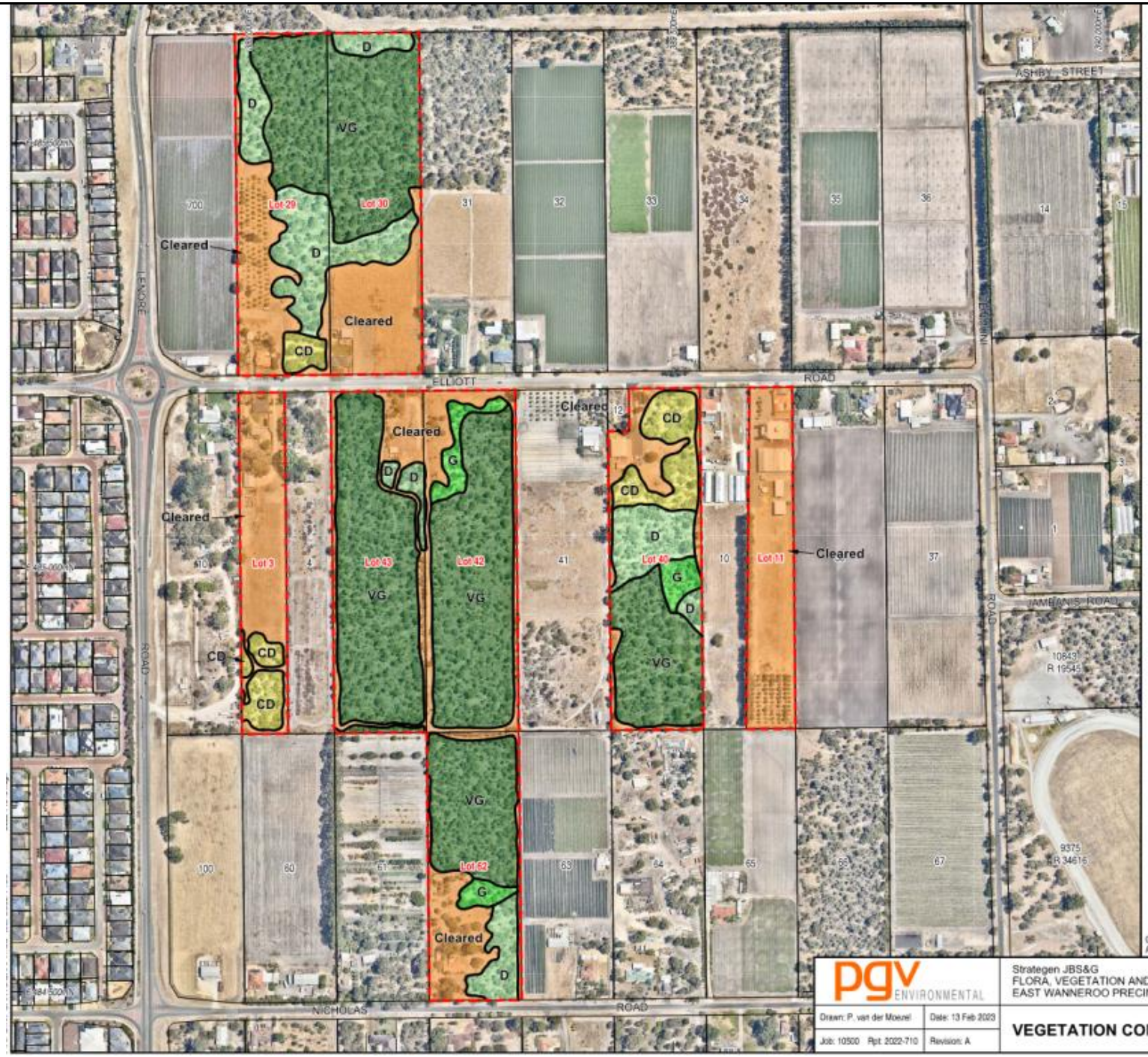
FLORA, VEGETATION AND FAUNA SURVEY
EAST WANNEROO PRECINCT 3
VEGETATION TYPES
Figure 3



Vegetation Condition
(SOURCE: Bush Forever, Govt. of W.A., 2000)

P - Pristine
Pristine or nearly so, no obvious signs of disturbance.

Ex - Excellent
Vegetation structure intact, disturbance affecting individual species and weeds are non aggressive species.

VG - Very Good
Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.

G - Good
Vegetation structure significantly altered by very obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.

D - Degraded
Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.

CD - Completely Degraded
The structure of the vegetation is no longer intact and the areas is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora composing weed or crop species with isolated native trees or shrubs.

Cl - Cleared
No native vegetation remaining.

CADASTRAL SOURCE: Landgate, February 2023.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown January 2023.

pgv ENVIRONMENTAL

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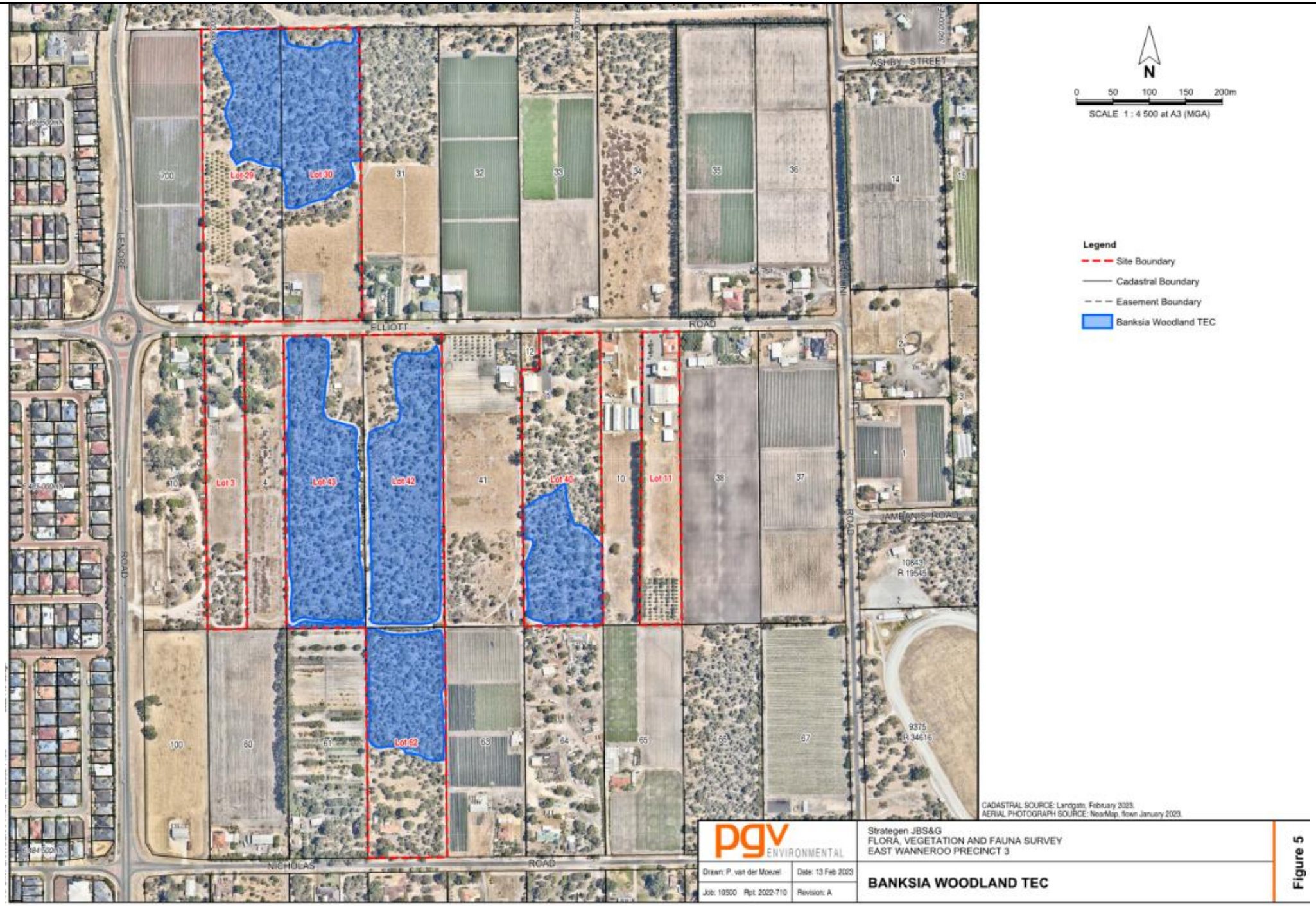
FLORA, VEGETATION AND FAUNA SURVEY
EAST WANNEROO PRECINCT 3

VEGETATION CONDITION

Figure 4


N
0 50 100 150 200m
SCALE 1 : 4 500 at A3 (MGA)
Legend
Site Boundary
Cadastral Boundary
Easement Boundary
Banksia Woodland TEC
ASHBY STREET
ELLIOTT ROAD
LENORE ROAD
EAGLEBY ROAD
JAMBANIS ROAD
NICHOLAS ROAD
Lot 29
Lot 30
Lot 3
Lot 43
Lot 42
Lot 40
Lot 11
Lot 62
CADASTRAL SOURCE: Landgate, February 2023.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown January 2023.
pgv ENVIRONMENTAL
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Date: 13 Feb 2023
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Revision: A
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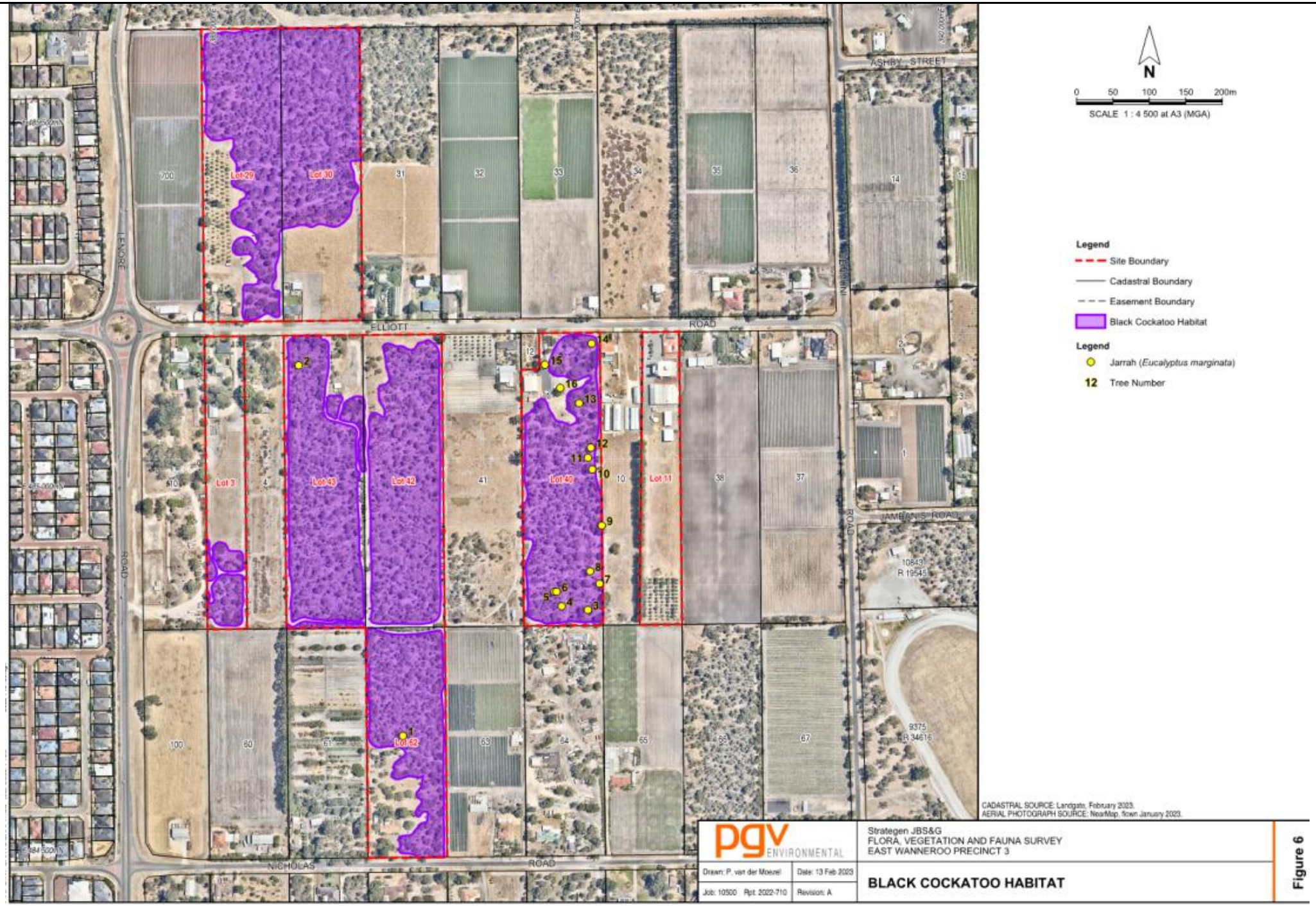
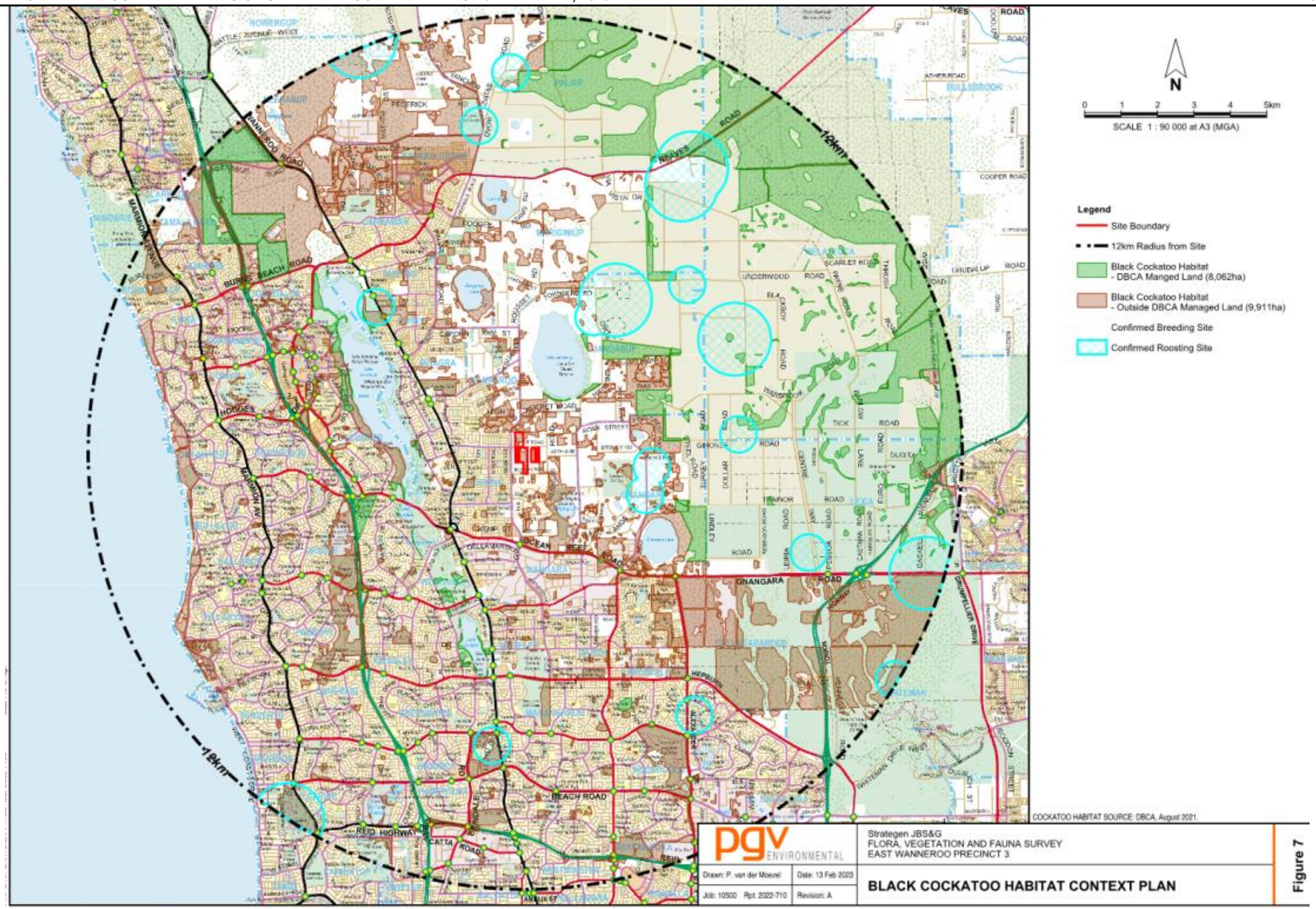
FLORA, VEGETATION AND FAUNA SURVEY
EAST WANNEROO PRECINCT 3
BANKSIA WOODLAND TEC
Figure 5


N
0 50 100 150 200m
SCALE 1 : 4 500 at A3 (MGA)
Legend
Site Boundary
Cadastral Boundary
Easement Boundary
Black Cockatoo Habitat
Legend
Jarrah (Eucalyptus marginata)
12 Tree Number
ELLIOTT ROAD
NICHOLAS ROAD
ASHBY STREET
LENORE ROAD
WANNEROO ROAD
JAMBANIS ROAD
Lot 29
Lot 30
Lot 3
Lot 43
Lot 42
Lot 40
Lot 11
Lot 52
CADASTRAL SOURCE: Landgate, February 2023.
AERIAL PHOTOGRAPH SOURCE: NearMap, flown January 2023.
pgv ENVIRONMENTAL
Drawn: P. van der Moezel
Date: 13 Feb 2023
Job: 10500 Rpt: 2022-710
Revision: A
Strategen JBS&G
FLORA, VEGETATION AND FAUNA SURVEY
EAST WANNEROO PRECINCT 3
BLACK COCKATOO HABITAT
Figure 6


N
0 1 2 3 4 5km
SCALE 1 : 90 000 at A3 (MGA)
Legend
Site Boundary
12km Radius from Site
Black Cockatoo Habitat - DBCA Manged Land (8,062ha)
Black Cockatoo Habitat - Outside DBCA Managed Land (9,911ha)
Confirmed Breeding Site
Confirmed Roosting Site
12km
18km
COCKATOO HABITAT SOURCE: DBCA, August 2021.
pgv ENVIRONMENTAL
Drawn: P. van der Moezel
Date: 13 Feb 2023
Job: 10500 Rpt: 2022-710
Revision: A
Strategen JBS&G
FLORA, VEGETATION AND FAUNA SURVEY
EAST WANNEROO PRECINCT 3
BLACK COCKATOO HABITAT CONTEXT PLAN
Figure 7

APPENDIX 1

DBCA Flora Database Search Reports

Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
5551323	3219	Acacia anomala	T	Grass-like, 0.5 m high. Multiple stems of grass-like shrub.	Hillside. Laterite.	Jarrah/Marri forest over scrub.			AUTO	3	//
8273553	3237	Acacia benthamii	2	Slender erect open shrub 70 cm high x 50 cm wide. In bud.	Slope above creek. Grey sand.	Degraded Tuart open woodland over Banksia low woodland.	scattered shrubs.		UNK	2	8/07/2007
8598320	3237	Acacia benthamii	2	Spindly shrub, 1 m high x 0.5 m wide.	Consolidated sand dune (Quindalup - Spearwood Dunes boundary). Light brown sand, leaf litter over Tamala Limestone. Area burnt > 5 years ago.	Woodland of Banksia menziesii, B. attenuata, Eucalyptus marginata, Allocasuarina fraseri (FCT 28). Associated species: Hibbertia hypericoides, Jacksonia sternbergiana, Opercularia vaginata, Orthrosanthus laxus var. laxus, Ricinocarpus glaucus, Schoenus c	2 plants only.		GPS	1	9/09/2013
920320	3237	Acacia benthamii	2						AUTO	3	23/09/1965
718297	3237	Acacia benthamii	2						AUTO	3	23/09/1965
7622090	3237	Acacia benthamii	2		Flat, sand.	Areas of degraded - modified remnant jarrah woodland and weed dominated areas.			UNK	2	22/11/2005
703656	3237	Acacia benthamii	2						MAN	0	/09/1975
169579	3237	Acacia benthamii	2		Sand.				MAN	1	/09/1901
8982627	3237	Acacia benthamii	2	Shrub, 1.3 m high.	Flat. Yellow brown sand.	Low open forest of Allocasuarina fraseriana, Banksia attenuata and B. menziesii over tall open shrubland of Xanthorrhoea preissii over low open heath of Hibbertia hypericoides and Acacia humilis over very open grassland/sedgeland of Mesomelaena pseudosty			GPS	1	12/10/2009
6843697	14129	Acacia oncinophylla subsp. oncinophylla	3	Single stemmed shrub to 1.8 m senescent.	On rocky clay.	With Hakea lissocarpha, Casuarina humilis.			UNK	3	3/09/1980
7132832	11336	Adenanthos cygnorum subsp. chamaephyton	3	Prostrate shrub 10 cm high x 1.5 m wide.	Swale. Grey sand.	Low woodland. Banksia attenuata, B. menziesii, Eucalyptus marginata subsp. thalassica.	population of 30 plants.		UNK	3	14/05/1999
8256136	18195	Amanita carneiphylla	3	Pileus up to 165 mm diameter, white, hemispheric when young applanate when mature, non-strate appendiculate margin, slightly viscid, no odour, context white, unchanging. Universal veil on the pileus: white, adnate, initially covering the whole pileus the	On Karrakatta sand. Emerging from deep sand.	Degraded Banksias woodland. Species of plants nearby: Jacksonia furcellata.	3 collected.	Microscopic character details housed with specimen. Gill piece taken for sequencing 27.1.13. - E. Davison.	UNK	3	15/06/2002
9388478	18195	Amanita carneiphylla	3	Pileus 50-59 mm diameter, 10-20 mm thick, white (dull grey cast), plane with shallow depression in centre, context white. Universal veil white, soft as woolly lumps. Lamellae pink (light flesh colour) 15-22 mm broad, adnate, lamellulae short, scattered,	Banksia woodland.	Tuart, Banksia, Jarrah.		Collection deeply rooted in open sandy track.	GPS	1	26/05/2020
8347352	43543	Amanita fibrillopes	3		In sand, with litter.	In degraded bushland, nearby Melaleuca preissiana.			GPS	1	18/06/2006
8776229	48332	Amanita preissii	3	Cap: 32 -59 mm, convex to planar, largest specimens have shallow central depressions. Surface dry, white to ochre/cinnamon with irregular flat scraps of universal veil over it, these are densest at the centres of the caps, but there are none on the large		Mixed introduced plants and grasses interspersed with gum trees.			TOPO	1	30/05/2010
8776237	48332	Amanita preissii	3	The cap was 71 mm in diameter and planar in shape. It was white in colour with pale cinnamon scurf to thin patches of universal veil over it. The cap margin was smooth and slightly appendiculate. The gills were succeeding to free, closely spaced with at	Growing in sandy soil.		single fruiting body.		TOPO	2	8/07/2007
7667485	48332	Amanita preissii	3	1. strong characteristic cauliflower odour; 2. pileus occasionally with light ochraceous-buff colour but dominantly white, white throughout certainly when young, light ochre-buff discolouration also occurring in context of stipe and bulb in age; context		Jarrah / Banksia woodland. Eucalyptus marginata, Banksia sp.		A diagnostic description provided by E.M. Davison is housed with this specimen.	TOPO	3	1/07/2001
7667493	48332	Amanita preissii	3	1. Conspicuous napiform bulb with marginate edge; 2. lamellar edges conspicuously white-fimbriate; 3. fruitbody white throughout except bulb with few ochracous or pale salmon stains; 4. spores elliptic, amyloid. Mode of Life: unknown Odour: strong caulif	Deeply in ground.	Jarrah / Banksia woodland. Eucalyptus calophylla, E. marginata, Banksia sp.	solitary.	A diagnostic description provided by E.M. Davison is housed with this specimen.	TOPO	3	1/07/2001

Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
8497257	11957	Anigozanthos humilis subsp. chrysanthus	4	In flower.	Crest - upper slope with grey sand.	Associated species: Pinus pinaster, Eucalyptus todtiana, Adenanthos cygnorum, Nuytsia floribunda, Alexgeorgea nitens, Hibbertia subvaginata, Scholtzia involucrata.		Condition of population: healthy. Potential threats: mining.	GPS	1	16/09/2005
8772584	11957	Anigozanthos humilis subsp. chrysanthus	4	Perennial herb, 0.3 m high x 0.2 m wide. Flowers yellow.	Slope with white to grey sand. Underlying geology: Bassendean Dune System.	Eucalyptus todtiana isolated mid mallee trees over Banksia attenuata, Banksia menziesii and Nuytsia floribunda sparse low woodland over Verticordia nitens, Beaufortia elegans, Jacksonia floribunda.	2 plants.		GPS	1	24/09/2014
8772614	11957	Anigozanthos humilis subsp. chrysanthus	4	Perennial herb, 0.3 m high x 0.2 m wide. Flowers yellow.	Slope with white / grey / yellow sand. Underlying geology: Bassendean Dune System.	Banksia attenuata and Banksia menziesii low woodland to sparse low woodland over Calytrix fraseri (Ellenbrook form), Verticordia nitens and Beaufortia elegans sparse mid shrubland over Alexgeorgea nitens and Desmocladus flexuosus sparse low rushland.	2 plants.		GPS	1	24/09/2014
5166071	35317	Austrostipa mundula	3			Tuart woodland.			AUTO	4	/08/1963
8339988	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Shrubs to 1.6 m, the branches somewhat layered. Petals white. hypanthium reddish.	Sand over limestone.	Tuart woodland.	frequent.		GPS	1	27/12/2009
3378667	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Erect shrub ca 2 m high. Petals white, pink-tinged underneath, with a deep pink band across the base; sepals pink; centre green or yellow.	Growing in sand with outcropping limestone on the upper W slopes of a limestone hill.			Abundance: Only 2 plants.	MAN		27/06/1982
3378632	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Open shrub 1 m high. Flowers white.	Soil - sand (dry).				AUTO	3	9/12/1981
3378047	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1		Yellow sand over limestone sea cliffs.				AUTO	3	/12/1957
3378640	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Tall compact-straggly shrub, 2 m high. Flowers white.	Grey sand. Hill side.	Banksia woodland.			MAN		21/12/1981
5378826	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1			Banksia woodland with scattered jarrah and tuart, tuart woodland, paperbark woodland over ephemeral wetland, various shrublands.			MAN		5/03/1986
3416119	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Shrub 1.8-2 m high, flowers white.	Limestone.				AUTO	3	21/10/1970
5378834	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1			Banksia woodland with scattered jarrah and tuart, tuart woodland, paperbark woodland over ephemeral wetland, various shrublands.		B7.	MAN		10/02/1986
3378659	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1						AUTO	3	//1982
5378842	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1			Banksia woodland with scattered jarrah and tuart, tuart woodland, paperbark woodland over ephemeral wetland, various shrublands.	common in northern part of the reserve, especially in more open Tuart woodland.		MAN		/01/1986
3416089	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1						AUTO	3	/11/1901
9139419	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Upright shrub to 2 m. White flowers.	Flat, sandy soil. Limestone.	Vegetation dominated by Banskia sessilis and Baeckea sp.	extensive population, 2307 plants recorded.		GPS	1	26/09/2017
9139540	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Upright shrub to 2 m. White flowers.	Flat, sandy soil.	Banksia woodland.	7 plants.		GPS	1	28/09/2017
8443122	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Erect shrub 1 m high x 1 m wide.	Limestone outcrop/ridge. Yellow sand. Sand derived from Tamala Limestone - Spearwood Dune System. Limetone. Burnt 5+ years.	Heath thickets in good condition. Banksia sessilis var. cygnorum, Spyridium globulosum, Acacia rostellidera, Calothamnus quadrifidus, Melaleuca systena, Hibbertia hypericoides, Lechenaultia linarioides, Conostylis candicans subsp. candicans, Pelargonium	widespread on limestone, 100+ plants.		GPS	1	17/09/2012

Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
9444432	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Multi-stemmed shrub at base to 2.5 m tall and up to 3 m wide along leaning stems. Pale pink to white flowers.	Mid-slope with NW aspect, well drained yellow sand, limestone at depth.	Open Tall Shrubland of Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425), Banksia sessilis, Jacksonia sternbergiana and Xanthorrhoea preissii over Open Shrubland of Hibbertia hypericoides, Phyllanthus calycinus, Diplolaena angustifolia, Banksia dallann	3440 extrapolated.	Juveniles were present. This is an old population, with many plants having large stems fallen and still growing. Adventitious buds are producing new plants. There are two separate patches of plants ca. 230 m apart.	GPS	1	28/10/2021
9444424	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Multi-stemmed shrub at base to 3 m tall and spreading from leaning stems along the ground ca. 5 m x 10 m. Pale pink to white flowers.	Upper slope gentle. Brown well-drained sand over limestone.	Occasional Eucalyptus gomphocephala over Low Open Forest of Eucalyptus marginata, Banksia attenuata, B. prionotes over Shrubland of Banksia sessilis, Xanthorrhoea preissii, Macrozamia riedlei, Hakea prostrata, Acacia pulchella, Leucopogon parviflorus ove	84 mature plants.	There are several patches of plants within the northern half of the bushland.	GPS	1	22/10/2021
9444416	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Multi-stemmed shrub at base to 3 m tall and spreading from leaning stems along the ground ca. 10 m x 10 m. Pale pink to white flowers.	Mid to Upper slope, yellow well-drained sand over limestone.	Open Woodland of Banksia attenuata, B. prionotes, B. sessilis over Open Heath of Calothamnus quadrifidus, Allocasuarina humilis, Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425), Macrozamia riedlei, Acacia pulchella over Low Shrubland of Grevillea cri	53 mature plants.		GPS	1	11/10/2021
1059203	34236	Beyeria cinerea subsp. cinerea	3	Shrub, open, 40/70 cm x 50/60 cm, flowers green-yellow.	Hilltop, sand over limestone.	Acacia xanthina shrubland.		Common.	MAN	3	29/11/1987
2434393	48689	Bolboschoenus fluviatilis	1		On bank of river in mud.				AUTO	3	20/01/1954
8210179	48689	Bolboschoenus fluviatilis	1	Perennial erect rhizomatous herb 2.0 m high x 0.6 m wide. Brown flowers.	Hillside/seep. Grey wet sand. Collection site: reserve.	Tall trees. With Lantana sp., Eucalyptus rudis.	6-20 plants. Area: 1-10 m squared.		GPS	1	20/11/2008
255947	1596	Caladenia huegelii	T						MAN	3	19/09/1945
6053297	1596	Caladenia huegelii	T	Orchid 0.6 m high x 0.1 m wide.	Plain. Organic litter, grey sand over sand.	Low Forest A. Banksia menziesii, B. attenuata.	occasional.		MAN	3	4/09/2000
9312358	51048	Calandrinia sp. Bayswater (C. Andrews s.n. 11/1902)	1						MAN	3	/11/1902
8008213	45757	Calectasia elegans	2	Small compact shrub to 30 cm high and 30 cm wide. mature fruit present.	Flat to gentle slope. Grey sand.	With Banksia attenuata, Banksia menziesii, Stirlingia latifolia.			GPS	1	11/12/2008
8617767	45757	Calectasia elegans	2	Erect perennial subshrub to c. 45 cm high. Typical purple flower with red anthers; stilt roots present; plants in full flower.	Flat plain with deep grey sand. Long unburnt area.	Low Banksia woodland with moderately dense vegetation. Associated species: Banksia spp., Stirlingia latifolia, Melaleuca spp., Eremaea spp., Hibbertia spp., Leucopogon spp.	several populations in this vicinity of 2 or 3 plants.		GPS	1	16/09/2008
8617740	45757	Calectasia elegans	2	Erect perennial subshrub to c. 45 cm high. Typical purple flower with red anthers; stilt roots present; plants in full flower.	Flat plain with deep grey sand. Long unburnt area.	Low Banksia woodland with moderately dense vegetation. Associated species: Banksia spp., Stirlingia latifolia, Melaleuca spp., Eremaea spp., Hibbertia spp., Leucopogon spp.	several populations in this vicinity of 2 or 3 plants.		GPS	1	16/09/2008
8008140	45757	Calectasia elegans	2	Small shrub.	Grey sand.	Associated species: Adenanthos cygnorum subsp. cygnorum, Jacksonia floribunda to 2.5 m, 20% cover, Beaufortia elegans to 1.7 m, 15% cover, Eremaea pauciflora subsp. pauciflora, Leucopogon conostephoides, Nuytsia floribunda to 0.9 m, 10% cover.	uncommon.		GPS	1	11/09/2008
8008132	45757	Calectasia elegans	2	Small shrub.	Grey sand.	Associated species: Banksia attenuata, Nuytsia floribunda to 5 m, 10% cover, Jacksonia floribunda, Adenanthos cygnorum subsp. cygnorum to 1.6 m, 5% cover, Verticordia nitens to 1.5 m, 2% cover.	uncommon.		GPS	1	11/09/2008
7215363	45757	Calectasia elegans	2	Herbaceous perennial shrub ca 40 cm x 50 cm in height with multiples stems and stilted roots. Flowers blue and fading to white.	On gentle slope above dampland, deep grey quartz sand. Last fire ca 20-30 years ago.	Banksia menziesii - Banksia attenuata - Banksia woodland (30-50% cover < 6m in height) over Regelia inops (2-10% cover <1.2 m in height) mixed low shrubs (10- 30% cover <0.5 m in height) rushes, sedges, perennial monocots (10-30%) and herbs-grasses (2-10	only two plants found.		GPS	1	8/11/2005
5392977	759	Carex tereticaulis	3	Grass like herb 1 m high x 0.1 m wide.	Watercourse, wet. Organic litter. Grey Bassendean Sand over sand.	Dense Forest. Eucalyptus rudis, Melaleuca rhaphiophylla.	occasional.		MAN		17/05/1999
2052121	1425	Conostylis bracteata	3	Loosely tufted herb, leaves in flattened fascicles, margins with white appressed to spreading plumose hairs.	Swale in undulating consolidated dunes, some outcropping limestone.	In coastal scrub of Dryandra sessilis, Acacia saligna, A. xanthina, Xanthorrhoea preissii, Banksia attenuata, Melaleuca acerosa.			AUTO	3	16/08/1986

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2052091	1425	Conostylis bracteata	3	Proliferous herb, leaves with hirsute, not spinescent margins.	On steep slope of consolidated sand dune.	Overlooking Blackboy Reserve, Acacia saligna scrub over dense low heath to 1m, on fringes of remnant tuart (Eucalyptus gomphocephala) woodland. Associated species include Xanthorrhoea and Banksia attenuata.			MAN		29/03/1986
5931436	1425	Conostylis bracteata	3		Top of sand dune.				MAN	3	19/11/1962
8755388	1425	Conostylis bracteata	3	Tufted herb to 20 cm tall. Flowers yellow. Plants flowering at the time of collection. Leaves arranged into flattened, broadly fan-like clusters. The leaf margins glabrescent.	Grey sand, on mid-slope.	Acacia rostellifera and Melaleuca systena mid shrubland. Lomandra maritima low open herbs.	1 mature plant.	Project: 3536.	GPS	1	4/11/2015
5305691	1425	Conostylis bracteata	3	Perennial herb, flowers yellow.	Plain near lake. Grey sand.	Jarrah with Banksia attenuata, B. menziesii, Burchardia congesta, Hibbertia hypericoides, Acacia spp., Ehrharta calycina.	occasional.		MAN		6/11/1997
1744321	1425	Conostylis bracteata	3	Loosely tufted herb to 80 cm diameter; leaf margins with white plumose appressed hairs <1 mm long; perianth 10-12 mm long, pale yellowish green outside, golden yellow inside tube, lobes cream inside, becoming golden yellow at base and near apex, conspicu	E slopes of a consolidated sand dune.	Low heath of Acanthocarpus preissii, Acacia lasiocarpa.		Rendered extinct by housing development on August 17.	MAN		16/08/1986
256935	13826	Cyanicula ixioides subsp. ixioides	4						MAN	3	/09/1913
4096711	16245	Cyathochaeta teretifolia	3						AUTO	3	6/12/1902
8122342	16245	Cyathochaeta teretifolia	3		Sandy loam.	Melaleuca preissania to 7.0 m, 10% cover, over Xanthorrhoea preissii, Banksia ilicifolia to 5.0 m, 20% cover, over Pultenaea reticulata, Astartea scoparia to 1.8 m, 10% cover, over Hypocalymma angustifolium to 0.7 m, 10% cover, over Mixed to 0.2 m, 10% co			GPS	1	26/10/2008
7704682	16245	Cyathochaeta teretifolia	3	Sedge up to 1.5 m.	Flat site. Dark brown loam with poor drainage. Ground wet all year. 90 % litter coverage. Pools of water up to 40 cm deep.	Melaleuca preissiana open forest over Astartea scopania tall open scrub over a Lepidosperma effusum and Meeboldina sp. sedgeland.	one plant.		GPS	1	13/11/2007
4219260	16245	Cyathochaeta teretifolia	3	Rhizomatous sedge, clumped 1.5 m high.	Seasonal creek line.	Low open forest of Melaleuca preissiana. Growing with Astartea fascicularis, Agonis linearifolia, Viminaria juncea.	common locally.	(DPU 003)	MAN		3/08/1995
4097394	16245	Cyathochaeta teretifolia	3	Perennial herb up to 2 m tall, clumped.	On grey sandy clay on seasonally wet slope beside permanent lake.	In Melaleuca preissiana and Eucalyptus rudis Open Low Woodland A over Aotus gracilima and Astartea aff. fascicularis Heath A over Herbs, Very Open Tall Sedges and Open Low Sedges.			MAN		//
2076802	16245	Cyathochaeta teretifolia	3	Tall grass like plant 1 m high.	In peat swamp.				MAN		7/02/1980
4654773	16245	Cyathochaeta teretifolia	3	Perennial herb up to 2 m tall, clumped.	On grey sandy clay on seasonally wet slope beside permanent lake.	In Melaleuca preissiana and Eucalyptus rudis Open Low Woodland A over Aotus gracilima and Astartea aff. fascicularis Heath A over Herbs, Very Open Tall Sedges and Open Low Sedges.			MAN		//
6529887	16245	Cyathochaeta teretifolia	3	Sedge, 0.6-1.6 m.	Lower part of floor of dampland complex.	Melaleuca preissiana, Banksia littoralis low open woodland over Melaleuca teretifolia high open shrubland over Melaleuca lateralis, Astartea aff. fascicularis shrubland to heath over Lepidosperma longitudinale, Baumea rubiginosa dense sedgeland. Dominant			GPS	1	21/08/1999
6570240	16245	Cyathochaeta teretifolia	3	Tufted perennial herb to 1.5 m.	Edge of seasonal wetland, gentle slope, north aspect, dark brown loam over red sand with limestone, well drained.	Associated species: Eucalyptus calophylla.			GPS	1	3/11/1995
6527930	16245	Cyathochaeta teretifolia	3	Sedge.	Site description: gently sloping to flat area.	Melaleuca preissiana, Banksia littoralis, low woodland to low open forest [patchy] over Pericalymma ellipticum var. ellipticum heath to closed heath over sedges.			GPS	1	6/09/1999
6427774	16245	Cyathochaeta teretifolia	3	Tufted perennial herb, flowers straw colour.	Damp margin of lake, flat ground, grey sand with clay, poor drainage, wet during winter/spring.	Open Low Woodland A. Associated species: Melaleuca preissiana, Eucalyptus rudis.			GPS	1	27/10/1994

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6527914	16245	Cyathochaeta teretifolia	3	Sedge.	Site description: a thin strip at a change in slope where there has probably been seepage. Soil: has a deep humus layer.	Corymbia calophylla over Agonis linearifolia high open shrubland over Xanthorrhoea preissii open shrubland. Zantedeschia aethiopica (young) established here.			MAN	2	28/09/1999
6808077	16245	Cyathochaeta teretifolia	3	Grass like or sedge.		Low forest, Melaleuca preissiana, Astartea fascicularis, Hypocalymma angustifolium, Banksia littoralis.			MAN	3	2/12/2002
4098374	16245	Cyathochaeta teretifolia	3	Perennial herb up to 2 m tall, clumped.	On grey sandy clay on seasonally wet slope beside permanent lake.	In Melaleuca preissiana and Eucalyptus rudis Open Low Woodland A over Actus gracilima and Astartea aff. fascicularis Heath A over Herbs, Very Open Tall Sedges and Open Low Sedges.			MAN		//
1030507	16245	Cyathochaeta teretifolia	3		Swamp.	Habitat of Gahnia.			AUTO	3	/12/1901
2554658	7485	Dampiera triloba	3						AUTO	3	/10/1900
2554631	7485	Dampiera triloba	3						AUTO	3	06/12/1899
2554682	7485	Dampiera triloba	3						AUTO	3	/10/1945
8138869	7485	Dampiera triloba	3	Erect perennial.	Loamy sand.	Melaleuca preissiana, Corymbia calophylla to 9 m, 5% cover, astartea scoparia to 2.1 m, 25% cover, Hypocalymma angustifolia to 1 m, 40% cover, Patersonia occidentalis, Hypochaeris glabra, Trachymene pilosa to 0.7 m, 10% cover, Lepidosperma striatum to 1.			GPS	1	28/09/2008
8190518	7485	Dampiera triloba	3		Loamy sand.	Melaleuca priessiana, Corymbia calophylla to 9.0 m, 5% cover, over Astartea scoparia to 2.1 m, 25% cover, over Hypocalymma angustifolia to 1.0 m, 40% cover, over Patersonia occidentalis, Hypochaeris glabra, Trachymene pilosa to 0.7 m, 10% cover, Lepidosp			GPS	1	24/09/2009
8429227	34773	Darwinia foetida	T	Low, spreading shrubs to 0.6m x 1m, the leaves somewhat glaucous. Inflorescences inclined to nodding; bracts glaucous green tinged pinkish.	Moist flat; dark grey sand.	Melaleuca raphiophylla, Hypocalymma angustifolia, Acacia pulchella shrubland beneath marri, with invasion by blackberry, brazilian peppertrees, weedy grasses.	frequent - hundreds of plants.		GPS	1	24/10/2010
7887442	34773	Darwinia foetida	T	Perennial, prostrate compact shrub 0.5 m high x 0.5 m wide.	Palusplain Multiple Use Wetland. Grey black soil. Burnt Spring 2006.	Corymbia calophylla, Melaleuca rhaphiophylla, Hypocalymma angustifolium.	21-50 plants (25 alive, 22 dead)	Percentage of population in fruit 30%.	GPS	1	9/03/2007
1026712	5523	Darwinia pimeloides	4						MAN	3	//
1026747	5523	Darwinia pimeloides	4	Small shrub; spreading 8" - 12" tall; bracts pale green, uniform in colour.					MAN	3	23/10/1959
1026704	5523	Darwinia pimeloides	4						MAN	3	30/08/1930
9016031	10796	Diuris drummondii	T		Swamp.				MAN	3	/12/1901
2386372	3115	Drosera occidentalis	4		Clayey sand soils.				AUTO	3	22/10/1987
9392831	31233	Drosera patens	1	Rosetted perennial herb, ca. 1-2 cm in diameter, 3-5 cm in height. Petioles bronze-green, lamina orange. Flowers white. Styles 3 or rarely 4, stigmas reniform, deep red. Pollen orange.	Edge of small swamp. Wet peaty white sand.		common in area.		GPS	1	30/11/2020
9251553	31233	Drosera patens	1	Rosetted perennial herb to 0.03 m. White flowers with reddish sepals and red anthers.	In drainage depression on edge of walking track in moist fine loamy sand, seasonally wet.	Open shrubland of Astartea ?affinis, Eutaxia virgata, Pericalymma ellipticum, Hypocalymma angustifolium over sedgeland of Leptocarpus ?scariosus and Schoenus subfascicularis. Associated species include Thysanotus multiflorus, Ornduffia albiflora, Melaleu	500+ plants.		GPS	1	7/01/2020
9251596	31233	Drosera patens	1	Rosetted perennial herb to 0.03 m. White flowers with reddish sepals and red anthers.	In drainage depression on edge of walking track in moist fine loamy sand, seasonally wet.	Open shrubland of Astartea ?affinis, Eutaxia virgata, Pericalymma ellipticum, Hypocalymma angustifolium over sedgeland of Leptocarpus ?scariosus and Schoenus subfascicularis. Associated species include Thysanotus multiflorus, Ornduffia albiflora, Melaleu	500+ plants in a linear 0.5 m x 5 m area.		GPS	1	7/01/2020
7881274	31233	Drosera patens	1	Fibrous rooted perennial herb with a solitary, compact leafy rosette, 1.8-2.5 cm diam.	On the margin of swamps, lakes and winter wet depression in sandy soils.				TOPO	2	17/01/1998
7881332	31233	Drosera patens	1						TOPO	2	19/11/1991
7881282	31233	Drosera patens	1						TOPO	2	31/01/1992
7579152	30712	Drosera x sidjamesii	1						TOPO	2	17/01/1998

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9392858	30712	Drosera x sidjamesii	1	Rosetted perennial herb, ca. 2-3 cm in diameter, 6-8 cm in height. Petioles bronze-green, lamina orange. Flowers white or very light pink. Styles 3-5, white, stigmas clavate and often curved, deep red. Pollen orange.	Edge of small swamp. Wet peaty white sand.		very common in area, plants forming dense colonies around swamp margin.		GPS	1	30/11/2020
8723303	30712	Drosera x sidjamesii	1		Grows on the northern margins of lake.				TOPO	2	5/02/1985
9251537	30712	Drosera x sidjamesii	1	Rosetted perennial herb to 0.06 m. Long scape with +/- 9 flowers per scape. White petals (to translucent pink).	In drainage depression on edge of walking track in moist fine loamy sand, seasonally wet.	Sedgeland of Leptocarpus ?scariosus, Schoenus subfascicularis with few Astartea ?affinis, Hypocalymma angustifolium.	50+ plants.		GPS	1	7/01/2020
7881517	30712	Drosera x sidjamesii	1	A natural hybrid, fibrous rooted perennial herb.	On margins of swamps, lakes and winter wet depressions in sandy soil.				TOPO	2	31/03/1992
7881533	30712	Drosera x sidjamesii	1						TOPO	2	17/01/1998
7579101	30712	Drosera x sidjamesii	1						TOPO	2	4/12/1984
7881525	30712	Drosera x sidjamesii	1						TOPO	2	4/12/1984
6512372	17605	Eleocharis keigheryi	T	Erect annually renewed sedge; flowers green.	Sumpland (claypan); clay grey/brown.	Sedges.	abundant in deepest area of claypan, in mown area of airfield.		GPS	1	20/09/1994
7782020	17605	Eleocharis keigheryi	T	Clumping grass-like sedge with height to 50 cm. Flowers green.	Seasonally inundated claypans with grey to brown clay.	Transitions from open clay pans comprised excusively of of E. keigheryi to vegetated clay pans. Melaleuca spp., Verticordia sp. Chorizandra enodis, herbs, Avena fatua and Briza maxima.	frequent.	Plants are located in seasonally inundated claypans scattered throughout S portion of reserve.	GPS	1	9/11/2007
7782047	17605	Eleocharis keigheryi	T	Clumping grasslike sedge, green with yellow hairs. Height 20 - 30 cm.	Claypan with brown clay. Found in open water ponds.	Chorizandra enodis. Trees and shrubs 1-2 m.			GPS	1	12/10/2007
7782039	17605	Eleocharis keigheryi	T	Clumping grass-like sedge to about 40 cm high. Green flowers with yellow hairs.	Seasonally inundated clay pan with brown clay.	Cotula coronopifolia, Triglochin sp., sedges and weed spp.	abundant in deepest section of claypan.		GPS	1	17/09/2007
2266865	17605	Eleocharis keigheryi	T	Tufted perennial herb, flowers inconspicuous.	Clay soil, under 6 inches water, dries in summer.		common.		MAN		19/10/1978
6512283	41801	Eryngium pinnatifidum subsp. Palustre (G.J. Keighery 13459)	3	Erect annually renewed herb; flowers green/white/purple.	Dampland; grey sand.	Melaleuca shrubland.	locally common.		GPS	1	3/11/1995
1123661	13091	Eucalyptus argutifolia	T		ESE aspect. Lower ridgetop slope. Sheet sand/brown boulder. Completely open to treeless site.	Melaleuca huegelii, Xanthorrhoea preissii, Dryandra sessilis/nivea, Hakea trifurcata, Hibbertia hypericoides, Native wisteria.			MAN	2	6/08/1990
4110544	13091	Eucalyptus argutifolia	T	Mallee to 3 m.	Dune slope, grey sand over limestone.	Mallee, Eucalyptus petrensis over heath.	rare in area.		AUTO	3	22/04/1991
9139524	13091	Eucalyptus argutifolia	T	Mallee to 2 m high.	At the base of a limestone ridge. Grey sand.		ca. 6 plants.		GPS	1	7/11/2017
2160765	13091	Eucalyptus argutifolia	T		Slight gully situation nestles between two limestone ridges. Sand/boulder/brown/ yellow/dry/limestone.	Completely open and treeless with dense scrubland. Dryandra's nivea/ sessilus, Hakea trifurcata, Melaleuca huegelii, Blackboys (Xanthorrhoea preissii), Templetonia retusa.	32 clumps.		MAN		15/11/1991
2117223	13091	Eucalyptus argutifolia	T		Slight gully situation nestled between two limestone ridges. Limestone/boulder/ sand/brown/yellow/dry.	Completely open & treeless with dense scrubland. Dryandra's nivea/ sessilus, Hakea trifurcata, Melaleuca huegelii, Blackboys (Xanthorrhoea preissii), Templetonia retusa.	32 clumps, undisturbed.		MAN		15/11/1991
8153302	13091	Eucalyptus argutifolia	T	Mallee to 2.5 m. Flowers white.	Slight slope/ridge. Grey/white sand over limestone.	With Acacia cyclops, Hakea prostrata, Lomandra maritima, rhagodia baccata, Spyridium globulosum.			GPS	1	8/01/2009
8153310	13091	Eucalyptus argutifolia	T	Mallee to 2.5 m. Flowers white.	Slight slope/ridge. Grey/white sand over limestone.	With Acacia cyclops, Hakea prostrata, Lomandra maritima, rhagodia baccata, Spyridium globulosum.			GPS	1	8/01/2009
4110536	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee to 2 m. In bud.	On low limestone ridge. Shallow sand over limestone.		abundant and dominant.		AUTO	3	22/04/1991
1176412	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee to 5 m tall, bark rough, flowers white.	Slopes of hill high in the landscape.	Limestone heath with Eucalyptus falcata and E. decipiens at foot of N side of hill.			MAN	3	24/02/1987
1153900	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee to < 3 m, grey bark rough at base, smooth above. Buds and branchlets yellow-orange.	On limestone/sand,	Dryandra sessilis, Grevillea thelemanniana, Hakea trifurcata.			MAN	2	6/07/1988
1153919	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee to < 3 m, grey bark rough at base, smooth above. Buds and branchlets yellow-orange.	On limestone/sand,	Dryandra sessilis, Grevillea thelemanniana, Hakea trifurcata.			MAN	2	6/07/1988
1145428	50737	Eucalyptus foecunda subsp. foecunda	4						MAN	3	25/04/1960
1145436	50737	Eucalyptus foecunda subsp. foecunda	4						MAN	3	25/04/1960

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8339678	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee to 5 m, forming a large clump to 10 m diam. Bark thin, rough at base.	Sandy soil over outcropping limestone.	With Eucalyptus decipiens, E. gomphocephala.	infrequent.		GPS	1	23/05/2010
1145002	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee 6 - 7 ft.	Sandy soil.				MAN	3	26/07/1953
1192558	50737	Eucalyptus foecunda subsp. foecunda	4	Smooth barked mallee to 2 m x 2 m.	Grey sand over limestone, hilltop.	Low limestone heath.	rare.		AUTO	3	30/05/1990
1144987	50737	Eucalyptus foecunda subsp. foecunda	4		Limestone soil.				MAN	3	28/01/1954
4919009	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee 7 ft high, flowers white.	Fixed dunes, near the crests, ca .75 miles inland.				AUTO	3	26/07/1953
1155458	50737	Eucalyptus foecunda subsp. foecunda	4		In limestone soil.				MAN	3	28/01/1954
1138650	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee to 1 m with thin grey bark at base.	On sand over limestone.	E. decipiens and E. aff. falcata.			MAN	2	18/08/1988
3704351	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee 2.5 m tall with smooth, light grey stem.	On E side of dune.	With Eucalyptus gomphocephala nearby.			AUTO	3	16/10/1983
1144235	50737	Eucalyptus foecunda subsp. foecunda	4		Sand over limestone.	In shrubland with E. petrensis.			MAN	2	2/07/1989
1144367	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee 3 m tall, bark rough, dark grey.	White sand dune over massive limestone.				TOPO	2	11/12/1984
1153870	50737	Eucalyptus foecunda subsp. foecunda	4	Mallee 2.5 m tall with smooth, light grey stems.	Growing on E side of dune.	E. gomphocephala nearby.			MAN		16/10/1983
8076626	20162	Fabronia hampeana	2		Private property in depression between limestone outcrops with yellow sand. Potential threat by urban development. Last burnt summer 2001.	Banksia low open woodland with occasional Eucalyptus decipiens, Macrozamia riedlei, Acacia rostellifera and Hypocalymma angustifolium.		Condition of population: Healthy.	GPS	1	12/01/2009
9248811	20162	Fabronia hampeana	2	Moss on Macrozamia riedlei trunks.	Lower dune. Dry pale grey sand.	Woodland of Banksia attenuata with Xanthorrhoea preissii, Mesomelaena pseudostygia, Hakea trifurcata and occasional Macrozamia.		The stems of Macrozamia needed to be well developed and the fronds large to provide shade.	GPS	1	10/06/2015
5939658	20162	Fabronia hampeana	2	Fertile moss.	On trunk of Macrozamia.	Emergent large Banksia over Macrozamia, Hibbertia, Xanthorrhoea, grasses, weeds and thick Dryandra regrowth.			MAN	3	14/09/1994
6512836	1984	Grevillea curviloba	T	Spreading shrub to 1 m.	Edge of seasonal wetland, gentle slope, N aspect. Dark brown loam over red sand with limestone, well drained.	Associated species: Eucalyptus calophylla.			GPS	1	3/11/1995
2415887	1984	Grevillea curviloba	T						AUTO	3	14/08/1900
2415925	1984	Grevillea curviloba	T	Shrub 1.5 - 1.8 m with white flowers and pinnate leaves.	In sand.				AUTO	3	5/10/1972
5492963	1984	Grevillea curviloba	T	Woody shrub to 3 m high. Erect branches. Mid pale green leaves, cream flowers.	Flat, near shallow seasonal creekline. Grey sand.	Shrubland/Sedgeland. Characteristic species: Hakea varia.			MAN		15/02/2000
9068759	1984	Grevillea curviloba	T	Very large shrub over 2 m. White flowers.	Flat with dark brown loam.	Occasional Xanthorrhoea preissii and weeds including Watsonia, Couch grass, love grass, veldt grass.	occasional - 1 adult and 3 juveniles in area.		GPS	1	21/09/2011
8649707	1984	Grevillea curviloba	T	Perennial shrub, to 4 m high, to 10 m wide.	Riparian zone and within cleared paddock on low plain. Moist brown sand.	Eucalyptus rudis low forest over open scrub over very open low sedges. Corymbia calophylla, Melaleuca rhaphiophylla, Jacksonia furcellata, Xanthorrhoea preissii, Hakea prostrata, Hibbertia hypericoides, Lepidosperma longitudinale.	7 clumps, clonal.	Degraded habitat. New population.	GPS	1	30/06/2009
8526656	1984	Grevillea curviloba	T	Erect shrub, 1.5 m tall with white cream flowers.	Drainage line, slope. Moist soil.	Associated species: Corymbia calophylla, Eucalyptus rudis, Xanthorrhoea preissii and Acacia saligna.	3 plants.	Vegetation condition: good.	GPS	1	16/09/2013
8863768	1984	Grevillea curviloba	T	Spreading shrub to 1.6 m with pinnatifid leaves, in early flower bud stage. Juvenile growth prostrate with broader leaf lobes than the mature upright leaves.	Flat, grey sand to sandy-loam, highly disturbed bushland corridor on rail and unmade road reserve.	Open Tall Shrubland of Acacia saligna over Open Shrubland of Xanthorrhoea preissii and Acacia ? cochlearis over African love grass, perennial Veldt grass and Cyathochaeta avenacea. Occasional Thysanotus ? patersonii and Hakea prostrata.	c. 120 plants in sometimes dense local patches, over a 230 m length.	Canker evident on many shrubs.	GPS	1	6/09/2016
8649723	1984	Grevillea curviloba	T	Perennial shrub, to 4 m high, to 10 m wide.	Riparian zone and within cleared paddock on low plain. Moist brown sand.	Eucalyptus rudis low forest over open scrub over very open low sedges. Corymbia calophylla, Melaleuca rhaphiophylla, Jacksonia furcellata, Xanthorrhoea preissii, Hakea prostrata, Hibbertia hypericoides, Lepidosperma longitudinale.	12 clumps, likely to be clonal.	Degraded habitat. New population.	GPS	1	30/06/2009

Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
8649715	1984	Grevillea curviloba	T	Perennial shrub, to 4 m high, to 10 m wide.	Riparian zone and within cleared paddock on low plain. Moist brown sand.	Eucalyptus rudis low forest over open scrub over very open low sedges. Corymbia calophylla, Melaleuca rhaphiophylla, Jacksonia furcellata, Xanthorrhoea preissii, Hakea prostrata, Hibbertia hypericoides, Lepidosperma longitudinale.	12 clumps, likely to be clonal.	Degraded habitat. New population.	GPS	1	30/06/2009
8816433	1984	Grevillea curviloba	T	Upright shrub, to 2 m high. Variable width. White flowers.	Lower slope. Near to creekline. Flat. Grey loamy sand.	Occasional Acacia saligna over Shrubland of Grevillea curviloba and Xanthorrhoea preissii over Closed Grassland of mixed weed species dominated by Agrostis curvula and Ehrharta calycina. Associated species: Corynotheca micrantha, Burchardia congesta, Jac	ca 25 shrubs in one localised area.	Plants are in poor condition. Insects are having a secondary impact on the population which is stressed from weed competition and drying climate.	GPS	1	22/10/2015
9068813	1984	Grevillea curviloba	T	Large shrub to 2 m with white flowers.	Near drainage line.	Occasional Banksia menziesii; over shrubland of Grevillea curviloba subsp. curviloba, Xanthorrhoea preissii, Acacia saligna; over closed sedgeland of Schoenus subfascicularis; over weeds.	occasional.	Leaves similar to G. vestita in this population, but leaf lobes sparsely tomentose with white hairs, not villous with rust coloured hairs as in G. vestita. Floral bracts deciduous, not persistent as in G. vestita.	GPS	1	21/09/2011
9068767	1984	Grevillea curviloba	T	Shrub with white flowers.	Well drained flat ground, degraded habitat. Grey sand.	Tall open scrub of Acacia saligna and Jacksonia sp.; over open heath of Grevillea curviloba subsp. curviloba with occasional Xanthorrhoea preissii; over weeds of Eragrostis curvula, Watsonia sp. and Poa sp.			GPS	1	30/08/2012
9068740	1984	Grevillea curviloba	T	Shrub to 2 m. White flowers starting to emerge.	In riparian vegetation.	Open woodland of Melaleuca rhaphiophylla and M. preissiana; over Grevillea curviloba subsp. incurva and Macrozamia riedlei; over closed sedgeland of Schoenus subfascicularis (riparian zone) and weeds.	occasional - 1 plant only.		GPS	1	17/08/2012
9068775	1984	Grevillea curviloba	T	Shrub over 2 m high, in bud. Some plants prostrate.	Dark brown loam sand.	Tall open scrub of Acacia saligna with occasional Banksia littoralis, B. sessilis, Hakea varia; over open heath of Stirlingia latifolia, Dianella revoluta and weeds of Eragrostis curvula, Oxalis sp. Babiana sp., Asparagoides.	locally frequent.		GPS	1	17/08/2012
9139915	1984	Grevillea curviloba	T	Perennial shrub to 1.5 m in height, with white/cream flowers. Leaves divided with margins recurved.	Road verge, c. 1 m from edge.	Amongst planted non-endemics, including Leptospermum laevigatum and Eucalyptus spp. dominated by planted Eucalypts.	uncommon.	Individuals were flowering with immature fruits. Individuals were located on southern side of Cardinal Drive, c. 200 m from intersection with Vines Avenue. An additional two plants located at the intersection.	GPS	1	14/09/2017
9175504	1984	Grevillea curviloba	T		Grey sand.	Monoculture of Grevillea curviloba subsp. curviloba.			UNK	2	16/09/2019
5414156	1984	Grevillea curviloba	T	Open, erect shrub 3+ m high x 2+ m wide. Old mature plants, appeared heavily grazed. No lower branches. No pods.	Winter wet creek line. Moist, grey sand.	Open Scrub (very old). Associated species: Acacia saligna, Melaleuca rhaphiophylla, sedges, Xanthorrhoea preissii, Banksia menziesii.	common locally.		TOPO	2	9/09/1998
9446990	1984	Grevillea curviloba	T	Multi-stemmed, shrub with spreading and erect branches to 2.5 m tall x 3-5 m wide. Divided leaves, with often three narrow lobes.	Disturbed, flat, low-lying plain adjacent to Maralla Creek. Grey sand.	Occasional Eucalyptus rudis and Corymbia calophylla over Shrubland of Grevillea curviloba over Closed Grassland of Ehrharta calycina and E. longiflora.	69 mature and 11 juvenile clumps (plants?). Clumps are separated as well as possible for counting, but due to the clonal nature of the species, these may not be individual plants.		GPS	1	21/09/2016
8422710	33737	Grevillea sp. Ocean Reef (D. Pike Joon 4)	1	Erect, spreading shrub. To 1.5 m x 3 m.	Sand dune. Dry brown / grey sand.	Coastal sand scrub with Acacia, Banksia sessilis, Spinidium globulosum, Clematis, Calothamnus, Pelargonium, Dianella, Hardenbergia.	40 - 60 plants (D. Pike November 2008).		GPS	1	15/08/2012
8509603	33737	Grevillea sp. Ocean Reef (D. Pike Joon 4)	1	Compact perennial shrub 150 cm high x 200-300 cm wide.	Broad dune swails. Grey shallow sand. Numerous limestone boulders.	Acacia rostilifera, Conostylis sp., Tetraria octandra, Spyridium globulosum, Acanthocarpos preissii, Desmocladus flexuosus, Phyllanthus calycinus, Dianella revoluta, Lepidosperma sp., Banksia sessilis, Clematis sp., Hardenbergia comptoniana, Rhagodia bac	26-50 plants plus additional 6-10 juveniles within 40 m radius.		GPS	1	16/10/2013

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8422605	33737	Grevillea sp. Ocean Reef (D. Pike Joon 4)	1	Erect, spreading shrub - clonal. To 1.5 m x 3 m.	Sand dune / gully. Dry brown / grey sand.	Coastal sand scrub with Acacia, Banksia sessilis, Spiridium globulosum, Clematis, Calothamnus, Pelargonium, Dianella, Hardenbergia.	40 - 60 plants (D. Pike November 2008).	Does not appear to set fruit (D. Pike's observation).	GPS	1	6/09/2012
7860579	33737	Grevillea sp. Ocean Reef (D. Pike Joon 4)	1	Dense, spreading shrub to 2 m high x 3 m wide. Plants in late flower.	Quindalup dunes. Dry, bare, light yellow-brown sand.	Tall shrubland. With Acacia rostellifera, Dryandra sessilis, Spyridium globulosum.	One apparently clonal population of 40-60 plants.		GPS	1	/11/2008
2697246	16952	Guichenotia tuberculata	3						AUTO	3	/09/1902
1044567	1469	Haemodorum loratum	3	Bulbous herb. Inflorescence to 2 m, flowers green/brown, scented.	Lateritic loam.	Wandoo woodland.			MAN		13/11/1981
2625563	49637	Hibbertia leptotheca	3						AUTO	3	//
3096424	49637	Hibbertia leptotheca	3	Domed green shrub, to 30 cm x 40 cm. Flowers yellow, reflexed over sepals when in flower. In full flower.	Sea cliff. Grey-black sand over limestone.	Low Melaleuca cardiophylla closed heath.	common.		AUTO	3	21/09/1990
1137654	6233	Hydrocotyle lemnoides	4						AUTO	3	22/08/1989
1048104	6233	Hydrocotyle lemnoides	4	Corolla mauve. Leaves floating, stem rooted in clay.	Growing in fresh water, stem rooted in clay.				MAN	3	7/10/1976
3401332	6233	Hydrocotyle lemnoides	4						AUTO	3	/09/1963
1048112	6233	Hydrocotyle lemnoides	4		Growing in shallow water over mud.				MAN	4	13/09/1985
1048139	6233	Hydrocotyle lemnoides	4	Leaves floating, stem rooted in clay. Corolla mauve.	Growing in fresh water, stem rooted in clay.				MAN	3	7/10/1976
8586489	11074	Hydrocotyle striata	1	75 mm high x 300 mm wide.	Winter wet creekline. Light leaf litter on dark brown sandy humic loam. Fire history: < 5 years.	Eucalyptus rudis, Melaleuca rhaphiophylla, Banksia littoralis creekline. Associated with Lepidosperma longitudinale, Pteridium esculentum, Astartea fascicularis, Muehlenbeckia polybotrya.	Not frequent. Small patches in bare areas.		GPS	1	1/12/2012
8836647	11074	Hydrocotyle striata	1	Spreading annual. Height: 5-10 cm.	Seasonally inundated depression within a Mound Spring. Moist, undulating slightly. Black peaty sand. Fire history: Autumn 1995.	Low Open forest of Melaleuca preissiana over Pteridium esculentum. With Cyathochaeta teretifolia (P3), Hibbertia perfoliata.	dense cover in localised ca 40 m x 30 m area. (Site not surveyed closely, plants maybe more widespread on Lot).	Collection made for identification as it had not been seen prior to removal of extremely dense cover of Blackberry initiated in 2012. Site is a Mound Spring of the Swan Coastal Plain threatened Ecological Community.	GPS	1	16/11/2016
8840776	11074	Hydrocotyle striata	1	Prostrate annual herb, 6-30 cm in diameter. Leaves with shallow palmate lobing, glabrous, fleshy, up to 13 mm long by 16 mm wide. Stems fine, glabrous, occasionally rooting at the nodes. Flowers in tight orbicular umbels, petals cream, involucral bracts	Winter wet creekline on sandy soil.	Riparian woodland dominated by Melaleuca rhaphiophylla and Eucalyptus rudis. Associated with Astartea fascicularis, Boronia subsessilis, Lepidosperma longitudinale, Xanthorrhoea sp., Gahnia decomposita. Plants growing with other herbs such as Corybas rec	locally frequent in sheltered positions.		GPS	1	6/11/2016
6528333	17622	Hypolaena robusta	4	Female. Rush, 40-65 cm.	Upper part of the crest of a quite tall dune. Soil: light greyish-brown sand with a pale grey surface in places and a thin litter layer elsewhere.	Banksia attenuata, Banksia menziesii low woodland over scattered Adenanthos cygnorum ssp. cygnorum over Conospermum stoechadis, Jacksonia densiflora open shrubland over Eremaea pauciflora ssp. pauciflora, Stirlingia latifolia, Astroloma xerophyllum, Scho			GPS	1	1/09/1999
6528341	17622	Hypolaena robusta	4	Male. Rush, 40-65 cm.	Upper part of the crest of a quite tall dune. Soil: light greyish-brown sand with a pale grey surface in places and a thin litter layer elsewhere.	Banksia attenuata, Banksia menziesii low woodland over scattered Adenanthos cygnorum ssp. cygnorum over Conospermum stoechadis, Jacksonia densiflora open shrubland over Eremaea pauciflora ssp. pauciflora, Stirlingia latifolia, Astroloma xerophyllum, Scho			GPS	1	1/09/1999
1676024	49662	Isopogon autumnalis	3	Multistemmed erect shrub, to 70 cm. Flowers yellow, in late flower.	Yellow sand.	Banksia attenuata low open woodland.	locally common.		MAN	3	2/06/1991
3418715	49662	Isopogon autumnalis	3						AUTO	3	17/05/1900
1023926	49662	Isopogon autumnalis	3						MAN	3	7/05/1900
8755396	20462	Jacksonia gracilima	3	Perennial tufted herb with narrow leaves 10-40 cm long, with rose pink flowers.	Grey sand, on mid-slope with exposed limestone. Fire > 5 years.	Low open forest of Eucalyptus rudis and Melaleuca preissiana. Banksia attenuata shrubs. Tall shrubland of Gastrolobium ebracteolatum and Kunzea glabrescens. Sedgeland of Baumea preissii subsp. laxa.	1 mature plant.	Project: 3516.	GPS	1	9/10/2015
5437806	4027	Jacksonia sericea	4	Prostrate shrub 0.1 m high, 1 m wide; sterile.	Side of Spearwood Dune, grey sand over deep yellow sand.	Banksia attenuata and B. menziesii woodland.	scattered.		AUTO	3	15/06/1999

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5369703	4027	Jacksonia sericea	4			Banksia woodland with scattered jarrah and tuart, tuart woodland, paperbark woodland over ephemeral wetland, various shrublands.			MAN		/09/1985
2171449	4027	Jacksonia sericea	4	Low spreading shrub to .3 m high. Brown pods.	In yellowish/brown sand on low ground.	In open woodland over low heath and disturbed areas, with Banksia attenuata, B. menziesii, Gomphlobium aristatum, Xanthorrhoea sp., Eucalyptus gomphocephalum.			MAN		15/05/1990
1131176	4027	Jacksonia sericea	4	Low spreading shrub 0.5 m high.	Highly disturbed.	Highly disturbed Tuart/Jarrah forest.			MAN	3	/11/1979
5368928	4027	Jacksonia sericea	4	Flowers summer/autumn.		Banksia woodland with scattered jarrah and tuart, tuart woodland, paperbark woodland over ephemeral wetland, various shrublands.		Unburnt F2/3.	MAN		17/07/1987
6410731	4027	Jacksonia sericea	4		Slope/flat. Dry grey sand over limestone.	Eucalyptus marginata, Banksia attenuata, B. menziesii Woodland. Associated species: Banksia attenuata, B. grandis, Allocasuarina fraseriana, Dryandra sessilis, Calothamnus sp.		Condition of population: healthy.	MAN	3	/07/2001
5988136	4027	Jacksonia sericea	4			Banksia woodland with scattered tuart, jarrah and marri overstorey, tuart woodland, heath and paperbark wetland.		[Plot] B7.	MAN	2	23/05/1985
6730620	4027	Jacksonia sericea	4	Shrub 30-60 cm high x 1 m wide. Perennial, prostrate, dense spreading. Flowers orange.	Hillside. Dry sand. Old soil disturbance.	Tuart, Banksia, Allocasuarina woodland.	over 50 plants, quite widespread.		MAN	3	14/10/2002
6512844	4027	Jacksonia sericea	4	Prostrate shrub to 0.1 m by 0.8 m. Flowers orange.	Sandridge; grey/white sand over limestone.	Low Scrub B.	scattered.		GPS	1	11/10/1995
7400160	4027	Jacksonia sericea	4	Low shrub.					GPS	1	24/04/2001
7684096	4027	Jacksonia sericea	4		Slope. Grey sand.	Disturbed area dominated by Adenanthos cygnorum, Jacksonia furcellata and Melaleuca preissiana. Associated species: Ehrharta calycina, Verticordia ? densiflora, Lyginia imberbis, Acacia stenoptera, Hypolaena exsulca, Thysanotus multiflorus.		Healthy population.	UNK	2	2/11/2004
7793189	4027	Jacksonia sericea	4		Well drained site on gentle slope with E aspect. Cream sand with pale yellow subsurface sand.	Banksia attenuata, B. menziesii, Allocasuarina fraseriana Low Woodland to Low Open Woodland with scattered emergent Eucalyptus marginata over species rich Shrubland over mixed Sedgeland, Herbland and Grassland.			GPS	1	9/01/1999
7833016	4027	Jacksonia sericea	4	Shrub perennial.	Flat, residential.	Parkland.		Potential threats from weeds, disease and recreational activities.	GPS	1	10/11/2005
7885407	4027	Jacksonia sericea	4			In open Banksia woodland of Banksia menziesii, B. grandis with Eucalyptus calophylla and Acacia saligna.			GPS	3	24/10/1994
7885490	4027	Jacksonia sericea	4						UNK	3	22/05/1994
8001189	4027	Jacksonia sericea	4	Spreading shrub 0.3 m wide with orange flowers.	Residential plain with grey sand.	Low trees and low shrubland with Eucalyptus marginata, Banksia attenuata, Adenanthos cygnorum, Xanthorrhoea preissii, Calytrix fraseri, Mesomelaena pseudostygia, Laxmannia squarrosa, Waitzia suaveolens, Corynotheca micrantha, Alexgeorgea nitens, Conosper	2 - 5.	Alien species: Gladiolus caryophyllaceus, Ehrharta calycina, Briza maxima, Pentaschistis airoides, Pelagonium capitatum, Ursinia anthemoides. Infestation area: 1 - 10 m2.	GPS	1	12/11/2008
8148511	4027	Jacksonia sericea	4	50 cm.	Slope. Recently burnt.	Woodland. With Eucalyptus marginata, Allocasuarina fraseriana, Banksia menziesii, Banksia attenuata, Ehrharta calycinus, Hibbertia hypericoides.	6-20 plants.		GPS	1	22/10/2007
8982643	4027	Jacksonia sericea	4	Shrub, 0.5 m high.	Gentle slope, slight ridge. Yellow brown loamy sand.	Tall open shrubland of Acacia rostellifera to 3 m over closed tall scrub of Banksia sessilis to 2.4 m over open shrubland of Xanthorrhoea preissii, Melaleuca systena and Hakea trifurcata to 2 m over low shrubland of Jacksonia sericea and Hibbertia hyperi	> 700 plants.		GPS	1	11/11/2010
2171430	4027	Jacksonia sericea	4	Spreading shrub to 0.5 m high. Stems and branchlets ridged. Inflorescence silky hairy. In bud and occasional flower.	Sandy flat, gradual slope.	Eucalyptus marginata open woodland over Banksia attenuata, B. menziesi low woodland A.	abundant on disturbed road verges, occasional elsewhere.		MAN		17/10/1990
1131192	4027	Jacksonia sericea	4	Prostrate shrub, 50 cm x 1.5 m diam. Flowers orange-yellow; eye yellow.	Hilltop, sand over limestone.	Banksia low woodland.	common.		MAN	3	20/01/1988

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1131206	4027	Jacksonia sericea	4	Multistem, prostrate shrub, 30 cm x 1.5 m diam. Flowers orange-yellow.	Flat, grey sand over sand.	Banksia woodland.	common.		MAN	3	2/12/1987
5504678	4027	Jacksonia sericea	4	Shrub 0.25 m high x 1.1 m wide. Spreading from centre, dense. Orange pea shaped flowers, yellow throat with red ring on standard petal. Grey hairy stems, no leaves. Pale green yellow narrow sepals.	Sand dune, flat inter-dune plain. Dry, ca 95% organic litter cover. Light grey sand.	Woodland, Eucalyptus marginata, Banksia attenuata, B. menziesii.	frequent.		MAN		14/11/1998
6053785	4027	Jacksonia sericea	4	Spreading shrub 0.4 m high x 1 m wide.	Gentle slope. Organic litter. Grey Bassendean sand.	Open Low Woodland A. Acacia saligna, Banksia menziesii.	occasional.		MAN	3	6/12/2000
9422749	4027	Jacksonia sericea	4	Many-branched, spreading low shrub, 0.45 m high x 3 m wide.	Coastal plain, gentle low slope on yellow sand.	Open Woodland of Banksia attenuata, B. menziesii over Open Shrubland of Xanthorrhoea preissii, Jacksonia floribunda, Allocasuarina humilis, Daviesia nudiflora over Low Shrubland of Eremaea pauciflora, Petrophile serruriae, Hypocalymma robustum, Hibbertia	55 plants including juveniles.	Plants were predominantly at gate access points on the W and S sides of the reserve, where soil has been disturbed.	GPS	1	6/04/2020
2973499	31312	Lecania turicensis var. turicensis	2		Coastal rocks, limestone.				AUTO	3	28/08/1988
1421441	3040	Lepidium pseudohyssopifolium	1		Swampy ground.				AUTO	3	/06/1902
6210082	40801	Leucopogon maritimus	1					Field No. 166.	MAN	3	27/06/1966
1147773	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3	Low twiggy woody shrub, 15-20 cm, flowers white, sweet honey scent.	Low hill, grey sand over limestone.	Limestone heath.	scattered in area.		AUTO	3	30/05/1990
2768720	7674	Levenhookia preissii	1						AUTO	3	09/01/1899
2768763	7674	Levenhookia preissii	1						AUTO	3	23/12/1901
1875221	7674	Levenhookia preissii	1	Flowers rosy pink (including labellum). Odourless.	Peaty sand fringing damp soil, bordering a watercourse.				AUTO	3	26/12/1924
2768828	7674	Levenhookia preissii	1						AUTO	3	/12/1901
2768844	7674	Levenhookia preissii	1						AUTO	3	/12/1900
8386831	25819	Marianthus paralius	T		Well drained dry white sand. Limestone ridge. Fire history: long ago.	Melaleuca cardiophylla, Scaevola crassifolia, Olearia axillaris, Rhagodia baccata Closed Low Heath.		Condition of plants: moderate.	TOPO	3	29/12/2010
7782144	25819	Marianthus paralius	T	Prostrate shrub with red flowers.	Limestone cliff with dry, brown sand. Exposed limestone outcropping.	Dense Heath B. Coastal heath vegetation including Spyridium sp., Thomasia sp., Melaleuca sp., Scaevola sp., Acanthocarpus sp.	9 plants recorded.		GPS	1	26/10/2006
9446605	25819	Marianthus paralius	T	Prostrate shrub. Vegetative only.	Coastal low cliff top. Rocky white sand over limestone.	Melaleuca cardiophylla, Acanthocarpus preissii, Templetonia retusa.	7 plants, all growing within approx. 5 m x 5 m area.		GPS	1	21/05/2021
7878311	33638	Meionectes tenuifolia	3	Erect herb with orange flowers. Height 0.5 m and width 0.05 m.	Grey clay, reserve and wetland.	Tall shrubland with Melaleuca rhaphiophylla, Baumea arthophylla and Triglocia lineare.	over plants over area of 11-100 m2.	100% flowering and reproducing by seeds.	MAN	3	28/12/2007
1162586	33638	Meionectes tenuifolia	3						MAN	4	/12/1900
9196951	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Slender erect open shrub, 2-3 m high x 1 m wide. In fruit, not in flower.	Limestone hill. Skeletal white loam over limestone.	Banksia sessilis / Melaleuca tall shrubland.	locally common.	Co-occurring with Melaleuca systena which is in full flower.	GPS	1	28/08/2004
8815224	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Erect to spreading shrub to 1.5 m with yellow flowers.	Limestone ridge remnant within a mine pit.	Remnant.	occasional.		GPS	1	6/12/2013
8816476	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Erect shrub 1 - 2.5 m x 2 m.	On fine sand to sandy loam soils with 30-70% outcropping limestone.	Closed tall scrub of Melaleuca systena, M. sp. Wanneroo, M. sp. Wanneroo x systena and M. huegelii, over low shrubland of Calothamnus quadrifidus, Banksia sessilis var. cygnorum, Leucopogon parviflorus and Templetonia retusa.	locally common.	Co-occurs with Melaleuca systena and M. systena x M. sp. Wanneroo. Population 1.	GPS	1	7/08/2014
8816522	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Erect shrub 1-2.5 m x 2 m. Flowers yellow.	On well drained grey sand with 30-70% outcropping limestone.	Tall open scrub of Melaleuca huegelii, M. sp. Wanneroo with occasional Eucalyptus petrensis and Melaleuca systena, over open low heath of Acacia alata var. tetrantha, Thomasia triphylla over open sedgeland/herbland.	locally common.		GPS	1	28/11/2014
9137459	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Tall shrub to 2 m tall. Yellow flowers.	Hilltop and upper slopes. Soil: shallow brown sand.	Shrubland. Associated species: Thomasia sp., sedges, Hakea trifurcata, Grevillea preissii, Melaleuca systena, Banksia sessilis.	>1000.		GPS	1	17/01/2019
8997675	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T		Hill slope. Yellow/brown sand.	Melaleuca shrubland. Associated species: Acacia alata var. tetrantha, Banksia sessilis, Melaleuca huegelii and M. systena.	1000+.		GPS	1	10/05/2017

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9041443	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Shrub to 2 m tall. Yellow flowers.	NE face of limestone hill. Soil: shallow yellow/brown sand.	Dense shrubland to 2 m. Associated species: Calothamnus sp., Hakea trifurcata, Grevillea preissii and Banksia sessilis.	>1000.		GPS	1	17/01/2019
6972942	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Slender erect single 2-3 m high and 1-2 m wide. Flowers pale yellow; in full flower.	Rugged limestone ridge. Mossy black sand.	Melaleuca cardiophylla, M. sp., M. systena tall closed shrubland.	dominant locally.		GPS	1	23/12/2004
8982635	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Shrub, 2.5 m high. Flowers yellow.	Limestone ridge. Brown loamy sand.	Tall open scrub of Melaleuca huegelii and M. sp. Wanneroo (G.J. Keighery 16705) over open shrubland to 1.5 m of Melaleuca systena, Xanthorrhoea preissii and Acacia lasiocarpa over low open shrubland to 0.4 m of Grevillea preissii and Banksia nivea over v	40 plants.		GPS	1	1/10/2009
9446958	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Many branched shrub to 1.3 m tall x 0.8 m wide. Leaves are linear to 20 mm long x 3-5 mm wide, hairy and bright green on young plants. Early fruits present towards stem ends, with new growth of shorter recurved leaves continuing.	Grey fine sand on limestone outcropping up to 70%. Upper slopes to ridge.	Very Open Shrub Mallee of Eucalyptus argutifolia over Closed to Open Heath of Melaleuca sp. Wanneroo (G.J. Keighery 16705), Grevillea preissii, Templetonia retusa, Melaleuca huegelii, Acacia lasiocarpa, A. alata subsp. tetranthera, Opercularia vaginata,	6250 plants extrapolated within a mapped population boundary.	The majority of plants had recruited after a wildfire 6 years previously. The habitat is between a water corporation facility and a mine-pit.	GPS	1	15/05/2018
9446966	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Many branched shrub to 1.3 m tall x 0.8 m wide. Leaves are linear to 20 mm long x 3-5 mm wide, hairy and bright green on young plants. Early fruits present towards stem ends, with new growth of shorter recurved leaves continuing.	Grey fine sand on limestone outcropping up to 70%. Upper slopes to ridge.	Very Open Shrub Mallee of Eucalyptus argutifolia over Closed to Open Heath of Melaleuca sp. Wanneroo (G.J. Keighery 16705), Grevillea preissii, Templetonia retusa, Melaleuca huegelii, Acacia lasiocarpa, A. alata subsp. tetranthera, Opercularia vaginata,	6250 plants extrapolated within a mapped population boundary.	The majority of plants had recruited after a wildfire 6 years previously. The habitat is between a water corporation facility and a mine-pit.	GPS	1	15/05/2018
8772630	14337	Millotia tenuifolia var. laevis	2	Annual herb, 0.05 m high x 0.01 m wide. Flowers yellow.	Upper slope with grey sand. Underlying geology: Bassendean Dune System.	Banksia attenuata and Banksia menziesii low woodland over Eucalyptus todtiana sparse mid mallee woodland over Adenanthos cygnorum subsp. cygnorum sparse tall shrubland over Eremaea pauciflora var. pauciflora sparse mid shrubland over Hibbertia hypericoid			GPS	1	24/09/2014
9234306	14337	Millotia tenuifolia var. laevis	2	Small upright herb to 3.5 cm, white-yellow flowers and furry leaves and stems.	Gently inclined low dune, grey sand.	Low woodland of Banksia attenuata and B. menziesii over mid open shrubland of Allocasuarina humilis over low open shrubland of Hibbertia hypericoides.	uncommon.	Recorded in a quadrat.	GPS	1	16/10/2018
8755442	50567	Netrostylis sp. Chandala (G.J. Keighery 17055)	2	Sedge c. 50 cm tall with very narrow leaves and culms. Inflorescence loose and branched, with dark brown florets.	Grey brown peaty soil in a swamp.	Low open forest of Eucalyptus rudis and Melaleuca preissiana. Tall open shrubland of Astartea fascicularis and Kunzea glabrescens. Pteridium esculentum mid ferns. Sedgeland of Lepidosperma.	100 mature plants.	Project: 3516.	GPS	1	8/10/2015
4864743	50567	Netrostylis sp. Chandala (G.J. Keighery 17055)	2	Rhizomatous herb 1.6 m high, 1 m wide; flowers brown; fruits brown.	Mound spring, black peat over clay & humic sand.	Assoc. vegn.: Melaleuca rhaphiophylla forest over sedges.	very common.		TOPO	2	4/02/1997
8599556	50567	Netrostylis sp. Chandala (G.J. Keighery 17055)	2	Sedge, 60 cm high x 60 cm wide.	Dampland with thick leaf litter over dark grey sand. Underlying geology: Southern River. Area burnt > 5 years ago.	Corymbia calophylla / Melaleuca preissiana dampland with Agonis linearifolia, Lepidosperma longitudinale, Eucalyptus rudis, Astartea fascicularis.	10 plants.		GPS	1	30/08/2013
5991714	2278	Persoonia sulcata	4	Decumbent shrub 0.2 m high with smooth, compact bark. Leaves spreading, slightly twisted, bright green.	Laterite.	Eucalypt woodland with low shrubby understory.	three plants seen.		MAN	3	18/12/1980
6498841	11557	Phlebocarya pilosissima subsp. pilosissima	3	Herb 15 cm.	Gentle slope to S at edge of a seasonal dampland. Light greyish brown sand with a pale grey (whitish) surface, a thin litter layer over parts (>half).	Banksia attenuata, Banksia ilicifolia low open woodland to low woodland over Regelia ciliata open scrub to closed scrub over Hypocalymma angustifolium open shrubland to open heath over scattered herbs and sedge of Dasypogon bromeliifolius and Hypolaena e		From site ML 18, Specimen ML18-12.	GPS	1	20/08/1999
6498868	11557	Phlebocarya pilosissima subsp. pilosissima	3	Herb, 15 cm.	Gentle slope to S at edge of a seasonal dampland. Light greyish brown sand with a pale grey (whitish) surface, a thin litter layer over parts (>half).	Banksia attenuata, Banksia ilicifolia low open woodland to low woodland over Regelia ciliata open scrub to closed scrub over Hypocalymma angustifolium open shrubland to open heath over scattered herbs and sedge of Dasypogon bromeliifolius and Hypolaena e		From site ML 18, Specimen ML18-13.	GPS	1	20/08/1999
3409171	5237	Pimelea calcicola	3	Shrub-like herb up to 18 inches high. Flowers pale mauve.		Heathland.			AUTO	3	16/10/1962
3409341	5237	Pimelea calcicola	3	Shrub to 2.5 ft. Flowers light pink-white.	Sand-limestone.				AUTO	3	27/09/1968

Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
3409368	5237	Pimelea calcicola	3	Shrub, erect 3 ft. Reddish pink flowers.					MAN	3	4/11/1964
1748807	5237	Pimelea calcicola	3	Rounded bushy shrub up to 1.5 m high. Flowers pale pink, the anthers becoming dark pink-purple.	On summit of limestone hill.	Weedy disturbed open shrubland dominated by Dryandra sessilis.			MAN		30/09/1982
1812130	5237	Pimelea calcicola	3	Slender erect shrub, to 60 cm. Flowers deep pink to very pale pink. In full flower.	Low hill. Shallow grey sand over massive limestone.	Dryandra sessilis closed heath.	common in area.		AUTO	3	7/11/1990
1603523	5237	Pimelea calcicola	3	Erect rounded, bushy shrub up to 1.5 m high. Flowers greenish at base and pale pink above, the anthers orange at first, becoming dark pink/purple.	On the summit of a limestone hill with yellow sand and exposed limestone.	Weedy, disturbed open woodland. Dominant species: Dryandra sessilis, a shrub up to 3 m high.			MAN		10/10/1983
1603531	5237	Pimelea calcicola	3	Erect rounded, bushy shrub up to 1.5 m high. Flowers greenish at base and pale pink above, the anthers orange at first, becoming dark pink/purple.	On the summit of a limestone hill with yellow sand and exposed limestone.	Weedy, disturbed open woodland. Dominant species: Dryandra sessilis, a shrub up to 3 m high.			MAN		10/10/1983
1603558	5237	Pimelea calcicola	3	Erect rounded, bushy shrub up to 1.5 m high. Flowers greenish at base and pale pink above, the anthers orange at first, becoming dark pink/purple.	On the summit of a limestone hill with yellow sand and exposed limestone.	Weedy, disturbed open woodland. Dominant species: Dryandra sessilis, a shrub up to 3 m high.			MAN		10/10/1983
6209874	8163	Pithocarpa corymbulosa	3					Field No. Y 64.	MAN	3	6/06/1963
6350178	42022	Poranthera moorokatta	2	Erect annual herb, 1 cm.	Flat to very slight depression on a broad flat dampland floor. Soil: surface light grey to grey, set clay with some coarse sand, thick white sand cover in some places. Belwo surface light grey-grey clay with some sand. Some litter in patches around shrub	Dominants: Melaleuca preissiana 4-13 +m 1-5% (varies); Calothamnus lateralis, Pericalymma ellipticum var. ellipticum 0.5-1 m >15%; Astartea aff. fascicularis 1-1.4 m <5%. Associated species: The more abundant species for this site were Phyllangium parado		Specimen ML48-8.	MAN	2	22/10/1999
8772606	42022	Poranthera moorokatta	2	Annual herb, 0.05 m high x 0.05 m wide.	Dampland with brown / white peat / sand. Underlying geology: Bassendean Dune System.	Melaleuca preissiana mid woodland over Banksia littoralis sparse low woodland over Xanthorrhoea preissii and Taxandria linearifolia open tall shrubland over Hypocalymma angustifolium sparse low shrubland.	1 plant.		GPS	1	17/09/2014
8772622	42022	Poranthera moorokatta	2	Annual herb, 0.05 m high x 0.05 m wide.	Slope with brown / white sand. Underlying geology: Bassendean Dune System.	Eucalyptus todtiana isolated mid mallee trees over Banksia attenuata, Banksia menziesii and Nuytsia floribunda sparse low woodland over Eremaea pauciflora var. pauciflora sparse mid shrubland over Hibbertia hypericoides, Hibbertia subvaginata and Scholtz	1 plant.		GPS	1	19/09/2014
8766185	42022	Poranthera moorokatta	2	Small herb, 1 cm high.	Crest of low dune with yellow sand (ant mounds). Greater than 10 years since a fire.	Banksia attenuata, Banksia menziesii, Allocasuarina fraseriana low woodland over Xanthorrhoea preissii open shrubland over Hibbertia hypericoides, Calothamnus sanguineus, Calytrix flavescens low shrubland over Mesomelaena pseudostygia scattered sedges.			GPS	1	25/10/2012
9234292	42022	Poranthera moorokatta	2	Small erect annual herb to 2 cm, white flowers.	Very gently inclined plain, grey sand.	Low woodland of Banksia attenuata and B. menziesii over mid open shrubland of Xanthorrhoea preissii over low open shrubland of Eremaea pauciflora.	uncommon.	Recorded in a quadrat.	GPS	1	30/10/2018
8039364	17543	Sarcozona bicarinata	3		Private property; limestone outcrops with dry white sand. Potential threat by urban development. Last burnt summer 2001.	Open Banksia sessilis heathland. Banksia sessilis, Opercularia vaginata, Scaevola crassifolia and Desmocladus flexuosus.	5 mature plants over 5 m squared.	Condition of population: Healthy.	GPS	1	12/01/2009
4583744	17543	Sarcozona bicarinata	3	Herbaceous succulent 8 cm high and spreading to generally less than 30 cm across the ground. Leaves dull grey, green in colour; seeds brown and rough all over.	Grey sand over rocky limestone outcrops. Exposed sunny areas.	Edge of Dryandra sessilis (Parrot Bush) heathlands and cleared area for housing.		No evidence of recent fire but few plants (3 only) found on edge of bushland where the area has been cleared for housing development.	AUTO	3	2/03/1997
4583736	17543	Sarcozona bicarinata	3	Herbaceous succulent 8 cm high and spreading to generally less than 30 cm across the ground. Leaves dull grey, green in colour; seeds brown and rough all over.	Grey sand over rocky limestone outcrops. Exposed sunny areas. Fire approximately 12 months prior to collection. The fire most probably stimulates seed germination and opens up the very dense Dryandra heath providing a sunny environment for this species t	Dryandra sessilis (Parrot Bush) heathlands.		Abundance: this species is common throughout the fire burnt area but did not occur outside where the Dryandra sessilis formed closed dense heath nor did it occur in adjacent unburnt Banksia bushland.	AUTO	3	2/03/1997
1278215	980	Schoenus capillifolius	3	Annual herb, in fruit.	Clay pan dry - some mud in deeper sections with live plants.				AUTO	3	14/11/1980
2239108	980	Schoenus capillifolius	3	Aquatic herb. Growing submerged or on edges.	Winter wet claypan.	With Glossostigma sp., Hydatella sp. and Trithuria sp. surrounded by regenerating heath B of Melaleuca lateritica.		Abundance: several hundred plants.	MAN		2/11/1990

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8893373	980	Schoenus capillifolius	3	Small aquatic herb.	Seasonally wet poorly drained flat. Brown sandy clay.	Melaleuca lateritia, Viminaria juncea and Kunzea micrantha over herbs.		Vegetation condition: very good. Claypan TEC, communities 7 & 8.	GPS	1	24/10/2012
4526422	17606	Schoenus griffinianus	4	Perennial sedge.	Soil: White sand. Topography/drainage: Well drained gentle SW facing slope. Geomorphology: Bassendean sands over guildford formation.	Vegetation: Banksia attenuata Open Low Woodland A over mixed Low Heath C over mixed Open Dwarf Scrub D over Lyginia barbata Very Open Low Sedges.			GPS	1	19/10/1993
7514271	1003	Schoenus natans	4	Floating aquatic herb.	Flooded claypan.	Melaleuca lateritia shrubland over Chorizandra enodis and aquatic herbs.	Common.		GPS	1	7/10/2004
4097610	16279	Schoenus sp. Bullsbrook (J.J. Alford 915)	2	Delicate herb 15 cm high, flowers brown and green.	Low lyingflat, grey peaty sand over ? clay.	Herbs and low shrubs.	common.		MAN		31/10/1986
4750411	17731	Schoenus sp. Waroona (G.J. Keighery 12235)	3	Annual 2-5 cm, flowers green.	Winter wet flats, dark brown loam clay over clay.	Burnt low heath.	common.		MAN	3	31/10/1988
6533744	49715	Stachystemon exilis	1	Upright shrub to 1 m by 0.3 m, buds and flowers.	Dry Flat, grey sand some humus, over humus and sand, well drained.	Open Scrub, Associated species: Adenanthos cygnorum.			GPS	1	19/10/1994
3978931	49715	Stachystemon exilis	1		On grey sand, seasonally damp.	Marri Open Low Woodland A over Melaleuca sp. B and Hypocalymma angustifolium Dwarf Scrub C over Mixed Herbs.			MAN		19/10/1994
9234314	49715	Stachystemon exilis	1	Slender small shrub, small white-yellow flowers and bright green narrowly lanceolate leaves with slightly recurved margins.	Very gently inclined plain, grey sand.	Low woodland of Banksia attenuata and B. menziesii over mid open shrubland of Xanthorrhoea preissii over low open shrubland of Eremaea pauciflora.	uncommon.		GPS	1	30/10/2018
4916964	19704	Stenanthemum sublineare	2	Low erect shrub, 10 cm high x 4 cm wide. Flowers greenish.	Sand plain. Littered white sand.	Low Forest B (Muir 1977) with Banksia attenuata, Xanthorrhoea preissii, Calytrix flavescens, Patersonia occidentalis.		Abundance: apparently quite common in relatively small area.	GPS	1	27/10/1997
7526989	19704	Stenanthemum sublineare	2		Low rise on an undulating plain. Dry, grey sand. Unburnt for 20 + years.	Open Banksia attenuata/Banksia menziesii low woodland, over heath (Beaufortia elegans, Eremaea pauciflora subsp. pauciflora, Regelia inops) Calytrix flavescens, Scholtzia involucrata, Bossiaea eriocarpa, Gompholobium tomentosum, Petrophile linearis, over	one plant.		GPS	1	17/11/2005
4916972	19704	Stenanthemum sublineare	2	Low erect shrub, 8 cm high x 4 cm wide. Flowers spent, few fruits evident.	Sand plain. Littered white sand.	Low Forest B (Muir 1977) with Banksia attenuata, Xanthorrhoea preissii, Calytrix flavescens, Patersonia occidentalis.	apparently quite common in relatively small area.		GPS	1	21/12/1997
2694263	7756	Stylidium longitubum	4	Erect leafless herb with red succulent stems and pink flowers.	Recently dried muddy depression in swamp.				TOPO	2	28/12/1971
6511546	7756	Stylidium longitubum	4	Flowers pink.	Seasonal Wetland, flat ground. Dark brown clay loam some peat, over ?clay. Poor drainage, wet during winter/spring.	Open Low Scrub A. Associated species: Astartea fascicularis.			GPS	1	10/11/1994
8161119	7756	Stylidium longitubum	4	Erect single stemmed plant with pink petals, darker pink with white at centres. Height 50 12 cm.	Flat, clay pan. Moist grey clay.	Jacksonia, Acacia, Asteraceae, Villarsia, weeds.	many plants but in an area of ca 25 m x 10 m.		GPS	1	28/11/2008
1643061	7756	Stylidium longitubum	4	Annual herb. Flowers pink, and laterally paired.	Grows in clayey sand, in small winter-wet depressions.	Under and around shrubs.			AUTO	3	12/11/1989
3510042	7756	Stylidium longitubum	4						MAN		30/10/1992
1631098	7756	Stylidium longitubum	4	Annual herb, flowers pink, throat yellow.	Winter wet claypan.	Melaleuca lateritia shrubland; burnt.	abundant.		AUTO	3	3/10/1988
8893101	7756	Stylidium longitubum	4	Small annual herb.	Seasonally wet poorly drained flat. Brown sandy clay.	Melaleuca lateritia, Viminaria juncea and Kunzea micrantha over herbs.		Vegetation condition: very good. Claypan TEC, communities 7 & 8.	GPS	1	24/10/2012
4430921	13127	Stylidium maritimum	3	Flowers pink-mauve, throat white, outer petal surface white to pale pink, upper winged throat appendages pink, lower throat appendages white-red tipped, leaves 3 per papery sheath.	On limestone outcrops in crater-like depressions filled with black sandy soil.	Area surrounded by low coastal heath and open Banksia menziesii woodland.			MAN		22/10/1995
9139559	13127	Stylidium maritimum	3	Sedge-like herb to 0.4 m high. In fruit.	Limestone ridge with outcropping. Sandy soil.	Melaleuca huegelii and Melaleuca systena TEC.	ca. 35 plants.		GPS	1	7/11/2017
7836384	13127	Stylidium maritimum	3		Grey sand-loam, slope, ridge, limestone, private property.	Closed Tall Scrub of Melaleuca huegelii, Dryandra sessilis with occasional Spyridium globulosum.		Healthy population, in flower. Potential threat from clearing and weeds.	MAN	3	16/10/2007
8755361	13127	Stylidium maritimum	3	Perennial tufted herb with narrow leaves 10-40 cm long, with rose pink flowers.	Grey sand, on mid-slope with exposed limestone.		1 mature plant.	Project: 3536.	GPS	1	4/11/2015
8982600	13127	Stylidium maritimum	3	Herb, 0.8 m high.	Limestone ridge. Brown loamy sand over limestone.	Tall shrubland of Melaleuca systena over open shrubland of Melaleuca huegelii and Acacia lasiocarpa over very open herbland of Desmocladus flexuosus. Associated species: Grevillea preissii.	15 plants.		GPS	1	2/10/2009

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8540942	25800	Stylidium paludicola	3		Sandy flats near winter-wet damplands.	Low woodland of marri and Banksia grandis over Baumea juncea sedgeland and mixed open heath adjacent to Melaleuca preissiana and Banksia littorea woodland.			MAN	3	//2007
2858010	25800	Stylidium paludicola	3						AUTO	3	10/10/1900
7838204	25800	Stylidium paludicola	3	Herb to 1 m tall.	Peat based mound spring. Permanently wet site with water oozing from entire surface. Dips and mounds occur in peat layer.	With forest - woodland of Melaleuca preissiana over dense shrubland of Cyclosorrus interruptus, Pteridium esculentum, Agonis linearifolia, Astartea fascicularis, Isolepis prolifera, Lobelia alata, Burchardia sp.	occasional.		GPS	1	26/11/2007
7282575	25800	Stylidium paludicola	3	Multi-stemmed erect plant with pink flowers, white throat. Height to 90 cm.	Flat with moist grey sand.	With Acacia sp., Melaleuca preissiana and Leptospermum sp.	ca 50 plants.		GPS	1	14/11/2005
7855656	25800	Stylidium paludicola	3	Reed-like perennial herb 35-80 cm high, numerous scapes per plant; corolla lobes laterally-paired, bright pink, darker pink in bud; labellum pale pink with a pink terminal appendage; throat white, yellow to inside, glandular; anthers greenish-red fading	Winter-wet flat; brown sandy-clay.	Open Melaleuca preissiana woodland with dense Myrtaceous shrubs.	localised patch		GPS	1	31/10/2006
6499171	20603	Stylidium trudgenii	3	Perennial herb, 4-5 cm	Dampland - wetland. Peat, soggy.	Melaleuca preissiana (1.8) 5-7 m 1-2%; Astartea aff. fascicularis 1-1.8 m +/- 30% (more out of 10 x 10 m; to > 70%); Pericalymma ellipticum var. ellipticum 0.7 m < 5%; Meeboldina scariosa (ML49-1)0.5-1 m < 5%. Associated species: Stylidium mimeticum, Iso		From site ML49, Specimen ML49-11.	GPS	1	22/10/1999
6529690	20603	Stylidium trudgenii	3	Perennial herb.	Floor of a dampland/wetland complex. Seasonally inundated? (probably for short period at most this year). Soil: dark grey (pale surface) sandy (little) peat.	Scattered Melaleuca preissiana, Banksia littoralis (shrubs), over Astartea aff. fascicularis heath. Associated species: Drosera pulchella, Drosera aff. pygmaea, Villarsia albiflora, Epilobium grandiflorum var. grandiflorum, Comesperma virgatum, patches of		Stylidium sp.Ellenbrook (M.Trudgen 49-11) in a localised patch about 5 m across of about 21 clumps.	GPS	1	1/12/1999
6704832	20603	Stylidium trudgenii	3	Caespitose perennial herb. Flowers cerise laterally paired.	In black peaty soil on a winter wet swamp margin.			Specimens grown on in cultivation until anthesis then pressed for vouchers.	GPS	1	23/10/2000
8604223	48297	Styphelia filifolia	3		On brown sand on midslopes.	Woodland of Banksia attenuata, B. menziesii, B. ilicifolia over Heath dominated by Allocasuarina humilis.			UNK	2	11/09/2007
2997290	48297	Styphelia filifolia	3						AUTO	3	11/06/1978
1016539	48297	Styphelia filifolia	3	Erect shrub to 50 cm.	Sandy soil.				TOPO	3	7/02/1980
5917905	48297	Styphelia filifolia	3	Erect shrub 60 cm high x 40 cm wide. Flowers white, strictly pendulous. Leaves patent. Plants single stemmed at ground level.	Coastal plain (Bassendean Sands). Dry, littered grey sand.	Banksia woodland with a few marri. Corymbia calophylla, Banksia attenuata, Regelia inops, Xanthorrhoea preissii.	very occasional (4-6).	Relatively low lying area.	GPS	1	10/06/2001
7337671	48297	Styphelia filifolia	3	Erect, well branched shrub to ca 50 cm high. White flowers. Mostly in bud.	Flat, slope. Dry, white sand.	Banksia ilicifolia, B. menziesii, Nuytsia floribunda, Melaleuca - paper bark trees and sandplain shrubs including Scholtzia involucrata.	10+ scattered plants.		GPS	1	25/02/2006
9376089	4540	Tetratheca pilifera	3		Hill. Brown sandy loam soil.	Mid Eucalyptus wandoo woodland over tall open Xanthorrhoea preissii shrubland over low open mixed shrubland.	1 individual plant.		GPS	1	21/10/2020
278696	1717	Thelymitra variegata	2	Petals purple, spotted. Sepals orange, purplish in the centre, with reddish- purple spots. Column purple with orange wings.	On limestone hills towards the coast.			'Leopard Orchid'	AUTO	3	/09/1919
2935007	13783	Thysanotus sp. Badgingarra (E.A. Griffin 2511)	2	? young style of T. sparteus.	Low roadside on gravel.	Low scrub.			AUTO	3	1/03/1959
3455971	13783	Thysanotus sp. Badgingarra (E.A. Griffin 2511)	2	Rhizomatous herb to 20 cm x 1 m. Flowers purple, in full flower.	Gentle slope, sandy lateritic loam over laterite.	Eucalyptus wandoo low woodland.	scattered but not uncommon in area.		AUTO	3	16/01/1991
6427405	44444	Tripterococcus sp. Brachylobus (A.S. George 14234)	4	Flowers yellow.	Seasonal Wetland, flat ground, black fine peaty clay loam sand, poor drainage, wet during winter/spring.	Open Herbs. Associated species: Lepyrodia muirii, Baumea articulata, Baumea vaginalis.			GPS	1	10/11/1994
2472635	32658	Trithuria occidentalis	T	Annual herb, leaves red, flowers red, anthers purple-red.	In water, muddy open.		common.		TOPO	3	27/10/1982
2841851	32658	Trithuria occidentalis	T	Small annual, reddish colour.	Drying pools, muddy claypan.	Melaleuca laterite scrub.	common.		MAN	3	27/10/1982

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7855885	32658	Trithuria occidentalis	T		Low-lying depression next to a low sand ridge covered by Petrophile sp. and Eucalyptus trees. Soil grey-brown clay, soft and damp to dry and hardening where higher.	Open shrubland of Melaleuca lateritia to 1.5 m tall with open ground between shrubs, colourful with flowering herbs including Villarsia capitata, Gratiola pubescens, Rhodanthe pyrethrum, Stylidium sp., Utricularia inaequalis, Aphelia drummondii, Lachnagr	About 500 plants over an area 15 metres across.	Growing with Trithuria bibracteata and with Trithuria submersa about 50 metres away in a different depression.	GPS		6/11/2007
8640688	32658	Trithuria occidentalis	T	Tiny annual ca 2 cm tall.	Low-lying depression. Grey-brown clay.	Open shrubland. With Gratiola pubescens, Melaleucac lateritia, Rhodanthe sp., Stylidium sp., Villarsia capitata.	> 100.		GPS	1	19/10/2012
2841886	32658	Trithuria occidentalis	T	Reddish annual herb.	Slightly submerged clay pan, open.		common.		AUTO	3	18/10/1978
1057219	14714	Verticordia lindleyi subsp. lindleyi	4		Gravelly soil.				MAN	3	/11/1901
6679765	14714	Verticordia lindleyi subsp. lindleyi	4						GPS	1	18/12/1998
5795672	14714	Verticordia lindleyi subsp. lindleyi	4	Erect shrub 0.5 m high.	Winter wet depression. Damp, grey-brown clay-sand-humus.	Dense shrubs (tall) over sedges. Melaleuca rhaphiophylla, Hypocalymma angustifolium, Juncus pallidus, sedges.	occasional.		MAN	3	10/12/1996
6679757	14714	Verticordia lindleyi subsp. lindleyi	4						GPS	1	18/12/1998
7400268	14714	Verticordia lindleyi subsp. lindleyi	4	Shrub 25 - 35 cm high.		Shrubland with some emergent Marri, Banksia and Nuytsia. Associated vegetation: Dasypogon bromelifolius, Melaleuca serriata, Stylidium repens, Hibbertia subvaginata.			GPS	1	9/02/2006
7400276	14714	Verticordia lindleyi subsp. lindleyi	4	Shrub 30 - 40 cm high.	Flat.	Shrubland with few emergent Marri, Banksia and Nuytsia. Associated vegetation: Verticordia nitens, Patersonia occidentalis, Dasypogon bromelifolius, Calytrix fraseri, Hibbertia subvaginata.			GPS	1	9/02/2006
6504914	14714	Verticordia lindleyi subsp. lindleyi	4		Topography: plain, low lying. Slope: flat. Soil texture: sand. Soil colour: brown to white. Surface layer: leaf litter. Rock type: limestone. Leaf litter coverage: 10-30% cover; ,3 cm depth; distribution mainly under shrubs. Wood litter: sparse. Fire his	Sparse Melaleuca preissiana over moderately dense Kunzea micrantha and Verticordia plumosa. Total vegetation cover: 95%. Trees <5 m, 2-10%: Melaleuca preissiana, Acacia saligna. Shrubs >2 m, 0-2%: Kunzea micrantha. Shrubs 1-2 m, 30-70%: Kunzea micrantha,			GPS	1	21/12/1998
2033720	12460	Verticordia serrata var. linearis	3	80 cm high x 15 cm wide. Flowers golden yellow.	White sand and gravel on road verge.	Growing in association with Adenanthos cygnorum.		This specimen was collected for painting.	AUTO	3	22/10/1987

PopId	NameId	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Method	MatCount	JuvCount	SeedCount	LiveTotal	CountType	AreaOccupy	InFlower	PopCondit	HabCondit	HabNotes	SoilCondit	Landform	RockType	Gravel	SoilType	SoilColor	Drainage	Aspect
86275	3237	Acacia benthamii	2		1			SWAN COASTAL	PRI			15/09/1975		0			0			N											
86278	3237	Acacia benthamii	2		4			SWAN COASTAL	MRD	VER		5/06/2000	ESTMT	71			71			N			VegClas: Open B.menziesii woodland over shrubland	MOIST	FLAT	LIMESTN		SAND	YELLOW		
89659	11336	Adenanthos cygnorum subsp. chamaephyton	3		19			SWAN COASTAL	LGA	VER		14/05/1999	UNKNOWN	0			30			N					OD_SWALE			SAND	GREY		
118770	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1		2			SWAN COASTAL	CC	NPK		29/09/2017	ESTMT	###			0	PLANTS		Y	HEALTHY	EXCELENT	No sign of fire	DRY	FLAT	LIMESTN	GRVL_10	SAND	GREY	WLL_DRND	
120049	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1		5			SWAN COASTAL	RDL	OTH		14/09/2018	ACT_IND	37	15		0	PLANTS	940	Y	HEALTHY	VRY_GOOD	Closed to Open Heath of Baeckea sp. Limestone, Melaleuca systena, Banksia sessilis subsp. cygnorum, Calothamnus quadrifidus, Olearia axillaris, Hakea trifurcata, Spyridium globulosum, Acacia pulchella over Open Herbland of Tricoryne elatior, Dianella rev	DRY	SL_UP_ST	LIMESTN	GRVL_30	SAND	BROWN	WLL_DRND	
122549	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1		6			SWAN COASTAL	RDL	CFF	WAT	22/10/2021	ACT_IND	200			0	PLANTS	1835	Y	HEALTHY	VRY_GOOD	Occasional Eucalyptus gomphocephala or Eucalyptus marginata over Low Open Woodland of Banksia attenuata, B. prionotes over Shrubland of Banksia sessilis, Xanthorrhoea preissii, Macrozamia riedlei over Shrubland to Open Heath of Calothamnus quadrifidus, A	MOIST	SL_UP_GE			SAND	YELLOW	WLL_DRND	
84935	1596	Caladenia huegelii	T	CR	22			SWAN COASTAL	LGA	VER		14/10/2004		0			0			N			Xanthorrhoea preissii, Patersonia sp., Hibbertia sp., Stirlingia latifolia.	DRY	RI_DUNE			SAND	GREY		
84938	1596	Caladenia huegelii	T	CR	25			SWAN COASTAL	PRI			15/10/1997	ESTMT	0			0			N			Xanthorrhoea preissii, Patersonia sp., Hibbertia sp., Stirlingia latifolia.	DRY	FLAT			SAND	GREY		
84940	1596	Caladenia huegelii	T	CR	32		U	SWAN COASTAL	CC	CFF		29/09/2004		0			0			N			Sonchus. Banksia Woodland. Hibbertia, grass trees.		SLOPE			SAND	GREY		
84941	1596	Caladenia huegelii	T	CR	34		U	SWAN COASTAL	PRI			29/09/2004	ACT_IND	0			0			N			Cape tulip. Banksia, allocasuarina, Xanthorrhoea, Patersonia, Hibbertia, Stirlingia. Caladenia longicaudia.		OD_DRGLN			LOAM_SND	GREY	PERMINUN	
84942	1596	Caladenia huegelii	T	CR	35		U	SWAN COASTAL	CC	CFF		29/09/2004	ACT_IND	0			0			N			Xanthorrhoea preissii, Patersonia, Hibbertia, Stirlingia latifolia. Habitat degraded & unsuitable.	DRY	FLAT			SAND	GREY		
84948	1596	Caladenia huegelii	T	CR	52		U	SWAN COASTAL	LGA			18/10/2004		0			0			N			Pockets of Banksia Woodland.		SLOPE			SAND	GREY		
84963	1596	Caladenia huegelii	T	CR	71			SWAN COASTAL	SPC	PAR		4/10/2005	ACT_IND	1			1			N	HEALTHY		Vegetation changes character, with more Banksia illicifolia etc to the north of this area.	DRY							
110514	1596	Caladenia huegelii	T	CR	81			SWAN COASTAL	PRI			24/09/2014	ESTMT	1			0	PLANTS		Y	HEALTHY	VRY_GOOD		DRY	FLAT		GRVL_10	SAND	WHITE	WLL_DRND	
114949	1596	Caladenia huegelii	T	CR	85			SWAN COASTAL	SPC	UNKNOWN		4/10/2017	ACT_IND	1			0	PLANTS	0.1	Y	HEALTHY	EXCELENT	Low Woodland of Banksia menziesii, B. attenuata, Eucalyptus todtiana, Nuytsia floribunda over occasional Adenanthos cygnorum over Low Shrubland of Hibbertia hypericoides, H. subvaginata, Stirlingia latifolia, Daviesia triflora, Philotheca spicata, Calytr	DRY	SL_UP_GE			SAND	GREY	WLL_DRND	ESE
104572	45757	Calectasia elegans	2		1	A		SWAN COASTAL	SPC	GVT		3/09/2019	ACT_IND	0			0	PLANTS		N		VRY_GOOD	Low Open Woodland of Banksia attenuata, B.menziesii and Nuytsia floribunda over Low Open Shrubland of Petrophile linearis, Acacia pulchella, Jacksonia floribunda, Leucopogon polymorphus, Boronia ramosa subsp. anethifolia, B. purdieana subsp. purdieana, H	MOIST	SLOPE			SAND	GREY	WLL_DRND	
104573	45757	Calectasia elegans	2		1	B		SWAN COASTAL	CC	FOR		3/09/2019		0			0			N			Low Open Woodland of Banksia attenuata, B. menziesii and occ. Nuytsia floribunda over Low Open Shrubland of Petrophile linearis, Acacia pulchella, Jacksonia floribunda, Leucopogon polymorphus, Boronia ramosa subsp. anethifolia, B. purdieana subsp. purdie		SL_LO_GE			SAND	GREY	WLL_DRND	
122249	45757	Calectasia elegans	2		2	A		SWAN COASTAL	CC	FOR		18/09/2018	ACT_IND	5			0	PLANTS		Y	HEALTHY	EXCELENT	Low Woodland of Banksia menziesii, B. attenuata over Open Shrubland of Jacksonia floribunda over Open Low Heath of Stirlingia latifolia, Melaleuca trichophylla, Hibbertia sericosepala, H. subvaginata, Daviesia triflora, Beaufortia elegans, Bossiaea erioc	DRY	SLOPE			SAND	WHITE	WLL_DRND	

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122253	45757	Calectasia elegans	2		2	B		SWAN COASTAL	CC	FOR		24/09/2019	ACT_IND	0			1	PLANTS	0.5	Y	POOR	EXCELENT	Low Woodland of Banksia attenuata and B.menziesii over Tall Shrubland of Adenanthos cygnorum and Regelia inops over Open Shrubland of Eremaea pauciflora, Petrophile linearis, Astroloma xerophyllum, Stirlingia latifolia, Gompholobium tomentosum, Hibbertia	DRY	SLOPE			SAND	GRY_BLCK		
122251	45757	Calectasia elegans	2		4			SWAN COASTAL	CC	FOR		15/10/2021	ACT_IND	10			0	PLANTS	1672	Y	MODERATE	VRY_GOOD	Low Woodland of Banksia attenuata, B.menzeisii, Eucalyptus todtiana and Nuytsia floribunda over Tall Shrubland of Adenanthos cygnorum over Shrubland of Eremaea pauciflora, Beaufortia elegans, Regelia inops, Jacksonia floribunda, Crowinia kingiana, Verticordia	DRY	SLOPE			SAND	GREY	WLL_DRND	
84454	759	Carex tereticaulis	3		4			SWAN COASTAL	UNKNOWN			17/05/1999		0			0			N			Watercourse, wet. Organic litter. Grey Bassendean sand. Dense forest.					SAND	GREY		
97141	1425	Conostylis bracteata	3		1	A		SWAN COASTAL	LGA			29/03/1986		0			0			N			DomSp:Xanthorrhoea sp.		RI_DUNE						
97142	1425	Conostylis bracteata	3		1	B	X	SWAN COASTAL	PRI			16/08/1986		0			0			N					RI_DUNE						E
97143	1425	Conostylis bracteata	3		1	C		SWAN COASTAL	LGA	PAR		16/08/1986		0			0			N			DomSp: Banksia attenuata, Melaleuca acerosa		RI_DUNE	LATERITE					
84822	1425	Conostylis bracteata	3		4			SWAN COASTAL	NON	UCL		6/11/1997		0			0			N			DomSp: Acacia spp , Ehrharta calycina.		CD_LKBED			SAND	GREY		
93193	16245	Cyathochaeta teretifolia	3		1			SWAN COASTAL	CC	CFF		3/11/1995		0			0			N			Galium, Daucus, Trachymene.		SLOPE			LOAM	BROWN		N
93212	16245	Cyathochaeta teretifolia	3		3			SWAN COASTAL	LGA	REC		27/10/1994		0			0			N											
93214	16245	Cyathochaeta teretifolia	3		5			SWAN COASTAL	PRI			3/08/1995		0			0			N			VegClass:Low Open Forest		CD_CREEK					SEASINUN	
93194	16245	Cyathochaeta teretifolia	3		10			SWAN COASTAL	LGA	VER		13/11/2007	ACT_IND	1			1			N			Open forest over tall open scrub over sedgeland. Meebolidina sp. Ground wet all year. 90% litter coverage.		FLAT			LOAM	BROWN	PERMINUN	
93197	16245	Cyathochaeta teretifolia	3		13			SWAN COASTAL	CC	CFF		3/11/1995		0			0			N					FL_PALU	LIMESTN		CLA_LOAM	RED_BRWN	SEASINUN	N
93198	16245	Cyathochaeta teretifolia	3		14			SWAN COASTAL	LGA	REC		8/12/1995		0			0			N					CD_SMPLD			CLAY_SND	BLACK		
93205	16245	Cyathochaeta teretifolia	3		20			SWAN COASTAL	PRI			6/09/1999		0			0			N					FLAT						
93206	16245	Cyathochaeta teretifolia	3		21			SWAN COASTAL	PRI			21/08/1999		0			0			N			DomSp:Astartea aff. fascicularis, Lepidosperma longitudinale, Baumea rubiginosa, Acacia saligna...	MOIST	CD_SMPLD						
93208	16245	Cyathochaeta teretifolia	3		23			SWAN COASTAL	PRI			28/09/1999		0			0			N					SLOPE						
93209	16245	Cyathochaeta teretifolia	3		24			SWAN COASTAL	CC	FOR		2/12/2002		0			0			N											
96623	34773	Darwinia foetida	T	EN	4			SWAN COASTAL	PRI			9/09/2007	ESTMT	25			25			N			Palusplain multiple use wetland.					SAND	GRY_BLCK		
90830	3115	Drosera occidentalis	4		2			SWAN COASTAL	PRI			6/01/1986	ESTMT	100			100			N											
90837	3115	Drosera occidentalis	4		3			SWAN COASTAL	PRI			6/01/1986		0			0			N											
93992	17605	Eleocharis keigheryi	T	VU	1			SWAN COASTAL	CC	CFA		9/11/2007	ESTMT	###			###			Y			Scrub over very open tall sedges over open herbs.	INUNDATE				CLAY	BROWN		
94007	17605	Eleocharis keigheryi	T	VU	7			SWAN COASTAL	COM	AIR		17/09/2007	ESTMT	0			0			Y			Open tall sedges.	DRY	FLAT			CLA_LOAM	BROWN		
101587	13091	Eucalyptus argutifolia	T	VU	7	A		SWAN COASTAL	CC	FOR		6/12/2013	ACT_CLMP	2	0	0	0	CLUMPS	11	Y	HEALTHY	EXCELENT	QUARRY Despite being surrounded by a limestone mine this elevated and isolated remnant of vegetation on the top of the ridge is in very good to excellent condition.	DRY	OUTCROP	LIMESTN	GRVL_3D	SAND	BROWN		
101588	13091	Eucalyptus argutifolia	T	VU	7	B		SWAN COASTAL	CC	FOR	MIN	6/12/2013	ACT_CLMP	41	3	0	0	CLUMPS	446	Y	HEALTHY		Heath of Banksia sessilis var. cygnorum, Acacia lasiocarpa, Melaleuca huegelii, Melaleuca systena, Xanthorrhoea preissii, Acacia ?stenoptera, Hemiandra pungens, Trymalium ledifolium var. ledifolium with occasional Hakea prostrata, Cassytha ?racemosa, Tem	MOIST	SLOPE	LIMESTN		SAND	BROWN		ESE

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90756	13091	Eucalyptus argutifolia	T	VU	10			SWAN COASTAL	WAT	WAT		15/05/2018	ACT_CLMP	17			0	CLUMPS	5800	N	HEALTHY	VRY_GOOD	Regenerating community: Very Open Shrub Mallee of Eucalyptus argutifolia over Tall Open Scrub of Banksia sessilis var. cygnorum, Xanthorrhoea preissii, Melaleuca systena, M. sp. Wanneroo (T), M. huegelii, Hakea prostrata, Acacia saligna over Open Low Hea	MOIST	SLOPE	LIMESTN		SAND	BROWN	WLL_DRND	E
90759	13091	Eucalyptus argutifolia	T	VU	13			SWAN COASTAL	LGA	REC		5/12/2017	ACT_CLMP	8			0	PLANTS	797	Y	HEALTHY	GOOD	HABITAT CONDITION: Good-degraded. Two bushland remnants still exist, but the degraded areas are reducing. 1. Low Open Woodland of Eucalyptus argutifolia over Tall Shrubland of Acacia rostellifera and Spyridium globulosum. 2. The second remnant is domi	MOIST	SL_MI_GE	LIMESTN		SAND	GREY	WLL_DRND	
101581	13091	Eucalyptus argutifolia	T	VU	14	A		SWAN COASTAL	NON	UCL		13/12/2013	ACT_IND	32	0	0	0	PLANTS	339	N	MODERATE	EXCELENT		MOIST	SL_UP_ST	LIMESTN	GRVL_1D	SAND	BROWN		NE
101582	13091	Eucalyptus argutifolia	T	VU	14	B		SWAN COASTAL	NON	UCL		13/12/2013	ACT_IND	6			0	PLANTS	10	N	HEALTHY	EXCELENT		MOIST	RIDGE	LIMESTN		SAND	BROWN		
90760	13091	Eucalyptus argutifolia	T	VU	15			SWAN COASTAL	LGA	REC		6/04/2021		0			20			N	HEALTHY	VRY_GOOD	A small amount of rubbish within population. Shrub Malle of Eucalyptus argutifolia over Shrubland Melaleuca huegelii, Melaleuca systena, Acacia rostellifera, Spyridium globulosum, Hakea trifurcata, over Hardenbergia comptoniana, Opercularia vaginata,	DRY	SL_UP_GE	LIMESTN		SAND	WHITE		
101584	13091	Eucalyptus argutifolia	T	VU	17			SWAN COASTAL	PRI			3/08/2006	ACT_IND	1			0			N	MODERATE			MOIST	RIDGE	LIMESTN		SAND	BROWN		
120029	13091	Eucalyptus argutifolia	T	VU	20			SWAN COASTAL	WAT	OTH		7/11/2017	ESTMT	6			0	PLANTS			HEALTHY	EXCELENT		DRY	SLOPE	LIMESTN	GRVL_1D	SAND	GREY	WLL_DRND	
94987	20162	Fabronia hampeana	2		2			SWAN COASTAL	PRI			14/09/1994		0			0			N			Banksia, Macrozamia, Hibbertia, Xanthorrhoea, Dyandra, grasses, weeds.								
104266	20162	Fabronia hampeana	2		4	A		SWAN COASTAL	PRI			12/01/2009		0			0			N			Dom sp: Xanthorrhoea preissii, Mesomelaena pseudostygia, Banksia sessilis, Spyridium globulosum					SAND			
104267	20162	Fabronia hampeana	2		4	B		SWAN COASTAL	PRI			12/01/2009		0			0			N			Dom sp: Macrozamia sp. & Banksia sp. Woodland.					SAND	YELLOW		
104268	20162	Fabronia hampeana	2		4	C		SWAN COASTAL	PRI			12/01/2009		0			0			N			Banksia low open woodland. Dom sp: Acacia cyclops, Hibbertai hypericoides, Desmocladus flexuosus			LIMESTN		SAND	YELLOW		
104269	20162	Fabronia hampeana	2		4	D		SWAN COASTAL	PRI			12/01/2009		0			0			N			Dom sp: Desmocladus flexuosus, Xanthorrhoea preissii, Hibbertia hypericoides & Banksia nivea.								
92200	14408	Grevillea curviloba subsp. curviloba	T	CR	2			SWAN COASTAL	CC	CFF		12/01/2017		0			0			N		GOOD	The western side of the Reserve was burnt in 1989 and eastern side was burnt in 1973.	MOIST	FLAT		GRVL_1D	SND_LOAM			
92201	14408	Grevillea curviloba subsp. curviloba	T	CR	3			SWAN COASTAL	CC	NRE		26/05/2015		0			0			N		DEGRADED	The vegetation and current regen appear to have been burnt more recently than 2013, and therefore it is likely that there was another burn post 2013. Very few native plants regenerating at this time. One adult Acacia saligna present plus a number of A	DRY	FLAT	NONE	GRVL_1D	SND_LOAM	GREY		
92202	14408	Grevillea curviloba subsp. curviloba	T	CR	4	A		SWAN COASTAL	CC	CFF		17/08/2012	ACT_CLMP	1			0	CLUMPS	6	Y		GOOD			FLAT						
92204	14408	Grevillea curviloba subsp. curviloba	T	CR	4	B		SWAN COASTAL	CC	CFF		26/10/2016	ACT_CLMP	29	3		0	CLUMPS		Y	MODERATE	DEGRADED	Habitat 1 (main group of plants) - Occasional Corymbia calophylla over Open Shrubland of Grevillea curviloba subsp. curviloba over Closed Grassland of *Ehrharta longiflora, *Bromus diandrus, *E calycina and *Briza maxima		OD_ORGLN			SAND	GREY		
112129	14408	Grevillea curviloba subsp. curviloba	T	CR	4	C		SWAN COASTAL	PRI			26/09/2016	ACT_CLMP	69	11		0	CLUMPS		Y	HEALTHY	DEGRADED	Habitat 2 (Clump of 4 plants) Drainage line. Clearing for development adjacent. Otherwise degraded.	MOIST	FLAT			SAND	GREY	WLL_DRND	
102719	14408	Grevillea curviloba subsp. curviloba	T	CR	5	A		SWAN COASTAL	RAI	RRE		2/12/2015	ACT_IND	135			0	PLANTS		N	HEALTHY	DEGRADED	Degraded grassland (Eragrostis curvula, Cynodon dactylon, Avena barbata)	DRY	FLAT			SND_LOAM	GREY	WLL_DRND	
102720	14408	Grevillea curviloba subsp. curviloba	T	CR	5	B		SWAN COASTAL	RAI	RRE		2/12/2015	ACT_IND	198			0	PLANTS		N	HEALTHY	DEGRADED	Degraded grassland, Eragrostis curvula, with patches of Watsonia meriana	DRY	FLAT			SND_LOAM	GREY	SEASINUN	

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102721	14408	Grevillea curviloba subsp. curviloba	T	CR	5	C		SWAN COASTAL	LGA	VER		3/09/2004	ACT_IND	2		5	7			Y			Acacia sp., weeds-grasses.	DRY	FLAT			LOAM	BROWN		
102722	14408	Grevillea curviloba subsp. curviloba	T	CR	5	D		SWAN COASTAL	RAI	RRE		2/12/2015	ACT_IND	0			0			N		DEGRADED	Degraded grassland - Eragrostis curvula, Cenchrus clandestinus	DRY	FLAT		GRVL_10	SND_LOAM	GREY	WLL_DRND	
109315	14408	Grevillea curviloba subsp. curviloba	T	CR	5	E		SWAN COASTAL	RAI	RRE		30/08/2012	ESTMT	44			0	CLUMPS	1800	Y	HEALTHY	DEGRADED	Tall open scrub (Acacia saligna, Jacksonia sp.), over open heath (Grevillea curviloba ssp curviloba with occasional Xanthorrea preissii). Weeds: Eragrostis curvula, Watsonia sp, various Poa spp On top of drain embankment - Locally modified environment.		FLAT		GRVL_10	SAND	GREY	WLL_DRND	
109316	14408	Grevillea curviloba subsp. curviloba	T	CR	5	F		SWAN COASTAL	RAI	RRE		3/12/2015	ACT_IND	165			0	PLANTS		N	HEALTHY	DEGRADED	Degraded grassland (Eragrostis curvula, Ehrharta calycina, Cenchrus clandestinus)	DRY	FLAT		GRVL_10	SND_LOAM	GREY	WLL_DRND	
109318	14408	Grevillea curviloba subsp. curviloba	T	CR	5	G		SWAN COASTAL	LGA	VER		1/08/2012	ESTMT	10			0	CLUMPS	20	Y	HEALTHY	DEGRADED	Tall open scrub (Acacia saligna) with occasional Banksia littoralis, Hakea varia, Banksia sessilis over open heath (Grevillea curviloba subsp. curviloba, with occasional Xanothorrhoea preissii). Occasional Sterlingia latifolia and Dianella revoluta. W		FLAT		GRVL_10	SND_LOAM	BROWN		
110231	14408	Grevillea curviloba subsp. curviloba	T	CR	5	H		SWAN COASTAL	RAI	RRE		22/10/2015	ESTMT	0			15	PLANTS	350	Y	POOR	DEGRADED	Occasional Acacia saligna over Shrubland of Grevillea curviloba subsp. incurva and Xanthorrhoea preissii over Closed Grassland of mixed weed species dominated by *Agrostis curvula and *Ehrharta calycina.		FLAT			LOAM_SND	GREY	WLL_DRND	
110229	14408	Grevillea curviloba subsp. curviloba	T	CR	5	I		SWAN COASTAL	LGA	VER		22/10/2015	ESTMT	0			10	PLANTS	150	Y	POOR	DEGRADED	Occasional Acacia saligna over Shrubland of Grevillea curviloba subsp. incurva and Xanthorrhoea preissii over Closed Grassland of mixed weed species dominated by *Agrostis curvula and *Ehrharta calycina.		FLAT			LOAM_SND	GREY	WLL_DRND	
102716	14408	Grevillea curviloba subsp. curviloba	T	CR	10	A		SWAN COASTAL	CC	CFF	NRE	16/01/2018		0	1		0			1	N	MODERATE	GOOD	Habitat description has changed to reflect the vegetation at the current plant locations. The historic population extent was greater and therefore the vegetation description reflected the broader area.	MOIST				SAND	BROWN		
102717	14408	Grevillea curviloba subsp. curviloba	T	CR	10	B		SWAN COASTAL	PRI			16/01/2018		0			0			N		COM_DEGR	Garden landscaping and lawn are now covering half the site where the plants occurred. There is an overstorey of Eucalyptus rudis and Corymbia calophylla over thick regrowth of tall Acacia saligna over Pteridium esculentum with occasional Xanthorrhoea p	MOIST	FL_PLAIN			SAND	BROWN		
121089	14408	Grevillea curviloba subsp. curviloba	T	CR	21			SWAN COASTAL	PRI	OTH		16/09/2019	ACT_CLMP	2			0	CLUMPS		N		GOOD	Monoculture of Grevillea curviloba subsp. curviloba					SAND	GREY		
84894	1469	Haemodorum loratum	3		2			SWAN COASTAL	UNKNOWN			13/11/1981		0			0			N			Wandoo woodland.			LATERITE		LOAM			
89726	49637	Hibbertia leptotheca	3		3			SWAN COASTAL	LGA			25/10/1982		0			0			N											
100789	49637	Hibbertia leptotheca	3		4	A		SWAN COASTAL	LGA	REC		21/09/1990		0			0			Y					SL_CLIFF	LIMESTN		SAND	GREY		
100790	49637	Hibbertia leptotheca	3		4	B		SWAN COASTAL	LGA	REC		21/09/1990		0			0			N					SL_CLIFF	LIMESTN		SAND	GREY		
88387	6233	Hydrocotyle lemnoides	4		1			SWAN COASTAL	CC	CFA		2/11/1990	ESTMT	###			###			Y			Pools of water.		OD_SWAMP			CLAY	BROWN	PERMINUN	
86874	4027	Jacksonia sericea	4		1			SWAN COASTAL	LGA	PAR	REC	15/11/1979		0			0			N											
86878	4027	Jacksonia sericea	4		2			SWAN COASTAL	LGA	CFF	REC	15/06/1979		0			0			N											
98915	4027	Jacksonia sericea	4		4	A		SWAN COASTAL	PRI			27/12/1989		0			0			N				DRY	RI_DUNE	LIMESTN		SAND	YELLOW		
98916	4027	Jacksonia sericea	4		4	B		SWAN COASTAL	NON	UCL		27/12/1989		0			0			N				DRY	RI_DUNE	LIMESTN		SAND	YELLOW		
98917	4027	Jacksonia sericea	4		4	C		SWAN COASTAL	PRI			27/12/1989		0			0			N				DRY	RI_DUNE	LIMESTN		SAND	YELLOW		
98919	4027	Jacksonia sericea	4		5	A		SWAN COASTAL	RAI	RRE		27/12/1989		0			0			N											

PopId	NameId	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Method	MatCount	JuvCount	SeedCount	LiveTotal	CountType	AreaOccupy	InFlower	PopCondit	HabCondit	HabNotes	SoilCondit	Landform	RockType	Gravel	SoilType	SoilColor	Drainage	Aspect
98920	4027	Jacksonia sericea	4		5	B		SWAN COASTAL	MRD	VER		27/12/1989		0			0			N											
98921	4027	Jacksonia sericea	4		5	C		SWAN COASTAL	MRD	VER		27/12/1989		0			0			N											
98922	4027	Jacksonia sericea	4		5	D		SWAN COASTAL	MRD	VER		27/12/1989		0			0			N											
98923	4027	Jacksonia sericea	4		5	E		SWAN COASTAL	RAI	RRE		27/12/1989		0			0			N											
98924	4027	Jacksonia sericea	4		5	F		SWAN COASTAL	PRI			27/12/1989		0			0			N											
98926	4027	Jacksonia sericea	4		7	A		SWAN COASTAL	LGA	CON		7/11/1990	ESTMT	750			750			N						LIMESTN			BROWN		
98927	4027	Jacksonia sericea	4		7	B		SWAN COASTAL	LGA	CON		7/11/1990	ESTMT	250			250			N						LIMESTN			BROWN		
98929	4027	Jacksonia sericea	4		9	A		SWAN COASTAL	LGA	VER		26/03/1990	ESTMT	280			280			N					SLOPE	LIMESTN			BROWN		
98930	4027	Jacksonia sericea	4		9	B		SWAN COASTAL	PRI			15/05/1990	ESTMT	###			###			N					SLOPE	LIMESTN		SAND	BROWN		
86875	4027	Jacksonia sericea	4		10			SWAN COASTAL	LGA	CON		17/10/1990	ESTMT	###			###			Y			Eucalyptus low woodland over Banksia attenuata low woodland A.	DRY				SAND	BROWN		
98912	4027	Jacksonia sericea	4		12	A		SWAN COASTAL	LGA	REC		4/04/1990	ESTMT	100			100			N					SLOPE			SAND	BROWN		
98913	4027	Jacksonia sericea	4		12	B		SWAN COASTAL	PRI			4/04/1990		0			0			N					SLOPE			SAND	BROWN		
86876	4027	Jacksonia sericea	4		13			SWAN COASTAL	LGA		REC	10/12/1990		0			0			N											
95536	25819	Marianthus parilus	T	EN	2			SWAN COASTAL	RDL	REC	CMN	22/03/2018	ACT_IND	0			7	PLANTS		N	POOR	EXCELENT	30%-70% exposed limestone. Open Low Heath of Melaleuca huegelii, M. cardiophylla, Tetragona decumbens, Scaevola crassifolia, Acanthocarpus preissii, Frankenia pauciflora, Olax benthamiana, Rhagodia baccata, Olearia axillaris. Habitat is excellent con	MOIST	SL_CLIFF	LIMESTN		SAND	GREY	WLL_DRND	SW
107424	25819	Marianthus parilus	T	EN	3			SWAN COASTAL	LGA	REC		18/09/2013	ACT_IND	137	8		0	PLANTS	1720	Y	HEALTHY		1) Acacia xanthina, Templetonia retusa Open Heath over Spyridium globulosum, Grevillea preissii, Allocasuarina lehmanniana, Melaleuca cardiophylla, Phyllanthus calycinus, Hibbertia hypericoides, Scaevola crassifolia, Lomandra maritima Low Shrubland. *Ehr	MOIST	SL_UP_GE	LIMESTN	GRVL_10	SAND	GREY	WLL_DRND	
96547	33638	Meionectes tenuifolia	3		4			SWAN COASTAL	PRI			3/11/1995		0			0			N			Hyalosperma humifusus, Hyalosperma cotula, Lepidosperma longitudinale.		FLAT	LIMESTN		CLAY	BROWN		
110769	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	1			SWAN COASTAL	LGA	GVT		8/07/2014	PART_CNT	50			0	PLANTS	5364		HEALTHY	EXCELENT	Almost on the top of the ridge, slightly SW - W aspect.	MOIST	RIDGE	LIMESTN		FSA_LOAM		WLL_DRND	SW
110770	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	2			SWAN COASTAL	PRI	UNKNOWN		7/04/2008	ESTMT	100			0	PLANTS	4022	Y		EXCELENT			OU_SLOPE	LIMESTN		SAND	BLACK		
110789	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	3	A		SWAN COASTAL	PRI			10/05/2017	ESTMT	15	1		0	PLANTS	100	N	HEALTHY	EXCELENT	Most of the plants occurred in: Tall open scrub of Melaleuca huegelii, Melaleuca sp Wanneroo with occasional Eucalyptus petrensis and Melaleuca systena, over open low heath of Acacia alata var. tetrantha, Thomasia triphylla over open sedgeland/herbland	DRY	OU_SLOPE	LIMESTN		SAND	GREY	WLL_DRND	
111492	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	3	B		SWAN COASTAL	RDL	MIN		27/11/2013	ACT_IND	1			0	PLANTS	4	N		EXCELENT	NOTE - Fire information was taken from Corporate Mapping Data. Not confirmed in the field			LIMESTN					
111509	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	3	C		SWAN COASTAL	RDL	MIN		30/09/2009	PART_CNT	41			0		2047	N		EXCELENT				LIMESTN					
120789	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	3	D		SWAN COASTAL	WAT	GVT		15/05/2018	EXT_GRQD	0			###	PLANTS	2500	N	HEALTHY	EXCELENT	Occasional Eucalyptus argutifolia and Eucalyptus petrensis to 1.5m over Closed Heath of Melaleuca sp. Wanneroo, Melaleuca huegelii, Grevillea preissii, Templetonia retusa, Scaevola crassifolia, Acacia lasiocarpa, Acacia alata var. tetrantha, Operocularia	MOIST	RIDGE	LIMESTN		SAND	GREY	WLL_DRND	
110790	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	4	A		SWAN COASTAL	CC	FOR		26/11/2013	PART_CNT	46			0	PLANTS	####	N		EXCELENT	NOTE - Fire information was taken from Corporate Mapping Data. Not confirmed in the field			LIMESTN					

PopId	NameId	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Method	MatCount	JuvCount	SeedCount	LiveTotal	CountType	AreaOccupy	InFlower	PopCondit	HabCondit	HabNotes	SoilCondit	Landform	RockType	Gravel	SoilType	SoilColor	Drainage	Aspect
111490	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	4	B		SWAN COASTAL	CC	FOR		6/12/2013	ESTMT	20		0	PLANTS	475	Y		EXCELENT		DRY	RIDGE	LIMESTN		SAND		WLL_DRND	
120790	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	4	C		SWAN COASTAL	CC	FOR		17/01/2019	PART_CNT	90		0	PLANTS	8900	Y	HEALTHY		Tall Open Scrub of Melaleuca systena, M. sp. Wanneroo, Banksia sessilis ssp. cygnorum, M. huegelii over Open Heath of Grevillea preissii, Hibbertia hypericoides, Conostylis candicans, Cryptandra mutila, Acacia pulchella, Desmocladus flexuosa.	DRY	SL_MI_ST	LIMESTN		SAND	GREY	WLL_DRND	NE
103688	17543	Sarcozona bicarinata	3		1	A		SWAN COASTAL	LGA	REC		4/08/1992		0		0			N			White sand over yellow sand.					SAND	WHITE		
103689	17543	Sarcozona bicarinata	3		1	B		SWAN COASTAL	LGA	REC		4/08/1992	ESTMT	0		25			Y			White sand over yellow sand.					SAND	WHITE		
84517	980	Schoenus capillifolius	3		3			SWAN COASTAL	CC	CFF		2/11/1990	ESTMT	0		100			Y			Growing submerged or on edges of Winter Wet Claypan.		OD_SWAMP			CLAY	BROWN	SEASINUN	
89291	7756	Stylidium longitubum	4		1			SWAN COASTAL	AGR	GVT		12/11/1989		0		0			Y								SND_CLAY			
89302	7756	Stylidium longitubum	4		2			SWAN COASTAL	CC	CFA		28/12/1971		0		0			N				MOIST	OD_SWAMP						
89307	7756	Stylidium longitubum	4		3			SWAN COASTAL	CC	NRE		3/10/1988		0		0			N			Winter wet claypan.		OD_SWAMP			CLAY		SEASINUN	
89308	7756	Stylidium longitubum	4		4			SWAN COASTAL	UNKNOWN			30/10/1992		0		0			N											
89298	7756	Stylidium longitubum	4		16			SWAN COASTAL	SPC			10/11/1994		0		0			N					FL_PALU			CLA_LOAM	BROWN	SEASINUN	
89304	7756	Stylidium longitubum	4		21			SWAN COASTAL	SPC			8/12/2005		0		0			N			DomSp: Deyeuxia quadriseta, Drosera gigantea subsp. gigantea		OD_SWAMP						
93721	44444	Tripterococcus sp. Brachylobus (A.S. George 14234)	4		17			SWAN COASTAL	PRI			10/11/1994		0		0			N			VegClass:Open Herbs		FL_PALU			CLA_LOAM	BLACK	SEASINUN	
96349	32658	Trithuria occidentalis	T	CR	1			SWAN COASTAL	CC	CFA		23/10/2018	EXT_GRQD	0		421	PLANTS	47	N	HEALTHY	EXCELENT	Open Heath of Melaleuca laterita and M. viminea over Herbland of Rhodanthe pyrethrum, Villarsia capitata, Stylidium sp. Centrolepis sp. Aphelia drummondii, Trithuria submersa and T. bibracteata. Note that soil was wet, and inundated in places. There	INUNDATE	FL_PALU			SND_CLAY	GREY	SEASINUN	

APPENDIX 2

Atlas of Living Australia Report

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/5291343e-fdeb-4a65-8ba5-928f5b96acf5	Gymnorhina tibicen	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Artamidae	Australian Magpie
https://biodiversity.org.au/afd/taxa/8117f68b-5460-4626-8400-e171464e08ad	Corvus coronoides	Vigors & Horsfield, 1827	species	Animalia	Chordata	Aves	Passeriformes	Corvidae	Australian Raven
https://biodiversity.org.au/afd/taxa/8204979f-5302-41ea-943f-01d3c420f7bb	Anthochaera (Anthochaera) carunculata	(Shaw, 1790)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Red Wattlebird
https://biodiversity.org.au/afd/taxa/9b4ad548-8bb3-486a-ab0a-905506c463ea	Eolophus roseicapilla	(Vieillot, 1817)	species	Animalia	Chordata	Aves	Psittaciformes	Cacatuidae	Galah
https://biodiversity.org.au/afd/taxa/1c4dce12-16f6-49ab-b578-0673551214fd	Rhipidura (Sauloprocta) leucophrys	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Rhipiduridae	Willie Wagtail
https://biodiversity.org.au/afd/taxa/81be58f5-caf7-4f3d-b1eb-d4f83eb0af5a	Anas (Anas) superciliosa	Gmelin, 1789	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Pārera
https://biodiversity.org.au/afd/taxa/f5f5ddd8-ae6a-431b-9e08-3e992b12fa64	Threskiornis moluccus	(Cuvier, 1829)	species	Animalia	Chordata	Aves	Ciconiiformes	Threskiornithidae	Black-necked Ibis
https://biodiversity.org.au/afd/taxa/bb53b420-0a1f-4a49-9d1e-2a6154c685a8	Fulica atra	Linnaeus, 1758	species	Animalia	Chordata	Aves	Gruiformes	Rallidae	Eurasian Coot
https://biodiversity.org.au/afd/taxa/f83c15ca-4ff5-4c37-be49-ce49a431f0ca	Cygnus (Chenopis) atratus	(Latham, 1790)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Black Swan
https://biodiversity.org.au/afd/taxa/681ea214-3788-4cc6-8b97-0b325d6bba6b	Cracticus torquatus	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Artamidae	Grey Butcherbird
https://biodiversity.org.au/afd/taxa/ce17b284-d607-496a-992f-f3129bfd3997	Grallina cyanoleuca	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Monarchidae	Magpie-lark
https://biodiversity.org.au/afd/taxa/eedce521-aaa8-43fa-bbd7-0074d0bcbf4b	Biziura lobata	(Shaw, 1796)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Musk Duck
https://biodiversity.org.au/afd/taxa/fe0d4e5e-6bd5-4e46-a77c-00e8cec73410	Zosterops lateralis	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Zosteropidae	Silvereye
https://biodiversity.org.au/afd/taxa/5fed5ecf-2199-4f64-a9f7-90b39f88a90a	Barnardius zonarius	(Shaw, 1805)	species	Animalia	Chordata	Aves	Psittaciformes	Psittacidae	Australian Ringneck
https://biodiversity.org.au/afd/taxa/34b31e86-7ade-4cba-960f-82a6ae586206	Cacatua (Licmetis) sanguinea	Gould, 1843	species	Animalia	Chordata	Aves	Psittaciformes	Cacatuidae	Little Corella
https://biodiversity.org.au/afd/taxa/0b7c528a-4104-4a96-853e-05a37c327067	Microcarbo melanoleucos	(Vieillot, 1817)	species	Animalia	Chordata	Aves	Pelecaniformes	Phalacrocoracidae	Little Cormorant
https://biodiversity.org.au/afd/taxa/97a59c84-af21-4cdc-bac7-a97c5201db42	Rhipidura (Rhipidura) albiscapa	Gould, 1840	species	Animalia	Chordata	Aves	Passeriformes	Rhipiduridae	Grey Fantail
https://biodiversity.org.au/afd/taxa/efaa935b-e248-456a-b85e-b048b465b676	Anas (Nettion) gracilis	Buller, 1869	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Oceanic Teal
https://biodiversity.org.au/afd/taxa/8931bcfb-95ea-44b1-96c9-c0036191e15c	Tadorna (Casarca) tadornoides	(Jardine & Selby, 1828)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Chestnut Shelduck
https://biodiversity.org.au/afd/taxa/3dbe8a1f-e562-42ba-a165-565c0704f8f2	Porphyrio (Porphyrio) porphyrio	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Gruiformes	Rallidae	Purple Gallinule
https://biodiversity.org.au/afd/taxa/1fc76c4d-4830-4129-9b86-1c7e944c3c50	Dacelo (Dacelo) novaeguineae	(Hermann, 1783)	species	Animalia	Chordata	Aves	Coraciiformes	Alcedinidae	Kookaburra
https://biodiversity.org.au/afd/taxa/c96b19fd-2a54-4361-a5cf-baecf741310e	Phalacrocorax (Phalacrocorax) sulcirostris	(Brandt, 1837)	species	Animalia	Chordata	Aves	Pelecaniformes	Phalacrocoracidae	Little Black Cormorant
https://biodiversity.org.au/afd/taxa/8fd1977b-9edf-4ddf-b6cf-24a09db4d18c	Egretta novaehollandiae	(Latham, 1790)	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	Matuka
https://biodiversity.org.au/afd/taxa/6ccdb357-d666-4097-b0f6-88bb1a392112	Gavicalis virescens	(Vieillot, 1817)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Singing Honeyeater
https://biodiversity.org.au/afd/taxa/4e118c73-06a7-4131-bd67-5da5d2d61fd7	Hirundo (Hirundo) neoxena	Gould, 1843	species	Animalia	Chordata	Aves	Passeriformes	Hirundinidae	Welcome Swallow
https://biodiversity.org.au/afd/taxa/31113d80-ed4f-4bb0-9a65-48080e4c6dd1	Haliastur sphenurus	(Vieillot, 1818)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Whistling Eagle-hawk
https://biodiversity.org.au/afd/taxa/75e90438-cf36-403e-9223-a7d4737b1fd1	Gerygone fusca	(Gould, 1838)	species	Animalia	Chordata	Aves	Passeriformes	Acanthizidae	Fuscous Warbler
https://biodiversity.org.au/afd/taxa/e2070aa5-7ab4-41a8-9b41-b3f0c2e26390	Chroicocephalus novaehollandiae	(Stephens, 1826)	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Silver Gull
https://biodiversity.org.au/afd/taxa/ada6105e-c2de-4b93-9687-8e64d10863a7	Lichmera (Lichmera) indistincta	(Vigors & Horsfield, 1827)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Brown Honeyeater
https://biodiversity.org.au/afd/taxa/43abe3ea-7ccc-41cc-920f-d9cfa107207e	Pelecanus conspicillatus	Temminck, 1824	species	Animalia	Chordata	Aves	Pelecaniformes	Pelecanidae	Australian Pelican
https://biodiversity.org.au/afd/taxa/cb748125-0c06-4649-8ed8-e379e81e53c1	Tachybaptus novaehollandiae	(Stephens, 1826)	species	Animalia	Chordata	Aves	Podicipediformes	Podicipedidae	Australian Little Grebe
https://biodiversity.org.au/afd/taxa/bf8abc11-ebe1-4f1a-9950-805e5bfcf90a	Columba (Columba) livia	Gmelin, 1789	species	Animalia	Chordata	Aves	Columbiformes	Columbidae	Rock Pigeon
https://biodiversity.org.au/afd/taxa/702a989c-9e87-40d5-9694-e6b94dc6521e	Malurus (Malurus) splendens	(Quoy & Gaimard, 1830)	species	Animalia	Chordata	Aves	Passeriformes	Maluridae	Splendid Fairy-wren
https://biodiversity.org.au/afd/taxa/7954bd26-ddb3-4e7e-823c-4a692b7bde74	Chenonetta jubata	(Latham, 1801)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Australian Wood Duck|maned Goose
https://biodiversity.org.au/afd/taxa/947595db-244f-4160-b30d-0473b37d857b	Poliocephalus poliocephalus	(Jardine & Selby, 1827)	species	Animalia	Chordata	Aves	Podicipediformes	Podicipedidae	Hoary-headed Dabchick
https://biodiversity.org.au/afd/taxa/c319dbaf-a363-4853-b333-75f14c47fc82	Threskiornis spinicollis	(Jameson, 1835)	species	Animalia	Chordata	Aves	Ciconiiformes	Threskiornithidae	Letter Bird
NZOR-6-117936	Streptopelia chinensis	Scopoli	species	Animalia	Chordata	Aves	Columbiformes	Columbidae	Spotted Dove
https://biodiversity.org.au/afd/taxa/c568921e-f800-4a6e-b88c-6d409def1e20	Circus approximans	Peale, 1848	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Australasian Harrier
https://biodiversity.org.au/afd/taxa/1268648b-451b-4cb1-b931-ef54dcab9ba0	Cacatua (Licmetis) tenuirostris	(Kuhl, 1820)	species	Animalia	Chordata	Aves	Psittaciformes	Cacatuidae	Long-billed Corella
https://biodiversity.org.au/afd/taxa/c517dae5-6bf7-48e8-8501-53e8b87e89a4	Trichoglossus haematodus	(Linnaeus, 1771)	species	Animalia	Chordata	Aves	Psittaciformes	Psittacidae	Rainbow Lorikeet
https://biodiversity.org.au/afd/taxa/ae8ff359-0981-4618-86a8-e641fb63b7adc	Himantopus himantopus	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Charadriiformes	Recurvirostridae	Pied Stilt
https://biodiversity.org.au/afd/taxa/615bdd63-9e8b-4f8d-9637-489c2a80c281	Aythya (Nyroca) australis	(Eyton, 1838)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Brownhead
https://biodiversity.org.au/afd/taxa/e3103245-2da1-4cc5-952d-49153f4668bbf	Pardalotus (Pardalotinus) striatus	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Passeriformes	Pardalotidae	Striated Pardalote
https://biodiversity.org.au/afd/taxa/3dd39f84-1293-4c04-ac87-2474f5c887b0	Platalea (Platibis) flavipes	Gould, 1838	species	Animalia	Chordata	Aves	Ciconiiformes	Threskiornithidae	Yellow-legged Spoonbill
https://biodiversity.org.au/afd/taxa/143cc9f0-bc3c-45b7-8e1c-21fbe9319bba	Ardea alba	Linnaeus, 1758	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	Baluun
https://biodiversity.org.au/afd/taxa/51829a26-3d88-4238-be5b-354de5174292	Acrocephalus (Acrocephalus) australis	(Gould, 1838)	species	Animalia	Chordata	Aves	Passeriformes	Acrocephalidae	Australian Reed Warbler
https://biodiversity.org.au/afd/taxa/69c22b10-ff42-4bef-bb0f-88dc01a8f96c	Coracina (Coracina) novaehollandiae	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Passeriformes	Campephagidae	Black-faced Cuckoo-shrike
https://biodiversity.org.au/afd/taxa/f933497e-60d2-4f80-bc5e-08d8b1349c2c	Smicromis brevirostris	(Gould, 1838)	species	Animalia	Chordata	Aves	Passeriformes	Acanthizidae	Brown Weebill
https://biodiversity.org.au/afd/taxa/b5e44fea-a0a2-412b-a1f7-476b3c1e8e03	Gallinula (Gallinula) tenebrosa	Gould, 1846	species	Animalia	Chordata	Aves	Gruiformes	Rallidae	Dusky Moorhen
https://biodiversity.org.au/afd/taxa/c1d3308d-b6d6-496c-81b0-97c689259d3a	Anhinga novaehollandiae	(Gould, 1847)	species	Animalia	Chordata	Aves	Pelecaniformes	Anhingidae	Arrgarra
https://biodiversity.org.au/afd/taxa/7d38efed-12ce-4aa3-b51a-67f85b109ded	Petrochelidon (Hylochelidon) nigricans	(Vieillot, 1817)	species	Animalia	Chordata	Aves	Passeriformes	Hirundinidae	Tree Martin
https://biodiversity.org.au/afd/taxa/70a29d57-3aea-43e3-b675-98c0196097fd	Falco (Falco) longipennis	Swainson, 1838	species	Animalia	Chordata	Aves	Falconiformes	Falconidae	Australian Hobby
https://biodiversity.org.au/afd/taxa/da002998-b551-4328-ac4e-5e04fc72708b	Phylidonyris (Meliornis) novaehollandiae	(Latham, 1790)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	New Holland Honeyeater
ALA_DR653_101	Spatula rhynchotis	(Latham, 1801)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Australasian Shoveler
https://biodiversity.org.au/afd/taxa/32f9229c-80e9-4dbe-991b-d4b1c2cfbe97	Oxyura australis	Gould, 1837	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Blue-billed Duck
https://biodiversity.org.au/afd/taxa/378bdcd1-f52a-4907-9f71-0541b05437da	Pachycephala (Alisteromis) rufiventris	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Pachycephalidae	Rufous Whistler
https://biodiversity.org.au/afd/taxa/dec8c88f-7f20-4f30-b2af-c75d09fb066c	Nycticorax caledonicus	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	Crane
https://biodiversity.org.au/afd/taxa/91f0535a-f513-417d-9826-8294ae640785	Podiceps cristatus	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Podicipediformes	Podicipedidae	Crested Grebe
https://biodiversity.org.au/afd/taxa/500e1350-1d00-4f1c-b9d3-d02b949cdd47	Acanthiza (Acanthiza) apicalis	Gould, 1847	species	Animalia	Chordata	Aves	Passeriformes	Acanthizidae	Red-rumped Tit
https://biodiversity.org.au/afd/taxa/148208ff-e6ea-40bd-9999-9f1a6b8acc1e	Phylidonyris (Meliornis) niger	(Bechstein, 1811)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	White-cheeked Honeyeater
https://biodiversity.org.au/afd/taxa/d470af0d-c131-48f7-961d-a5568fe6a185	Accipiter (Leucospiza) fasciatus	(Vigors & Horsfield, 1827)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Grey-headed Goshawk
https://biodiversity.org.au/afd/taxa/41d01e6b-e265-424d-8d6d-e39966b4ce8f	Casmerodius modesta	J.E. Grav, 1831	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	Eastern Great Egret
https://biodiversity.org.au/afd/taxa/66f82bb4-ae71-4543-a99e-35452536c4c8	Purpureicephalus spurius	(Kuhl, 1820)	species	Animalia	Chordata	Aves	Psittaciformes	Psittacidae	Red-capped Parrot
https://biodiversity.org.au/afd/taxa/37b96920-e8bf-409c-9967-b6911fedff51	Egretta garzetta	(Linnaeus, 1766)	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	Leisser Egret
https://biodiversity.org.au/afd/taxa/da100481-e4a7-4d6e-8535-89a748cf52ad	Plegadis falcinellus	(Linnaeus, 1766)	species	Animalia	Chordata	Aves	Ciconiiformes	Threskiornithidae	Black Curlew
https://biodiversity.org.au/afd/taxa/a7b00ef0-108f-44d9-bf89-a062c8674335	Ocyphaps lophotes	(Temminck, 1822)	species	Animalia	Chordata	Aves	Columbiformes	Columbidae	Crested Pigeon
https://biodiversity.org.au/afd/taxa/59b7c7f5-1d07-4ab0-90ef-9be0885de1dd	Anthochaera (Anellobia) lunulata	Gould, 1838	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Western Wattlebird
https://biodiversity.org.au/afd/taxa/c69e7308-527a-429d-a80d-143bd20b5100	Recurvirostra novaehollandiae	Vieillot, 1816	species	Animalia	Chordata	Aves	Charadriiformes	Recurvirostridae	Australian Red-necked Avocet
NZOR-6-40597	Anas rhynchotis	Latham	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Australasian Shoveler
https://biodiversity.org.au/afd/taxa/2f87aff4-450a-41a7-afe3-5f1423236b68	Litoria moorei	(Copland, 1957)	species	Animalia	Chordata	Amphibia	Anura	Hylidae	Motorbike Frog
https://biodiversity.org.au/afd/taxa/39083a3e-faf5-4b48-a5f0-69c2bfa32d68	Calyptorhynchus (Calyptorhynchus) banksii	(Latham, 1790)	species	Animalia	Chordata	Aves	Psittaciformes	Cacatuidae	Red-tailed Black Cockatoo
https://biodiversity.org.au/afd/taxa/135cc880-f84e-4470-a1c1-fbce3a0ed534	Todiramphus (Todiramphus) sanctus	(Vigors & Horsfield, 1827)	species	Animalia	Chordata	Aves	Coraciiformes	Alcedinidae	Sacred Kingfisher

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/aa581ac7-f29a-4e72-be0d-48a5e0a64de3	Acanthiza (Geobasileus) chrysorrhoa	(Quoy & Gaimard, 1830)	species	Animalia	Chordata	Aves	Passeriformes	Acanthizidae	Yellow-tail
https://biodiversity.org.au/afd/taxa/dc27b757-21bc-4e0b-becb-4e28490702l5	Malacorhynchus membranaceus	(Latham, 1801)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Pink-eared Duck
https://biodiversity.org.au/afd/taxa/e382a431-801d-4a24-9a5a-03a262be9279	Elanus axillaris	(Latham, 1801)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Black-shouldered Kite
https://biodiversity.org.au/afd/taxa/5f46e9da-17dd-4e0c-add0-79c61b9f616a	Crinia glauerti	Loveridge, 1933	species	Animalia	Chordata	Amphibia	Anura	Myobatrachidae	Glauert's Froglet
https://biodiversity.org.au/afd/taxa/9f9ddea7-8c74-46df-8ed9-3233d681e354	Merops (Merops) ornatus	Latham, 1801	species	Animalia	Chordata	Aves	Coraciformes	Meropidae	Rainbow Bee-eater
https://biodiversity.org.au/afd/taxa/1441c509-faf3-405e-a534-c51cccc4d720	Thalasseus bergii	(Lichtenstein, 1823)	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Crested Tern
https://biodiversity.org.au/afd/taxa/55994a9e-8ba7-4ff9-89a2-e22586ab25d1	Phalacrocorax (Phalacrocorax) varius	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Pelecaniformes	Phalacrocoracidae	Black-and-white Shag
https://biodiversity.org.au/afd/taxa/9cc11ab9-ab7a-43d6-a04f-3ae4c7a1a42a	Charadrius (Charadrius) ruficapillus	Temminck, 1821	species	Animalia	Chordata	Aves	Charadriiformes	Charadriidae	Red-capped Plover
https://biodiversity.org.au/afd/taxa/29472c00-22e3-42c3-b562-107bd28d1bdc	Phalacrocorax (Phalacrocorax) carbo	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Pelecaniformes	Phalacrocoracidae	Great Cormorant
https://biodiversity.org.au/afd/taxa/7da6fd6f-c180-4e68-b9e7-70d02e6f8448	Phaps (Phaps) chalcoptera	(Latham, 1790)	species	Animalia	Chordata	Aves	Columbiformes	Columbidae	Common Bronzewing
https://biodiversity.org.au/afd/taxa/29cbe213-85a4-46b7-b373-4c503231f299	Elseyornis melanops	(Vieillot, 1818)	species	Animalia	Chordata	Aves	Charadriiformes	Charadriidae	Black-fronted Dotterel
https://biodiversity.org.au/afd/taxa/b47a4ecd-416b-458c-886a-1dc3490e8175	Hieraaetus (Hieraaetus) morphnoides	(Gould, 1841)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Little Eagle
https://biodiversity.org.au/afd/taxa/031b2b69-e9fc-44c6-9df9-03c1470d5ec3	Sericornis (Sericornis) frontalis	(Vigors & Horsfield, 1827)	species	Animalia	Chordata	Aves	Passeriformes	Acanthizidae	White-fronted Scrubwren
https://biodiversity.org.au/afd/taxa/061fef09-7c9d-4b6d-9827-4da13a350dc6	Poodytes gramineus	(Gould, 1845)	species	Animalia	Chordata	Aves	Passeriformes	Locustellidae	Little Grassbird
https://biodiversity.org.au/afd/taxa/d792ddc0-bdc2-4764-ab9c-ea8e43cd586e	Tringa (Glottis) nebularia	(Gunnerus, 1767)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Greenshank
https://biodiversity.org.au/afd/taxa/ac5ce2ed-f580-4aa7-a037-690b9f9fbf99	Limnodynastes dorsalis	(Gray, 1841)	species	Animalia	Chordata	Amphibia	Anura	Limnodynastidae	Western Banjo Frog
https://biodiversity.org.au/afd/taxa/8f6b91ae-4019-490c-a133-73acb05d25e8	Falco (Tinnunculus) cenchroides	Vigors & Horsfield, 1827	species	Animalia	Chordata	Aves	Falconiformes	Falconidae	Wala
https://biodiversity.org.au/afd/taxa/cfed1332-ab8f-4009-8949-90aa3630ba67	Litoria adelaidensis	(Gray, 1841)	species	Animalia	Chordata	Amphibia	Anura	Hylidae	Slender Tree Frog
https://biodiversity.org.au/afd/taxa/1a490f00-368f-427c-8d4c-fa3f3271d75f	Apis (Apis) mellifera	Linnaeus, 1758	species	Animalia	Arthropoda	Insecta	Hymenoptera	Apidae	
https://biodiversity.org.au/afd/taxa/0242155c-714e-4f53-b973-333aab1343fb	Acanthorhynchus superciliosus	Gould, 1837	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Western Spinebill
https://id.biodiversity.org.au/node/apni/2913234	Banksia attenuata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Coast Banksia
https://biodiversity.org.au/afd/taxa/d3d52d02-537e-4cda-bfb2-0c0e93e38088	Hylaeus (Sphaerhylaeus) globuliferus	(Cockerell, 1929)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	Woollybush Bee
https://biodiversity.org.au/afd/taxa/06d1981c-58a7-4370-9e9a-158dfb89d600	Larus pacificus	Latham, 1801	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Pacific Gull
https://biodiversity.org.au/afd/taxa/5c9d12e2-698b-4384-ac91-e83842a263aa	Malurus (Leggeornis) assimilis	North, 1901	species	Animalia	Chordata	Aves	Passeriformes	Maluridae	
https://biodiversity.org.au/afd/taxa/cf8e02dd-2a6e-41dc-b14b-0e446444250a	Ardea pacifica	Latham, 1801	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	White-necked Heron
https://biodiversity.org.au/afd/taxa/23a8017a-3a2b-4a52-8ca6-d168bf52659c	Pandion haliaetus	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Osprey
https://biodiversity.org.au/afd/taxa/dc420306-4746-4663-9c2d-cf367587f728	Haliaeetus (Pontoaetus) leucogaster	(Gmelin, 1788)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	White-bellied Sea-eagle
https://biodiversity.org.au/afd/taxa/fe7684ea-14e2-49e9-8953-dabc1543ce46	Porzana (Porzana) tabuensis	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Gruiformes	Rallidae	Little Swamphen
https://biodiversity.org.au/afd/taxa/5c0d591a-0a98-48c6-8a4b-f925d43521cd	Manorina (Myzantha) flavigula	(Gould, 1840)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Yellow-throated Miner
https://biodiversity.org.au/afd/taxa/2ecff0de-1ba4-4b53-a368-0e01d36c289d	Tringa (Rhyacophilus) glareola	Linnaeus, 1758	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Wood Sandpiper
https://biodiversity.org.au/afd/taxa/4072e7ce-7ca4-4112-a9fa-c49a0f0ddd4d	Zanda latirostris	Carnaby, 1948	species	Animalia	Chordata	Aves	Psittaciformes	Cacatuidae	Short-billed Black-cockatoo
NZOR-6-24112	Gallirallus philippensis	Linnaeus	species	Animalia	Chordata	Aves	Gruiformes	Rallidae	
https://biodiversity.org.au/afd/taxa/5254fe03-630b-44b2-9233-df51a7b8f25f	Pardalotus (Pardalotus) punctatus	(Shaw, 1792)	species	Animalia	Chordata	Aves	Passeriformes	Pardalotidae	Spotted Pardalote
https://biodiversity.org.au/afd/taxa/23e2ccef-06b0-4749-abc6-d8a710b94f69	Aquila (Uroaetus) audax	(Latham, 1801)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Wedge-tailed Eagle
https://id.biodiversity.org.au/taxon/apni/51298304	Hibbertia hypericoides	(DC.) Benth.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	Yellow Buttercups
https://biodiversity.org.au/afd/taxa/02725816-5d59-41e1-aa00-f7cc41cd66dc	Accipiter (Paraspizias) cirrocephalus	(Vieillot, 1817)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Collared Sparrowhawk
https://biodiversity.org.au/afd/taxa/083b413f-8746-4788-8dc1-3da495d78a79	Falco (Hierofalco) peregrinus	Tunstall, 1771	species	Animalia	Chordata	Aves	Falconiformes	Falconidae	Duck Hawk
https://biodiversity.org.au/afd/taxa/1a6623ab-8d46-4da0-957c-f27b663f7ef0	Tiliqua rugosa	(Gray, 1825)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Bobtj
https://biodiversity.org.au/afd/taxa/1288a458-1631-40e5-837d-fd286679f866	Cladorhynchus leucocephalus	(Vieillot, 1816)	species	Animalia	Chordata	Aves	Charadriiformes	Recurvirostridae	Banded Stilt
https://id.biodiversity.org.au/node/apni/2912367	Hardenbergia comptoniana	(Andrews) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Native Wisteria
https://biodiversity.org.au/afd/taxa/3d2396a0-b532-410a-87e7-d1fe3ab497f6	Calidris (Ereunetes) ruficollis	(Pallas, 1776)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Red-necked Stint
https://biodiversity.org.au/afd/taxa/abeb5bf8-d03e-4b33-a1ea-bcfc0695102c	Actitis hypoleucos	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Common Sandpiper
https://id.biodiversity.org.au/node/apni/2897960	Banksia menziesii	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Firewood Banksia
https://biodiversity.org.au/afd/taxa/934ecab5-798d-45b9-bade-16b3380d08a0	Pieris rapae	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Pieridae	Cabbage White Butterfly
NZOR-6-34659	Chrysococcyx lucidus	Gmelin	species	Animalia	Chordata	Aves	Cuculiformes	Cuculidae	Shining Cuckoo
https://biodiversity.org.au/afd/taxa/715a2874-1942-4762-866c-1194990e7a91	Lophoictinia isura	(Gould, 1838)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Square-tailed Kite
https://biodiversity.org.au/afd/taxa/e57c3c64-4b61-4769-9c9a-bf7c21bf3746	Sterna (Sterna) paradisaea	Pontoppidan, 1763	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Arctic Tern
https://id.biodiversity.org.au/node/apni/2911572	Jacaranda mimosifolia	D.Don	species	Plantae	Charophyta	Equisetopsida	Lamiales	Bignoniaceae	Jacaranda
https://biodiversity.org.au/afd/taxa/cf991494-ccee-433d-b049-f2a0996a0a3b	Heleioporus eyrei	(Gray, 1845)	species	Animalia	Chordata	Amphibia	Anura	Limnodynastidae	Moaning Frog
https://biodiversity.org.au/afd/taxa/4b0423aa-6a0a-4707-8d48-9c66e48941bf	Lerista elegans	(Gray, 1845)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Elegant Slider
https://biodiversity.org.au/afd/taxa/2869ce8a-8212-46c2-8327-dfb7fabb8296	Vulpes vulpes	Linnaeus, 1758	species	Animalia	Chordata	Mammalia	Carnivora	Canidae	Fox
https://biodiversity.org.au/afd/taxa/41cdea6a-9c0f-4b64-b59c-53822470a4da	Malurus (Musciparus) leucopterus	Dumont, 1824	species	Animalia	Chordata	Aves	Passeriformes	Maluridae	White-winged Fairy-wren
https://id.biodiversity.org.au/node/apni/2905888	Xanthorrhoea preissii	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Xanthorrhoeaceae	Grass Tree
https://biodiversity.org.au/afd/taxa/3e61a01b-0ec9-4383-9540-b97bd073fc7a	Ctenotus inornatus	(Gray, 1845)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Bar-shouldered Ctenotus
https://biodiversity.org.au/afd/taxa/68fc5ba7-463f-4a86-8314-e42a5a8d0455	Ninox (Ninox) boobook	(Latham, 1801)	species	Animalia	Chordata	Aves	Strigiformes	Strigidae	
https://id.biodiversity.org.au/taxon/apni/51399012	Caladenia flava	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Cowslip Orchid
https://biodiversity.org.au/afd/taxa/408ee81c-6558-4ddf-b732-f9ad7d09f1ae	Cacomantis (Vidgenia) flabelliformis	(Latham, 1801)	species	Animalia	Chordata	Aves	Cuculiformes	Cuculidae	Fan-tailed Cuckoo
https://biodiversity.org.au/afd/taxa/8bec5cc6-ac31-4d23-9df3-856034968af9	Podargus strigoides	(Latham, 1801)	species	Animalia	Chordata	Aves	Caprimulgiformes	Podargidae	Tawny Frogmouth
https://biodiversity.org.au/afd/taxa/da1e1bf2-3684-4eea-b579-1d83507c020d	Hydroprogne caspia	(Pallas, 1770)	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Caspian Tern
https://biodiversity.org.au/afd/taxa/d0d5b903-32e8-48ee-b7c0-91f5ea9433a9	Anas (Nettion) castanea	(Eyton, 1838)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Chestnut Teal
https://biodiversity.org.au/afd/taxa/5f44995b-559b-4dea-a30d-e3f2adf17f8c	Chlidonias (Pelodes) hybrida	(Pallas, 1811)	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Whiskered Tern
ALA_DR654_5_1	Gallirallus philippensis		species	Animalia				Birds	
https://biodiversity.org.au/afd/taxa/e57c5e45-a109-49ff-9539-2b3d7583ced1	Morethia obscura	Storr, 1972	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Shrubland Morethia Skink
https://biodiversity.org.au/afd/taxa/4491debc-214f-46a2-95cf-572fe0150d0d	Tribonyx ventralis	(Gould, 1837)	species	Animalia	Chordata	Aves	Gruiformes	Rallidae	Black-tailed Native Hen
https://id.biodiversity.org.au/node/apni/2898292	Gladiolus caryophyllaceus	(Burm.f.) Poir.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Wild Gladiolus
https://id.biodiversity.org.au/node/apni/2920604	Gompholobium tomentosum	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Hairy Yellow Pea
https://id.biodiversity.org.au/node/apni/2918204	Hypocalymma robustum	(Endl.) Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Swan River Myrtle
https://id.biodiversity.org.au/node/apni/2919207	Conostephium pendulum	Benth.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Pearl Flower
https://id.biodiversity.org.au/taxon/apni/51283549	Drosera erythrorhiza	Lindl.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	Red Ink Sundew
https://id.biodiversity.org.au/taxon/apni/51404261	Diuris magnifica	D.L.Jones	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Pansy Orchid
https://biodiversity.org.au/afd/taxa/8f2d4aeb-50eb-438f-a145-5f12e356ffd8	Dicaeum (Dicaeum) hirundinaceum	(Shaw, 1792)	species	Animalia	Chordata	Aves	Passeriformes	Dicaeidae	Mistletoebird
https://id.biodiversity.org.au/node/apni/2892673	Corymbia calophylla	(Lindl.) K.D.Hill & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Marri

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/23c951c0-64d7-4ad0-ac9d-0e33b2a42eeb	Stictonetta naevosa	(Gould, 1841)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Freckled Duck
https://biodiversity.org.au/afd/taxa/b7013071-0a6a-4fd7-a084-0b0d3f473828	Porzana (Porzana) fluminea	Gould, 1843	species	Animalia	Chordata	Aves	Gruiformes	Rallidae	Spotted Crake
https://id.biodiversity.org.au/node/apni/2896832	Petrophile linearis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Pixie Mops
https://id.biodiversity.org.au/node/apni/2900824	Desmocladus flexuosus	(R.Br.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://biodiversity.org.au/afd/taxa/7af45089-4a0f-4303-a417-1708623809af	Colluricincla (Colluricincla) harmonica	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Pachycephalidae	Grey Shrike-thrush
https://id.biodiversity.org.au/node/apni/2900575	Mesomelaena pseudostygia	(K.Schum.) K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://biodiversity.org.au/afd/taxa/8bf4b8b0-f432-4e9d-8ea6-08fc20c8090c	Daphoenositta (Neositta) chrysoptera	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Neosittidae	Varied Sittella
https://biodiversity.org.au/afd/taxa/4b7b9c4a-1b60-4a43-ab70-b57bfc790138	Acanthiza (Geobasileus) inornata	Gould, 1841	species	Animalia	Chordata	Aves	Passeriformes	Acanthizidae	Masters' Tit
https://biodiversity.org.au/afd/taxa/ada5e2b7-1b23-410d-a3cf-1a81853a7de8	Menetia greyii	Gray, 1845	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Common Dwarf Skink
https://biodiversity.org.au/afd/taxa/33702f89-60b2-4098-9cb0-2018078514d	Passer (Passer) domesticus	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Passeriformes	Passeridae	House Sparrow
https://biodiversity.org.au/afd/taxa/82bed74a-c22a-4c65-8fe7-ac335f199708	Ardea intermedia	Wagler, 1829	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	A-garnandharrh
https://biodiversity.org.au/node/apni/2916273	Trachymene pilosa	Sm.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae	Dwarf Trachymene
https://id.biodiversity.org.au/taxon/apni/51398787	Caladenia arenicola	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Carousel Spider Orchid
https://biodiversity.org.au/afd/taxa/73c6d4f8-6aeb-497f-9d9c-a229e5629d51	Malurus (Leggeornis) lamberti	Vigors & Horsfield, 1827	species	Animalia	Chordata	Aves	Passeriformes	Maluridae	Variegated Fairy-wren
https://biodiversity.org.au/afd/taxa/7a402ec9-f9f3-46f4-9cb1-701e0188c921	Macropus fuliginosus	(Desmarest, 1817)	species	Animalia	Chordata	Mammalia	Diprotodontia	Macropodidae	Western Grey Kangaroo
https://id.biodiversity.org.au/node/apni/2907367	Hypochaeris glabra	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Smooth Catsear
https://biodiversity.org.au/afd/taxa/ab8816d0-2599-4813-a4c7-00d45d0c7ed0	Cacatua (Licmetis) pastinator	(Gould, 1841)	species	Animalia	Chordata	Aves	Psittaciformes	Cacatuidae	Western Corella
https://id.biodiversity.org.au/taxon/apni/51302290	Eucalyptus marginata	Donn ex Sm.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Jarrah
https://biodiversity.org.au/afd/taxa/856ed4e8-dbcf-487f-80c8-9c78591d2ff6	Ninox (Ninox) novaeseelandiae	(Gmelin, 1788)	species	Animalia	Chordata	Aves	Strigiformes	Strigidae	Southern Boobook
https://biodiversity.org.au/afd/taxa/cdd95894-bea9-439e-84cd-b807f8cc5242	Anas (Anas) platyrhynchos	Linnaeus, 1758	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Mallard
https://id.biodiversity.org.au/node/apni/2889771	Daviesia triflora	Crisp	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2915386	Bossiaea eriocarpa	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Common Brown Pea
https://id.biodiversity.org.au/node/apni/6283310	Conostylis aculeata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Prickly Conostylis
https://id.biodiversity.org.au/taxon/apni/51269054	Ursinia anthemoides	(L.) Poir.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Ursinia
https://biodiversity.org.au/afd/taxa/630adc1f-a781-4aed-9785-ac67078ffd06	Hemiergis quadrilineata	(DumÃ©ril & Bibron, 1839)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Two-toed Earless Skink
https://id.biodiversity.org.au/taxon/apni/51405028	Elythranthera brunonis	(Endl.) A.S.George	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Purple Enamel Orchid
https://biodiversity.org.au/afd/taxa/0446dbe0-12c9-4a5e-a65b-b0b59c673089	Crinia insignifera	Moore, 1954	species	Animalia	Chordata	Amphibia	Anura	Myobatrachidae	Sign-bearing Froglet
https://biodiversity.org.au/afd/taxa/1ed45f0a-8a3a-4a7e-8eca-43a86fb1688c	Erythrogonys cinctus	Gould, 1838	species	Animalia	Chordata	Aves	Charadriiformes	Charadriidae	Red-kneed Dotterel
https://id.biodiversity.org.au/node/apni/2912917	Burchardia congesta	Lindl.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae	
https://biodiversity.org.au/afd/taxa/70b173fb-a9cc-4b73-a9ee-598d1b5289a6	Limosa limosa	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Black-tailed Godwit
https://biodiversity.org.au/afd/taxa/b753892a-155e-4190-98ab-8e85cc9840b7	Bubulcus ibis	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	Cattle Egret
https://biodiversity.org.au/afd/taxa/e948fd99-7550-4d1b-866a-75666cc61f96	Heteroscenes pallidus	(Latham, 1801)	species	Animalia	Chordata	Aves	Cuculiformes	Cuculidae	Pallid Cuckoo
https://biodiversity.org.au/afd/taxa/f452242f-5a35-4d5d-a141-7e2dfb9f176b	Calidris (Erolia) acuminata	(Horsfield, 1821)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Sharp-tailed Sandpiper
https://id.biodiversity.org.au/node/apni/2908064	Briza maxima	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Great Quaking Grass
https://biodiversity.org.au/afd/taxa/c95af018-43ab-43b8-8e14-037604db64f6	Epthianura (Epthianura) albifrons	(Jardine & Selby, 1828)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	White-fronted Chat
https://id.biodiversity.org.au/node/apni/2893022	Kennedia prostrata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Running Postman
https://id.biodiversity.org.au/node/apni/2900204	Anigozanthos humilis	Lindl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Common Catspaw
https://id.biodiversity.org.au/node/apni/2888611	Aira caryophyllea	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Silvery Hairgrass
https://id.biodiversity.org.au/node/apni/2894004	Alexgeorgea nitens	(Nees) L.A.S.Johnson & B.G.Briggs	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/taxon/apni/51412478	Pyrorchis nigricans	(R.Br.) D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Red Beaks
https://biodiversity.org.au/afd/taxa/6c3c2da2-508b-43c4-b0df-c69a99c0aae0	Artamus (Angroyan) cinereus	Vieillot, 1817	species	Animalia	Chordata	Aves	Passeriformes	Artamidae	Black-faced Woodswallow
https://id.biodiversity.org.au/node/apni/2896184	Sowerbaea laxiflora	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Vanilla Lily
https://id.biodiversity.org.au/node/apni/2918736	Hybanthus calycinus	(DC.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Violaceae	Wild Violet
https://id.biodiversity.org.au/taxon/apni/51283539	Drosera drummondii	Planch.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	
https://biodiversity.org.au/afd/taxa/a3e5376b-f9e6-4bdf-adae-1e7add9f5c29	Petroica (Petroica) boodang	(Lesson, 1838)	species	Animalia	Chordata	Aves	Passeriformes	Petroicidae	Scarlet Robin
https://biodiversity.org.au/afd/taxa/ba8626ed-e049-42e5-81e3-4f8efd8fad32	Lerista praepedita	(Boulenger, 1887)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Blunt-tailed West-coast Slider
https://biodiversity.org.au/afd/taxa/fb531b39-fd0b-4afb-9115-5e4f4691cf7f	Synemon gratiosa	Westwood, 1877	species	Animalia	Arthropoda	Insecta	Lepidoptera	Castniidae	Graceful Sunmoth
https://id.biodiversity.org.au/node/apni/2886300	Philotheca spicata	(A.Rich.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae	Pepper And Salt
https://id.biodiversity.org.au/node/apni/2892855	Rytidosperma occidentale	(Vickery) Connor & Edgar	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/node/apni/2904580	Patersonia occidentalis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Purple Flag
https://biodiversity.org.au/afd/taxa/26271d50-30a1-457f-8ff5-f987231964bd	Melobasis gloriosa	(Laporte & Gory, 1837)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://id.biodiversity.org.au/node/apni/2905445	Banksia sessilis	(Knight) A.R.Mast & K.R.Thiele	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2920210	Stirlingia latifolia	(R.Br.) Steud.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Blueboy
https://id.biodiversity.org.au/taxon/apni/51287044	Acacia pulchella	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Prickly Moses
https://biodiversity.org.au/afd/taxa/30edbd1a-6367-4d84-87f1-3566e6cc54d6	Pachycephala (Pachycephala) pectoralis	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Pachycephalidae	Golden Whistler
https://biodiversity.org.au/afd/taxa/351be9fd-4b56-4f3d-8366-ebf85c445d89	Hylaeus (Euprosopis) elegans	(Smith, 1853)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/391bfdca-d8db-4629-952f-c2dd34e53dac	Melobasis costifera	Thomson, 1879	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/9b27ace8-a0ca-44ae-b292-738dbca34420	Castiarina aureola	(Carter, 1913)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/c437f86d-edcd-44c3-b2f7-4fda1d11b316	Diplacodes bipunctata	(Brauer, 1865)	species	Animalia	Arthropoda	Insecta	Odonata	Libellulidae	
https://id.biodiversity.org.au/node/apni/2893349	Schoenus curvifolius	(R.Br.) Poir.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2896043	Banksia grandis	Willd.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Giant Banksia
https://id.biodiversity.org.au/node/apni/2900642	Petrorhagia dubia	(Raf.) G.López & Romo	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae	Wild Pink
https://id.biodiversity.org.au/node/apni/2889663	Nuytsia floribunda	(Labill.) R.Br. ex G.Don	species	Plantae	Charophyta	Equisetopsida	Santalales	Loranthaceae	Western Australian Christmas Tree
https://id.biodiversity.org.au/node/apni/2918704	Acacia saligna	(Labill.) H.L.Wendl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Golden Wreath Wattle
https://biodiversity.org.au/afd/taxa/967549e7-7fa9-4770-b86e-5e3520d3c43d	Chelodina (Macrochelodina) oblonga	Gray, 1841	species	Animalia	Chordata	Reptilia	Testudines	Chelidae	Northern Snake-necked Turtle
https://biodiversity.org.au/afd/taxa/a4f3e880-e8d4-4459-8a45-247bf200d0e0	Aprasia repens	(Fry, 1914)	species	Animalia	Chordata	Reptilia	Squamata	Pygopodidae	Southwestern Sandplain Worm Lizard
https://biodiversity.org.au/afd/taxa/cff21565-2bc4-4a67-8c0c-600ae7c10fd8	Zanda baudinii	Lear, 1832	species	Animalia	Chordata	Aves	Psittaciformes	Cacatuidae	Baudin's Black-cockatoo
https://id.biodiversity.org.au/node/apni/2890360	Stylidium calcaratum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Book Triggerplant
https://id.biodiversity.org.au/node/apni/2896141	Hibbertia racemosa	(Endl.) Gilg	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	Stalked Guinea Flower

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2894669	Moraea flaccida	(Sweet) Steud.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	One-leaved Cape Tulip
https://id.biodiversity.org.au/node/apni/2895790	Hovea trisperma	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Common Hovea
https://id.biodiversity.org.au/node/apni/2895772	Sonchus oleraceus	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Sow Thistle
https://id.biodiversity.org.au/node/apni/2908142	Lomandra hermaphrodita	(C.R.P.Andrews) C.A.Gardner	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2917673	Daviesia divaricata	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Marno
https://id.biodiversity.org.au/node/apni/9442728	Isotropis cuneifolia	(Sm.) Walp.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Granny Bonnets
https://id.biodiversity.org.au/taxon/apni/51302276	Eremaea pauciflora	(Endl.) Druce	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://biodiversity.org.au/afd/taxa/5851a3f8-4962-477f-bd38-4f8647347295	Cheramoeca leucosterna	(Gould, 1841)	species	Animalia	Chordata	Aves	Passeriformes	Hirundinidae	White-backed Swallow
https://biodiversity.org.au/afd/taxa/f0a6a2c3-adad-4c57-9cae-17956131ecf0	Gliciphila melanops	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Tawny-crowned Honeyeater
https://id.biodiversity.org.au/node/apni/2888174	Lomandra caespitosa	(F.Muell. ex Benth.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Tufted Mat Rush
https://id.biodiversity.org.au/node/apni/2901052	Ptilotus manglesii	(Lindl.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	Pom Poms
https://id.biodiversity.org.au/node/fungi/60094367	Omphalotus nidiformis	(Berk.) O.K.Mill.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae	
NZOR-6-23572	Limosa haemastica	Linnaeus	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Hudsonian Godwit
https://biodiversity.org.au/afd/taxa/0628244e-287b-4001-946e-5a41ef056641	Falco (Ieracidea) berigora	Vigors & Horsfield, 1827	species	Animalia	Chordata	Aves	Falconiformes	Falconidae	Chicken Hawk
https://biodiversity.org.au/afd/taxa/0f5df411-17dd-4719-91de-158fb1a77b27	Cracticus nigrogularis	(Gould, 1837)	species	Animalia	Chordata	Aves	Passeriformes	Artamidae	Pied Butcherbird
https://id.biodiversity.org.au/node/apni/2888195	Jacksonia sternbergiana	HÃ¼gel ex Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Stinkwood
https://id.biodiversity.org.au/node/apni/2901796	Daucus glochidiatus	(Labill.) Fisch., C.A.Mey. & Ave-Lall.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Wild Carrot
https://id.biodiversity.org.au/node/apni/2908333	Pelargonium capitatum	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Rose-scented Pelargonium
https://id.biodiversity.org.au/node/apni/2914068	Leucopogon polymorphus	Sond.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/taxon/apni/51283580	Drosera macrantha	Endl.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	Bridal Rainbow
https://biodiversity.org.au/afd/taxa/48e09a45-e2af-4b68-a012-92fc13a4d09f	Blackbolbus frontalis	(GuÃ©rin-MÃ©neville, 1838)	species	Animalia	Arthropoda	Insecta	Coleoptera	Bolboceratidae	
https://biodiversity.org.au/afd/taxa/53a524b5-6952-4063-8916-bdfba2c8119c	Myobatrachus gouldi	(Gray, 1841)	species	Animalia	Chordata	Amphibia	Anura	Myobatrachidae	Turtle Frog
https://biodiversity.org.au/afd/taxa/a7c647a5-bcd5-468b-85e5-56ea1476d165	Dendostrea folium	(Linnaeus, 1758)	species	Animalia	Mollusca	Bivalvia	Ostreida	Ostreidae	Oyster
https://biodiversity.org.au/afd/taxa/dcf303b1-0371-4c8b-b431-c2e147941926	Pseudonaja affinis	GÃ¼nther, 1872	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Dugite
https://id.biodiversity.org.au/node/apni/2888259	Dampiera linearis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	Wedge-leaved Dampiera
https://id.biodiversity.org.au/node/apni/2905735	Banksia ilicifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Holly Leaved Banksia
https://id.biodiversity.org.au/node/apni/2907698	Jacksonia floribunda	Endl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://biodiversity.org.au/afd/taxa/351ef0f8-f560-43d6-b784-f393edb97df9	Corvus bennetti	North, 1901	species	Animalia	Chordata	Aves	Passeriformes	Corvidae	Little Crow
https://biodiversity.org.au/afd/taxa/cbef5be9-829a-4691-9de4-125356441b1f	Calidris (Ereunetes) subminuta	(Middendorff, 1851)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Long-toed Stint
https://id.biodiversity.org.au/node/apni/2891615	Haemodorum laxum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	
https://id.biodiversity.org.au/node/apni/2895486	Lyginia barbata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Anarthriaceae	
https://id.biodiversity.org.au/node/apni/2913426	Amphipogon turbinatus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/taxon/apni/51251009	Daviesia nudiflora	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://biodiversity.org.au/afd/taxa/618a2c4c-ddf2-4042-a6a7-34a3e893c219	Anthochaera (Anellobia) chrysoptera	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Little Wattlebird
https://biodiversity.org.au/afd/taxa/99e4518d-7877-46c8-a809-7e4e4d5bad81	Chalcites lucidus	(Gmelin, 1788)	species	Animalia	Chordata	Aves	Cuculiformes	Cuculidae	Shining Bronze-cuckoo
https://biodiversity.org.au/afd/taxa/b17388f8-4468-4a91-b434-659bf3739561	Lialis burtonis	Gray, 1835	species	Animalia	Chordata	Reptilia	Squamata	Pygopodidae	Burton's Snake-lizard
https://id.biodiversity.org.au/node/apni/2886977	Trifolium campestre	Schreb.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Hop Clover
https://id.biodiversity.org.au/node/apni/2892900	Stylidium piliferum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Common Butterfly Triggerplant
https://id.biodiversity.org.au/node/apni/2899692	Eryngium pinnatifidum	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Blue Devils
https://id.biodiversity.org.au/node/apni/2909103	Astroloma pallidum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Kick Bush
https://id.biodiversity.org.au/node/apni/2916495	Hakea lissocarpha	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Honey Bush
https://id.biodiversity.org.au/node/apni/2921158	Hibbertia huegelii	(Endl.) F.Muell.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	
https://id.biodiversity.org.au/taxon/apni/51294849	Petrophile macrostachya	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2894397	Xanthosia huegelii	(Benth.) Steud.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Heath Xanthosia
https://id.biodiversity.org.au/node/apni/2895364	Scaevola repens	de Vriese	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	
https://id.biodiversity.org.au/node/apni/2898345	Homalosciadium homalocarpum	(F.Muell.) H.Eichler	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	
https://id.biodiversity.org.au/node/apni/2900921	Anigozanthos manglesii	D.Don	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Red And Green Kangaroo Paw
https://id.biodiversity.org.au/node/apni/2905459	Leucopogon conostephioides	DC.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2915937	Macrozamia riedlei	(Fisch. ex Gaudich.) C.A.Gardner	species	Plantae	Charophyta	Equisetopsida	Cycadales	Zamiaceae	Zamia Palm
https://id.biodiversity.org.au/taxon/apni/51289286	Calothamnus sanguineus	Labill.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Silky-leaved Bloodflower
https://biodiversity.org.au/afd/taxa/12efe8e2-13c3-4551-8c7c-2fd6923b0d9e	Platycercus (Violania) icterotis	(Temminck & Kuhl, 1820)	species	Animalia	Chordata	Aves	Psittaciformes	Psittacidae	Western Rosella
https://biodiversity.org.au/afd/taxa/320eeab1-aead-4b82-a580-8cd3ae99fdef	Artamus (Angroyan) cyanopterus	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Artamidae	Dusky Woodswallow
https://biodiversity.org.au/afd/taxa/5d937df2-e9dc-43a1-b829-2087ca5529ff	Ethmostigmus rubripes	(Brandt, 1840)	species	Animalia	Arthropoda	Chilopoda	Scolopendromorpha	Scolopendridae	
https://biodiversity.org.au/afd/taxa/68f71798-b3ab-47f5-856e-0ae4c8dcb478	Lampropholis guichenoti	(DumÃ©ril & Bibron, 1839)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Pale-flecked Garden Sunskink
https://biodiversity.org.au/afd/taxa/e53a981f-22da-4f2f-a489-85c3ee79473e	Anthus (Anthus) novaeseelandiae	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Passeriformes	Motacillidae	Australian Pipit
https://biodiversity.org.au/afd/taxa/f5f5b062-43f9-436d-ae93-8dcdcb7f71c6	Christinus marmoratus	(Gray, 1845)	species	Animalia	Chordata	Reptilia	Squamata	Gekkonidae	Marbled Gecko
https://id.biodiversity.org.au/node/apni/2886043	Euchilopsis linearis	(Benth.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Swamp Pea
https://id.biodiversity.org.au/node/apni/2886783	Conostylis juncea	Endl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	
https://id.biodiversity.org.au/node/apni/2898995	Isolepis marginata	(Thunb.) A.Dietr.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Coarse Club-rush
https://id.biodiversity.org.au/node/apni/2903560	Cerastium glomeratum	Thuill.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae	Sticky Mouse-ear Chickweed
https://id.biodiversity.org.au/node/apni/2905202	Leucopogon propinquus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2908469	Stylidium brunonianum	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Pink Fountain Triggerplant
https://id.biodiversity.org.au/node/apni/2912492	Conostylis setigera	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Bristly Cottonhead
https://id.biodiversity.org.au/node/apni/2915089	Allocasuarina fraseriana	(Miq.) L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Fagales	Casuarinaceae	Western Sheoak
https://id.biodiversity.org.au/node/apni/2915651	Eucalyptus gomphocephala	DC.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Tuart Gum
https://id.biodiversity.org.au/node/apni/2920474	Centrolepis drummondiana	(Nees) Walp.	species	Plantae	Charophyta	Equisetopsida	Poales	Centrolepidaceae	
https://id.biodiversity.org.au/node/apni/2921246	Ehrharta calycina	Sm.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Perennial Veldt Grass
https://id.biodiversity.org.au/taxon/apni/51283213	Tetraria octandra	(Nees) KÃ¼k.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://biodiversity.org.au/afd/taxa/692effa3-b719-495f-a86f-ce89e2981652	Oryctolagus cuniculus	(Linnaeus, 1758)	species	Animalia	Chordata	Mammalia	Lagomorpha	Leporidae	Rabbit
https://biodiversity.org.au/afd/taxa/a2399fe3-c90f-4fb1-a710-fe81643ff56e	Parvipsitta porphyrocephala	(Dietrichsen, 1837)	species	Animalia	Chordata	Aves	Psittaciformes	Psittacidae	Purple-crowned Lorikeet

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/c74464f4-57fd-4386-90fe-c68e1d629729	Simoselaps bertholdi	(Jan, 1859)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Jan's Banded Snake
https://biodiversity.org.au/afd/taxa/cf17c9bb-09d1-47ce-adfe-dc060ba0b04c	Morus serrator	(G.R. Gray, 1843)	species	Animalia	Chordata	Aves	Pelecaniformes	Sulidae	Australasian Gannet
https://biodiversity.org.au/afd/taxa/d6156ed3-bda2-42d6-a948-07d94c7e6559	Chalcites basalis	(Horsfield, 1821)	species	Animalia	Chordata	Aves	Cuculiformes	Cuculidae	Horsfield's Bronze-cuckoo
https://id.biodiversity.org.au/node/apni/2893374	Tricoryne elatior	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae	Yellow Rush Lily
https://id.biodiversity.org.au/node/apni/2897217	Astroloma xerophyllum	(DC.) Sond.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2898215	Thysanotus manglesianus	Kunth	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Fringed Lily
https://id.biodiversity.org.au/node/apni/2904766	Hemiandra pungens	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	Snakebush
https://id.biodiversity.org.au/node/apni/2916623	Hibbertia subvaginata	(Steud.) F.Muell.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	
https://id.biodiversity.org.au/node/apni/2918220	Calectasia narragara	R.L.Barrett & K.W.Dixon	species	Plantae	Charophyta	Equisetopsida	Dasypogonales	Dasypogonaceae	
https://id.biodiversity.org.au/node/apni/2920944	Briza minor	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Small Shivery Grass
https://id.biodiversity.org.au/taxon/apni/51291824	Lysimachia arvensis	(L.) U.Manns & Anderb.	species	Plantae	Charophyta	Equisetopsida	Ericales	Primulaceae	
https://id.biodiversity.org.au/taxon/apni/51399117	Caladenia latifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Pink Fairies
https://id.biodiversity.org.au/taxon/apni/51412440	Pterostylis vittata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Banded Greenhood
https://biodiversity.org.au/afd/taxa/33cc201a-3634-4cec-bd9c-c2859966203c	Brachyurophis semifasciatus	GÃ¼nther, 1863	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Southern Shovel-nosed Snake
https://biodiversity.org.au/afd/taxa/c7d8dbc8-dcde-4182-85ba-907182f95ea9	Latrodectus hasseltii	Thorell, 1870	species	Animalia	Arthropoda	Arachnida	Araneae	Theridiidae	Jockey Spider
https://id.biodiversity.org.au/node/apni/2890796	Burchardia umbellata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae	Milkmaids
https://id.biodiversity.org.au/node/apni/2893007	Hakea prostrata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Harsh Hakea
https://id.biodiversity.org.au/node/apni/2893288	Phyllanthus calycinus	Labill.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae	False Boronia
https://id.biodiversity.org.au/node/apni/2897232	Crassula colorata	(Nees) Ostenf.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae	Stonecrop
https://id.biodiversity.org.au/node/apni/2900587	Spyridium globulosum	(Labill.) Benth.	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae	Basket Bush
https://id.biodiversity.org.au/node/apni/2902062	Hypolaena exsulca	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/node/apni/2903217	Phlebocarya ciliata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	
https://id.biodiversity.org.au/node/apni/2920050	Ptilotus drummondii	(Moq.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	Narrowleaf Mulla Mulla
https://id.biodiversity.org.au/node/fungi/60095231	Schizophyllum commune	Fr.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Schizophyllaceae	
https://biodiversity.org.au/afd/taxa/1142a7e2-ff49-4b09-9e2b-50587ce05801	Cryptoblepharus buchananii	(Gray, 1838)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Buchanana€™s Snake-eyed Skink
https://biodiversity.org.au/afd/taxa/234cf7f3-11a6-4525-8ee2-11337ccaee8c	Hydrophis platurus	(Linnaeus, 1766)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	
https://biodiversity.org.au/afd/taxa/4c642a6d-3dd9-41bd-bd6d-79c981d9c197	Gryllotalpa pluvialis	(MjÃ¶berg, 1913)	species	Animalia	Arthropoda	Insecta	Orthoptera	Gryllotalpidae	
https://biodiversity.org.au/afd/taxa/8fa8d059-9ce9-41f4-b604-63408d1de0b4	Tringa (Rhyacophilus) stagnatilis	(Bechstein, 1803)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Marsh Sandpiper
https://biodiversity.org.au/afd/taxa/ba72b1cb-a2f8-431c-b75c-b154948519781	Orthetrum caledonicum	(Brauer, 1865)	species	Animalia	Arthropoda	Insecta	Odonata	Libellulidae	
https://biodiversity.org.au/afd/taxa/fae9cb67-45a7-4adf-bb03-90afc3a9bccc	Cylindraustralia kochii	de Saussure, 1877	species	Animalia	Arthropoda	Insecta	Orthoptera	Cylindrachetidae	
https://id.biodiversity.org.au/node/apni/2889203	Vulpia myuros	(L.) C.C.Gmel.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Rat's Tail Fescue
https://id.biodiversity.org.au/node/apni/2904122	Millotia tenuifolia	Cass	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Soft Millotia
https://id.biodiversity.org.au/node/apni/2908167	Macarthuria australis	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Limeaceae	
https://id.biodiversity.org.au/node/apni/2908888	Hibbertia cuneiformis	(Labill.) Sm.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	Cutleaf Hibbertia
https://id.biodiversity.org.au/node/apni/2917802	Lachenalia reflexa	Thunb.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2918338	Heliophila pusilla	L.f.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	
https://id.biodiversity.org.au/node/apni/2918606	Dasypogon bromeliifolius	R.Br.	species	Plantae	Charophyta	Equisetopsida	Dasypogonales	Dasypogonaceae	Pineapple Bush
https://id.biodiversity.org.au/node/apni/2919519	Calytrix fraseri	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Pink Summer Calytrix
https://biodiversity.org.au/afd/taxa/2118456c-631c-4c4c-b995-72ce9d40d16e	Occasitermes occasus	(Silvestri, 1909)	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/44dea5cf-f8a5-4d2b-9b8a-9a94647dc6ab	Suta gouldii	(Gray, 1841)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Gould's Hooded Snake
https://biodiversity.org.au/afd/taxa/72b23d0a-7050-413f-9100-3562d383888e	Gelochelidon nilotica	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Gull-billed Tern
https://biodiversity.org.au/afd/taxa/7ab4afa0-70ec-4a57-8429-7299ea4440eb	Isoodon fusciventer	(J.E. Gray, 1841)	species	Animalia	Chordata	Mammalia	Peramelemorphia	Peramelidae	Quenda
https://biodiversity.org.au/afd/taxa/908e6ef4-de96-4951-a603-cb62caae6fdc	Neophema (Neonanodes) elegans	(Gould, 1838)	species	Animalia	Chordata	Aves	Psittaciformes	Psittacidae	Elegant Parrot
https://id.biodiversity.org.au/node/apni/2886946	Boronia purdieana	Diels	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae	Winter Boronia
https://id.biodiversity.org.au/node/apni/2894254	Lomandra preissii	(Endl.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2894848	Verticordia nitens	(Lindl.) Endl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Yellow Morrison
https://id.biodiversity.org.au/node/apni/2895473	Daviesia physodes	A.Cunn. ex G.Don	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2906779	Hibbertia aurea	Steud.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	
https://id.biodiversity.org.au/node/apni/2912814	Banksia marginata	Cav.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Honeysuckle
https://id.biodiversity.org.au/node/apni/2916956	Microlaena stipoides	(Labill.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Rice Grass
https://id.biodiversity.org.au/node/apni/2918789	Waitzia suaveolens	(Benth.) Druce	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Fragrant Waitzia
https://id.biodiversity.org.au/node/apni/2919672	Stylidium schoenoides	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Cow Kicks
https://id.biodiversity.org.au/node/apni/2920110	Wahlenbergia preissii	de Vriese	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	
https://id.biodiversity.org.au/node/apni/6285445	Conostylis candicans	Endl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Grey Cottonhead
https://biodiversity.org.au/afd/taxa/10dbd908-00f3-4ec2-9a9c-a2fd4782eaf1	Petroica (Petroica) goodenovii	(Vigors & Horsfield, 1827)	species	Animalia	Chordata	Aves	Passeriformes	Petroicidae	Red-capped Robin
https://biodiversity.org.au/afd/taxa/5457e4b9-38c9-4f26-82dc-4b2c8ef10ab6	Vanessa kershawi	(McCoy, 1868)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Australian Painted Lady
https://biodiversity.org.au/afd/taxa/ab455a0c-4545-4c5d-b2e8-1d8f112e413f	Sternula nereis	(Gould, 1843)	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Fairy Tern
https://biodiversity.org.au/afd/taxa/b129c2db-7d93-4688-a17f-2f77f1a09ae1	Archimantis sobrina	Saussure, 1872	species	Animalia	Arthropoda	Insecta	Mantodea	Mantidae	Large Brown Mantid
https://biodiversity.org.au/afd/taxa/f0c40591-1d07-4b81-9b0e-426d9a8c2d7f	Physalia utriculus	(La MartiniÃ©rÃ©. 1787)	species	Animalia	Cnidaria	Siphonophora	Cystonectae	Physaliidae	Bluebottle
https://id.biodiversity.org.au/node/apni/2886123	Lomandra suaveolens	(Endl.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2887259	Conostylis aurea	Lindl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	
https://id.biodiversity.org.au/node/apni/2887445	Pimelea sulphurea	Meisn.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae	
https://id.biodiversity.org.au/node/apni/2889040	Wahlenbergia capensis	(L.) A.DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Cape Bluebell
https://id.biodiversity.org.au/node/apni/2891835	Bromus diandrus	Roth	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Giant Brome
https://id.biodiversity.org.au/node/apni/2893649	Opercularia vaginata	Labill. ex Juss.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae	Dog Weed
https://id.biodiversity.org.au/node/apni/2894800	Gastrolobium capitatum	(Benth.) G.Chandler & Crisp	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2895373	Acacia sessilis	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2899357	Ehrharta longiflora	Sm.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Annual Veldt Grass
https://id.biodiversity.org.au/node/apni/2900212	Melaleuca seriata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2900859	Silene gallica	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae	French Catchfly
https://id.biodiversity.org.au/node/apni/2902954	Austrostipa flavescens	(Labill.) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2905928	Poranthera microphylla	Brongn.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae	Small Poranthera
https://id.biodiversity.org.au/node/apni/2911846	Pimelea leucantha	Diels	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae	
https://id.biodiversity.org.au/node/apni/2912739	Quinetia urvillei	Cass.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Grey Zic-zac
https://id.biodiversity.org.au/node/apni/2913902	Calytrix flavescens	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Summer Starflower
https://id.biodiversity.org.au/node/apni/2916418	Grevillea vestita	(Endl.) Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2919924	Gastrolobium linearifolium	G.Chandler & Crisp	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/6475313	Monotaxis grandiflora	Endl.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Diamond Of The Desert
https://id.biodiversity.org.au/node/apni/7392107	Scaevola canescens	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	Grey Scaevola
https://id.biodiversity.org.au/taxon/apni/51398952	Caladenia discoidea	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Dancing Spider Orchid
https://id.biodiversity.org.au/taxon/apni/51404199	Diuris corymbosa	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Common Donkey Orchid
https://biodiversity.org.au/afd/taxa/00b1b9a2-70c9-45be-8019-9c7fd755afc8	Trichosurus vulpecula	(Kerr, 1792)	species	Animalia	Chordata	Mammalia	Diprotodontia	Phalangeridae	Common Brushtail Possum
https://biodiversity.org.au/afd/taxa/0cbb688f-7d9c-4d2b-9956-844e71d1cd80	Lampropholis delicata	(De Vis, 1888)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Dark-flecked Garden Sunskink
https://biodiversity.org.au/afd/taxa/0e1b5b3c-e18b-4ec7-b60a-ca45364acb2a	Cimex lectularius	Linnaeus, 1758	species	Animalia	Arthropoda	Insecta	Hemiptera	Cimicidae	Bed Bug
https://biodiversity.org.au/afd/taxa/383daf29-74b1-40b1-9014-51bbf3af8898	Chlidonias (Chlidonias) leucopterus	(Temminck, 1815)	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	White-winged Tern
https://biodiversity.org.au/afd/taxa/4090ad27-9c69-454d-aa47-23860b9ee50b	Xenus cinereus	(GÃ¼ldenstÃ¤dt, 1775)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Terek Sandpiper
https://biodiversity.org.au/afd/taxa/41d32c25-20dd-4dd4-b52c-cbccfafa38a0	Austrolestes analis	(Rambur, 1842)	species	Animalia	Arthropoda	Insecta	Odonata	Lestidae	
https://biodiversity.org.au/afd/taxa/48bd256d-536d-4ca8-96eb-950f17e80184	Rhipidura (Rhipidura) fuliginosa	(Sparrman, 1787)	species	Animalia	Chordata	Aves	Passeriformes	Rhipiduridae	New Zealand Fantail
https://biodiversity.org.au/afd/taxa/67c256a8-6a31-46de-9dde-d75d5578496c	Turnix (Austroturnix) varius	(Latham, 1801)	species	Animalia	Chordata	Aves	Turniciformes	Turnicidae	Scrub Quail
https://biodiversity.org.au/afd/taxa/6e61b4ab-a84f-42e7-ad78-d2f84c02d3bb	Ommatoiulus moreleti	(Lucas, 1860)	species	Animalia	Arthropoda	Diplopoda	Julida	Julidae	
https://biodiversity.org.au/afd/taxa/8af934d1-3d47-4d4a-aac6-0d7ed64745b7	Heteronympha merope	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Common Brown
https://biodiversity.org.au/afd/taxa/92358f59-80ae-482f-8979-5679b23e92cc	Lalage (Lalage) tricolor	(Swainson, 1825)	species	Animalia	Chordata	Aves	Passeriformes	Campephagidae	Australian White-winged Triller
https://biodiversity.org.au/afd/taxa/b89f6072-46a2-4c1f-a417-fd45ee4d5c3f	Hemicordulia tau	(Selys, 1871)	species	Animalia	Arthropoda	Insecta	Odonata	Cordulidae	
https://biodiversity.org.au/afd/taxa/c4fdfce4-238c-4cfe-9abd-c365b6782b15	Amitermes conformis	Gay, 1968	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/d37d230d-c913-4248-b32e-c601761d1813	Austrothemis nigrescens	(Martin, 1901)	species	Animalia	Arthropoda	Insecta	Odonata	Libellulidae	
https://biodiversity.org.au/afd/taxa/d9061bb7-6e32-4e47-bb5c-ebd6f1919ec0	Hippotion celerio	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Sphingidae	
https://id.biodiversity.org.au/node/apni/2888190	Acacia cyclops	A.Cunn. ex G.Don	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Western Coastal Wattle
https://id.biodiversity.org.au/node/apni/2889387	Drosera pallida	Lindl.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	Pale Rainbow
https://id.biodiversity.org.au/node/apni/2889830	Orthrosanthus laxus	(Endl.) Benth.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Morning Iris
https://id.biodiversity.org.au/node/apni/2891893	Podolepis gracilis	Graham	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Slender Podolepis
https://id.biodiversity.org.au/node/apni/2899222	Anocrinum preissii	Lehm.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae	
https://id.biodiversity.org.au/node/apni/2904117	Caesia micrantha	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae	Pale Grass Lily
https://id.biodiversity.org.au/node/apni/2904465	Corynotheca micrantha	(Lindl.) Druce	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae	Sand Lily
https://id.biodiversity.org.au/node/apni/2915917	Melaleuca systena	Craven	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Coastal Honeymyrtle
https://id.biodiversity.org.au/node/apni/2919436	Lepidosperma squamatum	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2919475	Macrozamia fraseri	Miq.	species	Plantae	Charophyta	Equisetopsida	Cycadales	Zamiaceae	
https://id.biodiversity.org.au/taxon/apni/51287560	Dianella revoluta	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae	Black-anther Flax-lily
https://id.biodiversity.org.au/taxon/apni/51288833	Beaufortia elegans	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Elegant Beaufortia
https://id.biodiversity.org.au/taxon/apni/51406630	Microtis media	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Common Mignonette Orchid
https://id.biodiversity.org.au/taxon/apni/51412234	Pterostylis nana	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Dwarf Greenhood
https://biodiversity.org.au/afd/taxa/0b73e8bb-c141-4f07-8b14-47c3510e9c98	Badumna insignis	(L. Koch, 1872)	species	Animalia	Arthropoda	Arachnida	Araneae	Desidae	
https://biodiversity.org.au/afd/taxa/2c33a1fd-34f4-48ec-9ae6-38b51f2aa7ea	Cacatua (Cacatua) galerita	(Latham, 1790)	species	Animalia	Chordata	Aves	Psittaciformes	Cacatuidae	Sulphur-crested Cockatoo
https://biodiversity.org.au/afd/taxa/522a22ec-3318-4e17-97e7-8d8af150146b	Coptotermes michaelseni	Silvestri, 1909	species	Animalia	Arthropoda	Insecta	Blattodea	Rhinotermitidae	
https://biodiversity.org.au/afd/taxa/71c9826f-b797-4286-9fae-375b7fc2f53d	Xanthagrion erythroneurum	(Selys, 1876)	species	Animalia	Arthropoda	Insecta	Odonata	Coenagrionidae	
https://biodiversity.org.au/afd/taxa/71f334b1-42bb-9ea3-bcfd-3262ea069946	Ctenophorus adelaidensis	(Gray, 1841)	species	Animalia	Chordata	Reptilia	Squamata	Agamidae	Western Heath Dragon
https://biodiversity.org.au/afd/taxa/7f0b5430-3e37-4dd4-8dff-d6b288cde445	Turdus merula	Linnaeus, 1758	species	Animalia	Chordata	Aves	Passeriformes	Turdidae	Eurasian Blackbird
https://biodiversity.org.au/afd/taxa/8833ec4a-73e7-48b6-9a8f-37b76b612dd6	Castiarina pallidiventris	(Gory & Laporte, 1838)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/984bf7f3-3089-4e55-b494-a285eda21b1d	Motacilla (Budytes) tschutschensis	Gmelin, 1789	species	Animalia	Chordata	Aves	Passeriformes	Motacillidae	Eastern Yellow Wagtail
https://biodiversity.org.au/afd/taxa/eba0227f-f618-41b7-b5f6-1e4041ae1d5c	Ischnura aurora	(Brauer, 1865)	species	Animalia	Arthropoda	Insecta	Odonata	Coenagrionidae	
https://id.biodiversity.org.au/node/apni/2888082	Conostephium preissii	Sond.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2889975	Scaevola globulifera	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	
https://id.biodiversity.org.au/node/apni/2893109	Acacia lasiocarpa	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2893312	Conospermum stoechadis	Endl.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Common Smokebush
https://id.biodiversity.org.au/node/apni/2896509	Jacksonia furcellata	(Bonpl.) DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Grey Stinkwood
https://id.biodiversity.org.au/node/apni/2898242	Gazania linearis	(Thunb.) Druce	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Gazania Daisy
https://id.biodiversity.org.au/node/apni/2900959	Eucalyptus todtiana	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Blackbutt
https://id.biodiversity.org.au/node/apni/2903335	Drosera pulchella	Lehm.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	Pretty Sundew
https://id.biodiversity.org.au/node/apni/2903478	Jacksonia sericea	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2904201	Lysinema ciliatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Curry Flower
https://id.biodiversity.org.au/node/apni/2907808	Pithocarpa pulchella	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Dark-stigma Pithocarpa
https://id.biodiversity.org.au/node/apni/2907847	Lepidosperma angustatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2908654	Gonocarpus pithyoides	Nees	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae	
https://id.biodiversity.org.au/node/apni/2915505	Thysanotus patersonii	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Twining Fringe Lily
https://id.biodiversity.org.au/node/apni/2921305	Synaphea spinulosa	(Burm.f.) Merr.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/taxon/apni/51286923	Acacia huegelii	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/taxon/apni/51290326	Scholtzia involucrata	(Endl.) Druce	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Spiked Scholtzia
https://id.biodiversity.org.au/taxon/apni/51299925	Calytrix angulata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/taxon/apni/51399140	Caladenia longicauda	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	White Spider Orchid
https://id.biodiversity.org.au/taxon/apni/51404255	Diuris longifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Common Donkey Orchid
https://biodiversity.org.au/afd/taxa/183540dd-a37f-4feb-9720-c417cfb4c9f9	Notechis scutatus	(Peters, 1861)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Tiger Snake
https://biodiversity.org.au/afd/taxa/36f99ede-f626-4588-9c23-dfcc0241289c	Castiarina placida	(Thomson, 1879)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/386cdd45-1e01-4224-82b5-935fe3a7bb80	Cornu aspersum	(MÃ¼ller, 1774)	species	Animalia	Mollusca	Gastropoda	Stylommatophora	Helicidae	
https://biodiversity.org.au/afd/taxa/6ed80e89-7fcb-467e-b3c1-b09fcbb1be5b	Aedes (Ochlerotatus) ratcliffei	Marks, 1959	species	Animalia	Arthropoda	Insecta	Diptera	Culicidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/81aa2878-5c8c-45b1-9517-834a03e477ea	Rhytidoponera metallica	(Smith, 1858)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/c875d96f-82a1-459b-ac49-35057cfa0e70	Geitoneura minyas	(Waterhouse & Lyell, 1914)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Western Xenica
https://biodiversity.org.au/afd/taxa/e8d7b862-1d56-4d27-84a1-937f7915a0de	Vanellus (Lobivanellus) tricolor	(Vieillot, 1818)	species	Animalia	Chordata	Aves	Charadriiformes	Charadriidae	Banded Lapwing
https://biodiversity.org.au/afd/taxa/ec1da3d8-9780-48d0-b328-7d75e1ad0ebf	Buddelundia cinerascens	(Budde-Lund, 1912)	species	Animalia	Arthropoda	Malacostraca	Isopoda	Armadillidae	
https://biodiversity.org.au/afd/taxa/ef82ba0e-0d48-447e-963d-40517d3b25f9	Neelaps calonotus	(DumÃ©ril, Bibron & DumÃ©ril, 1854)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Black-striped Burrowing Snake
https://biodiversity.org.au/afd/taxa/f777ebe8-250f-4b8e-9e25-b5944a2ea023	Pogona minor	(Sternfeld, 1919)	species	Animalia	Chordata	Reptilia	Squamata	Agamidae	Dwarf Bearded Dragon
https://id.biodiversity.org.au/node/apni/2890836	Laxmannia squarrosa	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2891662	Drosera x sidjamesii	Lowrie & Conran	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	
https://id.biodiversity.org.au/node/apni/2893408	Adenanthos cygnorum	Diels	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2893469	Lagenophora huegelii	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Coarse Bottle-daisy
https://id.biodiversity.org.au/node/apni/2895692	Hypocalymma angustifolium	(Endl.) Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	White Myrtle
https://id.biodiversity.org.au/node/apni/2896357	Romulea rosea	(L.) Eckl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Guildford Grass
https://id.biodiversity.org.au/node/apni/2900052	Schoenus clandestinus	S.T.Blake	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2900679	Thysanotus triandrus	(Labill.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2905345	Banksia prionotes	Lindl.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Acorn Banksia
https://id.biodiversity.org.au/node/apni/2909339	Athrotaxis cupressoides	D.Don	species	Plantae	Charophyta	Equisetopsida	Pinales	Cupressaceae	Pencil Pine
https://id.biodiversity.org.au/node/apni/2915549	Urospermum picroides	(L.) Scop. ex F.W.Schmidt	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	False Hawkbit
https://id.biodiversity.org.au/node/apni/2916029	Laxmannia ramosa	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2918533	Lechenaultia floribunda	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	
https://id.biodiversity.org.au/node/apni/2919971	Myriophyllum tillaeoides	Diels	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae	
https://id.biodiversity.org.au/node/apni/5040372	Banksia dallanneyi	A.R.Mast & K.R.Thiele	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/taxon/apni/51267241	Arctotheca calendula	(L.) K.Lewin	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	African Marigold
https://id.biodiversity.org.au/taxon/apni/51285764	Vicia sativa	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Common Vetch
https://id.biodiversity.org.au/taxon/apni/51290266	Regelia ciliata	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/taxon/apni/51405072	Eriochilus dilatatus	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	White Bunny Orchid
https://id.biodiversity.org.au/taxon/apni/51406461	Leporella fimbriata	(Lindl.) A.S.George	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Hare Orchid
https://id.biodiversity.org.au/taxon/apni/51406465	Leptoceras menziesii	(R.Br.) Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Hare's Ears Orchid
https://id.biodiversity.org.au/taxon/apni/51414346	Thelymitra macrophylla	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Scented Sun Orchid
https://biodiversity.org.au/afd/taxa/08f00850-a369-4ecf-bf74-0212ef725382	Maratus clupeatus	Otto & Hill, 2014	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/1351b437-2eb5-4949-990b-b18eb45252af	Coccinella transversalis	Fabricius, 1781	species	Animalia	Arthropoda	Insecta	Coleoptera	Coccinellidae	Transverse Ladybird
https://biodiversity.org.au/afd/taxa/20938676-d287-43d7-a887-a15fbb3ff6bb	Ixobrychus dubius	Mathews, 1912	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	Minute Bittern
https://biodiversity.org.au/afd/taxa/20cf2b3c-3f38-4110-8c9f-32da03484256	Cercartetus concinnus	(Gould, 1845)	species	Animalia	Chordata	Mammalia	Diprotodontia	Burramyidae	Western Pygmy-possum
https://biodiversity.org.au/afd/taxa/3e1b019f-3659-4c9e-8d45-3e7b357aac4b	Hesperotermes infrequens	(Hill, 1927)	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/558915f1-ed5c-4406-bdc5-41d5084abdbd	Dasypodia selenophora	GuenÃ©e, 1852	species	Animalia	Arthropoda	Insecta	Lepidoptera	Erebidae	
https://biodiversity.org.au/afd/taxa/562a5c6b-51e8-457e-9b5d-c921af5e18ed	Tarsipes rostratus	Gervais & Verreaux, 1842	species	Animalia	Chordata	Mammalia	Diprotodontia	Tarsipedidae	Honey Possum
https://biodiversity.org.au/afd/taxa/5a264c77-a7d1-43ca-ae1f-233f59b175aa	Ptilotula ornata	(Gould, 1838)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Yellow-plumed Honeyeater
https://biodiversity.org.au/afd/taxa/64bbd521-e1ad-4768-9c40-bce5ff6630095	Heterotermes platycephalus	Froggatt, 1897	species	Animalia	Arthropoda	Insecta	Blattodea	Rhinotermitidae	
https://biodiversity.org.au/afd/taxa/66cf9e86-f1f3-4716-a4d3-cd4650ff087a	Tringa (Heteroscelus) brevipes	(Vieillot, 1816)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Grey-tailed Tattler
https://biodiversity.org.au/afd/taxa/78106ae5-509d-4ab5-aac9-74f23b8ed9ca	Iridonyssus formicans	Raven, 2015	species	Animalia	Arthropoda	Arachnida	Araneae	Corinnidae	
https://biodiversity.org.au/afd/taxa/7de6b16a-f854-4b4b-88cf-81868ce74ad8	Felis catus	Linnaeus, 1758	species	Animalia	Chordata	Mammalia	Carnivora	Felidae	Cat
https://biodiversity.org.au/afd/taxa/8b1eb1bb-9fdb-4ef7-b2a3-2874072c7b07	Neelaps bimaculatus	(DumÃ©ril, Bibron & DumÃ©ril, 1854)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Black-naped Snake
https://biodiversity.org.au/afd/taxa/99992944-b7c4-448e-92ae-d50205e00ab1	Castiarina mimesis	Barker, 1993	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/a485d484-20b7-4687-8397-6b33bdbc1526	Apricia jovialis	(L. Koch, 1879)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/a4afa011-fe07-48bb-bbea-184758594291	Nephila edulis	(LabillardiÃ¨re, 1799)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	Australian Golden Orb-weaving Spider
https://biodiversity.org.au/afd/taxa/a7b48a73-14d8-405a-958a-17f1fe46f945	Calotemognatha varicollis	(Carter, 1913)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/bf8d2470-6c86-4483-b695-51fa1a373ec1	Kalotermes aemulus	Sewell & Gay, 1978	species	Animalia	Arthropoda	Insecta	Blattodea	Kalotermitidae	
https://biodiversity.org.au/afd/taxa/d7b2b8ef-9597-4048-9265-7c456b5ba90c	Crypsiphona ocultaria	(Donovan, 1805)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/e2b6aed6-2f82-4b7c-9966-5ef2f9190bee	Apus (Apus) pacificus	(Latham, 1801)	species	Animalia	Chordata	Aves	Apodiformes	Apodidae	Fork-tailed Swift
https://biodiversity.org.au/afd/taxa/ebfeed95-746f-40a6-b453-6e6b78aaabc1	Valanga irregularis	(Walker, 1870)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	Giant Grasshopper
https://id.biodiversity.org.au/node/apni/2887115	Grevillea preissii	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Spider Net Grevillea
https://id.biodiversity.org.au/node/apni/2889330	Podotheca gnaphalioides	Graham	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2890986	Hovea pungens	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Devils Pins
https://id.biodiversity.org.au/node/apni/2893218	Allocasuarina humilis	(Otto & A.Dietr.) L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Fagales	Casuarinaceae	Dwarf Sheoak
https://id.biodiversity.org.au/node/apni/2896012	Acanthocarpus preissii	Lehm.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2896403	Hemiandra linearis	Benth.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	Speckled Snakebush
https://id.biodiversity.org.au/node/apni/2896656	Melaleuca preissiana	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Moonah
https://id.biodiversity.org.au/node/apni/2898550	Croninia kingiana	(F.Muell.) J.M.Powell	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2898862	Calandrinia corrigioloides	F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Portulacaceae	Strap Purslane
https://id.biodiversity.org.au/node/apni/2903083	Orobanche minor	Sm.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Orobanchaceae	Broomrape
https://id.biodiversity.org.au/node/apni/2911793	Lomandra nigricans	T.D.Macfarl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2915964	Olearia axillaris	(DC.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Coast Daisy-bush
https://id.biodiversity.org.au/node/apni/2916661	Stylidium repens	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Matted Triggerplant
https://id.biodiversity.org.au/node/apni/2918542	Euphorbia terracina	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Terracine Spurge
https://id.biodiversity.org.au/node/apni/2919872	Trifolium arvense	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Haresfoot Clover
https://id.biodiversity.org.au/node/fungi/60104069	Trichia favoginea	(Batsch) Pers.	species	Protista	Amoebozoa	Myxogastrea	Trichiida	Trichiaceae	
https://id.biodiversity.org.au/taxon/apni/51403416	Disa bracteata	Sw.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	South African Orchid
https://id.biodiversity.org.au/taxon/apni/51412026	Pterostylis aspera	D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Brown-veined Shell Orchid
https://biodiversity.org.au/afd/taxa/0a1b22e4-3ae9-4034-b180-060d09de40f8	Melobasis superba	(Laporte & Gory, 1837)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/2a4e373b-913a-4e2a-a53f-74828f6dae7e	Dromaius novaehollandiae	(Latham, 1790)	species	Animalia	Chordata	Aves	Struthioniformes	Casuariidae	Emu
https://biodiversity.org.au/afd/taxa/446610b7-2def-4dc1-b0c9-f57f8bb47532	Xederra gwynnei	Rentz, 1985	species	Animalia	Arthropoda	Insecta	Orthoptera	Tettigoniidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/4df73026-423d-4a0f-a9c5-cb82f319167f	Orthodera ministralis	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Mantodea	Mantidae	Green Mantid
https://biodiversity.org.au/afd/taxa/684578a5-71f6-4918-81b5-67a39880473e	Deretaphrus xanthorrhoeae	Lea, 1899	species	Animalia	Arthropoda	Insecta	Coleoptera	Bothrideridae	
https://biodiversity.org.au/afd/taxa/7036b0ec-7f13-4825-9a06-304242bc985a	Leioproctus (Colletopsis) contrarius	Michener, 1965	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	A Short-tongued Bee
https://biodiversity.org.au/afd/taxa/7685fef2-1975-4417-b16a-91f991c9bee0	Hylaeus (Euprosopis) violaceus	(Smith, 1853)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/9a942ab6-c29b-4de5-ab2a-72c9ef99605a	Strophurus spinigerus	(Gray, 1842)	species	Animalia	Chordata	Reptilia	Squamata	Diplodactylidae	South-western Spiny-tailed Gecko
https://biodiversity.org.au/afd/taxa/a064e0ce-9140-4ab1-a143-bacc1835e9ee	Diphucrania tyrrhena	(Carter, 1923)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/d08f6bce-36dc-4347-811f-dccf5b08369c	Paragia tricolor	Smith, 1850	species	Animalia	Arthropoda	Insecta	Hymenoptera	Vespidae	
https://biodiversity.org.au/afd/taxa/ec2c76c7-0cd9-4f26-935e-4d90762590fa	Haematopus longirostris	Vieillot, 1817	species	Animalia	Chordata	Aves	Charadriiformes	Haematopodidae	Pied Oystercatcher
https://biodiversity.org.au/afd/taxa/ee90eb32-3d7c-41d6-8bf6-3ffda1ad8b9b	Crinia georgiana	Tschudi, 1838	species	Animalia	Chordata	Amphibia	Anura	Myobatrachidae	Tschudi's Froglet
https://biodiversity.org.au/afd/taxa/f0d2deda-1c2a-44ab-b81e-b469e4e15eac	Hypochrysops halyaetus	Hewitson, 1874	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lycaenidae	Western Jewel
https://biodiversity.org.au/afd/taxa/f29f01e6-0bfe-4621-b068-42dac6c758dc	Petrochelidon (Petrochelidon) ariel	(Gould, 1842)	species	Animalia	Chordata	Aves	Passeriformes	Hirundinidae	Fairy Martin
https://biodiversity.org.au/afd/taxa/f5013a8e-bca0-4063-a07a-e17577f0aba0	Castiarina simulata	(Gory & Laporte, 1838)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://id.biodiversity.org.au/name/apni/51361753_0	Cyanothamnus ramosus		species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae	
https://id.biodiversity.org.au/node/apni/2886078	Leucopogon parviflorus	(Andrews) Lindl.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Coast Beard Heath
https://id.biodiversity.org.au/node/apni/2886637	Podotheca chrysantha	(Steetz) Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Yellow Podotheca
https://id.biodiversity.org.au/node/apni/2886742	Astartea scoparia	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Common Astartea
https://id.biodiversity.org.au/node/apni/2887451	Desmocladus fasciculatus	(R.Br.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/node/apni/2889526	Ricinocarpos glaucus	Endl.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Wedding Bush
https://id.biodiversity.org.au/node/apni/2893707	Lomandra maritima	T.S.Choo	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2896952	Templetonia retusa	(Vent.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Bullock Bush
https://id.biodiversity.org.au/node/apni/2898239	Cotula turbinata	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Ferny Cotula
https://id.biodiversity.org.au/node/apni/2898669	Ptilotus polystachyus	(Gaudich.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	Long Tails
https://id.biodiversity.org.au/node/apni/2898676	Exocarpos sparteus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae	Broom Ballart
https://id.biodiversity.org.au/node/apni/2900173	Persoonia saccata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Snottygobble
https://id.biodiversity.org.au/node/apni/2908914	Acacia cochlearis	(Labill.) H.L.Wendl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Rigid Wattle
https://id.biodiversity.org.au/node/apni/2909343	Thysanotus sparteus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2910555	Daviesia decurrens	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Thorny Bitter-pea
https://id.biodiversity.org.au/node/apni/2911400	Gelonix regia	(Bojer ex Hook.) Raf.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Peacock Flower
https://id.biodiversity.org.au/node/apni/2912207	Pimelea argentea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae	Silver-leaved Pimelea
https://id.biodiversity.org.au/node/apni/2912741	Solanum nigrum	L.	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae	Nightshade
https://id.biodiversity.org.au/node/apni/2913977	Banksia littoralis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Swamp Banksia
https://id.biodiversity.org.au/node/apni/2914252	Austrostipa compressa	(R.Br.) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/node/apni/2914378	Cyathochaeta teretifolia	W.Fitzg.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2915025	Lobelia tenuior	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Slender Lobelia
https://id.biodiversity.org.au/node/apni/2916036	Acacia willdenowiana	H.L.Wendl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Grass Wattle
https://id.biodiversity.org.au/node/apni/2919145	Comesperma calymega	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae	Blue-spike Milkwort
https://id.biodiversity.org.au/node/apni/2920316	Chamaescilla corymbosa	(R.Br.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Blue Stars
https://id.biodiversity.org.au/node/apni/7169152	Hibbertia sericosepala	K.R.Thiele	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	
https://id.biodiversity.org.au/node/fungi/60092453	Amanita xanthocephala	(Berk.) D.A.Reid & R.N.Hilton	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Amanitaceae	
https://id.biodiversity.org.au/taxon/apni/51285711	Pultenaea reticulata	(Sm.) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/taxon/apni/51291672	Persicaria decipiens	(R.Br.) K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Polygonaceae	Slender Knotweed
https://id.biodiversity.org.au/taxon/apni/51295527	Callitris preissii	Miq.	species	Plantae	Charophyta	Equisetopsida	Pinales	Cupressaceae	White Pine
https://id.biodiversity.org.au/taxon/apni/51302262	Calothamnus quadrifidus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	One-sided Bottlebrush
https://id.biodiversity.org.au/taxon/apni/51409843	Prasophyllum parvifolium	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Autumn Leek Orchid
https://id.biodiversity.org.au/taxon/apni/51412292	Pterostylis recurva	Benth.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Jug Orchid
https://id.biodiversity.org.au/taxon/apni/51412382	Pterostylis sp. short sepals (W.Jackson 8J259)	WA Herbarium	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	
https://biodiversity.org.au/afd/taxa/0724a2b5-5216-4f98-96b0-7761e4133204	Amegilla (Notomegilla) chlorocyanea	(Cockerell, 1914)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Apidae	Blue Banded Bee
https://biodiversity.org.au/afd/taxa/204cbfe1-dcdd-42b9-8511-0d92f00ab166	Argiope trifasciata	(Forsskål, 1775)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/33013eb9-e3e1-4e2b-95a4-89d7505ad0a1	Araiope protensa	L. Koch, 1872	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/36b436b1-3dc2-487d-8386-8bf3f3972e40	Phascogale calura	Gould, 1844	species	Animalia	Chordata	Mammalia	Dasyuromorphia	Dasyuridae	Red-tailed Phascogale
https://biodiversity.org.au/afd/taxa/3cf02a11-d525-4d6c-a8ef-8d82162a7cee	Kalotermes hili	Emerson in Snyder, 1949	species	Animalia	Arthropoda	Insecta	Blattodea	Kalotermitidae	
https://biodiversity.org.au/afd/taxa/424418ac-76a5-48b0-ad53-bf6da2ab96f5	Chasmoptera hutti	(Westwood, 1848)	species	Animalia	Arthropoda	Insecta	Neuroptera	Nemopteridae	
https://biodiversity.org.au/afd/taxa/5626df4b-12d2-4a67-82f3-9fc6e0f16497	Cinclorhamphus (Cinclorhamphus) cruralis	(Vigors & Horsfield, 1827)	species	Animalia	Chordata	Aves	Passeriformes	Locustellidae	Brown Songlark
https://biodiversity.org.au/afd/taxa/5fb8f066-4b41-48be-a021-aa3ddf3ad2d5	Mesodina cyanophracta	Lower, 1911	species	Animalia	Arthropoda	Insecta	Lepidoptera	Hesperiidae	Blue Iris-skipper
https://biodiversity.org.au/afd/taxa/7a054f56-4679-4ca7-a123-1cc7aa5bdf36	Orthophagus haagi	Harold, 1867	species	Animalia	Arthropoda	Insecta	Coleoptera	Scarabaeidae	
https://biodiversity.org.au/afd/taxa/7de2660b-e39a-4c85-9512-bec18c5f82fc	Harmonia conformis	(Boisduval, 1835)	species	Animalia	Arthropoda	Insecta	Coleoptera	Coccinellidae	
https://biodiversity.org.au/afd/taxa/8698c1d0-2079-477f-832a-0771c8df7cad	Acanthagenys rufogularis	Gould, 1838	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Spiny-cheeked Honeyeater
https://biodiversity.org.au/afd/taxa/8ce899d0-e1ad-4646-a161-6fe4838babbc	Cherax quinquecarinatus	(Gray, 1845)	species	Animalia	Arthropoda	Malacostraca	Decapoda	Parastacidae	Dilki
https://biodiversity.org.au/afd/taxa/9f0d30c0-e324-4454-97dd-e1f5c6e206ff	Armadillidium vulgare	(Latreille, 1804)	species	Animalia	Arthropoda	Malacostraca	Isopoda	Armadillidiidae	
https://biodiversity.org.au/afd/taxa/b07aed34-2184-4ce6-b8f3-106e477c7eb1	Glycyphana (Glycyphaniola) stolata	(Fabricius, 1781)	species	Animalia	Arthropoda	Insecta	Coleoptera	Scarabaeidae	
https://biodiversity.org.au/afd/taxa/b32a2ec6-315c-48cf-84b3-4898e39f4b57	Sugomel nigrum	(Gould, 1838)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Black Honeyeater
https://biodiversity.org.au/afd/taxa/b7b51fc9-39ea-4623-8b41-f6eecde71cf2	Leioproctus (Leioproctus) macmillani	Houston, 1991	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/b9255d27-58e0-4a8b-9ac8-854c1ad1a741	Nephrotoma australasiae	(Skuse, 1890)	species	Animalia	Arthropoda	Insecta	Diptera	Tipulidae	
https://biodiversity.org.au/afd/taxa/bed0da1d-99da-4bed-92ed-4c61441389f8	Lasioglossum (Chilalictus) castor	Walker, 1995	species	Animalia	Arthropoda	Insecta	Hymenoptera	Halictidae	
https://biodiversity.org.au/afd/taxa/ce8a3b07-0dae-4be2-9ecc-666abb2f85fd	Melobasis lathami	(Laporte & Gory, 1837)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/de272308-a7fb-46cf-bcfd-1bc245862c9b	Mictis profana	(Fabricius, 1803)	species	Animalia	Arthropoda	Insecta	Hemiptera	Coreidae	Crusader Bug
https://biodiversity.org.au/afd/taxa/eb612f15-7f65-4ec5-9660-95fae2fd00de	Spodoptera litura	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://id.biodiversity.org.au/name/apni/9303805	Hibbertia striata	(Steud.) K.R.Thiele	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	
https://id.biodiversity.org.au/node/apni/2886928	Podotheca angustifolia	(Labill.) Less.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Sticky Longheads
https://id.biodiversity.org.au/node/apni/2887617	Conostephium minus	Lindl.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Pink-tipped Pearl Flower

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2888495	Raphanus raphanistrum	L.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Wild Radish
https://id.biodiversity.org.au/node/apni/2889922	Eragrostis curvula	(Schrad.) Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	African Love Grass
https://id.biodiversity.org.au/node/apni/2891670	Eucalyptus rudis	Endl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Flooded Gum
https://id.biodiversity.org.au/node/apni/2894027	Banksia nivea	Labill.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2895283	Lepidosperma scabrum	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2895963	Haemodorum spicatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	
https://id.biodiversity.org.au/node/apni/2896026	Tetratheca hirsuta	Lindl.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae	Black-eyed Susan
https://id.biodiversity.org.au/node/apni/2896776	Stellaria media	(L.) Vill.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae	Kohukohu
https://id.biodiversity.org.au/node/apni/2897492	Adenanthos obovatus	Labill.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Basket Flower
https://id.biodiversity.org.au/node/apni/2899137	Crassula glomerata	P.J.Bergius	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae	
https://id.biodiversity.org.au/node/apni/2900424	Oenothera drummondii	Hook.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Onagraceae	Beach Evening Primrose
https://id.biodiversity.org.au/node/apni/2902747	Lysinema pentapetalum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2903399	Lupinus cosentinii	Guss.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Sandplain Lupin
https://id.biodiversity.org.au/node/apni/2908422	Avena fatua	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Wild Oat
https://id.biodiversity.org.au/node/apni/2909279	Levenhookia stipitata	(Benth.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Common Stylewort
https://id.biodiversity.org.au/node/apni/2913117	Calytrix sapphirina	Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2913966	Melaleuca cardiophylla	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Tangling Melaleuca
https://id.biodiversity.org.au/node/apni/2914300	Ricinocarpos undulatus	Lehm.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	
https://id.biodiversity.org.au/node/apni/2914552	Hensmania turbinata	(Endl.) W.Fitzg.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae	
https://id.biodiversity.org.au/node/apni/2915205	Melaleuca huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Chenille Honeymyrtle
https://id.biodiversity.org.au/node/apni/2917718	Leucopogon oxycedrus	Sond.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2919170	Euphorbia peplus	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Petty Spurge
https://id.biodiversity.org.au/taxon/apni/51283236	Calectasia elegans	R.L.Barrett	species	Plantae	Charophyta	Equisetopsida	Dasypogonales	Dasypogonaceae	Elegant Tinsel Lily
https://id.biodiversity.org.au/taxon/apni/51283608	Drosera paleacea	DC.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	Dwarf Sundew
https://id.biodiversity.org.au/taxon/apni/51399044	Caladenia georgei	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Tuart Spider Orchid
https://id.biodiversity.org.au/taxon/apni/51407862	Pheladenia deformis	(R.Br.) D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Blue Beard
NZOR-6-103292	Chara fibrosa	(Agardh ex Bruzelius) R.D. Wood	species	Plantae	Chlorophyta	Charophyceae	Charales	Characeae	
NZOR-6-54688	Tyto alba	Gould	species	Animalia	Chordata	Aves	Strigiformes	Tytonidae	Barn Owl
NZOR-6-79306	Poronia erici	Lohmeyer & Benkert	species	Fungi	Ascomycota	Sordariomycetes	Xylariales	Xylariaceae	
https://biodiversity.org.au/afd/taxa/09e007e5-22c5-44ff-9654-4bcf4f1fcdb4	Simosyrphus grandicornis	(Macquart, 1842)	species	Animalia	Arthropoda	Insecta	Diptera	Syrphidae	
https://biodiversity.org.au/afd/taxa/0cb18aba-116d-465d-94e6-784ecd86f7e4	Austroagrion cyane	(Selys, 1876)	species	Animalia	Arthropoda	Insecta	Odonata	Coenagrionidae	
https://biodiversity.org.au/afd/taxa/182e9eae-5358-4261-8a17-b123c1200c8d	Vespula germanica	(Fabricius, 1793)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Vespidae	
https://biodiversity.org.au/afd/taxa/24c21411-d78c-415d-a848-f0abb83b615a	Platalea (Platalea) regia	Gould, 1838	species	Animalia	Chordata	Aves	Ciconiiformes	Threskiornithidae	Royal Spoonbill
https://biodiversity.org.au/afd/taxa/2fe21bed-d7f5-4e45-8deb-5d4e5b08fc4d	Austrolestes annulosus	(Selys, 1862)	species	Animalia	Arthropoda	Insecta	Odonata	Lestidae	
https://biodiversity.org.au/afd/taxa/3da69bfc-5152-4f96-bf75-ce208d759c5f	Archaeosynthemis leachii	(Selys, 1871)	species	Animalia	Arthropoda	Insecta	Odonata	Synthemistidae	
https://biodiversity.org.au/afd/taxa/4fbec7b1-d763-484f-b5c3-f169b192cbb0	Ctenotus australis	(Gray, 1838)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Western Limestone Ctenotus
https://biodiversity.org.au/afd/taxa/50448708-93a6-4537-8ff7-7190996715be	Porzana (Porzana) pusilla	(Pallas, 1776)	species	Animalia	Chordata	Aves	Gruiformes	Rallidae	Marsh Crake
https://biodiversity.org.au/afd/taxa/52673304-993c-4feb-b3c1-75e3c539a112	Theba pisana	(MÃ¼ller, 1774)	species	Animalia	Mollusca	Gastropoda	Stylommatophora	Helicidae	White Italian Snail
https://biodiversity.org.au/afd/taxa/566fa247-c252-4bf5-895b-39b0f5bab32c	Antichiropus whistleri	Attems, 1911	species	Animalia	Arthropoda	Diplopoda	Polydesmida	Paradoxosomatidae	
https://biodiversity.org.au/afd/taxa/579f62c4-22c2-4150-87af-61e9031de4f3	Agrotis munda	Walker, 1857	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://biodiversity.org.au/afd/taxa/61a86980-313f-4d13-a592-4e506dac73fe	Hemidactylus frenatus	DumÃ©ril & Bibron, 1836	species	Animalia	Chordata	Reptilia	Squamata	Gekkonidae	House Gecko
https://biodiversity.org.au/afd/taxa/6617f80d-3f99-46d7-9567-534d79a98108	Pletholax gracilis	Cope, 1864	species	Animalia	Chordata	Reptilia	Squamata	Pygopodidae	Keeled Legless Lizard
https://biodiversity.org.au/afd/taxa/7fcc9d58-823e-4095-9ca2-512ef3b93e4b	Polistes (Polistes) dominulus	(Christ, 1791)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Vespidae	
https://biodiversity.org.au/afd/taxa/a5f83a90-288d-4f93-ad46-5a6e3018da19	Plebs cyphoxis	(Simon, 1908)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/a9b2251c-0ee0-4e28-92c5-9e62c7121073	Cyclodomorphus celatus	Shea & Miller, 1995	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Western Slender Blue-tongue
https://biodiversity.org.au/afd/taxa/ad50631c-9cf2-4eb3-8b82-a73e1e41cbad	Synechocera elongata	Thomson, 1879	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/c1a849ed-2124-42a8-a3ec-b0c321661bb5	Lerista lineopunctulata	(DumÃ©ril & Bibron, 1839)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Dotted-line Robust Slider
https://biodiversity.org.au/afd/taxa/c413e82b-40ae-4473-8461-f80ab97f9342	Nasutitermes exitiosus	(Hill, 1925)	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/c650dca9-69e3-4051-ace8-86444b0ee972	Egretta sacra	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	Blue Heron
https://biodiversity.org.au/afd/taxa/c7a9314a-100e-4138-b7de-7c6b86248be4	Poecilotoma grandicornis	(Erichson, 1842)	species	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	
https://biodiversity.org.au/afd/taxa/d3bf2b8a-e178-4adb-9c5e-bef63c34e032	Spilopelia chinensis	(Scopoli, 1786)	species	Animalia	Chordata	Aves	Columbiformes	Columbidae	Spotted Turtle-dove
https://biodiversity.org.au/afd/taxa/d3e1f2df-ce9b-4e42-ab17-ac74aa0e954c	Neolucia agricola	(Westwood, 1851)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lycaenidae	Fringed Blue
https://biodiversity.org.au/afd/taxa/d925c055-ee20-46ad-80b1-f0ca0f5f5416	Idiosoma sigillatum	(O.P.-Cambridge, 1870)	species	Animalia	Arthropoda	Arachnida	Araneae	Idiopidae	Swan Coastal Plain Shield-backed Trapdoor Spider
https://biodiversity.org.au/afd/taxa/eabb996d-3dff-4af9-8526-470d9c42de8d	Trapezites argenteoornatus	(Hewitson, 1868)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Hesperiidae	Silver-spotted Skipper
https://biodiversity.org.au/afd/taxa/ed422909-791d-4e3a-85a3-8184546ad710	Bathyllus albicinctus	(Erichson, 1842)	species	Animalia	Arthropoda	Insecta	Hemiptera	Cercopidae	
https://biodiversity.org.au/afd/taxa/f13d3116-25ed-439c-bb75-531a94bd77d0	Neurocterus transitus	Monteith, 1997	species	Animalia	Arthropoda	Insecta	Hemiptera	Aradidae	
https://biodiversity.org.au/afd/taxa/f4bad98b-a1fe-449c-95c9-575972fa43d0	Megachile aurifrons	Smith, 1853	species	Animalia	Arthropoda	Insecta	Hymenoptera	Megachilidae	
https://id.biodiversity.org.au/node/apni/2886311	Dielsia stenostachya	(W.Fitzg.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/node/apni/2886785	Carpobrotus edulis	(L.) N.E.Br.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Aizoaceae	Hottentot Fig
https://id.biodiversity.org.au/node/apni/2888211	Drosera patens	Lowrie & Conran	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	
https://id.biodiversity.org.au/node/apni/2888659	Stylidium androsaceum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	
https://id.biodiversity.org.au/node/apni/2889348	Jacksonia calcicola	Chappill	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2890488	Thysanotus thyrsoideus	Baker	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2891504	Conospermum acerosum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Needle-leaved Smokebush
https://id.biodiversity.org.au/node/apni/2895348	Thysanotus arbuscula	Baker	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2896873	Leucopogon australis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Spike Beard-heath
https://id.biodiversity.org.au/node/apni/2896899	Amphipogon lazuroides	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/node/apni/2897398	Poranthera ericoides	Klotzsch	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae	
https://id.biodiversity.org.au/node/apni/2898454	Eutaxia virgata	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2899088	Cassytha flava	Nees	species	Plantae	Charophyta	Equisetopsida	Laurales	Lauraceae	Dodder Laurel

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2900436	Pericalymma ellipticum	(Endl.) Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Swamp Teatree
https://id.biodiversity.org.au/node/apni/2900733	Hakea ruscifolia	Labill.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Candle Hakea
https://id.biodiversity.org.au/node/apni/2902036	Utricularia gibba	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae	Bladderwort
https://id.biodiversity.org.au/node/apni/2903990	Pentameris pallida	(Thunb.) Galley & H.P.Linder	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/node/apni/2904101	Tricoryne tenella	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae	Mallee Rush Lily
https://id.biodiversity.org.au/node/apni/2904505	Viminaria juncea	(Schrad. & J.C.Wendl.) Hoffmanns.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Native Broom
https://id.biodiversity.org.au/node/apni/2905038	Stylidium rigidulum	Sond.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	
https://id.biodiversity.org.au/node/apni/2905839	Leptospermum laevigatum	(Gaertn.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Coast Tea Tree
https://id.biodiversity.org.au/node/apni/2906267	Millotia myosotidifolia	(Benth.) Steetz	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Broad-leaf Millotia
https://id.biodiversity.org.au/node/apni/2907304	Chondrilla juncea	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Skeleton Weed
https://id.biodiversity.org.au/node/apni/2909385	Diplolaena angustifolia	Hook.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae	Yanchep Rose
https://id.biodiversity.org.au/node/apni/2910246	Lyginia imberbis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Anarthriaceae	
https://id.biodiversity.org.au/node/apni/2910499	Phyllangium paradoxum	(R.Br.) Dunlop	species	Plantae	Charophyta	Equisetopsida	Gentianales	Loganiaceae	Wiry Mitrewort
https://id.biodiversity.org.au/node/apni/2912157	Brassica tournefortii	Gouan	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Mediterranean Turnip
https://id.biodiversity.org.au/node/apni/2912980	Acacia applanata	Maslin	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Grass Wattle
https://id.biodiversity.org.au/node/apni/2913396	Rhagodia baccata	(Labill.) Moq.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae	Berry Saltbush
https://id.biodiversity.org.au/node/apni/2913644	Verticordia ovalifolia	Meisn.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Oval-leaved Featherflower
https://id.biodiversity.org.au/node/apni/2914410	Dischisma arenarium	E.Mey.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae	
https://id.biodiversity.org.au/node/apni/2914702	Chamelaucium uncinatum	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Geraldton Wax
https://id.biodiversity.org.au/node/apni/2918187	Asteridea pulverulenta	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2918334	Schoenus grandiflorus	(Nees ex Lehm.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Large Flowered Bog-rush
https://id.biodiversity.org.au/node/apni/2918621	Verticordia drummondii	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Drummond's Featherflower
https://id.biodiversity.org.au/node/apni/2920927	Monoculus monstrosus	(Burm.f.) B.Nord.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/6990396	Erigeron sumatrensis	Retz.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/ausmoss/10066620	Campylopus introflexus	(Hedw.) Brid.	species	Plantae	Bryophyta	Bryopsida	Dicranales	Leucobryaceae	
https://id.biodiversity.org.au/node/fungi/60095033	Volvariella speciosa	(Fr.) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Pluteaceae	
https://id.biodiversity.org.au/taxon/apni/51290286	Regelia inops	(Schauer) Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/taxon/apni/51293793	Leptocarpus scariosus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/taxon/apni/51294947	Petrophile brevifolia	Lindl.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/taxon/apni/51406604	Microtis alba	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	White Mignonette Orchid
https://id.biodiversity.org.au/taxon/apni/51409785	Prasophyllum hians	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Yawning Leek Orchid
https://id.biodiversity.org.au/taxon/apni/51412104	Pterostylis dilatata	A.S.George	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Robust Snail Orchid
https://id.biodiversity.org.au/taxon/apni/51414248	Thelymitra campanulata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Shirt Orchid
https://id.biodiversity.org.au/taxon/apni/51414286	Thelymitra fuscolutea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Chestnut Sun Orchid
NZOR-6-55278	Martensia fragilis	Harv.	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae	Red Alga
https://biodiversity.org.au/afd/taxa/04220e3c-ba73-4448-a605-8da333e6d08e	Parentia perthensis	Bickel, 1994	species	Animalia	Arthropoda	Insecta	Diptera	Dolichopodidae	
https://biodiversity.org.au/afd/taxa/093b24db-34bf-4f75-97fe-2329e21c3b18	Steatoda grossa	(C.L. Koch, 1838)	species	Animalia	Arthropoda	Arachnida	Araneae	Theridiidae	
https://biodiversity.org.au/afd/taxa/09843a8d-0a78-4680-8bf4-bd95dc93e80e	Spilopelia senegalensis	(Linnaeus, 1766)	species	Animalia	Chordata	Aves	Columbiformes	Columbidae	Laughing Turtle-dove
https://biodiversity.org.au/afd/taxa/0cfe0945-3377-4d01-b379-1913bfa39e3e	Opopaea framenai	Baehr & Harvey, 2013	species	Animalia	Arthropoda	Arachnida	Araneae	Oonopidae	
https://biodiversity.org.au/afd/taxa/0d4c9c0c-51d3-44e0-a365-fe0f8b791e66	Tachyglossus aculeatus	(Shaw, 1792)	species	Animalia	Chordata	Mammalia	Monotremata	Tachyglossidae	Short-beaked Echidna
https://biodiversity.org.au/afd/taxa/0fbb8f1e-ec6d-4b65-a663-7387c91c68bf	Isoodon obesulus	(Shaw, 1797)	species	Animalia	Chordata	Mammalia	Peramelemorphia	Peramelidae	Southern Brown Bandicoot
https://biodiversity.org.au/afd/taxa/11d782c0-b5e6-4be8-970d-777fd3875fec	Argyrodes antipodianus	O.P.-Cambridge, 1880	species	Animalia	Arthropoda	Arachnida	Araneae	Theridiidae	
https://biodiversity.org.au/afd/taxa/171b0bfe-3afa-42bf-91ac-5cd85d3e43d1	Polytelis anthopeplus	(Lear, 1831)	species	Animalia	Chordata	Aves	Psittaciformes	Psittacidae	Regent Parrot
https://biodiversity.org.au/afd/taxa/1865b014-626d-42dc-b53c-91c208e9b89e	Ardeotis australis	(J.E. Gray, 1829)	species	Animalia	Chordata	Aves	Gruiformes	Otididae	Plain Turkey
https://biodiversity.org.au/afd/taxa/1b11ebd1-7e44-4d81-8c12-7141ffddfc78	Myiagra (Seisura) inquieta	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Monarchidae	Restless Flycatcher
https://biodiversity.org.au/afd/taxa/1f701f08-4aed-4edf-a45e-1d18a659182f	Maratus paronis	(Dunn, 1947)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/46d5eed0-3d80-4d46-9114-3ad170982193	Pseudosuccinea columella	(Say, 1817)	species	Animalia	Mollusca	Gastropoda		Lymnaeidae	Freshwater Snail
https://biodiversity.org.au/afd/taxa/47cfcaf1-588b-40bf-ad99-790019adb433	Motacilla (Motacilla) alba	Linnaeus, 1758	species	Animalia	Chordata	Aves	Passeriformes	Motacillidae	White Wagtail
https://biodiversity.org.au/afd/taxa/4bff5ae8-c3d5-443f-8103-7d32270ea7ff	Megachile (Hackeriapis) tosticauda	Cockerell, 1912	species	Animalia	Arthropoda	Insecta	Hymenoptera	Megachilidae	
https://biodiversity.org.au/afd/taxa/4d0af7f5-3488-4b72-a15e-d817eaf5d597	Ophiusa tirhaca	(Cramer, 1777)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Erebidae	
https://biodiversity.org.au/afd/taxa/4f20c198-9224-4d9b-82fd-6070e449ee8f	Anthrenus (Nathrenus) verbasci	(Linnaeus, 1767)	species	Animalia	Arthropoda	Insecta	Coleoptera	Dermestidae	
https://biodiversity.org.au/afd/taxa/5a2d93bf-0657-459a-ad9f-c17b7fd5b9d3	Castiarina crocicolor	(Gory & Laporte, 1838)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/62529ca4-5d73-4807-a045-8db334f6233c	Scutellastra peronii	(Blainville, 1825)	species	Animalia	Mollusca	Gastropoda		Patellidae	Limpet
https://biodiversity.org.au/afd/taxa/67ecbf3c-43c3-4b9c-b23c-bd6d4a0419c6	Synoicus ypsilophora	(Bosc, 1792)	species	Animalia	Chordata	Aves	Galliformes	Phasianidae	Partridge Quail
https://biodiversity.org.au/afd/taxa/6ef0726a-fb7c-4816-829d-54c2b1a80845	Dolichoderus ypsilon	Forel, 1902	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/86025a5e-4aed-4d45-9a15-98521d3c6407	Opopaea rixi	Baehr & Harvey, 2013	species	Animalia	Arthropoda	Arachnida	Araneae	Oonopidae	
https://biodiversity.org.au/afd/taxa/8c7319ee-c6f9-4f11-98ee-e8ca0ebe465d	Rhinotia suturalis	(MacLeay, 1826)	species	Animalia	Arthropoda	Insecta	Coleoptera	Belidae	Tailed Weevil
https://biodiversity.org.au/afd/taxa/8ce669b4-fb53-4be0-9203-b02444eca02a	Strepera (Neostrepera) versicolor	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Artamidae	Grey Currawong
https://biodiversity.org.au/afd/taxa/910b27e8-19c3-4194-b55a-fd95a80ccdf9	Caretta caretta	(Linnaeus, 1758)	species	Animalia	Chordata	Reptilia	Testudines	Cheloniidae	Loggerhead Turtle
https://biodiversity.org.au/afd/taxa/a2665ace-ee67-4396-8f4d-f2497e9550f4	Megachile ignita	Smith, 1853	species	Animalia	Arthropoda	Insecta	Hymenoptera	Megachilidae	
https://biodiversity.org.au/afd/taxa/a4e03513-f96b-4904-b4d3-563d265fa6e0	Xyroscelis crocata	(Gory & Laporte, 1839)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/a5b1896e-ef50-4571-ac94-7c1f1c031049	Calidris (Erolia) melanotos	(Vieillot, 1819)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Pectoral Sandpiper
https://biodiversity.org.au/afd/taxa/a6861226-214e-400e-8ca3-23b127054480	Megachile (Eutricharaea) chrysopyga	Smith, 1853	species	Animalia	Arthropoda	Insecta	Hymenoptera	Megachilidae	
https://biodiversity.org.au/afd/taxa/b817ed58-14c6-4169-bcad-66f7a227e72a	Amblyomma triguttatum	Koch, 1844	species	Animalia	Arthropoda	Arachnida	Ixodida	Ixodidae	
https://biodiversity.org.au/afd/taxa/ba965aeb-5125-46b5-acf8-dbb049106f7d	Bothriembryon (Bothriembryon) bulla	(Menke, 1843)	species	Animalia	Mollusca	Gastropoda	Stylommatophora	Bothriembryontidae	
https://biodiversity.org.au/afd/taxa/bf3fcd09-dc47-4ec8-9612-1b4089c7258a	Anilios australis	(Gray, 1845)	species	Animalia	Chordata	Reptilia	Squamata	Typhlopidae	Southern Blind Snake
https://biodiversity.org.au/afd/taxa/bf8c0283-f035-473b-893b-e365242738d3	Austrotichus rugosus	Gross, 1975	species	Animalia	Arthropoda	Insecta	Hemiptera	Scutelleridae	
https://biodiversity.org.au/afd/taxa/d4822aaa-639c-46a3-8ce1-18a21fdc9c32	Acritoscincus trilineatus	(Gray, 1838)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Western Three-lined Skink
https://biodiversity.org.au/afd/taxa/d9ec8440-78e7-4797-bb92-27e75b262b08	Austrohoplochaetella imparicystis	(Michaelsen, 1907)	species	Animalia	Annelida	Oligochaeta		Megascolecidae	
https://biodiversity.org.au/afd/taxa/dc38b13f-aca3-4e90-9420-607582807260	Nacaduba biocellata	(C. & R. Felder, 1865)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lycaenidae	Two-spotted Line-blue
https://biodiversity.org.au/afd/taxa/de3bdeb9-41ec-4566-b676-9a1bfb579362	Ischnura heterosticta	(Burmeister, 1839)	species	Animalia	Arthropoda	Insecta	Odonata	Coenagrionidae	
https://biodiversity.org.au/afd/taxa/dfbd4199-b657-4163-bc11-6f05c781c659	Castiarina cupreoflava	(Saunders, 1869)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/f44f30a7-f6ed-4479-bb61-98f932701328	Hippodamia variegata	(Goeze, 1777)	species	Animalia	Arthropoda	Insecta	Coleoptera	Coccinellidae	
https://id.biodiversity.org.au/name/apni/51346968	Pterostylis brevisepala	(D.L.Jones & C.J.French) D.L.Jones & C.J.French	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	
https://id.biodiversity.org.au/name/apni/51401817	Ammothryon grandiflorum	(Nees ex Lehm.) R.L.Barrett, K.L.Wilson & J.J.Bruhl	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Large Flowered Bog-rush
https://id.biodiversity.org.au/node/apni/2888600	Gompholobium confertum	(DC.) Crisp	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2888230	Rhadinothamnus anceps	(DC.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae	Blister Bush
https://id.biodiversity.org.au/node/apni/2888654	Stylidium crossocephalum	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Posy Triggerplant
https://id.biodiversity.org.au/node/apni/2888777	Chenopodium macrospermum	Hook.f.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae	
https://id.biodiversity.org.au/node/apni/2891026	Andersonia heterophylla	Sond.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2891531	Lepidosperma longitudinale	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Pithy Sword-sedge
https://id.biodiversity.org.au/node/apni/2891782	Lechenaultia linarioides	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	Yellow Leschenaultia
https://id.biodiversity.org.au/node/apni/2893199	Acacia benthamii	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2893570	Kunzea glabrescens	Toelken	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2893977	Scaevola crassifolia	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	Thick-leaved Scaevola
https://id.biodiversity.org.au/node/apni/2894273	Romulea flava	(Lam.) M.P.de Vos	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	
https://id.biodiversity.org.au/node/apni/2894425	Gompholobium scabrum	Sm.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Painted Lady
https://id.biodiversity.org.au/node/apni/2895025	Leucopogon sprengelioides	Sond.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2895392	Polygala myrtifolia	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae	Cascade Curse
https://id.biodiversity.org.au/node/apni/2900534	Galium murale	(L.) All.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae	Small Goosegrass
https://id.biodiversity.org.au/node/apni/2902574	Olea europaea	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Oleaceae	Common Olive
https://id.biodiversity.org.au/node/apni/2903803	Erodium cicutarium	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Common Heron's-bill
https://id.biodiversity.org.au/node/apni/2905837	Melaleuca rhaphiophylla	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Swamp Paperbark
https://id.biodiversity.org.au/node/apni/2906911	Euphorbia paralias	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Sea Spurge
https://id.biodiversity.org.au/node/apni/2909307	Acacia truncata	Hoffmanns.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2909476	Leptomeria pauciflora	R.Br.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae	Sparse-flowered Currant Bush
https://id.biodiversity.org.au/node/apni/2909747	Ficinia nodosa	(Rottb.) Goetgh., Muasya & D.A.Simpson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Knobby Club-rush
https://id.biodiversity.org.au/node/apni/2910089	Laxmannia sessiliflora	Decne.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Nodding Lily
https://id.biodiversity.org.au/node/apni/2910937	Omduffia albiflora	(F.Muell.) Tippery & Les	species	Plantae	Charophyta	Equisetopsida	Asterales	Menyanthaceae	
https://id.biodiversity.org.au/node/apni/2911170	Chordifex microcodon	B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/node/apni/2912644	Drosera omissa	Diels	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	
https://id.biodiversity.org.au/node/apni/2914806	Lepidosperma pubisquameum	Steud.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2915188	Platytheca galioides	Steetz	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae	
https://id.biodiversity.org.au/node/apni/2915629	Cortaderia selloana	(Schult. & Schult.f.) Asch. & Graebn.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Pampas Grass
https://id.biodiversity.org.au/node/apni/2915842	Leptospermum spinescens	Endl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2916854	Conospermum incurvum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Plume Smokebush
https://id.biodiversity.org.au/node/apni/2917792	Senecio pinnatifolius	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Variable Groundsel
https://id.biodiversity.org.au/node/apni/2919041	Cakile maritima	Scop.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Sea Rocket
https://id.biodiversity.org.au/node/apni/2919963	Stylidium bulbiferum	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Circus Triggerplant
https://id.biodiversity.org.au/node/apni/2920172	Gastrolobium ebracteolatum	G.Chandler & Crisp	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/6986247	Erigeron bonariensis	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Flax-leaved Fleabane
https://id.biodiversity.org.au/node/apni/9030685	Amaranthus blitum	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	
https://id.biodiversity.org.au/node/ausmoss/10126455	Zygodon menziesii	(Schwägr.) Arn.	species	Plantae	Bryophyta	Bryopsida	Orthotrichales	Orthotrichaceae	
https://id.biodiversity.org.au/node/fungi/60092723	Cortinarius archeri	Berk.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Cortinariaceae	
https://id.biodiversity.org.au/node/fungi/60093861	Crepidotus eucalyptorum	Cleland	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Inocybaceae	
https://id.biodiversity.org.au/node/fungi/60095263	Agrocybe semiorbicularis	(Bull.) Fayod	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60096945	Scleroderma cepa	Pers.	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Sclerodermataceae	
https://id.biodiversity.org.au/node/fungi/60100605	Colus pusillus	(Berk.) Reichert	species	Fungi	Basidiomycota	Agaricomycetes	Phallales	Phallaceae	
https://id.biodiversity.org.au/node/fungi/60103637	Tubifera ferruginosa	(Batsch) J.F.Gmel.	species	Protista	Amoebozoa	Myxogastrea	Liceida	Tubiferaceae	
https://id.biodiversity.org.au/node/fungi/60103751	Fuligo septica	(L.) F.H.Wigg.	species	Protista	Amoebozoa	Myxogastrea	Physarida	Physaraceae	
https://id.biodiversity.org.au/taxon/apni/51269753	Cardamine occulta	Hornem.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	
https://id.biodiversity.org.au/taxon/apni/51290390	Eucalyptus decipiens	Endl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Redheart
https://id.biodiversity.org.au/taxon/apni/51291098	Fumaria capreolata	L.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Papaveraceae	White Fumitory
https://id.biodiversity.org.au/taxon/apni/51294393	Stylidium neurophyllum	Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Coastal Plain Triggerplant
https://id.biodiversity.org.au/taxon/apni/51399312	Caladenia reptans	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Little Pink Fairies
https://id.biodiversity.org.au/taxon/apni/51412314	Pterostylis sanguinea	D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Banded Greenhood
https://id.biodiversity.org.au/taxon/apni/51414242	Thelymitra benthamiana	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Blotched Sun-orchid
55059001	Nizymenia conferta	(Sonder) Chiovitti, Saunders & Kraft	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Nizymeniaceae	Red Alga
55095020	Gelinaria ulvoidea	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae	Red Alga
55095034	Halymenia floresia	(Clemente y Rubio) C.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae	Red Alga
56197007	Caulerpa obscura	Sonder, 1845	species	Plantae	Chlorophyta	Ulvophyceae	Bryopsidales	Caulerpaceae	Green Alga
NZOR-6-109380	Chara globularis	Thuillier	species	Plantae	Chlorophyta	Charophyceae	Charales	Characeae	
NZOR-6-20562	Volvopluteus gloiocephalus	(DC.) Vizzini, Contu & Justo	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Pluteaceae	
NZOR-6-5212	Aeshna brevistyla	Rambur	species	Animalia	Arthropoda	Insecta	Odonata	Aeshnidae	
NZOR-6-59550	Pterocladia lucida	(Turner) J.Agardh	species	Plantae				Pterocladiaceae	
https://biodiversity.org.au/afd/taxa/0068714f-cc38-49e8-9541-7ff0e796b5f9	Limosa lapponica	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Bar-tailed Godwit
https://biodiversity.org.au/afd/taxa/057d6fe4-d2ea-40f7-8b90-4e0f9e7ff665	Coptotermes acinaciformis	(Froggatt, 1898)	species	Animalia	Arthropoda	Insecta	Blattodea	Rhinotermitidae	Subterranean Termite
https://biodiversity.org.au/afd/taxa/05b0f88f-2b75-4885-97e1-e83872f82738	Haematopus fuliginosus	Gould, 1845	species	Animalia	Chordata	Aves	Charadriiformes	Haematopodidae	Sooty Oystercatcher
https://biodiversity.org.au/afd/taxa/0925387e-5964-4117-9edd-8fe6f31b2141	Megachile rugosa	Smith, 1879	species	Animalia	Arthropoda	Insecta	Hymenoptera	Megachilidae	
https://biodiversity.org.au/afd/taxa/0cb62000-c387-415a-9f5d-15fe848a2110	Adversaeschna brevistyla	(Rambur, 1842)	species	Animalia	Arthropoda	Insecta	Odonata	Aeshnidae	
https://biodiversity.org.au/afd/taxa/0ccbba45-af08-484a-8aaa-ff983ca3a633	Melithreptus (Melithreptus) chloropsis	Gould, 1848	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/0cf87549-56ab-44a0-9dae-98a9152228d6	Pholcus phalangioides	(Fuesslin, 1775)	species	Animalia	Arthropoda	Arachnida	Araneae	Pholcidae	
https://biodiversity.org.au/afd/taxa/107696b5-063c-4c09-a015-6edfdb6f4e52	Mus musculus	Linnaeus, 1758	species	Animalia	Chordata	Mammalia	Rodentia	Muridae	House Mouse
https://biodiversity.org.au/afd/taxa/125adc68-3bee-4ba9-86c3-3709572dcd13	Zygometis xanthogaster	(L. Koch, 1875)	species	Animalia	Arthropoda	Arachnida	Araneae	Thomisidae	
https://biodiversity.org.au/afd/taxa/13884e3b-e8bc-4e0f-b96f-89b608db7a98	Hylaeus (Euprosopoides) ruficeps	(Smith, 1853)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/16171fac-8d6c-4327-9fab-f2dbd864d71bf	Cyprinus carpio	Linnaeus, 1758	species	Animalia	Chordata	Actinopterygii	Cypriniformes	Cyprinidae	European Carp
https://biodiversity.org.au/afd/taxa/178a17ff-2135-48e8-856b-39f546f02092	Rattus rattus	(Linnaeus, 1758)	species	Animalia	Chordata	Mammalia	Rodentia	Muridae	Black Rat
https://biodiversity.org.au/afd/taxa/198b63f0-2786-4496-b8e3-b9e1ce53561c	Tramea stenoloba	(Watson, 1962)	species	Animalia	Arthropoda	Insecta	Odonata	Libellulidae	
https://biodiversity.org.au/afd/taxa/19f72aa6-8444-4978-af79-3a7c027dd862	Delma fraseri	Gray, 1831	species	Animalia	Chordata	Reptilia	Squamata	Pygopodidae	Fraser's Delma
https://biodiversity.org.au/afd/taxa/1a267044-0be0-484d-918d-9ffd914355df	Tiliqua occipitalis	(Peters, 1863)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Western Blue-tongue
https://biodiversity.org.au/afd/taxa/1e159e05-e603-49fa-a0a5-4362cc0e4b5e	Castiarina flaviceps	(Carter, 1913)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/1e540286-d6f2-43a1-bf27-180858eb9f98	Helea perforata	(Latreille, 1817)	species	Animalia	Arthropoda	Insecta	Coleoptera	Tenebrionidae	
https://biodiversity.org.au/afd/taxa/21b29887-89bf-4f82-9b7e-ab240245c7b3	Urnisa rugosa	de Saussure, 1884	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	
https://biodiversity.org.au/afd/taxa/260436e4-342d-4e7d-b2a3-f26003586d04	Isopeda leishmanni	Hogg, 1903	species	Animalia	Arthropoda	Arachnida	Araneae	Sparassidae	
https://biodiversity.org.au/afd/taxa/29796f05-7bba-4837-8fa2-9b58ba1bd3b8	Anax papuensis	(Burmeister, 1839)	species	Animalia	Arthropoda	Insecta	Odonata	Aeshnidae	
https://biodiversity.org.au/afd/taxa/2d85e882-a404-4087-a909-206abf8c455a	Peakesia brunnea	(White, 1841)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	
https://biodiversity.org.au/afd/taxa/30afdc05-c995-4a3d-a342-9c29762996c2	Venator immansueta	(Simon, 1909)	species	Animalia	Arthropoda	Arachnida	Araneae	Lycosidae	
https://biodiversity.org.au/afd/taxa/30dfcca6-8f44-4913-b8ad-0dda0533b8be	Goniaea australasiae	(Leach, 1814)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	Gumleaf Grasshopper
https://biodiversity.org.au/afd/taxa/3426a025-fc39-4433-be23-eb7f034ddd3d	Opopaea araciilima	Baehr & Harvey, 2013	species	Animalia	Arthropoda	Arachnida	Araneae	Oonopidae	
https://biodiversity.org.au/afd/taxa/3836f177-b016-45c5-a682-c1c8aae350f3	Nephila pilipes	(Fabricius, 1793)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	Giant Golden Orb-weaving Spider
https://biodiversity.org.au/afd/taxa/3b05d614-aca5-4d6e-b4b9-8bd7ac7f7ee6	Calidris (Crocethia) alba	(Pallas, 1764)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Sanderling
https://biodiversity.org.au/afd/taxa/4020ce10-e79b-4a86-8559-7b1d94eb6ed3	Triplectides australis	NavÃ¡s, 1934	species	Animalia	Arthropoda	Insecta	Trichoptera	Leptoceridae	
https://biodiversity.org.au/afd/taxa/46b7236e-c41f-4148-847b-31e64fc5c789	Milvus migrans	(Boddaert, 1783)	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Black Kite
https://biodiversity.org.au/afd/taxa/4eaee23a-9e11-42aa-ae9f-cd9a047450fc	Porcellionides pruinosus	(Brandt, 1833)	species	Animalia	Arthropoda	Malacostraca	Isopoda	Porcellionidae	
https://biodiversity.org.au/afd/taxa/4f6119da-111a-4e8b-ba84-512cc0d3be2c	Distoleon bistrigatus	(Rambur, 1842)	species	Animalia	Arthropoda	Insecta	Neuroptera	Myrmeleontidae	
https://biodiversity.org.au/afd/taxa/511a318a-5fe5-4092-84d5-d3f33a519b97	Temognatha mitchelli	(Hope, 1846)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/52ca7486-340a-4755-b359-7305379e0f49	Paracyclops fimbriatus	(Fischer, 1853)	species	Animalia	Arthropoda	Maxillopoda	Cyclopoida	Cyclopidae	Copepod
https://biodiversity.org.au/afd/taxa/54448cb9-8772-4726-a138-71cb1837eec5	Egernia kingii	(Gray, 1838)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	King's Skink
https://biodiversity.org.au/afd/taxa/5526c312-451f-4c90-a69e-088b55be6956	Pluvialis fulva	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Charadriiformes	Charadriidae	Pacific Golden Plover
https://biodiversity.org.au/afd/taxa/5583a462-2966-4ded-81e5-8d954f1f0adb	Daphnia carinata	King, 1853	species	Animalia	Arthropoda	Branchiopoda	Diplostraca	Daphniidae	Water Flea
https://biodiversity.org.au/afd/taxa/57fcbc39-071b-4a1f-bb6c-2e607919b357	Danaus chrysippus	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Lesser Wanderer
https://biodiversity.org.au/afd/taxa/59d6e8e2-455e-4e8e-a1ca-fda928ae5f39	Procordulia affinis	(Selys, 1871)	species	Animalia	Arthropoda	Insecta	Odonata	Cordulidae	
https://biodiversity.org.au/afd/taxa/694a8fde-c6b1-4947-bae1-801541614999	Circus assimilis	Jardine & Selby, 1828	species	Animalia	Chordata	Aves	Accipitriformes	Accipitridae	Spotted Harrier
https://biodiversity.org.au/afd/taxa/6fb2f41f-f689-453a-ae7a-27010ed86f00	Catasarcus spinipennis	FÃ¥hraeus, 1840	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	
https://biodiversity.org.au/afd/taxa/737198bf-0ca6-43e1-a428-f9e0f257f5c3	Chalcites osculans	Gould, 1847	species	Animalia	Chordata	Aves	Cuculiformes	Cuculidae	Black-eared Cuckoo
https://biodiversity.org.au/afd/taxa/78c96276-bff1-43f7-a8e5-fbca2249965b	Leptocneria reducta	(Walker, 1855)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Erebidae	
https://biodiversity.org.au/afd/taxa/78cbe563-aca0-4f15-bb1f-90400540451d	Diphucrania macmillani	(Barker, 2001)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/7a39c977-3c87-4d6d-842f-9844d0c9ccd7	Monopis meliorella	(Walker, 1863)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Tineidae	
https://biodiversity.org.au/afd/taxa/80c876b2-0b7c-48cb-9273-2f207af3654d	Geitoneura klugii	(GuÃ©rin-MÃ©neville, 1830)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Klug's Xenica
https://biodiversity.org.au/afd/taxa/8313e5d6-0b23-4360-bffd-a81e9f83bc9d	Varanus gouldii	(Gray, 1838)	species	Animalia	Chordata	Reptilia	Squamata	Varanidae	Gould's Goanna
https://biodiversity.org.au/afd/taxa/84adf23d-4529-4df1-9cf3-6bbd6f50344d	Caedicia simplex	(Walker, 1869)	species	Animalia	Arthropoda	Insecta	Orthoptera	Tettigoniidae	
https://biodiversity.org.au/afd/taxa/873d2c48-f5fa-4f86-af6a-94afc82f86c7	Metallesthes metallescens	(White, 1859)	species	Animalia	Arthropoda	Insecta	Coleoptera	Scarabaeidae	
https://biodiversity.org.au/afd/taxa/8989b7ed-4d42-4784-8a8d-7756e36ae55c	Exarna includens	Walker, 1870	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	
https://biodiversity.org.au/afd/taxa/8e07995d-e488-4e25-80c9-d16a3248ef56	Donuca spectabilis	Walker, 1865	species	Animalia	Arthropoda	Insecta	Lepidoptera	Erebidae	
https://biodiversity.org.au/afd/taxa/928f9b98-d671-4c9d-8ffc-0698b21271f9	Pollanisus cupreus	Walker, 1854	species	Animalia	Arthropoda	Insecta	Lepidoptera	Zygaenidae	
https://biodiversity.org.au/afd/taxa/95afb4b0-67a8-4093-8bda-d55b2fa836be	Melithreptus (Melithreptus) lunatus	(Vieillot, 1802)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	White-naped Honeyeater
https://biodiversity.org.au/afd/taxa/ac05ef33-5323-4514-9f90-d322e896944d	Castiarina decemguttata	(Gory, 1841)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/ac48e985-2adb-4c1e-bce9-39906cf6761d	Podalonia tydei	(Le Guillou, 1841)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Sphecidae	
https://biodiversity.org.au/afd/taxa/ae509348-06f3-46a2-b661-4094a62bfb46	Hylaeus (Macrohylaeus) alcyoneus	(Erichson, 1842)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/aedfe517-8a70-4b16-9ca6-c315056998b9	Hypoblemum griseum	(Keyserling, 1882)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/b5e7d396-d457-4617-872b-37019f4db5e4	Paragoniastrea australensis	(Milne Edwards, 1857)	species	Animalia	Cnidaria	Anthozoa	Scleractinia	Merulinidae	Stony Coral
https://biodiversity.org.au/afd/taxa/bf610eb5-3521-4788-87ea-a5315edd986a	Phoracantha semipunctata	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Coleoptera	Cerambycidae	
https://biodiversity.org.au/afd/taxa/c6172901-1269-40f1-bfb7-385ac34076fc	Opisthoncus polyphemus	(L. Koch, 1867)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/d2dac84e-c302-4ac7-9fdc-6ba4a02b476a	Abispa (Abispa) ephippium	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Vespidae	
https://biodiversity.org.au/afd/taxa/d5a8bde0-f56a-4af9-962a-d168b3e3308b	Coturnix (Coturnix) pectoralis	Gould, 1837	species	Animalia	Chordata	Aves	Galliformes	Phasianidae	Grey Quail
https://biodiversity.org.au/afd/taxa/d65742aa-b0e4-4961-b2de-5801773b0cdb	Anthela varia	(Walker, 1855)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Anthelidae	
https://biodiversity.org.au/afd/taxa/db8bfaee-c833-4457-8702-837e953428f4	Ellipsidion humerale	(Tepper, 1893)	species	Animalia	Arthropoda	Insecta	Blattodea	Ectobiidae	
https://biodiversity.org.au/afd/taxa/dba78701-cae9-4afb-a41a-6697c52c5e34	Botaurus poiciloptilus	(Wagler, 1827)	species	Animalia	Chordata	Aves	Ciconiiformes	Ardeidae	Australasian Bittern
https://biodiversity.org.au/afd/taxa/de840853-a3a3-4ec5-9dc0-7f12680a054f	Climacteris (Climacteris) rufus	Gould, 1841	species	Animalia	Chordata	Aves	Passeriformes	Climacteridae	Rufous Treecreeper
https://biodiversity.org.au/afd/taxa/e427115f-dc9d-4c32-bd07-131b9ab64300	Oreoica gutturalis	(Vigors & Horsfield, 1827)	species	Animalia	Chordata	Aves	Passeriformes	Oreoicidae	Crested Bellbird
https://biodiversity.org.au/afd/taxa/e453dbf4-ac86-44b6-8776-de892b568f51	Austracantha minax	(Thorell, 1859)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/e55f2d1e-5bcf-41c3-97b4-b2df4ec470b4	Thalaina angulosa	Walker, 1865	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/e6ea1087-ce34-4cf8-be85-546a9d732965	Calidris (Erolia) ferruginea	(Pontoppidan, 1763)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Curlew Sandpiper
https://biodiversity.org.au/afd/taxa/eba4fd5b-559c-4bdc-aede-6b11274ae173	Opopaea marangaroo	Baehr & Harvey, 2013	species	Animalia	Arthropoda	Arachnida	Araneae	Oonopidae	
https://biodiversity.org.au/afd/taxa/ecf50dcc-855c-466b-8233-981041cde573	Crustulina bicruciata	Simon, 1908	species	Animalia	Arthropoda	Arachnida	Araneae	Theridiidae	
https://biodiversity.org.au/afd/taxa/f2ecb3e3-a6e2-45cc-a986-716a69eec650	Chalinolobus gouldii	(J.E. Gray, 1841)	species	Animalia	Chordata	Mammalia	Chiroptera	Vespertilionidae	Gould's Wattled Bat
https://biodiversity.org.au/afd/taxa/f9317593-94c1-49d3-aadb-df26a1c924da	Coelophora inaequalis	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Coleoptera	Coccinellidae	
https://biodiversity.org.au/afd/taxa/fcf44c91-ba0c-4eb8-8c97-1c935e070574	Morethia lineoocellata	(DumÃ©ril & Bibron, 1839)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	West Coast Morethia Skink
https://biodiversity.org.au/afd/taxa/fd928615-5613-47eb-9cd4-7eb8e30a4993	Pluvialis squatarola	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Charadriiformes	Charadriidae	Grey Plover
https://id.biodiversity.org.au/name/apni/51312038	Diplodium brevisepalum	D.L.Jones & C.J.French	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	
https://id.biodiversity.org.au/name/apni/51358801	Styphelia discolor	(Hislop & A.J.G.Wilson) Hislop, Crayn & Puente-Lel.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/name/apni/51359068	Styphelia insularis	(A.Cunn. ex DC.) Hislop, Crayn & Puente-Lel.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/name/apni/51401860	Morelotia octandra	(Nees) R.L.Barrett & J.J.Bruhl	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/name/apni/8929742	Styphelia filifolia	Hislop & Puente-Lel.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2886603	Chaetanthus aristatus	(R.Br.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	Bearded Twinerush
https://id.biodiversity.org.au/node/apni/2886690	Acacia rostellifera	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2886876	Epilobium tetragonum	L.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Onagraceae	Square-stalked Willowherb
https://id.biodiversity.org.au/node/apni/2887652	Catapodium rigidum	(L.) C.E.Hubb.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Rigid Fescue
https://id.biodiversity.org.au/node/apni/2890286	Schoenus subfascicularis	KÃ¼k.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2890692	Calectasia cyanea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Dasypogonales	Dasypogonaceae	Blue Tinsel Lily
https://id.biodiversity.org.au/node/apni/2890723	Galinsoga parviflora	Cav.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Peterson's Pest
https://id.biodiversity.org.au/node/apni/2890993	Santalum acuminatum	(R.Br.) A.DC.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae	Sandalwood
https://id.biodiversity.org.au/node/apni/2891077	Hakea trifurcata	(Sm.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Two-leaf Hakea
https://id.biodiversity.org.au/node/apni/2891179	Ptilotus sericostachyus	(Nees) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	
https://id.biodiversity.org.au/node/apni/2891238	Damasia triloba	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	
https://id.biodiversity.org.au/node/apni/2891342	Levenhookia pusilla	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Midget Stylewort
https://id.biodiversity.org.au/node/apni/2891374	Melaleuca lanceolata	Otto	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Tea-tree
https://id.biodiversity.org.au/node/apni/2892299	Pentameris airoides	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/node/apni/2893281	Guichenotia ledifolia	J.Gay	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae	
https://id.biodiversity.org.au/node/apni/2893765	Siloxerus humifusus	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Procumbent Siloxerus
https://id.biodiversity.org.au/node/apni/2893822	Calandrinia granulifera	Benth.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Portulacaceae	Pigmy Purslane
https://id.biodiversity.org.au/node/apni/2894970	Schoenoplectus tabernaemontani	(C.C.Gmel.) Palla	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	River Clubsedge
https://id.biodiversity.org.au/node/apni/2896173	Holcus setiger	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Annual Fog
https://id.biodiversity.org.au/node/apni/2897244	Oxalis pes-caprae	L.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae	Oxalis
https://id.biodiversity.org.au/node/apni/2898093	Tersonia cyathiflora	(Fenzl) A.S.George ex J.W.Green	species	Plantae	Charophyta	Equisetopsida	Brassicales	Gyrostemonaceae	Button Creeper
https://id.biodiversity.org.au/node/apni/2898520	Verticordia densiflora	Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Compacted Featherflower
https://id.biodiversity.org.au/node/apni/2898538	Myoporum caprarioides	Benth.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae	Slender Myoporum
https://id.biodiversity.org.au/node/apni/2899343	Plantago lanceolata	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	Plantain
https://id.biodiversity.org.au/node/apni/2901489	Stylidium junceum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Reed Triggerplant
https://id.biodiversity.org.au/node/apni/2903772	Andersonia lehmanniana	Sond.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2904899	Lupinus angustifolius	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Narrow-leaved Lupin
https://id.biodiversity.org.au/node/apni/2904981	Myoporum insulare	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae	Native Jumper
https://id.biodiversity.org.au/node/apni/2906711	Ehrharta brevifolia	Schrad.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Annual Veldt Grass
https://id.biodiversity.org.au/node/apni/2907189	Astroloma microcalyx	Sond.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Native Cranberry
https://id.biodiversity.org.au/node/apni/2907262	Phyllanthus tenellus	Roxb.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae	Hen And Chickens
https://id.biodiversity.org.au/node/apni/2907634	Medicago polymorpha	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Burr Medic
https://id.biodiversity.org.au/node/apni/2909092	Schinus terebinthifolia	Raddi	species	Plantae	Charophyta	Equisetopsida	Sapindales	Anacardiaceae	Broad-leaf Pepper Tree
https://id.biodiversity.org.au/node/apni/2909260	Lobelia anceps	L.f.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Lobelia
https://id.biodiversity.org.au/node/apni/2911349	Brachyscome bellidioides	Steetz	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2911746	Tetragonia decumbens	Mill.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Aizoaceae	Sea Spinach
https://id.biodiversity.org.au/node/apni/2911970	Carpobrotus virescens	(Haw.) Schwantes	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Aizoaceae	Coastal Pigface
https://id.biodiversity.org.au/node/apni/2912118	Thysanotus arenarius	Brittan	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2912523	Lepyrodia muirii	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/node/apni/2914585	Stenanthemum sublineare	Rye	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae	
https://id.biodiversity.org.au/node/apni/2914596	Lachenalia bulbifera	(Cirillo) Engl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2915173	Poa porphyroclados	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/node/apni/2915741	Stylidium adpressum	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Trigger-on-stilts
https://id.biodiversity.org.au/node/apni/2916722	Brachychiton acerifolius	(A.Cunn. ex G.Don) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae	Flame Tree
https://id.biodiversity.org.au/node/apni/2916912	Scaevola nitida	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	Shining Fanflower
https://id.biodiversity.org.au/node/apni/2917124	Stylidium cyanorum	W.Fitzg.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	
https://id.biodiversity.org.au/node/apni/2917991	Chasmanthe floribunda	(Salisb.) N.E.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	African Cornflag
https://id.biodiversity.org.au/node/apni/2917995	Lagurus ovatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Hare's Tail Grass
https://id.biodiversity.org.au/node/apni/2918032	Vulpia bromoides	(L.) Gray	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Silver Grass
https://id.biodiversity.org.au/node/apni/2918082	Grevillea robusta	A.Cunn. ex R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Silky Oak
https://id.biodiversity.org.au/node/apni/2918159	Asphodelus fistulosus	L.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asphodelaceae	Onion Weed
https://id.biodiversity.org.au/node/apni/2918410	Phytolacca octandra	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Phytolaccaceae	Dyeberry
https://id.biodiversity.org.au/node/apni/2918442	Utricularia volubilis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae	Twining Bladderwort
https://id.biodiversity.org.au/node/apni/2919334	Leucopogon squarrosus	Benth.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2920256	Billardiera fraseri	(Hook.) L.Cayzer, Crisp & I.Telford	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae	
https://id.biodiversity.org.au/node/apni/2920283	Juncus pallidus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae	Pale Rush
https://id.biodiversity.org.au/node/apni/2920325	Grevillea crithmifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2920619	Cartonema philydroides	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Commelinaceae	
https://id.biodiversity.org.au/node/apni/2920735	Lechenaultia biloba	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	Blue Leschenaultia
https://id.biodiversity.org.au/node/apni/6923911	Centella asiatica	(L.) Urb.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Centella
https://id.biodiversity.org.au/node/apni/6987629	Erigeron canadensis	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Canadian Fleabane
https://id.biodiversity.org.au/node/apni/7121288	Lepidosperma calcicola	R.L.Barrett & K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/7153451	Hibbertia crassifolia	(Turcz.) Benth.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	
https://id.biodiversity.org.au/node/ausmoss/10059274	Barbula calycina	SchwÃ¤gr.	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae	
https://id.biodiversity.org.au/node/ausmoss/10063237	Calymperastrum latifolium	(Hampe) I.G.Stone	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae	
https://id.biodiversity.org.au/node/fungi/60080667	Phytophthora nicotianae	Breda de Haan	species	Chromista	Oomycota	Peronosporea	Peronosporales	Peronosporaceae	
https://id.biodiversity.org.au/node/fungi/60092361	Amanita preissii	(Fr.) Sacc.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Amanitaceae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/fungi/60092503	Bolbitius titubans	(Bull.) Fr.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Bolbitiaceae	
https://id.biodiversity.org.au/node/fungi/60093425	Fistulina hepatica	(Schaeff.) With.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Fistulinaceae	
https://id.biodiversity.org.au/node/fungi/60093459	Laccaria laccata	(Scop.) Cooke	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hydnangiaceae	
https://id.biodiversity.org.au/node/fungi/60096901	Pisolithus arhizus	(Scop.) Rauschert	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Sclerodermataceae	
https://id.biodiversity.org.au/node/fungi/60099129	Pycnoporus coccineus	(Fr.) Singer & Bondartsev	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae	
https://id.biodiversity.org.au/node/fungi/60099679	Russula clelandii	O.K.Mill. & R.N.Hilton	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae	
https://id.biodiversity.org.au/taxon/apni/51249803	Pteridium esculentum	(G.Forst.) Cockayne	species	Plantae	Charophyta	Equisetopsida	Polypodiales	Dennstaedtiaceae	Manehu
https://id.biodiversity.org.au/taxon/apni/51285685	Latrobea tenella	(Meisn.) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/taxon/apni/51286955	Acacia longifolia	(Andrews) Willd.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Golden Wattle
https://id.biodiversity.org.au/taxon/apni/51291699	Rumex acetosella	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Polygonaceae	Sorrel
https://id.biodiversity.org.au/taxon/apni/51294359	Stylidium araeophyllum	Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Stilt Walker
https://id.biodiversity.org.au/taxon/apni/51401270	Cyanicula gemmata	(Lindl.) Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Blue China Orchid
https://id.biodiversity.org.au/taxon/apni/51401348	Cyrtostylis huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Midge Orchid
https://id.biodiversity.org.au/taxon/apni/51414264	Thelymitra crinita	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Blue Lady Orchid
55057006	Hennedya crispa	Harvey	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Acrotylaceae	Red Alga
55095043	Pachymenia orbicularis	(Zanardini) Setchell & N.L.Gardner	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae	Red Alga
55106012	Curdiea obesa	(Harvey) Kylin	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae	Red Alga
55106017	Gracilaria flagelliformis	(Sonder) Womersley	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae	Red Alga
55130002	Euptilota articulata	(J.Agardh) F.Schmitz	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Callithamniaceae	Red Alga
55131057	Platysiphonia hypneoides	(Harvey) Womersley & Shepley	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae	Red Alga
56197021	Caulerpa distichophylla	Sonder	species	Plantae	Chlorophyta	Ulvophyceae	Bryopsidales	Caulerpaceae	Green Alga
NZOR-6-116441	Puccinia lagenophorae	Cooke	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniaceae	
NZOR-6-132588	Peronospora farinosa	(Fr.) Fr.	species	Chromista	Oomycota	Peronosporea	Peronosporales	Peronosporaceae	
NZOR-6-21713	Melobesia membranacea	(Esper) J.V.Lamour.	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Hapalidiaceae	Red Alga
NZOR-6-53387	Cryptococcus gattii	(Vanbreus. & Takashio) Kwon-Chung & Boekhout	species	Fungi	Basidiomycota	Tremellomycetes	Tremellales	Tremellaceae	
NZOR-6-54590	Chara globularis	Thuill.	species	Plantae	Chlorophyta	Charophyceae	Charales	Characeae	
NZOR-6-55435	Dasyclonium incisum	(J.Agardh) Kylin	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae	Red Alga
https://biodiversity.org.au/afd/taxa/02d0aa55-ed80-433a-a720-0aa971fe2c2a	Castiarina anchoralis	(Gory & Laporte, 1838)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/07f61731-6c7a-440f-a01f-0c8956d31222	Sidymella trapezia	(L. Koch, 1874)	species	Animalia	Arthropoda	Arachnida	Araneae	Thomisidae	
https://biodiversity.org.au/afd/taxa/08d400a0-e576-44dc-8177-325f028a5a65	Dendrocygna arcuata	Horsfield, 1824	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Wandering Whistling-duck
https://biodiversity.org.au/afd/taxa/0a0a01dd-f096-42b5-8efd-f65f96a8915c	Cuspicona simplex	Walker, 1867	species	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	Green Potato Bug
https://biodiversity.org.au/afd/taxa/0a67a6d3-0b35-4031-ab17-1bd26373329e	Clynotis severus	(L. Koch, 1879)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/0c5d2393-45b6-4394-9f85-766e7c1c78e9	Arenopsaltria fullo	(Walker, 1850)	species	Animalia	Arthropoda	Insecta	Hemiptera	Cicadidae	Sandgrinder
https://biodiversity.org.au/afd/taxa/0c6260a5-59f2-4feb-8372-db2138b29fc3	Diplacodes haematodes	(Burmeister, 1839)	species	Animalia	Arthropoda	Insecta	Odonata	Libellulidae	
https://biodiversity.org.au/afd/taxa/0f7d9921-1e32-4204-aa7e-ec15e8043a32	Gastrimargus musicus	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	Yellow-winged Locust
https://biodiversity.org.au/afd/taxa/0fc44003-1617-4f53-baff-1be37f0141c4	Chlorochlyta insigillata	(Walker, 1862)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/1067f58c-b822-412d-bb6e-07a9b8416a52	Pseudomys albocinereus	(Gould, 1845)	species	Animalia	Chordata	Mammalia	Rodentia	Muridae	Ash-grey Mouse
https://biodiversity.org.au/afd/taxa/130de598-50bd-4d8d-baa3-dcdc1853cd4a	Austrosaga spinifer	Rentz, 1993	species	Animalia	Arthropoda	Insecta	Orthoptera	Tettigoniidae	Spiny Katydid (swan Coastal Plain)
https://biodiversity.org.au/afd/taxa/13f8f6f4-21db-44a5-8c33-5daf8b6fcbc69	Trichiocercus sparshalli	(Curtis, 1830)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Notodontidae	
https://biodiversity.org.au/afd/taxa/140b779e-ba1c-4310-afc3-7c80c9bb0a29	Glenbolodectes amaroo	Rentz, 1985	species	Animalia	Arthropoda	Insecta	Orthoptera	Tettigoniidae	
https://biodiversity.org.au/afd/taxa/146f01aa-333f-4744-a8a2-f90a8e9c6050	Hellula hydralis	GuenÃ©e, 1854	species	Animalia	Arthropoda	Insecta	Lepidoptera	Crambidae	
https://biodiversity.org.au/afd/taxa/14833a25-6e9d-4651-bbf3-2163de7e1252	Geopelia cuneata	(Latham, 1801)	species	Animalia	Chordata	Aves	Columbiformes	Columbidae	Diamond Dove
https://biodiversity.org.au/afd/taxa/14ba17b0-eb56-4fd0-85cd-c7a7de1862b9	Porpita porpita	(Linnaeus, 1758)	species	Animalia	Cnidaria	Hydrozoa	Anthoathecata	Porpitidae	Blue Button
https://biodiversity.org.au/afd/taxa/17f426a5-514d-4598-9b10-660366eb3c45	Hypoblemum scutulatum	(L. Koch, 1881)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/18dc7440-15cf-442f-9212-21c1ae66ebfe	Tumulitermes apiocephalus	(Silvestri, 1909)	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/195e9b1a-84e5-44e3-86bc-5e783b2ba250	Pheidole megacephala	(Fabricius, 1793)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/19ead63b-75ca-4a9c-9541-5293ebab6f8b	Callomelitta antipodes	(Smith, 1853)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/1a2dcf1e-4352-46ca-8399-1507b83925fe	Rentinus dilatatus	(Westwood, 1838)	species	Animalia	Arthropoda	Insecta	Hemiptera	Fulgoridae	
https://biodiversity.org.au/afd/taxa/246ede86-5d70-4efb-9498-4ebe75ccf492	Taeniopygia guttata	(Vieillot, 1817)	species	Animalia	Chordata	Aves	Passeriformes	Estrildidae	Zebra Finch
https://biodiversity.org.au/afd/taxa/27653d1b-205d-4cc4-931e-3a5396332ee7	Cheilomenes sexmaculata	(Fabricius, 1781)	species	Animalia	Arthropoda	Insecta	Coleoptera	Coccinellidae	
https://biodiversity.org.au/afd/taxa/2798ca0f-8c21-449a-93b6-a64a0fbc9287	Archaeosynthemis occidentalis	Tillyard, 1910	species	Animalia	Arthropoda	Insecta	Odonata	Synthemistidae	
https://biodiversity.org.au/afd/taxa/2a29658d-dfe2-40ce-b786-6228e47f6bf1	Geocrinia leai	(Fletcher, 1898)	species	Animalia	Chordata	Amphibia	Anura	Myobatrachidae	Lea's Frog
https://biodiversity.org.au/afd/taxa/3029a74e-2791-45fa-bcb4-b1e7e8b88b55	Austromyzinum nubilipennis	(Turner, 1910)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Tiphiidae	
https://biodiversity.org.au/afd/taxa/316c5ff9-137b-4356-a46d-5d136aecb1d1	Microeca (Microeca) fascinans	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Petroicidae	Jacky Winter
https://biodiversity.org.au/afd/taxa/31ee4129-8d8d-45eb-b6ef-0e72e16d0764	Thomisus spectabilis	Doleschall, 1859	species	Animalia	Arthropoda	Arachnida	Araneae	Thomisidae	
https://biodiversity.org.au/afd/taxa/397a4f2e-c8ed-4428-bda1-476530c66a14	Myrmecia gulosa	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/3f192e7c-5eec-4696-9bc7-68211c69f473	Coryphistes ruricola	(Burmeister, 1838)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	Bark-mimicking Grasshopper
https://biodiversity.org.au/afd/taxa/3fdccf54-68f7-4fc8-a94a-2e09f6801dcd	Crenadactylus ocellatus	(Gray, 1845)	species	Animalia	Chordata	Reptilia	Squamata	Diplodactylidae	South-western Clawless Gecko
https://biodiversity.org.au/afd/taxa/400cf534-a7c8-4c12-bf89-70778f7bee25	Theridion pyramidale	L. Koch, 1867	species	Animalia	Arthropoda	Arachnida	Araneae	Theridiidae	
https://biodiversity.org.au/afd/taxa/4479b4ab-0d58-4f49-b147-dd55cd74d7ff	Zizina otis	(Fabricius, 1787)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lycaenidae	Common Grass-blue
https://biodiversity.org.au/afd/taxa/4487770a-883d-4850-8a8d-381d3faf1752	Delta bicinctum	(Saussure, 1852)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Vespidae	
https://biodiversity.org.au/afd/taxa/4574c573-e2ea-4ae0-99d0-fe2dd5d88a5c	Melanerythrus mactans	(StÃ¥l, 1866)	species	Animalia	Arthropoda	Insecta	Hemiptera	Lygaeidae	
https://biodiversity.org.au/afd/taxa/4838066e-1185-4eda-bd26-8119895fad7a	Acanthistius serratus	(Cuvier, 1828)	species	Animalia	Chordata	Actinopterygii	Perciformes	Serranidae	Western Wirrah
https://biodiversity.org.au/afd/taxa/4a60a1c3-6acb-457a-a650-0059f7c6215f	Leptograpsus variegatus	(Fabricius, 1793)	species	Animalia	Arthropoda	Malacostraca	Decapoda	Grapsidae	Shore Crab
https://biodiversity.org.au/afd/taxa/4a65a812-f89a-4bbc-9ba7-31435a57f381	Tetragnatha demissa	L. Koch, 1872	species	Animalia	Arthropoda	Arachnida	Araneae	Tetragnathidae	
https://biodiversity.org.au/afd/taxa/4bed54f3-9d5a-4c64-aede-195eb191b30a	Heterotermes occiduus	(Hill, 1927)	species	Animalia	Arthropoda	Insecta	Blattodea	Rhinotermitidae	
https://biodiversity.org.au/afd/taxa/4cb195fd-b127-44cb-ad85-a62d224e9a96	Lathamus discolor	(Shaw, 1790)	species	Animalia	Chordata	Aves	Psittaciformes	Psittacidae	Swift Parrot
https://biodiversity.org.au/afd/taxa/4e971936-cff5-4877-a113-b5bd5f07d28a	Phrissogonus laticostata	(Walker, 1862)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/4f8d196e-6b81-44cb-beeb-64cd15c2ae19	Lychas marmoreus	(C.L. Koch, 1845)	species	Animalia	Arthropoda	Arachnida	Scorpiones	Buthidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/4fdb76e6-ca81-472e-b4bf-a05844ab45bd	Nettapus (Cheniscus) pulchellus	Gould, 1842	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Green Goose
https://biodiversity.org.au/afd/taxa/5091a2b2-7b67-4dc5-b4a0-cbe271c9aa0c	Cornu apertus	(Born, 1778)	species	Animalia	Mollusca	Gastropoda	Stylommatophora	Helicidae	
https://biodiversity.org.au/afd/taxa/56912aa7-1ce3-49a1-a464-ab712d6d8327	Cephrenes augiades	(C. Felder, 1860)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Hesperiidae	Orange Palm-dart
https://biodiversity.org.au/afd/taxa/57815553-1b85-49b5-a46d-035c0a35622f	Chelodina (Macrodiremys) colliei	Gray, 1856	species	Animalia	Chordata	Reptilia	Testudines	Chelidae	South-western Long-necked Turtle
https://biodiversity.org.au/afd/taxa/5d108c7a-607a-4ba5-8577-7321687ed62a	Physalia physalis	(Linnaeus, 1758)	species	Animalia	Cnidaria	Siphonophora	Cystonectae	Physaliidae	Portuguese Man-of-war
https://biodiversity.org.au/afd/taxa/5d1f294c-d87a-4644-84ca-fe1f160902db	Chortoicetes terminifera	(Walker, 1870)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	Australian Plague Locust
https://biodiversity.org.au/afd/taxa/5ff29bca-f02f-468f-9f96-9ae956015e01	Numenius (Numenius) madagascariensis	(Linnaeus, 1766)	species	Animalia	Chordata	Aves	Charadriiformes	Scolopacidae	Far Eastern Curlew
https://biodiversity.org.au/afd/taxa/643c69f3-d060-4f65-a48a-e8d8466aa60b	Helicoverpa armigera	(HÃ¼bner, 1808)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://biodiversity.org.au/afd/taxa/647ca922-6994-41c3-9856-d37f0e127a59	Amitermes heterognathus	(Silvestri, 1909)	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/6671d23d-f916-4bb5-a995-200a5b0968eb	Ethonion rooi	(Saunders, 1868)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/67e53714-92bf-47cc-aa6a-cb4f90a5bce5	Demansia psammophis	(Schlegel, 1837)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Yellow-faced Whip Snake
https://biodiversity.org.au/afd/taxa/683ee36c-bcda-42d5-a733-35b2e2e82d18	Helochares (Hydrobaticus) tenuistriatus	RÃ©gimbart, 1908	species	Animalia	Arthropoda	Insecta	Coleoptera	Hydrophilidae	
https://biodiversity.org.au/afd/taxa/69abc664-0e8f-499a-a934-9b530c5732bd	Tharpyna campestrata	L. Koch, 1874	species	Animalia	Arthropoda	Arachnida	Araneae	Thomisidae	
https://biodiversity.org.au/afd/taxa/6af1d88c-2087-4e3c-a9c2-760ac1c626ea	Diplodactylus polyophthalmus	GÃ¼nther, 1867	species	Animalia	Chordata	Reptilia	Squamata	Diplodactylidae	Spotted Sandplain Gecko
https://biodiversity.org.au/afd/taxa/70eed478-5390-40c7-8660-97810fef7365	Calotemognatha yarelli	(Gory & Laporte, 1838)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/77bed52a-31cd-43e1-92de-5b43559e903a	Phasmodes ranatriformis	Westwood, 1845	species	Animalia	Arthropoda	Insecta	Orthoptera	Tettigonidae	
https://biodiversity.org.au/afd/taxa/78d2a16f-f80f-4fcd-a43f-3de3d9220a5a	Schedorhinotermes reticulatus	(Froggatt, 1897)	species	Animalia	Arthropoda	Insecta	Blattodea	Rhinotermitidae	
https://biodiversity.org.au/afd/taxa/79984cb9-958f-4b5b-a89d-b264af10a1fa	Periplaneta americana	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Blattodea	Blattidae	American Cockroach
https://biodiversity.org.au/afd/taxa/80115d8a-e36b-4944-9005-0b5a5de69abc	Badumna longinqua	(L. Koch, 1867)	species	Animalia	Arthropoda	Arachnida	Araneae	Desidae	
https://biodiversity.org.au/afd/taxa/824f963d-e953-410a-806b-b9a27f3d29af	Myandra cambridgei	Simon, 1887	species	Animalia	Arthropoda	Arachnida	Araneae	Prodidomidae	
https://biodiversity.org.au/afd/taxa/83090e67-1582-49d2-81b3-98e7c5ede79e	Megachile (Austrochile) subferox	Meade-Waldo, 1915	species	Animalia	Arthropoda	Insecta	Hymenoptera	Megachilidae	
https://biodiversity.org.au/afd/taxa/835d10f9-60c8-435e-abba-b6be2518629a	Ctenotus gemmula	Storr, 1974	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Jewelled South-west Ctenotus
https://biodiversity.org.au/afd/taxa/8413e590-4d79-480a-8063-730be44d3541	Hylaeus (Rhodohylaeus) rufipes	(Smith, 1853)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/84458af1-fd80-4cea-a377-d3d5fbfa2b8c	Argiope keyserlingi	Karsch, 1878	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/86a747d6-737e-4005-a1ad-a16ca71c181e	Plesiastrea versipora	(Lamarck, 1816)	species	Animalia	Cnidaria	Anthozoa	Scleractinia		Stony Coral
https://biodiversity.org.au/afd/taxa/86fb93fd-4551-4b38-9a12-62b6b433729b	Tyto javanica	(Gmelin, 1788)	species	Animalia	Chordata	Aves	Strigiformes	Tytonidae	Eastern Barn Owl
https://biodiversity.org.au/afd/taxa/889675fb-39f7-4eb5-82d7-ea43ea29aed3	Oecetis pechana	Mosely, 1953	species	Animalia	Arthropoda	Insecta	Trichoptera	Leptoceridae	
https://biodiversity.org.au/afd/taxa/8899ed59-044b-4ae8-a741-0c29bedb7975	Phaulacridium vittatum	(SjÃ¶stedt, 1920)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	Wingless Grasshopper
https://biodiversity.org.au/afd/taxa/8c181054-63bc-4139-81dc-6a8d98d0bdba	Acrida conica	(Fabricius, 1781)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	Giant Green Slant-face
https://biodiversity.org.au/afd/taxa/90848061-77fe-4881-b9a7-f59e2ad7e95b	Megachile speluncarum	Meade-Waldo, 1915	species	Animalia	Arthropoda	Insecta	Hymenoptera	Megachilidae	
https://biodiversity.org.au/afd/taxa/96dd7eb9-d9d1-4083-a454-cc473fffe1c9	Lipotriches (Austronomia) flavoviridis	(Cockerell, 1905)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Halictidae	
https://biodiversity.org.au/afd/taxa/96f6e692-73e1-4a59-8222-65e97c311178	Tilodon sexfasciatus	(Richardson, 1842)	species	Animalia	Chordata	Actinopterygii	Perciformes	Microcanthidae	Moonlighter
https://biodiversity.org.au/afd/taxa/9d3256fd-b0e0-42f5-b27d-e1d4c0ceab4c	Meliphaga (Meliphaga) notata	(Gould, 1867)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Yellow-spotted Honeyeater
https://biodiversity.org.au/afd/taxa/a1d02d32-239c-49fd-becb-1440f4256666	Paracymus pygmaeus	(W.J. Macleay, 1871)	species	Animalia	Arthropoda	Insecta	Coleoptera	Hydrophilidae	
https://biodiversity.org.au/afd/taxa/a2310e94-1369-4736-9c70-93e4d1795d93	Perga affinis	Kirby, 1882	species	Animalia	Arthropoda	Insecta	Hymenoptera	Pergidae	
https://biodiversity.org.au/afd/taxa/a3e148b8-2a20-4d4b-8467-ac7d27fd15d9	Oenochroma vinaria	GuenÃ©e, 1857	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/aecd711c-3d66-42a5-b574-8f20b974fc1a	Halobaena caerulea	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Procellariiformes	Procellariidae	Blue Petrel
https://biodiversity.org.au/afd/taxa/af92c549-dc95-4c7d-88b1-4cb4e551ae40	Physeema quadricincta	(Walker, 1850)	species	Animalia	Arthropoda	Insecta	Hemiptera	Cicadidae	Tick-tock
https://biodiversity.org.au/afd/taxa/b7d21fef-2f99-4724-a8ec-2376eae1c0cc	Bibio imitator	Walker, 1835	species	Animalia	Arthropoda	Insecta	Diptera	Bibionidae	
https://biodiversity.org.au/afd/taxa/b8f921d8-9f0a-45f2-a2d8-21904ddfbb5b1	Varanus tristis	(Schlegel, 1839)	species	Animalia	Chordata	Reptilia	Squamata	Varanidae	Black-headed Monitor
https://biodiversity.org.au/afd/taxa/b97f2ef9-6728-4916-b96e-dfcabe0461e1	Echthromorpha intricatoria	(Fabricius, 1804)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Ichneumonidae	
https://biodiversity.org.au/afd/taxa/babedf46-96f6-42b5-b817-963228c553c1	Corasoides occidentalis	Humphrey, 2017	species	Animalia	Arthropoda	Arachnida	Araneae	Desidae	
https://biodiversity.org.au/afd/taxa/bdaa2e86-2da7-494d-ad28-f69df6e6499f	Delma grayii	Smith, 1849	species	Animalia	Chordata	Reptilia	Squamata	Pygopodidae	Side-barred Delma
https://biodiversity.org.au/afd/taxa/be87984d-abae-4d1b-aa3f-1adaa2feb086	Leperina seposita	(Olliff, 1886)	species	Animalia	Arthropoda	Insecta	Coleoptera	Trogossitidae	
https://biodiversity.org.au/afd/taxa/c1f2ea28-9306-40b8-9fa0-d5c4f5c34ccc	Diphucrania parva	(Blackburn, 1887)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/c5c1f18a-42a4-4cba-9082-d717f8c586ef	Erina acasta	(Cox, 1873)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lycaenidae	Blotched Blue
https://biodiversity.org.au/afd/taxa/c63b023d-4808-47a8-a34e-1296d04fbf08	Deinopis subrufa	L. Koch, 1878	species	Animalia	Arthropoda	Arachnida	Araneae	Deinopidae	
https://biodiversity.org.au/afd/taxa/c927f294-dc00-4574-89bc-68a48f6585a4	Macronectes giganteus	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Procellariiformes	Procellariidae	Southern Giant-petrel
https://biodiversity.org.au/afd/taxa/cd3b561e-f922-40d5-9433-9f2c9afed5e9	Paracapritermes kraepelini	(Silvestri, 1909)	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/d283e09b-9b64-4006-9aef-2ba84c1ce2dd	Catasarcus bilineatus	(FÃ¥hraeus, 1840)	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	
https://biodiversity.org.au/afd/taxa/d560c2ba-faff-4973-a2d1-f4dbcf06bbf0	Clogmia albipunctata	(Williston, 1893)	species	Animalia	Arthropoda	Insecta	Diptera	Psychodidae	
https://biodiversity.org.au/afd/taxa/da165c37-56cc-4195-94d5-daf47348d836	Iridomyrmex suchieri	Forel, 1907	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/dba6cff0-68f4-4c61-a263-a1ba54dc2cc1	Menemerus bivittatus	(Dufour, 1831)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/dcfa9fe8-e80a-4dd4-98f9-34f87aac6049	Cryptolaemus montrouzieri	Mulsant, 1853	species	Animalia	Arthropoda	Insecta	Coleoptera	Coccinellidae	
https://biodiversity.org.au/afd/taxa/dd33af1e-19e7-4fcd-9485-8726d84a664e	Darwinocoris australicus	Slater, 1962	species	Animalia	Arthropoda	Insecta	Hemiptera	Pachygronthidae	
https://biodiversity.org.au/afd/taxa/df0e1cf0-aed0-4e5d-affc-cdbcdcdaae2a	Camponotus chalceus	Crawley, 1915	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/e1702f13-8a42-4d55-8307-4ee07c1a3f0c	Euzosteria femoralis	(Walker, 1868)	species	Animalia	Arthropoda	Insecta	Blattodea	Blattidae	
https://biodiversity.org.au/afd/taxa/e27d813a-0e26-45c5-9396-687d368a2c37	Polistes (Polistella) humilis	(Fabricius, 1781)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Vespidae	Common Paper Wasp
https://biodiversity.org.au/afd/taxa/ee694d26-6d4d-4837-99ad-9b25d3454d9d	Aegotheles (Aegotheles) cristatus	(Shaw, 1790)	species	Animalia	Chordata	Aves	Apodiformes	Aegothelidae	Australian Owlet-nightjar
https://biodiversity.org.au/afd/taxa/efe4e6eb-c17e-49e9-9516-a2b47a708e51	Heterocerus similimus	Charpentier, 1968	species	Animalia	Arthropoda	Insecta	Coleoptera	Heteroceridae	
https://biodiversity.org.au/afd/taxa/f2f806e5-6103-4dc7-bb84-45998bf1aba1	Astraeus (Depollius) aberrans	van de Poll, 1886	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/f4ed227b-f3bd-4d4a-b302-033df5a565e7	Agraptocorixa eurynome	(Kirkaldy, 1897)	species	Animalia	Arthropoda	Insecta	Hemiptera	Corixidae	
https://biodiversity.org.au/afd/taxa/f79c45d5-a700-470e-94c8-8d03ed8c04d1	Austrosciapus connexus	(Walker, 1835)	species	Animalia	Arthropoda	Insecta	Diptera	Dolichopodidae	
https://biodiversity.org.au/afd/taxa/fa583a97-e6a2-44f7-965e-9b65e126589c	Lampides boeticus	(Linnaeus, 1767)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lycaenidae	Pea Blue
https://biodiversity.org.au/afd/taxa/fbe074ac-277a-4964-a709-4a79424124ea	Caenoplana coerulea	Moselev, 1877	species	Animalia	Platyhelminthes	Rhabditophora	Tricladida	Geoplanidae	
https://id.biodiversity.org.au/name/apni/50664168	Sixalix atropurpurea	(L.) Greuter & Burdet	species	Plantae	Charophyta	Equisetopsida	Dipsacales	Caprifoliaceae	
https://id.biodiversity.org.au/name/apni/51306772	Pentameris	P.Beauv.	genus	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/name/apni/51338178	Lazenophora platysperma	Jian Wang ter & A.R.Bean	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/name/apni/51360300	Goodenia reinwardtii	(de Vriese) K.A.Sheph.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	
https://id.biodiversity.org.au/node/apni/2886103	Melilotus indicus	(L.) All.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Hexham Scent
https://id.biodiversity.org.au/node/apni/2886532	Solanum symonii	H.Eichler	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae	
https://id.biodiversity.org.au/node/apni/2887264	Apium graveolens	L.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Celery (wild Form)

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2887401	Astartea fascicularis	(Labill.) DC.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Recherche Astartea
https://id.biodiversity.org.au/node/apni/2887834	Clematis pubescens	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae	Common Clematis
https://id.biodiversity.org.au/node/apni/2887923	Daviesia hakeoides	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2888695	Hemiandra glabra	Benth.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	
https://id.biodiversity.org.au/node/apni/2889067	Isolepis caldwellii	(W.J.Cook) SojÃ¡k	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Marsh Club-rush
https://id.biodiversity.org.au/node/apni/2889161	Hibbertia scandens	(Willd.) Dryand.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	Snake Vine
https://id.biodiversity.org.au/node/apni/2889171	Juncus amabilis	Edgar	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae	
https://id.biodiversity.org.au/node/apni/2889436	Doryanthes excelsa	Correa	species	Plantae	Charophyta	Equisetopsida	Asparagales	Doryanthaceae	Gymea Lily
https://id.biodiversity.org.au/node/apni/2890025	Cyperus involucratus	Rottb.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Umbrella Sedge
https://id.biodiversity.org.au/node/apni/2890026	Hibbertia helianthemoides	(Turcz.) F.Muell.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	
https://id.biodiversity.org.au/node/apni/2890307	Posidonia sinuosa	Cambridge & J.Kuo	species	Plantae	Charophyta	Equisetopsida	Alismatales	Posidoniaceae	Seagrass
https://id.biodiversity.org.au/node/apni/2890336	Drosera subhirtella	Planch.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	Sunny Rainbow
https://id.biodiversity.org.au/node/apni/2891459	Nemesia strumosa	Benth.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae	
https://id.biodiversity.org.au/node/apni/2891726	Desmocladus asper	(Nees) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/node/apni/2892118	Ipomoea muelleri	Benth.	species	Plantae	Charophyta	Equisetopsida	Solanales	Convolvulaceae	Poison Morning Glory
https://id.biodiversity.org.au/node/apni/2892146	Xylomelum occidentale	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Woody Pear
https://id.biodiversity.org.au/node/apni/2892929	Acacia trigonophylla	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2892938	Conostylis teretifolia	J.W.Green	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	
https://id.biodiversity.org.au/node/apni/2893609	Lomandra sericea	(Endl.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Silky Mat Rush
https://id.biodiversity.org.au/node/apni/2894173	Hydrocotyle callicarpa	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae	Tiny Pennywort
https://id.biodiversity.org.au/node/apni/2894326	Melia azedarach	L.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Meliaceae	Umbrella Tree
https://id.biodiversity.org.au/node/apni/2894606	Pimelea floribunda	Meisn.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae	
https://id.biodiversity.org.au/node/apni/2894632	Lessertia frutescens	(L.) Goldblatt & J.C.Manning	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2895339	Conostylis androstemma	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Trumpets
https://id.biodiversity.org.au/node/apni/2895368	Lactuca serriola	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Prickly Lettuce
https://id.biodiversity.org.au/node/apni/2895768	Galenia pubescens	(Eckl. & Zevh.) Druce	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Aizoaceae	Coastal Galenia
https://id.biodiversity.org.au/node/apni/2896041	Baumea articulata	(R.Br.) S.T.Blake	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Jointed Rush
https://id.biodiversity.org.au/node/apni/2896053	Atriplex isatidea	Moq.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae	Coast Saltbush
https://id.biodiversity.org.au/node/apni/2897215	Conostylis bracteata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	
https://id.biodiversity.org.au/node/apni/2897804	Xanthorrhoea brunonis	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Xanthorrhoeaceae	
https://id.biodiversity.org.au/node/apni/2898077	Baumea laxa	(Nees) Boeckeler	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Lax Twig-rush
https://id.biodiversity.org.au/node/apni/2898446	Mirbelia spinosa	(Benth.) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2898563	Petrophile serruriae	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2898885	Pimelea calcicola	Rye	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae	
https://id.biodiversity.org.au/node/apni/2899348	Senecio depressicola	I.Thomps.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2900200	Hemarthria uncinata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Mat Grass
https://id.biodiversity.org.au/node/apni/2900289	Adenanthos sericeus	Labill.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Coastal Woollybush
https://id.biodiversity.org.au/node/apni/2900342	Acacia stenoptera	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2900645	Aotus gracilima	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2901115	Poa annua	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Winter Grass
https://id.biodiversity.org.au/node/apni/2901148	Clematis linearifolia	Steud.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae	Slender Clematis
https://id.biodiversity.org.au/node/apni/2901294	Dichelachne crinita	(L.f.) Hook.f.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Longhair Plumegrass
https://id.biodiversity.org.au/node/apni/2902759	Austrostipa semibarbata	(R.Br.) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Fibrous Spear-grass
https://id.biodiversity.org.au/node/apni/2902929	Westringia fruticosa	(Willd.) Druce	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	Coastal Rosemary
https://id.biodiversity.org.au/node/apni/2903460	Lepidobolus preissianus	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/node/apni/2903479	Trifolium resupinatum	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Shaftal Clover
https://id.biodiversity.org.au/node/apni/2903998	Halophila ovalis	(R.Br.) Hook.f.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Hydrocharitaceae	Sea Wrack
https://id.biodiversity.org.au/node/apni/2904086	Freesia leichtlinii	Klatt	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	
https://id.biodiversity.org.au/node/apni/2904374	Acacia suaveolens	(Sm.) Willd.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Sweet Wattle
https://id.biodiversity.org.au/node/apni/2904420	Melaleuca trichophylla	Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2904712	Scaevola thesioides	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	Gibbous-fruited Scaevola
https://id.biodiversity.org.au/node/apni/2905546	Caesia occidentalis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae	Pale Grass Lily
https://id.biodiversity.org.au/node/apni/2905601	Cuscuta planiflora	Ten.	species	Plantae	Charophyta	Equisetopsida	Solanales	Convolvulaceae	Small-seeded Alfalfa Dodder
https://id.biodiversity.org.au/node/apni/2906546	Avena barbata	Pott ex Link	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Bearded Oats
https://id.biodiversity.org.au/node/apni/2906672	Cassytha racemosa	Nees	species	Plantae	Charophyta	Equisetopsida	Laurales	Lauraceae	Dodder Laurel
https://id.biodiversity.org.au/node/apni/2907010	Stylidium diuroides	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Donkey Triggerplant
https://id.biodiversity.org.au/node/apni/2907374	Phyla nodiflora	(L.) Greene	species	Plantae	Charophyta	Equisetopsida	Lamiales	Verbenaceae	Matgrass
https://id.biodiversity.org.au/node/apni/2907494	Silene nocturna	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae	Mediterranean Catchfly
https://id.biodiversity.org.au/node/apni/2907935	Epilobium ciliatum	Raf.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Onagraceae	Glandular Willow-herb
https://id.biodiversity.org.au/node/apni/2908070	Mesomelaena stygia	(R.Br.) Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2908256	Lepidosperma striatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2908483	Melaleuca scabra	R.Br.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Rough Honeymyrtle
https://id.biodiversity.org.au/node/apni/2908930	Hydrocotyle diantha	DC.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae	Kangaroo Island Pennywort
https://id.biodiversity.org.au/node/apni/2909143	Dimorphotheca ecklonis	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2909503	Tribulus terrestris	L.	species	Plantae	Charophyta	Equisetopsida	Zygophyllales	Zygophyllaceae	Bindyi
https://id.biodiversity.org.au/node/apni/2910010	Bacopa monnieri	(L.) Wettst.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	
https://id.biodiversity.org.au/node/apni/2910239	Hakea lorea	(R.Br.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Needlewood
https://id.biodiversity.org.au/node/apni/2910254	Epilobium hirtigerum	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Onagraceae	Hairy Willow Herb
https://id.biodiversity.org.au/node/apni/2910296	Typha domingensis	Pers.	species	Plantae	Charophyta	Equisetopsida	Poales	Typhaceae	Narrowleaf Cumbungi
https://id.biodiversity.org.au/node/apni/2910427	Chordifex sinuosus	B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	
https://id.biodiversity.org.au/node/apni/2910980	Lomandra micrantha	(Endl.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Small-flowered Mat-rush

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2911592	Carex fascicularis	Sol. ex Boott	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Tassel Sedge
https://id.biodiversity.org.au/node/apni/2911683	Lobularia maritima	(L.) Desv.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Sweet Alyssum
https://id.biodiversity.org.au/node/apni/2912734	Agonis flexuosa	(Willd.) Sweet	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Peppermint Willow
https://id.biodiversity.org.au/node/apni/2912910	Eucalyptus spathulata	Hook.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Swamp Gimlet
https://id.biodiversity.org.au/node/apni/2913065	Melaleuca incana	R.Br.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Grey Honeymyrtle
https://id.biodiversity.org.au/node/apni/2913186	Leptomeria empetriformis	Miq.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae	
https://id.biodiversity.org.au/node/apni/2913192	Trymalium ledifolium	Fenzl	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae	
https://id.biodiversity.org.au/node/apni/2913741	Aira praecox	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Early Hairgrass
https://id.biodiversity.org.au/node/apni/2913953	Persicaria lapathifolia	(L.) Delarbre	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Polygonaceae	Pale Knotweed
https://id.biodiversity.org.au/node/apni/2914375	Cryptandra pungens	Steud.	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae	
https://id.biodiversity.org.au/node/apni/2914583	Spinifex hirsutus	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Silver Grass
https://id.biodiversity.org.au/node/apni/2914798	Ptilotus declinatus	Nees	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	Curved Mulla-mulla
https://id.biodiversity.org.au/node/apni/2914985	Baumea preissii	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2915299	Quercus robur	L.	species	Plantae	Charophyta	Equisetopsida	Fagales	Fagaceae	English Oak
https://id.biodiversity.org.au/node/apni/2915797	Posidonia australis	Hook.f.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Posidoniaceae	Seagrass
https://id.biodiversity.org.au/node/apni/2915808	Acacia sphacelata	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2917276	Isotoma hypocrateniformis	(R.Br.) Druce	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Woodbridge Poison
https://id.biodiversity.org.au/node/apni/2917330	Luzula meridionalis	H.Nordensk.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae	Field Woodrush
https://id.biodiversity.org.au/node/apni/2917465	Haemodorum paniculatum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Mardja
https://id.biodiversity.org.au/node/apni/2918625	Johnsonia acaulis	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae	
https://id.biodiversity.org.au/node/apni/2918757	Lasiopetalum membranaceum	(Steud.) Benth.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae	
https://id.biodiversity.org.au/node/apni/2918921	Schoenus brevisetis	(R.Br.) Poir.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2919200	Acacia iteaphylla	F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Flinders Ranges Wattle
https://id.biodiversity.org.au/node/apni/2919217	Lachnagrostis filiformis	(G.Forst.) Trin.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Perehia
https://id.biodiversity.org.au/node/apni/2920206	Synaphea polymorpha	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Albany Synaphea
https://id.biodiversity.org.au/node/apni/2920854	Isolepis cernua	(Vahl) Roem. & Schult.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Nodding Club-rush
https://id.biodiversity.org.au/node/apni/6881039	Tetragonia tetragonoides	(Pall.) Kuntze	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Aizoaceae	Native Spinach
https://id.biodiversity.org.au/node/apni/6979038	Craspedia variabilis	J.Everett & Doust	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Billy-buttons
https://id.biodiversity.org.au/node/apni/7238218	Kennedia coccinea	(Curtis) Vent.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Coral Vine
https://id.biodiversity.org.au/node/apni/7387836	Geranium solanderi	Carolin	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Matua-kÃ¤mara
https://id.biodiversity.org.au/node/apni/7744138	Pittosporum angustifolium	Lodd.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae	Guwiirra
https://id.biodiversity.org.au/node/apni/7772838	Polypogon monspeliensis	(L.) Desf.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Annual Beardgrass
https://id.biodiversity.org.au/node/apni/7957707	Myoporum montanum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae	Native Myrtle
https://id.biodiversity.org.au/node/apni/8507720	Dillwynia retorta	(J.C.Wendl.) Druce	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/8694676	Eremophila glabra	(R.Br.) Ostenf.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae	Common Emu Bush
https://id.biodiversity.org.au/node/apni/9041023	Pittosporum ligustrifolium	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae	
https://id.biodiversity.org.au/node/ausmoss/10108619	Racopilum cuspidigerum	(SchwÃ¤gr.) Ã...ngstr.	species	Plantae	Bryophyta	Bryopsida	Hypnodendrales	Racopilaceae	
https://id.biodiversity.org.au/node/ausmoss/10110349	Rosulabryum billardieri	(SchwÃ¤gr.) J.R.Spence	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae	
https://id.biodiversity.org.au/node/ausmoss/10114913	Syntrichia laevipila	Brid.	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae	
https://id.biodiversity.org.au/node/ausmoss/10129376	Gemmabryum pachytheca	(MÃ¼ll.Hal.) J.R.Spence & H.P.Ramsay	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae	
https://id.biodiversity.org.au/node/fungi/60087873	Anthracobia muelleri	(Berk.) Rifai	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Pyronemataceae	
https://id.biodiversity.org.au/node/fungi/60089985	Colletotrichum xanthorrhoeae	R.G.Shivas, Bathgate & Podger	species	Fungi	Ascomycota	Sordariomycetes		Glomerellaceae	
https://id.biodiversity.org.au/node/fungi/60091551	Battarrea stevenii	(Libosch.) Fr.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60091889	Leucoagaricus leucothites	(Vittad.) M.M.Moser ex Bon	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60092005	Mycenastrum corium	(Guers. ex DC.) Desv.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60092173	Amanita arenaria	K.Syme	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Amanitaceae	
https://id.biodiversity.org.au/node/fungi/60092735	Cortinarius australiensis	(Cheel & Cleland) E.Horak	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Cortinariaceae	
https://id.biodiversity.org.au/node/fungi/60092929	Cortinarius ochraceofulvus	Cleland	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Cortinariaceae	
https://id.biodiversity.org.au/node/fungi/60093001	Cortinarius sublargus	Cleland	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Cortinariaceae	
https://id.biodiversity.org.au/node/fungi/60093773	Panaeolina foenisecii	(Pers.) Maire	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales		
https://id.biodiversity.org.au/node/fungi/60095141	Parasola plicatilis	(Curtis) Redhead, Vilgalys & Hopple	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Psathyrellaceae	
https://id.biodiversity.org.au/node/fungi/60095479	Hebeloma crustuliniforme	(Bull.) QuÃ©l.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60096899	Pisolithus albus	(Cooke & Massee) Priest	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Sclerodermataceae	
https://id.biodiversity.org.au/node/fungi/60097563	Coltricia cinnamomea	(Jacq.) Murrill	species	Fungi	Basidiomycota	Agaricomycetes	Hymenochaetales	Hymenochaetaceae	
https://id.biodiversity.org.au/node/fungi/60097615	Fuscoporia gilva	(Schwein.) T.Wagner & M.Fisch.	species	Fungi	Basidiomycota	Agaricomycetes	Hymenochaetales	Hymenochaetaceae	
https://id.biodiversity.org.au/node/fungi/60098405	Phlebia subceracea	(Wakef.) Nakasone	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Meruliaceae	
https://id.biodiversity.org.au/node/fungi/60098897	Panus fasciatus	(Berk.) Pegler	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae	
https://id.biodiversity.org.au/node/fungi/60099693	Russula erumpens	Cheel & Cleland	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae	
https://id.biodiversity.org.au/node/fungi/60100067	Thelephora terrestris	Ehrh.	species	Fungi	Basidiomycota	Agaricomycetes	Thelephorales	Thelephoraceae	
https://id.biodiversity.org.au/node/fungi/60103757	Leocarpus fragilis	(Dicks.) Rostaf.	species	Protista	Amoebozoa	Myxogastrea	Physarida	Physaraceae	
https://id.biodiversity.org.au/node/fungi/60104045	Perichaena corticalis	(Batsch) Rostaf.	species	Protista	Amoebozoa	Myxogastrea	Trichiida	Trichiaceae	
https://id.biodiversity.org.au/taxon/apni/51257218	Ptilotus nobilis	(Lindl.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	Yellowtails
https://id.biodiversity.org.au/taxon/apni/51267100	Thysanotus multiflorus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Many-flowered Fringe
https://id.biodiversity.org.au/taxon/apni/51267823	Brachyscome iberidifolia	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Swan River Daisy
https://id.biodiversity.org.au/taxon/apni/51283610	Drosera micrantha	Lehm.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	
https://id.biodiversity.org.au/taxon/apni/51289143	Calothamnus phellosus	A.S.George	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/taxon/apni/51289571	Calothamnus lateralis	Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/taxon/apni/51289696	Eremaea asterocarpa	Hnatiuk	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/taxon/apni/51289799	Eremaea purpurea	C.A.Gardner	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/taxon/apni/51291052	Bellardia trixago	(L.) All.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Orobanchaceae	Bellardia

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/taxon/apni/51291653	Muehlenbeckia polybotrya	Meisn.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Polygonaceae	
https://id.biodiversity.org.au/taxon/apni/51294397	Stylidium paludicola	Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Swamp Reed Triggerplant
https://id.biodiversity.org.au/taxon/apni/51399000	Caladenia falcata	(Nicholls) M.A.Clem. & Hopper	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Green Spider Orchid
https://id.biodiversity.org.au/taxon/apni/51399251	Caladenia pectinata	R.S.Rogers	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	King Spider Orchid
https://id.biodiversity.org.au/taxon/apni/51399456	Caladenia vulgata	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Common Spider Orchid
https://id.biodiversity.org.au/taxon/apni/51401282	Cyanicula sericea	(Lindl.) Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Silky Blue Orchid
https://id.biodiversity.org.au/taxon/apni/51404307	Diuris porrifolia	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Rosy-cheeked Donkey Orchid
https://id.biodiversity.org.au/taxon/apni/51405086	Eriochilus helonomos	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Swamp Bunny Orchid
https://id.biodiversity.org.au/taxon/apni/51414290	Thelymitra graminea	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Shy Sun Orchid
20450005	Margaretta gracilior	(Ortmann, 1892)	species	Animalia	Bryozoa	Gymnolaemata	Cheilostomata	Margarettidae	Bryozoan
24432010	Goniobranchus tinctorius	(RÃ¼ppell & Leuckart, 1828)	species	Animalia	Mollusca	Gastropoda	Nudibranchia	Chromodorididae	Nudibranch
54025007	Lobospira bicuspidata	Areschoug	species	Chromista	Ochrophyta	Phaeophyceae	Dictyotales	Dictyotaceae	Brown Alga
54102005	Scytothalia dorycarpa	(Turner) Greville	species	Chromista	Ochrophyta	Phaeophyceae	Fucales	Seirococcaceae	Brown Alga
54103043	Platythalia quercifolia	(R.Brown ex Turner) Sonder	species	Chromista	Ochrophyta	Phaeophyceae	Fucales	Sargassaceae	Brown Alga
54105047	Sargassum linearifolium	(Turner) C.Agardh	species	Plantae				Sargassaceae	Brown Alga
54105071	Sargassum tristichum	Greville & C.Agardh ex Sonder	species	Plantae				Sargassaceae	Brown Alga
55030033	Ptilophora prolifera	(Harvey) J. Agardh, 1876	species	Plantae				Gelidiaceae	Red Alga
55055003	Tylotus obtusatus	(Sonder) J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Dicranemataceae	Red Alga
55056001	Erythroclonium muelleri	Sonder	species					Areschougiaceae	Red Alga
55056010	Callophycus costatus	(Harvey) P.C.Silva	species					Areschougiaceae	Red Alga
55056015	Callophycus oppositifolius	(C.Agardh) P.C.Silva	species					Areschougiaceae	Red Alga
55057005	Claviclonium ovatum	(J.V.Lamouroux) Kraft & Min-Thein	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Acrotylaceae	Red Alga
55058002	Phacelocarpus peperocarpos	(Poiret) M.J. Wynne, ArdrÃ© & P.C. Silva	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Phacelocarpaceae	Red Alga
55058003	Phacelocarpus apodus	J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Phacelocarpaceae	Red Alga
55061001	Hypnea ramentacea	(C.Agardh) J. Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Gloiosiphoniaceae	Red Alga
55090009	Plocamium preissianum	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Plocamiales	Plocamiaceae	Red Alga
55097002	Platoma cyclocolpa	(Montagne) F.Schmitz	species	Plantae	Rhodophyta	Florideophyceae	Nemastomales	Schizymeniaceae	Red Alga
55106011	Curdiea irvineae	J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae	Red Alga
55110020	Leptosomia rosea	(Harvey) Womersley	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae	Red Alga
55111014	Champia zostericola	(Harvey) Reedman & Womersley	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Champiaceae	Red Alga
55121070	Metagoniolithon radiatum	(Lamarck) Ducker	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae	Red Alga
55121071	Metamastophora flabellata	(Sonder) Setchell	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae	Red Alga
55130096	Ceramium flaccidum	(Harvey ex KÃ¼tzing) Ardissone	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae	Red Alga
55130238	Spongoclonium conspicuum	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Wrangeliaceae	Red Alga
55131002	Heterodoxia denticulata	(Kuntze) J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae	Red Alga
55131019	Chauviniella corifolia	(Harvey) Papenfuss	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae	Red Alga
55131024	Holmsella australis	Noble & Kraft	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae	Red Alga
55131047	Myriogramme pulchella	(Harvey) A.J.K.Millar	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae	Red Alga
55131059	Sarcomenia delesserioides	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae	Red Alga
55133002	Dictyomenia tridens	(Mertens ex Turner) Greville	species	Plantae				Rhodomelaceae	Red Alga
55133089	Kuetzingia canaliculata	(Greville) Sonder	species	Plantae				Rhodomelaceae	Red Alga
56190004	Bryopsis foliosa	Sonder	species	Plantae	Chlorophyta	Ulvophyceae	Bryopsidales	Bryopsidaceae	Green Alga
56191018	Codium galeatum	J.Agardh	species	Animalia	Arthropoda	Insecta	Diptera	Tachinidae	Green Alga
56191025	Codium laminarioides	Harvey	species	Animalia	Arthropoda	Insecta	Diptera	Tachinidae	Green Alga
56196009	Halimeda cuneata	K.Hering	species	Plantae				Udoteaceae	Green Alga
56211001	Apjohnia laetevirens	Harvey	species	Plantae	Chlorophyta	Ulvophyceae	Cladophorales	Siphonocladaceae	Green Alga
NZOR-6-104703	Griffithsia teges	Harv.	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Wrangeliaceae	Red Alga
NZOR-6-10594	Hemimycena hirsuta	(Todd) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Mycenaceae	
NZOR-6-116009	Coleosporium plumeriae	Pat.	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Coleosporiaceae	
NZOR-6-116659	Linaria maroccana	Hook.f.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	
NZOR-6-119784	Phacelocarpus sessilis	Harv. ex J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Phacelocarpaceae	
NZOR-6-120100	Asparagopsis armata	Harv.	species	Plantae	Rhodophyta	Florideophyceae	Bonnemaisoniales	Bonnemaisoniaceae	Red Alga
NZOR-6-120897	Caulerpa geminata	(Harv.) Weber Bosse	species	Plantae	Chlorophyta	Ulvophyceae	Bryopsidales	Caulerpaceae	Green Alga
NZOR-6-12440	Brongniartella australis	(C.Agardh) Schmitz	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae	Red Alga
NZOR-6-124439	Peziza repanda	Wahlenb.	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Pezizaceae	
NZOR-6-129455	Dictyota dichotoma	(Huds.) J.V.Lamour.	species	Chromista	Ochrophyta	Phaeophyceae	Dictyotales	Dictyotaceae	Brown Alga
NZOR-6-133995	Plumeria rubra	L.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Apocynaceae	
NZOR-6-134586	Rhodymenia folifera	Harv.	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae	Red Alga
NZOR-6-134869	Lobophora variegata	(J.V.Lamour.) Womersley	species	Chromista	Ochrophyta	Phaeophyceae	Dictyotales	Dictyotaceae	Brown Alga
NZOR-6-16792	Triplectides cephalotes	Walker	species	Animalia	Arthropoda	Insecta	Trichoptera	Leptoceridae	
NZOR-6-17582	Dichondra micrantha	Urb.	species	Plantae	Charophyta	Equisetopsida	Solanales	Convolvulaceae	
NZOR-6-19303	Amphiroa anceps	(Lam.) Decne.	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae	Red Alga
NZOR-6-24030	Nitella tasmanica	(O.F. MÃ¼ll. ex. A. Braun) R.D. Wood	species	Plantae	Chlorophyta	Charophyceae	Charales	Characeae	
NZOR-6-27377	Puccinia hieracii	(RÃ¶hl.) H. Mart.	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniaceae	
NZOR-6-33624	Anthracobia melaloma	(Alb. & Schwein.) Boud.	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Pyronemataceae	
NZOR-6-38212	Physarum straminipes	Lister	species	Protista	Amoebozoa	Myxogastrea	Physarida	Physaraceae	
NZOR-6-38793	Soliena robusta	(Grev.) Kylin	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Solieriaceae	Red Alga

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
NZOR-6-40879	Phlebiopsis crassa	(LÃ©v.) D. Floudas & Hibbett	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Phanerochaetaceae	
NZOR-6-42740	Pimelea carnosa	C.J.Burrows	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae	
NZOR-6-48398	Leratiomyces ceres	(Cooke & Massee) Bridge & Spooner	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
NZOR-6-48609	Manilkara zapota	(L.) P.Royen	species	Plantae	Charophyta	Equisetopsida	Ericales	Sapotaceae	
NZOR-6-59794	Phaseolus coccineus	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
NZOR-6-6484	Aleuria aurantia	(Pers.) Fuckel	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Pyronemataceae	
NZOR-6-73164	Caulerpa flexilis	J.V.Lamour.	species	Plantae	Chlorophyta	Ulvophyceae	Bryopsidales	Caulerpaceae	Green Alga
NZOR-6-73715	Mycosphaerella anethi	(Pers.) Petr.	species	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Mycosphaerellaceae	
NZOR-6-75734	Amanita drummondii	E.M. Davison	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Amanitaceae	Drummond's Grisette
NZOR-6-80326	Chara corallina	(Klein ex Willd.) R.D. Wood	species	Plantae	Chlorophyta	Charophyceae	Charales	Characeae	
NZOR-6-86728	Puccinia recondita	Desm.	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniaceae	
NZOR-6-94641	Retama monosperma	(L.) Boiss.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Bridal Veil Broom
f12ac3b659096c4114674Saf2d519a21	Arcyria occidentalis	(T.Macbr.) G.Lister, 1911	species	Protista	Amoebozoa	Myxogastrea	Trichiida	Arcyriaceae	
https://biodiversity.org.au/afd/taxa/01b12f8c-779a-48be-8f97-ebcbe36300d5	Allodessus bistrigatus	(Clark, 1862)	species	Animalia	Arthropoda	Insecta	Coleoptera	Dytiscidae	
https://biodiversity.org.au/afd/taxa/030e1e11-aea3-4d57-92f3-2b58c728256e	Diphucrania roseocuprea	(Hope, 1846)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/03c7f451-eab0-43e1-93bc-a5a653c4c75a	Tympanophora similis	Riek, 1976	species	Animalia	Arthropoda	Insecta	Orthoptera	Tettigonidae	
https://biodiversity.org.au/afd/taxa/03f483bb-5e5f-4e6e-afc1-2f3594b4e697	Booralana wunderra	Bruce, 1986	species	Animalia	Arthropoda	Malacostraca	Isopoda	Cirolanidae	Isopod
https://biodiversity.org.au/afd/taxa/0446a0bc-ddb9-4bf1-b7e3-ecd7a3b8fa84	Iridomyrmex longisoma	Heterick & Shattuck, 2011	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/0519208b-fe23-41e0-ab67-e1320ab89d30	Diphucrania stigmata	(Gory & Laporte, 1839)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/054b8aa4-fd1e-42ec-b103-094624ff5c1b	Nyctophilus geoffroyi	Leach, 1821	species	Animalia	Chordata	Mammalia	Chiroptera	Vespertilionidae	Lesser Long-eared Bat
https://biodiversity.org.au/afd/taxa/05d7e54c-47b8-4157-b7ea-8f2596772905	Egernia napoleonis	(Gray, 1838)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	South-western Crevice-skink
https://biodiversity.org.au/afd/taxa/06c31d5c-61c7-400e-a036-6afa17b80ca8	Aedes (Rampamyia) notoscriptus	(Skuse, 1889)	species	Animalia	Arthropoda	Insecta	Diptera	Culicidae	
https://biodiversity.org.au/afd/taxa/073dbc4b-7d42-4f17-9946-3435e80a3e54	Gea theridioides	(L. Koch, 1872)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/09136ecf-ef77-4786-8438-4c67d7e11111	Lunella (Ninella) torquatus	(Gmelin, 1791)	species	Animalia	Mollusca	Gastropoda		Turbinidae	Sydney Or Heavy Turban Shell
https://biodiversity.org.au/afd/taxa/0b7db155-ac36-4263-b113-95f6fbec19c8	Phonognatha graeffei	(Keyserling, 1865)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/0bbc9844-172f-48d1-a721-cd95fed98ce9	Melobasis wannerua	Carter, 1936	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/0c9c95dc-9442-49f4-bad4-8fff86cfd033	Lampona murina	L. Koch, 1873	species	Animalia	Arthropoda	Arachnida	Araneae	Lamponidae	
https://biodiversity.org.au/afd/taxa/0cfe42e3-3fd8-4150-ae59-660d6cdc0f48	Tursiops aduncus	(Ehrenberg, 1832)	species	Animalia	Chordata	Mammalia	Cetacea	Delphinidae	Long-beaked Bottle-nosed Dolphin
https://biodiversity.org.au/afd/taxa/0e526884-3eb4-490c-9362-3eb8065ee0d4	Plutella xylostella	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Plutellidae	
https://biodiversity.org.au/afd/taxa/110d0c94-3439-4f5b-82cb-6ec0b9cde190	Australomisidia cruentata	(L. Koch, 1874)	species	Animalia	Arthropoda	Arachnida	Araneae	Thomisidae	
https://biodiversity.org.au/afd/taxa/114bb9c5-3077-41ef-9034-40882f6cbf42	Aurelia aurita	(Linnaeus, 1758)	species	Animalia	Cnidaria	Scyphozoa	Semaeostomeae	Ulmaridae	Moon Jellyfish
https://biodiversity.org.au/afd/taxa/1265b13a-52b4-462f-8b28-0575df7ff68d	Glareola (Glareola) maldivarum	J.R. Forster, 1795	species	Animalia	Chordata	Aves	Charadriiformes	Glareolidae	Oriental Pratincole
https://biodiversity.org.au/afd/taxa/12e8f856-2bbb-4a33-8e4c-f409774c760d	Cyrioides vittigera	(Laporte & Gory, 1835)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/13a31834-0f30-4a9c-a68f-a22dd3d3158b	Onychoprion fuscatus	(Linnaeus, 1766)	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Sooty Tern
https://biodiversity.org.au/afd/taxa/1599acc7-2364-49df-babd-201a39c456c7	Girella tephraeops	(Richardson, 1846)	species	Animalia	Chordata	Actinopterygii	Perciformes	Girellidae	Western Rock Blackfish
https://biodiversity.org.au/afd/taxa/15ac1f99-0fec-48d0-8f0c-361627400ce3	Melobasis rectipilosa	Levey, 2012	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/1611ee09-cd2e-41ef-a40b-77a28693e6c1	Hogna crispipes	(L. Koch, 1877)	species	Animalia	Arthropoda	Arachnida	Araneae	Lycosidae	
https://biodiversity.org.au/afd/taxa/16fcc761-685a-4527-b5e4-e6c7042ae2c6	Heleioporus inornatus	(Lee & Main, 1954)	species	Animalia	Chordata	Amphibia	Anura	Limnodynastidae	Plains Frog
https://biodiversity.org.au/afd/taxa/17e66cd6-ec05-4478-8e8d-9e9d8ffc8045	Castiarina crenata	(Donovan, 1805)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/18544c24-739f-4323-aaa0-e41b9e558d9b	Cryptachaea veruculata	(Urquhart, 1886)	species	Animalia	Arthropoda	Arachnida	Araneae	Theridiidae	
https://biodiversity.org.au/afd/taxa/195bde02-d775-4b20-a434-10466e66e9e1	Lucilia cuprina	(Wiedemann, 1830)	species	Animalia	Arthropoda	Insecta	Diptera	Calliphoridae	
https://biodiversity.org.au/afd/taxa/1bBec366-b012-4c39-b47b-c2c53ac2b4a7	Cochlicella acuta	(MÃ¼ller, 1774)	species	Animalia	Mollusca	Gastropoda	Stylommatophora	Hygromidae	
https://biodiversity.org.au/afd/taxa/1bb11b35-17f2-4202-960a-1fc29e5c36f6	Maratus spicatus	Otto & Hill, 2012	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/1bb7b18a-69e7-4628-b53f-bc0497b8d1ec	Euomus insculptus	(Boheman, 1842)	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	
https://biodiversity.org.au/afd/taxa/1c42aff5-173d-4c68-a61e-ae7fe8c36015	Crematogaster frivola	Forel, 1902	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/1dfa06ee-4576-4a78-a9d9-8578cc16be34	Doratifera oxleyi	(Newman, 1855)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Limacodidae	
https://biodiversity.org.au/afd/taxa/1e5668f8-6a29-4400-8f8f-ca514ce65ebf	Helpis occidentalis	Simon, 1909	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/1ebf8ec6-9aee-4b58-8789-0be73eb97b2f	Thinornis cucullatus	(Vieillot, 1818)	species	Animalia	Chordata	Aves	Charadriiformes	Charadriidae	Hooded Plover
https://biodiversity.org.au/afd/taxa/1fd46464-b765-409e-95c7-cd0ac1bad58e	Acantholophus amycteroides	Macleay, 1865	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	
https://biodiversity.org.au/afd/taxa/227f47ce-b27a-41c9-8bc3-a4e29f9ecf9f	Atractomorpha similis	BolÃvar, 1884	species	Animalia	Arthropoda	Insecta	Orthoptera	Pyrgomorphidae	Common Grass Pyrgomorph
https://biodiversity.org.au/afd/taxa/23caa354-df37-4d68-94fa-2b34ad58f4e8	Paranisops endymion	(Kirkaldy, 1904)	species	Animalia	Arthropoda	Insecta	Hemiptera	Notonectidae	
https://biodiversity.org.au/afd/taxa/242bc8a7-ecf6-43b9-96bb-bd459a6bb362	Diatenes aglossoides	GuenÃ©e, 1852	species	Animalia	Arthropoda	Insecta	Lepidoptera	Erebidae	
https://biodiversity.org.au/afd/taxa/2505fa15-3e40-4615-8504-29e3938d8ac1	Olisthops cyanomelas	Richardson, 1850	species	Animalia	Chordata	Actinopterygii	Perciformes	Labridae	Herring Cale
https://biodiversity.org.au/afd/taxa/259086df-3dba-4f1c-989c-356eb82a056d	Idiodes idiocrossa	(Turner, 1947)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/26827e31-fa72-44bc-86cb-7ce377d0f2f9	Chrysodeixis argentifera	(GuenÃ©e, 1852)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://biodiversity.org.au/afd/taxa/282bae67-d9e9-45bf-a045-fc37517fe3ea	Theclinesthes miskini	(T.P. Lucas, 1889)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lycaenidae	Wattle Blue
https://biodiversity.org.au/afd/taxa/28663829-709e-4dc3-99c1-7ce68b4c1e8b	Musgravia sulciventris	(StÃ¥l, 1863)	species	Animalia	Arthropoda	Insecta	Hemiptera	Tessaratomidae	Bronze Orange Bug
https://biodiversity.org.au/afd/taxa/28cb02de-e27d-4b5e-8723-b4db755335b3	Papilio (Princeps) demoleus	Linnaeus, 1758	species	Animalia	Arthropoda	Insecta	Lepidoptera	Papilionidae	Chequered Swallowtail
https://biodiversity.org.au/afd/taxa/29c2dab4-8895-4e17-a181-a6f3988991ae	Theseus modestus	(StÃ¥l, 1865)	species	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	
https://biodiversity.org.au/afd/taxa/2ad46217-7f3d-440f-9e29-b3327d32e464	Lucilia sericata	(Meigen, 1826)	species	Animalia	Arthropoda	Insecta	Diptera	Calliphoridae	
https://biodiversity.org.au/afd/taxa/2b692f84-bda2-4068-86e1-4554c77f3917	Catopsilia pyranthe	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Pieridae	White Migrant
https://biodiversity.org.au/afd/taxa/2b814a7f-6840-459c-bdf5-ccb2956d6420	Abantiades hydrographus	(R. Felder, 1874)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Hepialidae	
https://biodiversity.org.au/afd/taxa/2ba88fd9-4afa-444f-8165-f1ebb0fbf728	Achyra affinitalis	(Lederer, 1863)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Crambidae	
https://biodiversity.org.au/afd/taxa/2cb3495a-730b-47b9-937a-617259059183	Carybdea xaymacana	Conant, 1897	species	Animalia	Cnidaria	Cubozoa	Carybdeida	Carybdeidae	
https://biodiversity.org.au/afd/taxa/2cd037cd-2ba7-44bd-b038-84d3b009f2eb	Myrmecia swalei	Crowley, 1922	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/2cfd3178-5ca9-4b57-9182-17a7e1764e69	Astraeus (Astraeus) macmillani	Barker, 1975	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/2e57beca-76c4-41c7-b6ce-b211fe05b44c	Maculabatis toshi	(Whitley, 1939)	species	Animalia	Chordata	Chondrichthyes	Myliobatiformes	Dasyatidae	Coachwhip Ray
https://biodiversity.org.au/afd/taxa/2e639034-a770-4dac-961b-f04fc60f22bc	Circopetes obtusata	(Walker, 1860)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/2eb0ca14-d12b-4288-8c3e-90d825098187	Aplocitsoma milesi	(Richardson, 1850)	species	Animalia	Chordata	Actinopterygii	Scorpaeniformes	Aploactinidae	Velvetfish
https://biodiversity.org.au/afd/taxa/31141a78-19fb-42ad-be85-5b5528159e42	Trictena atripalpis	(Walker, 1856)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Hepialidae	
https://biodiversity.org.au/afd/taxa/3134a393-7059-4099-a417-45ff499e1836	Polistes (Polistella) stigma	(Fabricius, 1793)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Vespidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/32ec77e9-568d-4b0f-a380-5dcffbe2b95a	Phaulacridium crassum	Key, 1992	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	
https://biodiversity.org.au/afd/taxa/339f1b35-3f79-4dfe-a34a-fb7d954b21db	Cheilodactylus spectabilis	Hutton, 1872	species	Animalia	Chordata	Actinopterygii	Perciformes	Cheilodactylidae	Banded Morwong
https://biodiversity.org.au/afd/taxa/33cb4b8a-5016-4e24-94ca-694d97f218c8	Bakeriana procurrens	(Jacobi, 1909)	species	Animalia	Arthropoda	Insecta	Hemiptera	Cicadellidae	
https://biodiversity.org.au/afd/taxa/341db571-01fb-4444-b077-129428f8dc61	Goniaea vocans	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	Slender Gumleaf Grasshopper
https://biodiversity.org.au/afd/taxa/34221f1a-9d5c-4a8a-a612-6d63b9ba844e	Aphrodita australis	Baird, 1865	species	Animalia	Annelida	Polychaeta		Aphroditidae	Polychaete Worm
https://biodiversity.org.au/afd/taxa/3425c6b1-8600-4ca8-8533-7d22d5eb0136	Pseudopenthes hesperis	Lambkin & Yeates, 2003	species	Animalia	Arthropoda	Insecta	Diptera	Bombyliidae	
https://biodiversity.org.au/afd/taxa/34435f18-4db9-4dc5-87e8-ff451fa56e35	Lonchura (Munia) castaneothorax	(Gould, 1837)	species	Animalia	Chordata	Aves	Passeriformes	Estrildidae	Chestnut-breasted Munia
https://biodiversity.org.au/afd/taxa/344b48ea-869e-43ed-aabf-ca684e181eb4	Austrogomphus (Austrogomphus) collaris	Hagen, 1854	species	Animalia	Arthropoda	Insecta	Odonata	Gomphidae	
https://biodiversity.org.au/afd/taxa/35aa6f7e-08c7-4766-b16c-7342bf10a3ed	Plesiochrysa ramburi	(Schneider, 1851)	species	Animalia	Arthropoda	Insecta	Neuroptera	Chrysopidae	
https://biodiversity.org.au/afd/taxa/36ff0403-36ea-490a-a025-126e9473c841	Austrolestes psyche	(Hagen, 1862)	species	Animalia	Arthropoda	Insecta	Odonata	Lestidae	
https://biodiversity.org.au/afd/taxa/37636e2e-3e48-49df-9b19-fcf4e5e93712	Saiphos equalis	(Gray, 1825)	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Three-toed Skink
https://biodiversity.org.au/afd/taxa/38152d43-3618-4618-9735-6c0fa50f7e4d	Misumena bipunctata	Rainbow, 1898	species	Animalia	Arthropoda	Arachnida	Araneae	Thomisidae	
https://biodiversity.org.au/afd/taxa/38d46ddf-c4c9-47e9-bc2f-040cad0b8bc7	Ceratitis capitata	(Wiedemann, 1824)	species	Animalia	Arthropoda	Insecta	Diptera	Tephritidae	Medfly
https://biodiversity.org.au/afd/taxa/390bb87e-bf1b-4261-bdaa-bc8d07db76ce	Lepturidea occidentalis	(Blackburn, 1891)	species	Animalia	Arthropoda	Insecta	Coleoptera	Tenebrionidae	
https://biodiversity.org.au/afd/taxa/392d78ae-a192-4591-aa89-600d6e945113	Sphyraena novaehollandiae	GÃ¼nther, 1860	species	Animalia	Chordata	Actinopterygii	Perciformes	Sphyraenidae	Snook
https://biodiversity.org.au/afd/taxa/3965ccbe-1b54-44b2-a8de-2039b2227ba1	Idaea inversata	(GuenÃ©e, 1857)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/3a561002-ef17-4bc5-9c86-f41b2658b3a3	Ogyris amaryllis	Hewitson, 1862	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lycaenidae	Amaryllis Azure
https://biodiversity.org.au/afd/taxa/3ae7d5bb-50ea-4b21-993d-ec3c76ea09a8	Turbo (Marmarostoma) kenwilliamsi	Williams, 2008	species	Animalia	Mollusca	Gastropoda		Turbinidae	Turban Shell
https://biodiversity.org.au/afd/taxa/3b9c4cc1-1465-4b7d-8015-8fd558ed4531	Ardenna pacifica	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Procellariiformes	Procellariidae	Wedge-tailed Petrel
https://biodiversity.org.au/afd/taxa/3cabd997-b0ac-4ccd-8918-ae44ec1b556b	Chlamydosaurus kingii	Gray, 1825	species	Animalia	Chordata	Reptilia	Squamata	Agamidae	Frilled Lizard
https://biodiversity.org.au/afd/taxa/3d360857-88a1-41ef-bbd7-b4251bd6cf59	Buddelundia inaequalis	(Budde-Lund, 1912)	species	Animalia	Arthropoda	Malacostraca	Isopoda	Armadillidae	
https://biodiversity.org.au/afd/taxa/3e76ec1f-622b-452b-b556-904da60adea2	Pseudapines geminata	(Van Duzee, 1905)	species	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	Pittosporum Bug
https://biodiversity.org.au/afd/taxa/40f84ab92-7a98-420e-a1da-fbb5b970006d	Drymaplaneta semivitta	(Walker, 1868)	species	Animalia	Arthropoda	Insecta	Blattodea	Blattidae	
https://biodiversity.org.au/afd/taxa/40f1f5b3-0399-4c50-a135-508f3f34c9af	Pycnostictus seriatus	de Saussure, 1884	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	
https://biodiversity.org.au/afd/taxa/4135b459-80ab-40e3-88ac-1e9670403bea	Stigmatopora argus	(Richardson, 1840)	species	Animalia	Chordata	Actinopterygii	Syngnathiformes	Syngnathidae	Gulf Pipefish
https://biodiversity.org.au/afd/taxa/41a3eac2-17fd-4bcc-9807-617b5775fa76	Maratus speculifer	(Simon, 1909)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/428afbec-3947-4aa8-b871-0bcf9de68f2c	Anthrenus (Florilinus) museorum	(Linnaeus, 1761)	species	Animalia	Arthropoda	Insecta	Coleoptera	Dermestidae	
https://biodiversity.org.au/afd/taxa/429cd14f-2018-47e4-b084-037f6bb03249	Arrade destituta	(Walker, 1865)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Erebidae	
https://biodiversity.org.au/afd/taxa/43adf129-76b1-4e81-9593-cd4f5ac7c829	Spoladea recurvalis	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Crambidae	
https://biodiversity.org.au/afd/taxa/4437613f-3906-418f-90ba-57c0d5c6c3bd	Phryganoporus nigrinus	Simon, 1908	species	Animalia	Arthropoda	Arachnida	Araneae	Desidae	
https://biodiversity.org.au/afd/taxa/448d14ff-e9a6-4331-8827-e7708eb2bd3f	Chaetodon assarius	Waite, 1905	species	Animalia	Chordata	Actinopterygii	Perciformes	Chaetodontidae	Western Butterflyfish
https://biodiversity.org.au/afd/taxa/46306d30-cfa1-4528-906b-cae2e9c5c0e8	Vanellus (Lobipluvia) miles	(Boddaert, 1783)	species	Animalia	Chordata	Aves	Charadriiformes	Charadriidae	Masked Plover
https://biodiversity.org.au/afd/taxa/463b6e20-8f71-4e8e-af1c-8f308fd63744	Arachnura higginsi	(L. Koch, 1872)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/465659ca-6d28-48a3-910d-ea8f5c58da72	Kogia breviceps	(Blainville, 1838)	species	Animalia	Chordata	Mammalia	Cetacea	Kogiidae	Pygmy Sperm Whale
https://biodiversity.org.au/afd/taxa/46fab894-7099-478b-a17d-94989f5b5993	Ctenotus impar	Storr, 1969	species	Animalia	Chordata	Reptilia	Squamata	Scincidae	Odd-striped Ctenotus
https://biodiversity.org.au/afd/taxa/477786c2-49d7-416f-b629-ac5560af0c0	Pachyptila desolata	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Procellariiformes	Procellariidae	Antarctic Prion
https://biodiversity.org.au/afd/taxa/477ea9f7-c06e-46fd-a1c1-41adc611ee82	Brachyurophis fasciolatus	(GÃ¼nther, 1872)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Narrow-banded Shovel-nosed Snake
https://biodiversity.org.au/afd/taxa/478144c3-57f4-49ac-bf83-c0ba7a52c43b	Pheidole antipodum	(Smith, 1858)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/48000c09-76aa-46a0-b42e-88f3cfef0ac4	Sympetes orbicularis	(BrÃ¤me, 1842)	species	Animalia	Arthropoda	Insecta	Coleoptera	Tenebrionidae	
https://biodiversity.org.au/afd/taxa/48cbf375-2e37-41df-80aa-57ac103a9068	Porcellio laevis	Latreille, 1804	species	Animalia	Arthropoda	Malacostraca	Isopoda	Porcellionidae	
https://biodiversity.org.au/afd/taxa/48f3f156-a0b5-4858-8095-21d4b885e15b	Castiarina bazilisca	(Obenberger, 1933)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/4a1edd70-8ca8-433e-948e-8ce829476fd6	Cleidothaerus albidus	(Lamarck, 1819)	species	Animalia	Mollusca	Bivalvia		Cleidothaeridae	White Cleidothaerus
https://biodiversity.org.au/afd/taxa/4c0f0066-4275-40a6-b815-7b1a2649860b	Dendrocygna eytoni	(Eyton, 1838)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Plumed Whistling-duck
https://biodiversity.org.au/afd/taxa/4c9f0bd4-1f0e-4efb-bfd6-b3c90150e83d	Cylindrococcus soiniferus	Maskell, 1892	species	Animalia	Arthropoda	Insecta	Hemiptera	Eriococcidae	Casuarina Gall
https://biodiversity.org.au/afd/taxa/4cc9abe1-8adf-4e83-bd7f-69c61f8a0cdc	Radumeris tasmaniensis	(Saussure, 1854)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Scoliidae	
https://biodiversity.org.au/afd/taxa/4e4cd88d-b79c-458a-a9a1-a766e97cfda1	Castiarina subcincta	Barker, 1996	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/4e958f93-ee86-4b04-ba44-03302bce7dca	Strumatophyma verrucosa	(Clark, 1864)	species	Animalia	Arthropoda	Insecta	Coleoptera	Chrysomelidae	
https://biodiversity.org.au/afd/taxa/4ecf88e7-9368-4163-9d00-bf14eed98f3e	Orcus australasiae	(Boisduval, 1835)	species	Animalia	Arthropoda	Insecta	Coleoptera	Coccinellidae	
https://biodiversity.org.au/afd/taxa/4ed296cd-960e-4a76-b416-38492e900332	Tamopsis fickerti	(L. Koch, 1876)	species	Animalia	Arthropoda	Arachnida	Araneae	Hersiliidae	
https://biodiversity.org.au/afd/taxa/4f1a9c5c-89a3-470c-bed4-aba21f5db224	Cygnus olor	(Gmelin, 1789)	species	Animalia	Chordata	Aves	Anseriformes	Anatidae	Mute Swan
https://biodiversity.org.au/afd/taxa/4f5be6a5-41c0-4b49-ba7f-e4d693bd01a5	Porcellio scaber	Latreille, 1804	species	Animalia	Arthropoda	Malacostraca	Isopoda	Porcellionidae	
https://biodiversity.org.au/afd/taxa/4f8b5ff2-d37e-43a0-a12d-90cea2e26efb	Melobasis melanura	Kerremans, 1898	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/4fb80e54-ced0-4d93-a646-b2a2dfcc6f1d	Earias huegeliana	Gaede, 1938	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nolidae	
https://biodiversity.org.au/afd/taxa/50a9ff8c-2ff2-4866-b42a-09efb17ca2ce	Aleeta curvicosta	(Germar, 1834)	species	Animalia	Arthropoda	Insecta	Hemiptera	Cicadidae	
https://biodiversity.org.au/afd/taxa/5147c83e-1c90-4690-9ccb-be428f73274f	Tumulitermes westraliensis	(Hill, 1921)	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/5185cfe8-f011-43bf-a04e-1d2ae810775d	Tranes vigorsi	Boheman, 1843	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	
https://biodiversity.org.au/afd/taxa/519c1f64-2074-4379-9b5b-b976fe078c59	Chelonibia testudinaria	(Linnaeus, 1758)	species	Animalia	Arthropoda	Maxillopoda	Sessilia	Chelonibiidae	Barnacle
https://biodiversity.org.au/afd/taxa/51ad10ec-f434-4311-922f-bb75fa025c34	Polypedilum (Polypedilum) nubifer	(Skuse, 1889)	species	Animalia	Arthropoda	Insecta	Diptera	Chironomidae	
https://biodiversity.org.au/afd/taxa/52f3c1c6-8e4f-4ade-b0f7-17890169efb2	Pavo cristatus	Linnaeus, 1758	species	Animalia	Chordata	Aves	Galliformes	Phasianidae	Peafowl
https://biodiversity.org.au/afd/taxa/53557da8-1694-403f-897d-1f2f79acca0e	Psammoperca waigiensis	(Cuvier, 1828)	species	Animalia	Chordata	Actinopterygii	Perciformes	Latidae	Dwarf Palmer
https://biodiversity.org.au/afd/taxa/55a9ec75-ed36-4ba4-9a56-b1b412540f48	Maratus speciosus	(O.P.-Cambridge, 1874)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/56be1e92-3324-4a50-a8cd-0a0c457516fd	Protestrica montana	Gross, 1975	species	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	
https://biodiversity.org.au/afd/taxa/57e9ab8f-b0cb-4996-a273-c4659981ff7a	Anthaster valvulatus	(MÃ¼ller & Troschel, 1843)	species	Animalia	Echinodermata	Asteroidea	Valvatida	Oreasteridae	Seastar
https://biodiversity.org.au/afd/taxa/588a782c-be72-4e20-a241-af5f3876a658	Bembix littoralis	Turner, 1908	species	Animalia	Arthropoda	Insecta	Hymenoptera	Crabronidae	
https://biodiversity.org.au/afd/taxa/5a6ca16e-5645-4c8a-9d6d-d15269cbcdba	Larvnotodus australiae	Herrich-Schaeffer, 1850	species	Animalia	Arthropoda	Insecta	Hemiptera	Rhyparochromidae	
https://biodiversity.org.au/afd/taxa/5be359c8-dff8-4709-935e-db9c764cddd0	Micromus tasmaniae	(Walker, 1860)	species	Animalia	Arthropoda	Insecta	Neuroptera	Hemerobiidae	
https://biodiversity.org.au/afd/taxa/5bf31cd8-1098-46e9-95df-88fd479d2d1e	Brunotartessus fulvus	(Walker, 1851)	species	Animalia	Arthropoda	Insecta	Hemiptera	Cicadellidae	
https://biodiversity.org.au/afd/taxa/5c9ab00e-2da3-49d9-9979-651b2bd4eba3	Pyralis farinalis	Linnaeus, 1758	species	Animalia	Arthropoda	Insecta	Lepidoptera	Pyralidae	
https://biodiversity.org.au/afd/taxa/5dcbb866-60f4-462a-a597-d3e46c28fa2e	Ctenochares bicolorus	(Linnaeus, 1767)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Ichneumonidae	
https://biodiversity.org.au/afd/taxa/5f0db0a6-319b-4b89-b0d8-c3de50ef42cc	Austrolestes io	(Selys, 1862)	species	Animalia	Arthropoda	Insecta	Odonata	Lestidae	
https://biodiversity.org.au/afd/taxa/5f189fad-a439-4ac6-aad5-cf40afc9b570	Myrmecia urens	Lowne, 1865	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/5fd932c0-a8d8-41d0-a142-15681f1951fc	Catasarcus asphaltinus	Thompson, 1968	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/61c83128-fc72-426f-95e0-15b870528c22	Homalictus (Homalictus) dotatus	(Cockerell, 1912)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Halictidae	
https://biodiversity.org.au/afd/taxa/623f0c55-e927-42a7-b0e6-220fec9d9691	Melangyna (Austrosyrphus) viridiceps	(Macquart, 1847)	species	Animalia	Arthropoda	Insecta	Diptera	Syrphidae	
https://biodiversity.org.au/afd/taxa/6388c877-2bde-4fd9-8fb0-067ae333e79b	Nacoleia rhoeoalis	(Walker, 1859)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Crambidae	
https://biodiversity.org.au/afd/taxa/63bbb06b-119a-4ad0-9e2b-37cbf1ced130	Ectopatria aspera	(Walker, 1857)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://biodiversity.org.au/afd/taxa/63f90170-118f-4b12-8330-63d61ca6ae53	Herpetogramma licarsisalis	(Walker, 1859)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Crambidae	
https://biodiversity.org.au/afd/taxa/659878f4-1f1a-4e18-b0b4-25a6042b1339	Euphronarcha leptodesma	(Meyrick, 1892)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/6666bf89-da47-4595-ac09-2019e23bb4d2	Lantanophaga pusillidactylus	(Walker, 1864)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Pterophoridae	Lantana Plume Moth
https://biodiversity.org.au/afd/taxa/674c164d-e85f-4a64-ab8c-72b1c3145c61	Aedes (Ochlerotatus) clelandi	(Taylor, 1914)	species	Animalia	Arthropoda	Insecta	Diptera	Culicidae	
https://biodiversity.org.au/afd/taxa/67c090e7-e98d-46a6-95d4-0c889db11cd5	Harpobittacus australis	(Klug, 1838)	species	Animalia	Arthropoda	Insecta	Mecoptera	Bittacidae	
https://biodiversity.org.au/afd/taxa/67e39071-2bd9-4fc3-af12-1baec9a2d80f	Coris auricularis	(Valenciennes, 1839)	species	Animalia	Chordata	Actinopterygii	Perciformes	Labridae	King Wrasse
https://biodiversity.org.au/afd/taxa/683021bb-2474-40ac-8ef1-8e0386c192b6	Solanodolichopus pruvoti	(Brolemann, 1931)	species	Animalia	Arthropoda	Diplopoda	Polydesmida	Paradoxosomatidae	
https://biodiversity.org.au/afd/taxa/6863ec45-938b-42d5-b3a3-9f5c8d9ff791	Scolecobrotus westwoodi	Hope, 1833	species	Animalia	Arthropoda	Insecta	Coleoptera	Cerambycidae	
https://biodiversity.org.au/afd/taxa/6914e2a5-3cf4-4e09-8da2-497703209235	Austrolittorina unifasciata	(Gray, 1826)	species	Animalia	Mollusca	Gastropoda	Hypsogastropoda	Littorinidae	Periwinkle
https://biodiversity.org.au/afd/taxa/69321b94-7265-4aa3-bcab-4b682b8d9436	Spodoptera picta	(GuÃ©nin-MÃ©neville, 1831)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://biodiversity.org.au/afd/taxa/69745229-efbc-4989-96c4-ec00184a452b	Psammothynnus depressus	(Westwood, 1844)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Tiphiidae	
https://biodiversity.org.au/afd/taxa/6a1b1c1a-41f9-4fd2-83a4-f3bdc95e8bee	Daption capense	(Linnaeus, 1758)	species	Animalia	Chordata	Aves	Procellariformes	Procellariidae	Cape Petrel
https://biodiversity.org.au/afd/taxa/6a73df51-9cd8-4973-9013-363475ddb721	Conuber conicus	(Lamarck, 1822)	species	Animalia	Mollusca	Gastropoda	Hypsogastropoda	Naticidae	Conical Moon Snail
https://biodiversity.org.au/afd/taxa/6d1aeef1-b551-4b14-9136-7b66c7078aa2	Sphenarches anisodactylus	(Walker, 1864)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Pterophoridae	
https://biodiversity.org.au/afd/taxa/6d49aa09-3cf7-450c-92f8-468369b87b81	Platynectes (Platynectes) aenescens	Sharp, 1882	species	Animalia	Arthropoda	Insecta	Coleoptera	Dytiscidae	
https://biodiversity.org.au/afd/taxa/6da002c5-fb5e-4443-8cd5-9a3485c48d04	Anisops thienemanni	Lundblad, 1933	species	Animalia	Arthropoda	Insecta	Hemiptera	Notonectidae	
https://biodiversity.org.au/afd/taxa/6f3c42a3-fd98-48b6-8d84-66b7fe712c08	Taractrocera papyria	(Boisduval, 1832)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Hesperiidae	White-banded Grass-dart
https://biodiversity.org.au/afd/taxa/701d1fcf-2f1a-4b49-a3b4-d9a295d9bdac	Megaporus solidus	(Sharp, 1882)	species	Animalia	Arthropoda	Insecta	Coleoptera	Dytiscidae	
https://biodiversity.org.au/afd/taxa/710e4262-4733-4db6-959a-1e9660dc7581	Mauropteron pelzato	(Walker, 1849)	species	Animalia	Arthropoda	Insecta	Diptera	Asilidae	
https://biodiversity.org.au/afd/taxa/740ba93d-1b80-47ef-991d-ac9c166411d3	Haliotis roei	Gray, 1826	species	Animalia	Mollusca	Gastropoda		Haliotidae	Roe's Abalone
https://biodiversity.org.au/afd/taxa/742646c4-7ee5-466a-b94c-c692ee57f434	Aphaenogaster poultoni	Crawley, 1922	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/744ae7f0-50cd-4e5f-8397-e503da681267	Opisthoncus nigrofemoratus	(L. Koch, 1867)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/74c78aa5-f46d-4c76-94f4-cc96f2a14cf3	Coelostoma (Coelostoma) fabricii	(Montrouzier, 1860)	species	Animalia	Arthropoda	Insecta	Coleoptera	Hydrophilidae	
https://biodiversity.org.au/afd/taxa/756de09a-efb8-420c-aaeb-7f01f6241626	Stigmodera roei	Saunders, 1868	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/7599014c-a394-4895-809f-3abb54149880	Ochetellus glaber	(Mayr, 1862)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/773a96dd-4862-435b-8c6e-6fe231049175	Labioporella bursaria	(MacGillivray, 1887)	species	Animalia	Bryozoa	Gymnolaemata	Cheilostomata	Labioporellidae	
https://biodiversity.org.au/afd/taxa/77bc9cb2-3192-4ae9-893f-20c75da19798	Trichorhachus australis	(Westwood, 1941)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Argidae	
https://biodiversity.org.au/afd/taxa/7b31b043-a8c7-4e48-9681-dcea0569d8db	Nyssus coloripes	Walckenaer, 1805	species	Animalia	Arthropoda	Arachnida	Araneae	Corinnidae	
https://biodiversity.org.au/afd/taxa/7b537819-13c2-4974-969e-c95c6b00201d	Melanodryas (Melanodryas) cucullata	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Petroicidae	Hooded Robin
https://biodiversity.org.au/afd/taxa/7d69a9fc-ab80-493b-a008-b75514f70422	Sylvicola dubius	(Macquart, 1850)	species	Animalia	Arthropoda	Insecta	Diptera	Anisopodidae	
https://biodiversity.org.au/afd/taxa/7ef23364-cb69-4935-84da-98752b8f835e	Gastrinodes argoplaca	(Meyrick, 1892)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Geometridae	
https://biodiversity.org.au/afd/taxa/7f252ae7-8f66-4a58-976e-d2202920a949	Arkys walckenaeri	Simon, 1879	species	Animalia	Arthropoda	Arachnida	Araneae	Arkyidae	
https://biodiversity.org.au/afd/taxa/8016e00a-edd5-4218-8270-ad6cfcdb97f25	Typhlodromus dossei	Schicha, 1979	species	Animalia	Arthropoda	Arachnida	Mesostigmata	Phytoseiidae	
https://biodiversity.org.au/afd/taxa/82286ba5-3882-4b4e-903c-35f6dda60565	Pterodroma mollis	(Gould, 1844)	species	Animalia	Chordata	Aves	Procellariformes	Procellariidae	Soft-plumaged Petrel
https://biodiversity.org.au/afd/taxa/82df47de-1d49-4efc-acff-3f9e95a7a6a2	Ranatra dispar	Montandon, 1903	species	Animalia	Arthropoda	Insecta	Hemiptera	Nepidae	Needle Bug
https://biodiversity.org.au/afd/taxa/82f36fbf-fb78-42e0-9794-6159877d1c1	Bulla quoyii	Gray in Dieffenbach, 1843	species	Animalia	Mollusca	Gastropoda	Cephalaspidea	Bullidae	Bubble Shell
https://biodiversity.org.au/afd/taxa/8426dc76-c05f-4f13-8749-463821b74928	Hermetia illucens	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Diptera	Stratiomyidae	
https://biodiversity.org.au/afd/taxa/84a75047-d5ff-4d51-b8bd-e5afb586c412	Pericyma cruegeri	(Butler, 1886)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Erebidae	
https://biodiversity.org.au/afd/taxa/84c88105-75fc-45f9-a467-47d092e76b33	Paragia oligomera	Snelling, 1986	species	Animalia	Arthropoda	Insecta	Hymenoptera	Vespidae	
https://biodiversity.org.au/afd/taxa/84c9f2c6-e1cb-433c-a1f8-5cf070ed8ba5	Stomatolepas elegans	(Costa, 1838)	species	Animalia	Arthropoda	Maxillopoda	Sessilia	Platylepadidae	Barnacle
https://biodiversity.org.au/afd/taxa/854374fc-be37-402f-8bd1-114b78dfc2b5	Euryattus bleekeri	(Doleschall, 1859)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/865ed81a-38de-4eb1-bd90-706e645fc59f	Chrysopogon melanorrhinus	Clements, 1985	species	Animalia	Arthropoda	Insecta	Diptera	Asilidae	
https://biodiversity.org.au/afd/taxa/877fe3b4-fbaf-4d4c-a1fc-669ac14972f1	Antiporus hollinsworthi	Watts, 1997	species	Animalia	Arthropoda	Insecta	Coleoptera	Dytiscidae	
https://biodiversity.org.au/afd/taxa/87d9769f-c38e-4586-8dc8-f8bd1416aa6f	Metacymia marmorea	Pascoe, 1870	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	
https://biodiversity.org.au/afd/taxa/87f1507f-bf8f-4e0a-8d2e-bf6b9f067ec9	Malurus (Leggeornis) elegans	Gould, 1837	species	Animalia	Chordata	Aves	Passeriformes	Maluridae	Red-winged Fairy-wren
https://biodiversity.org.au/afd/taxa/88a99f63-a236-45ec-a408-d93a0b46a980	Crinia signifera	Girard, 1853	species	Animalia	Chordata	Amphibia	Anura	Myobatrachidae	Common Froglet
https://biodiversity.org.au/afd/taxa/88ab4486-1ae6-4179-b62e-163fc33fd95f	Falcunculus frontatus	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Falcunculidae	Crested Shrike-tit
https://biodiversity.org.au/afd/taxa/88df2bd3-f117-4961-a4f3-db8d9fde2510	Proscopiomima consobrina	(Rehn, 1952)	species	Animalia	Arthropoda	Insecta	Orthoptera	Morabidae	
https://biodiversity.org.au/afd/taxa/8a55ee82-fbcb-47ce-a8d5-be7f1d592379	Simoselaps littoralis	(Storr, 1968)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	West-coast Banded Snake
https://biodiversity.org.au/afd/taxa/8abc16cd-d2b6-43e7-853e-0275a2ed7697	Morelia spilota	(LacÃ©pÃ¨de, 1804)	species	Animalia	Chordata	Reptilia	Squamata	Pythonidae	Diamond Python
https://biodiversity.org.au/afd/taxa/8c01d140-5b21-4efc-ab92-a3e78c7bbce5	Diphucrania leucosticta	(Kirby, 1818)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/8d2bce3c-bed6-48da-8933-8f2b122b939a	Pseudophryne guentheri	Boulenger, 1882	species	Animalia	Chordata	Amphibia	Anura	Myobatrachidae	Gunther's Toadlet
https://biodiversity.org.au/afd/taxa/8d51e063-e8a6-4904-9503-2e59fadf339c	Temognatha rectipennis	(Blackburn, 1891)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/8d657c07-f523-4139-bb3e-781a72fda714	Poecilometis punctiventris	(StÃ¥l, 1876)	species	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	
https://biodiversity.org.au/afd/taxa/8d6600ec-a32b-462c-84a6-0ef8bb93401c	Dactylopus dactylopus	(Valenciennes, 1837)	species	Animalia	Chordata	Actinopterygii	Perciformes	Callionymidae	Finzered Dragonet
https://biodiversity.org.au/afd/taxa/8df2d882-0a1b-4ca0-b408-096835562d3f	Neohavinthus pentatoma	(Herrich-Schaeffer, 1853)	species	Animalia	Arthropoda	Insecta	Hemiptera	Reduviidae	
https://biodiversity.org.au/afd/taxa/8ff04785-58d1-4944-984a-1708df7d7375	Delta latreillei	(Saussure, 1852)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Vespidae	
https://biodiversity.org.au/afd/taxa/922b4bf7-26b2-4381-843b-b869f04c3df1	Pterohelaeus parallelus	BrÃ™me, 1842	species	Animalia	Arthropoda	Insecta	Coleoptera	Tenebrionidae	
https://biodiversity.org.au/afd/taxa/92bec3c2-6528-4901-86fb-355ac39b382d	Trachymantis dentifrons	(StÃ¥l, 1877)	species	Animalia	Arthropoda	Insecta	Mantodea	Mantidae	
https://biodiversity.org.au/afd/taxa/92ffc2fa-6250-446f-a9b1-39261da0ad92	Pseudonaja mengdeni	Wells & Wellington, 1985	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Gwardar
https://biodiversity.org.au/afd/taxa/937b81e1-f802-4103-8205-6d1610c4eba2	Litoria rothii	(De Vis, 1884)	species	Animalia	Chordata	Amphibia	Anura	Hylidae	Northern Laughing Tree Frog
https://biodiversity.org.au/afd/taxa/93852469-f5e8-432e-ad53-fbd871afa035	Sterna (Sterna) dougallii	Montagu, 1813	species	Animalia	Chordata	Aves	Charadriiformes	Laridae	Roseate Tern
https://biodiversity.org.au/afd/taxa/941de859-ed16-490f-86be-70c8fef42e72	Spilosoma glatigny	(Le Guillou, 1841)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Erebidae	
https://biodiversity.org.au/afd/taxa/9458875f-bb0d-472f-8bdd-c89b11fa60e5	Crvptes baccatus	(Maskell, 1892)	species	Animalia	Arthropoda	Insecta	Hemiptera	Coccidae	Wattle Tick Scale
https://biodiversity.org.au/afd/taxa/956fe018-4285-43ab-9bbd-8992d9e3c63b	Polyphrades laticollis	FÃ¥hraeus, 1840	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	
https://biodiversity.org.au/afd/taxa/9576934c-6db0-4226-ab25-eeadd4b69de5	Castiarina versicolor	Gory & Laporte, 1838	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/957797f3-97b6-4d28-b9c0-3ed3efe27b39	Maratus chrysomelas	(Simon, 1909)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/959f58df-013a-4c3c-b374-c6a8fa6e6c7e	Temognatha reichei	(Gory & Laporte, 1838)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/96c2a75e-53e4-4132-8600-4a7650c29dea	Paropsis elytrura	Blackburn, 1901	species	Animalia	Arthropoda	Insecta	Coleoptera	Chrysomelidae	
https://biodiversity.org.au/afd/taxa/96e81ce0-ba02-4f33-b831-b598eece44a7	Rattus fuscipes	(Waterhouse, 1839)	species	Animalia	Chordata	Mammalia	Rodentia	Muridae	Bush Rat
https://biodiversity.org.au/afd/taxa/97814fc6-dc59-4720-b80a-cdaaa4c63380	Pelates octolineatus	(Jenyns, 1840)	species	Animalia	Chordata	Actinopterygii	Perciformes	Terapontidae	Sea Trumpeter
https://biodiversity.org.au/afd/taxa/98438f53-d19f-4b89-84c3-7d32a510271b	Antiporus femoralis	(Boheman, 1858)	species	Animalia	Arthropoda	Insecta	Coleoptera	Dytiscidae	
https://biodiversity.org.au/afd/taxa/986aa1db-7d6d-4a45-95f7-3ed68b0564f1	Smeringopus natalensis	Lawrence, 1947	species	Animalia	Arthropoda	Arachnida	Araneae	Pholcidae	
https://biodiversity.org.au/afd/taxa/98767dcc-bb0b-48d7-bc7e-efcfa5cedad3	Tursiops truncatus	(Montagu, 1821)	species	Animalia	Chordata	Mammalia	Cetacea	Delphinidae	Bottlenose Dolphin
https://biodiversity.org.au/afd/taxa/98d54aa9-9a0a-493c-a2ab-33e385f3af0	Anisynta sphenosema	(Meyrick & Lower, 1902)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Hesperiidae	Wedge Skipper
https://biodiversity.org.au/afd/taxa/994624d1-f781-4248-91e1-16b0a018f104	Deinopis unicolor	L. Koch, 1878	species	Animalia	Arthropoda	Arachnida	Araneae	Deinopidae	
https://biodiversity.org.au/afd/taxa/9aeef589-2845-4876-a57b-b62fcbc49275	Charadrius (Charadrius) leschenaultii	Lesson, 1826	species	Animalia	Chordata	Aves	Charadriiformes	Charadriidae	Greater Sand Plover
https://biodiversity.org.au/afd/taxa/9b190353-676e-459b-b184-f0aefaaa130c	Neorhaphiomidas pallida	Paramonov, 1953	species	Animalia	Arthropoda	Insecta	Diptera	Mydidae	
https://biodiversity.org.au/afd/taxa/9baa55f2-69c1-486c-91f7-f96e58b7c945	Hydromys chrysogaster	Geoffroy, 1804	species	Animalia	Chordata	Mammalia	Rodentia	Muridae	Rakali
https://biodiversity.org.au/afd/taxa/9cf77e85-2c45-4f6a-bb26-e2a0919debaf	Palaemonetes australis	Dakin, 1915	species	Animalia	Arthropoda	Malacostraca	Decapoda	Palaemonidae	
https://biodiversity.org.au/afd/taxa/9e602831-9ffb-4491-83bb-fafcf96fc3fe	Lissopimpla excelsa	(Costa, 1864)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Ichneumonidae	
https://biodiversity.org.au/afd/taxa/9ef64a31-2ba4-4a76-8334-f038b40ea381	Anthomyia punctipennis	Wiedemann, 1830	species	Animalia	Arthropoda	Insecta	Diptera	Anthomyiidae	
https://biodiversity.org.au/afd/taxa/a0018d4e-df6e-45fa-aebc-8512f1e6b06b	Dasyhesma abnormis	(Ravment, 1935)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/a11f5591-0c7e-444b-a332-5ded2ed08b28	Havinthus longiceps	StÃ¤l, 1859	species	Animalia	Arthropoda	Insecta	Hemiptera	Reduviidae	
https://biodiversity.org.au/afd/taxa/a1bd2a59-9485-4afd-baa5-d904ae335b57	Torquigener vicinus	Whitley, 1930	species	Animalia	Chordata	Actinopterygii	Tetraodontiformes	Tetraodontidae	Orangespotted Puffer
https://biodiversity.org.au/afd/taxa/a224f035-550a-41b1-8ada-aef7542438f	Grvllotalpa nitidula	Audinet-Serville, 1839	species	Animalia	Arthropoda	Insecta	Orthoptera	Grvllotalpidae	
https://biodiversity.org.au/afd/taxa/a2ca35ec-6541-450b-83d4-506ea5bd7017	Moerarchis clathrata	(R. Felder & Rogenhofer, 1875)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Tineidae	
https://biodiversity.org.au/afd/taxa/a379f319-061a-4b98-8387-ad1c748802d3	Leucania uda	GuenÃ©e, 1852	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://biodiversity.org.au/afd/taxa/a37f51f0-85fe-4714-88d5-633719a4746c	Vincentia punctata	(Klunzinger, 1879)	species	Animalia	Chordata	Actinopterygii	Perciformes	Apogonidae	Orange Cardinalfish
https://biodiversity.org.au/afd/taxa/a390a6d9-ca4f-459f-8959-e9305918590e	Eopsaltria (Eopsaltria) griseogularis	Gould, 1838	species	Animalia	Chordata	Aves	Passeriformes	Petroicidae	Western Yellow Robin
https://biodiversity.org.au/afd/taxa/a4362213-b21c-4aac-b757-bd95657bb0ff	Acantholophus humeralis	Macleay, 1865	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	
https://biodiversity.org.au/afd/taxa/a509b9a5-6190-491f-8a1c-f3b947e1584a	Heterodontus portusjacksoni	(Meyer, 1793)	species	Animalia	Chordata	Chondrichthyes	Heterodontiformes	Heterodontidae	Port Jackson Shark
https://biodiversity.org.au/afd/taxa/a5586a6c-0767-43a2-ba0e-03329d2d8582	Cyphastrea seraila	(ForsskÃ¥l, 1775)	species	Animalia	Cnidaria	Anthozoa	Scleractinia	Merulinidae	Stony Coral
https://biodiversity.org.au/afd/taxa/a56a6da5-2070-42da-9ab1-5e26002a4866	Pseudocephalus mirus	(Pascoe, 1865)	species	Animalia	Arthropoda	Insecta	Coleoptera	Cerambycidae	
https://biodiversity.org.au/afd/taxa/a588d8d8-2282-426a-9bc4-e6c262438679	Calosoma (Australodrepa) schayeri	Erichson, 1842	species	Animalia	Arthropoda	Insecta	Coleoptera	Carabidae	
https://biodiversity.org.au/afd/taxa/a5ea37bf-956a-430a-b719-3985da2b7ba9	Danaus petilia	(Stoll, 1790)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Lesser Wanderer
https://biodiversity.org.au/afd/taxa/a828oddb-3924-481b-9e5d-71c3ce8b9373	Catenicella buski	Thomson, 1858	species	Animalia	Bryozoa	Gymnolaemata	Cheilostomata	Catenicellidae	Bryozoan
https://biodiversity.org.au/afd/taxa/a96b8888-b892-43d1-aa9b-ded928d954e1	Ctenophorus ornatus	(Gray, 1845)	species	Animalia	Chordata	Reptilia	Squamata	Agamidae	Ornate Dragon
https://biodiversity.org.au/afd/taxa/a9ed9718-7fb1-403d-a211-e766edd60ae4	Scaeochlamys livida	(Lamarck, 1819)	species	Animalia	Mollusca	Bivalvia	Pectinida	Pectinidae	Scallop
https://biodiversity.org.au/afd/taxa/a9facf7e-2ce7-470b-b411-8a80c05114d	Proteuxoa coelenoptera	(Lower, 1915)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://biodiversity.org.au/afd/taxa/aac0f414-a6ba-478c-9338-c158886e4620	Pyropsalta melete	(Walker, 1850)	species	Animalia	Arthropoda	Insecta	Hemiptera	Cicadidae	Red Bandit
https://biodiversity.org.au/afd/taxa/ac2de3ed-ffb5-4792-b765-0831102d3238	Limnodynastes tasmaniensis	GÃ¼nther, 1858	species	Animalia	Chordata	Amphibia	Anura	Limnodynastidae	Spotted Grass Frog
https://biodiversity.org.au/afd/taxa/ac3c3f84-c863-46f6-818f-648ead50f92f	Anamesia anzusta	Mackerras, 1966	species	Animalia	Arthropoda	Insecta	Blattodea	Blattidae	
https://biodiversity.org.au/afd/taxa/ac95e26d-dd65-417e-8acc-9cbeea23018c	Mothocya renardi	(Bleeker, 1857)	species	Animalia	Arthropoda	Malacostraca	Isopoda	Cymothoidae	Isopod
https://biodiversity.org.au/afd/taxa/acfb16b0-beb2-47ac-8ef5-682adf492eb1	Chelonibia caretta	(Spengler, 1790)	species	Animalia	Arthropoda	Maxillopoda	Sessilia	Chelonibiidae	Barnacle
https://biodiversity.org.au/afd/taxa/ade9e065-faa3-460b-8aef-e1ef4d00d730	Chromodoris westraliensis	O'Donoghue, 1924	species	Animalia	Mollusca	Gastropoda	Nudibranchia	Chromodorididae	
https://biodiversity.org.au/afd/taxa/adf11871-c02e-4864-83ae-393d528614b7	Nesoptilotis leucotis	(Latham, 1801)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	White-eared Honeyeater
https://biodiversity.org.au/afd/taxa/ae27a30b-e5c5-4399-aba4-1ded9f037c58	Myandra bicincta	Simon, 1908	species	Animalia	Arthropoda	Arachnida	Araneae	Prodidomidae	
https://biodiversity.org.au/afd/taxa/af814ab2-db65-43ef-8f19-dd19283eb47e	Gymnodoris ceylonica	(Kelaart, 1858)	species	Animalia	Mollusca	Gastropoda	Nudibranchia	Polyceridae	Nudibranch
https://biodiversity.org.au/afd/taxa/b048f739-16e8-40d6-a86d-eca601c371b8	Enochrus (Methydrus) eyrensis	(Blackburn, 1895)	species	Animalia	Arthropoda	Insecta	Coleoptera	Hydrophilidae	
https://biodiversity.org.au/afd/taxa/b078bf14-1322-474b-bb86-404d996b0579	Bothriembryon (Bothriembryon) kendricki	Hill, Johnson & Merrifield, 1983	species	Animalia	Mollusca	Gastropoda	Stylommatophora	Bothriembryontidae	
https://biodiversity.org.au/afd/taxa/b0c40bea-66af-4cff-8482-897b7cf60354	Tabanus australicus	Taylor, 1919	species	Animalia	Arthropoda	Insecta	Diptera	Tabanidae	
https://biodiversity.org.au/afd/taxa/b1438325-ab4d-46f4-a6da-295963a4579d	Trachurus novaezelandiae	Richardson, 1843	species	Animalia	Chordata	Actinopterygii	Perciformes	Carangidae	Yellowtail Scad
https://biodiversity.org.au/afd/taxa/b200510f-c3f7-4a51-a22e-ed0b58d9bd15	Spectrotrota fimbrialis	Warren, 1891	species	Animalia	Arthropoda	Insecta	Lepidoptera	Pyralidae	
https://biodiversity.org.au/afd/taxa/b36d55fa-8f6a-4673-a162-e04d6d008d18	Eriophora transmarina	(Keyserling, 1865)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/b373ab3c-2a15-4644-b975-142dfecdb815	Poecilometis apicalis	(Westwood, 1837)	species	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	
https://biodiversity.org.au/afd/taxa/b5f84596-ce29-4f8b-aed7-a71b5198da28	Bradybaena similaris	(FÃ©russac, 1821)	species	Animalia	Mollusca	Gastropoda	Stylommatophora	Camaenidae	
https://biodiversity.org.au/afd/taxa/b82b5f86-fc3e-4de6-b064-9824d8a303b1	Cirphula carbonaria	(Audinet-Serville, 1838)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	
https://biodiversity.org.au/afd/taxa/b968dddf-272a-4530-8087-fafeda46079d	Venatrix pseudopeciosa	Framenau & Vink, 2001	species	Animalia	Arthropoda	Arachnida	Araneae	Lycosidae	
https://biodiversity.org.au/afd/taxa/b9beedbb-f0ae-4a13-91a9-9e5f42b411da	Scieropepla trinervis	(Meyrick, 1904)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Oecophoridae	
https://biodiversity.org.au/afd/taxa/ba36aec6-32b9-4b30-829f-f29b03be8be9	Siphanta acuta	(Walker, 1851)	species	Animalia	Arthropoda	Insecta	Hemiptera	Flatidae	Green Planthopper
https://biodiversity.org.au/afd/taxa/ba404a36-c227-44c1-a070-08ded1686449	Microcanthus strigatus	(Cuvier, 1831)	species	Animalia	Chordata	Actinopterygii	Perciformes	Microcanthidae	Stripey
https://biodiversity.org.au/afd/taxa/ba9dd062-8e95-4933-aac6-a9a4137f6238	Oechalia schellenbergii	(GuÃ©rin, 1831)	species	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	Predatory Shield Bug
https://biodiversity.org.au/afd/taxa/bafbcdad-417a-4445-9e62-52503d9306e1	Orthophagus flavoapicalis	Lea, 1923	species	Animalia	Arthropoda	Insecta	Coleoptera	Scarabaeidae	
https://biodiversity.org.au/afd/taxa/bd332ca4-dab5-4fda-8d68-04b678ffcdb4	Ninox (Hieracoglaux) connivens	(Latham, 1801)	species	Animalia	Chordata	Aves	Strigiformes	Strigidae	Barking Owl
https://biodiversity.org.au/afd/taxa/bd7fb0e2-2c7d-4c41-b2ad-e6c3029e9cde	Oncodosia patula	(Walker, 1849)	species	Animalia	Arthropoda	Insecta	Diptera	Bombyliidae	
https://biodiversity.org.au/afd/taxa/bdad9445-06aa-4278-8a77-a41669b543af	Papyrius nitidus	(Mayr, 1862)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/bdcc0acc-980a-4f51-b8c0-85447ce59bea	Melithreptus (Eidopsarus) brevirostris	(Vigors & Horsfield, 1827)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	Brown-headed Honeyeater
https://biodiversity.org.au/afd/taxa/bee71788-0df3-472e-a692-07823d70ab99	Paraplesiops meleagris	(Peters, 1869)	species	Animalia	Chordata	Actinopterygii	Perciformes	Plesiopidae	Southern Blue Devil
https://biodiversity.org.au/afd/taxa/bf6e16a6-d158-4a05-8c2f-7de4354041da	Tosia australis	Gray, 1840	species	Animalia	Echinodermata	Asteroidea	Valvatida	Goniasteridae	Seastar
https://biodiversity.org.au/afd/taxa/c02ef442-e172-4813-9328-2a2bcfe8d4f9	Vanessa cardui	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Painted Lady
https://biodiversity.org.au/afd/taxa/c188e141-68f6-47ad-8327-c9fe56075c0a	Synemon leucospila	Meyrick, 1891	species	Animalia	Arthropoda	Insecta	Lepidoptera	Castniidae	
https://biodiversity.org.au/afd/taxa/c27d2d2d-1c9f-4f42-8d04-3097e30a2562	Junonia villida	(Fabricius, 1787)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Meadow Argus
https://biodiversity.org.au/afd/taxa/c47470f0-efee-42f7-a96c-d2b96ea9b2f0	Furgaleus macki	(Whitley, 1943)	species	Animalia	Chordata	Chondrichthyes	Carcharhiniformes	Triakidae	Shakey Shark
https://biodiversity.org.au/afd/taxa/c524b7c0-f8ab-45a0-9579-3a90209b95e1	Chrysodeixis eriosoma	(Doubleday, 1843)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://biodiversity.org.au/afd/taxa/c5c8ad7b-da8b-4918-bb9d-b8973fb40ebf	Diphucrania viridipurpurea	(Carter, 1924)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/c79951a6-0e9f-462c-9543-17418df00fc1	Leioproctus (Protomorpha) minutus	(Cockerell, 1916)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/c7fe51be-dcfa-43cc-818d-c4b0579f6a91	Austrochiltonia subtenuis	(Sayce, 1902)	species	Animalia	Arthropoda	Malacostraca	Amphipoda	Chiltoniidae	Amphipod
https://biodiversity.org.au/afd/taxa/c832e3bf-7ff0-4a28-a9d2-f50ed0857b1f	Anthrax incomptus	Walker, 1849	species	Animalia	Arthropoda	Insecta	Diptera	Bombyliidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/c89c6fab-4dda-48fd-bbf3-78d6f1441ecb	Synothele michaelseni	Simon, 1908	species	Animalia	Arthropoda	Arachnida	Araneae	Barychelidae	
https://biodiversity.org.au/afd/taxa/c8c6a91e-bc1b-43e9-8a4e-c79ef1866e90	Macrosiphum (Macrosiphum) rosae	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Hemiptera	Aphididae	Rose Aphid
https://biodiversity.org.au/afd/taxa/c8fba3e6-d5f4-4dcf-adef-03c04d15fb1b	Ichneumon promissorius	(Erichson, 1842)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Ichneumonidae	
https://biodiversity.org.au/afd/taxa/c95005c7-8318-429a-b708-8945d20a5433	Alcaeus lignicolor	Walker, 1867	species	Animalia	Arthropoda	Insecta	Hemiptera	Pentatomidae	
https://biodiversity.org.au/afd/taxa/cbbc328d-ec39-4159-9ef8-8794bacad0c6	Berosus (Enoplurus) australiae	Mulsant & Rey, 1858	species	Animalia	Arthropoda	Insecta	Coleoptera	Hydrophilidae	
https://biodiversity.org.au/afd/taxa/cc7aa9fc-3d0f-4be2-9642-a377f545dd2d	Lampona cylindrata	(L. Koch, 1866)	species	Animalia	Arthropoda	Arachnida	Araneae	Lamponidae	
https://biodiversity.org.au/afd/taxa/cd1d1b8a-dea2-4df1-af19-a7aaa41ea89a	Idiommata blackwallii	(O.P.-Cambridge, 1870)	species	Animalia	Arthropoda	Arachnida	Araneae	Barychelidae	
https://biodiversity.org.au/afd/taxa/cdaa7b1a-64a5-4414-a3c3-13c3725fc574	Contusus brevicaudus	Hardy, 1981	species	Animalia	Chordata	Actinopterygii	Tetraodontiformes	Tetraodontidae	Hardys Toadfish
https://biodiversity.org.au/afd/taxa/cdbe8a3c-5de0-4140-aadc-2f0b48806e33	Moloch horridus	Gray, 1841	species	Animalia	Chordata	Reptilia	Squamata	Agamidae	Thorny Devil
https://biodiversity.org.au/afd/taxa/cddecf56-3979-4ad6-a31c-8519af2ac503	Rhantus suturalis	(W.S. Macleay, 1825)	species	Animalia	Arthropoda	Insecta	Coleoptera	Dytiscidae	
https://biodiversity.org.au/afd/taxa/ce1a1b56-cfe0-4f2b-be12-26aaec5b944d	Austrolestes aleison	Watson & Moulds, 1979	species	Animalia	Arthropoda	Insecta	Odonata	Lestidae	
https://biodiversity.org.au/afd/taxa/cec9b490-3fb0-47d9-a5fe-6c65ad316335	Sphex modestus	Smith, 1856	species	Animalia	Arthropoda	Insecta	Hymenoptera	Sphecidae	
https://biodiversity.org.au/afd/taxa/d03ef73f-d3a7-42af-be70-c61413d68718	Abantiades albofasciatus	(Swinhoe, 1892)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Hepialidae	
https://biodiversity.org.au/afd/taxa/d0e897bb-e6f5-4654-a511-1c30ef95cd35	Litoria ewingii	(DumÃ©ril & Bibron, 1841)	species	Animalia	Chordata	Amphibia	Anura	Hylidae	Ewing's Tree Frog
https://biodiversity.org.au/afd/taxa/d1d91598-3ad0-40fb-9887-ba93bca2c559	Dolichoderus nizer	Crawley, 1922	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/d223497f-b905-424f-8463-4427c35f51ca	Heliocosma rhodopnoana	Meyrick, 1881	species	Animalia	Arthropoda	Insecta	Lepidoptera	Tortricidae	
https://biodiversity.org.au/afd/taxa/d2d45565-98ef-4578-83c4-309792f99f4a	Catenicella venusta	MacGillivray, 1887	species	Animalia	Bryozoa	Gymnolaemata	Cheilostomata	Catenicellidae	Bryozoan
https://biodiversity.org.au/afd/taxa/d32ba5d4-cf49-4577-a478-691307ec7d6e	Cryptophlebia ombrodelta	(Lower, 1898)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Tortricidae	
https://biodiversity.org.au/afd/taxa/d3b92b57-0cbc-4735-b316-ef53fc0bacc2	Austroicetes vulgaris	(SjÃ¶stedt, 1931)	species	Animalia	Arthropoda	Insecta	Orthoptera	Acrididae	
https://biodiversity.org.au/afd/taxa/d3d47129-093c-42a4-b0e5-15d38d8ddc89	Pseudocaranx georgianus	(Cuvier, 1833)	species	Animalia	Chordata	Actinopterygii	Perciformes	Carangidae	Silver Trevally
https://biodiversity.org.au/afd/taxa/d411a519-2729-44a4-9a14-48277b58190b	Scutellastra flexuosa	(Quoy & Gaimard, 1834)	species	Animalia	Mollusca	Gastropoda		Patellidae	Limpet
https://biodiversity.org.au/afd/taxa/d571ec3b-df38-426b-8a53-288e938e2694	Berosus (Berosus) approximans	Fairmaire, 1879	species	Animalia	Arthropoda	Insecta	Coleoptera	Hydrophilidae	
https://biodiversity.org.au/afd/taxa/d61bcd8c-b603-43ee-bb84-50faf2952d92	Backobourkia brouni	(Urquhart, 1885)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/d72f15c3-954c-4558-b920-4240172ea9d7	Catadromus lacordairei	Boisduval, 1835	species	Animalia	Arthropoda	Insecta	Coleoptera	Carabidae	Green-lined Ground Beetle
https://biodiversity.org.au/afd/taxa/d746a560-b77f-4c16-ac54-1672167c592	Diphucrania duodecimmaculata	(Fabricius, 1801)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/d7bcf33e-609c-4005-a4c1-84c915b5273c	Leioproctus (Leioproctus) plumosus	(Smith, 1853)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Colletidae	
https://biodiversity.org.au/afd/taxa/d8013c80-f75c-4e4e-951b-690e7298bb28	Gonocephalum elderi	(Blackburn, 1892)	species	Animalia	Arthropoda	Insecta	Coleoptera	Tenebrionidae	
https://biodiversity.org.au/afd/taxa/d8af29b8-05d6-451a-ac51-ba27f3aa07b7	Oecobius navus	Blackwall, 1859	species	Animalia	Arthropoda	Arachnida	Araneae	Oecobiidae	
https://biodiversity.org.au/afd/taxa/d8b03abf-2be3-48a7-8f85-16590bc694a7	Notoncus gilberti	Forel, 1895	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/d8bfef15-b717-464b-8969-18732f259b0e	Iridomyrmex bicknelli	Emery, 1898	species	Animalia	Arthropoda	Insecta	Hymenoptera	Formicidae	
https://biodiversity.org.au/afd/taxa/d968d4e0-11a2-4f15-a6bc-3756e6418e6f	Notamacropus irma	(Jourdan, 1837)	species	Animalia	Chordata	Mammalia	Diprotodontia	Macropodidae	Western Brush Wallaby
https://biodiversity.org.au/afd/taxa/d9d5caed-4028-4a4c-97cb-c886690ea582	Agrius convolvuli	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Sphingidae	
https://biodiversity.org.au/afd/taxa/daa188cc-adc2-4b8b-92e9-d8f4ee0b28d7	Ptilotula penicillata	(Gould, 1837)	species	Animalia	Chordata	Aves	Passeriformes	Meliphagidae	White-plumed Honeyeater
https://biodiversity.org.au/afd/taxa/db2ed9d0-4d1a-47e2-9c03-013a25cf4276	Chaetodermis penicilligerus	(Cuvier, 1816)	species	Animalia	Chordata	Actinopterygii	Tetraodontiformes	Monacanthidae	Leafy Leatherjacket
https://biodiversity.org.au/afd/taxa/dc2918a1-3d48-4628-b156-cf38c14c6c97	Faveria tritalis	(Walker, 1863)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Pyralidae	
https://biodiversity.org.au/afd/taxa/dc3a97c6-d2b4-4627-8e85-8afaa3bb7fa8	Limnoxenus zealandicus	(Broun, 1880)	species	Animalia	Arthropoda	Insecta	Coleoptera	Hydrophilidae	
https://biodiversity.org.au/afd/taxa/dd83edf0-d583-44aa-a16f-d9675e43558f	Pygopus lepidopodus	(LacÃ©pÃ¨de, 1804)	species	Animalia	Chordata	Reptilia	Squamata	Pygopodidae	Common Scaly-foot
https://biodiversity.org.au/afd/taxa/de179f89-9593-4f0a-bdc0-d3945e9e01c9	Pachysaga australis	(Walker, 1869)	species	Animalia	Arthropoda	Insecta	Orthoptera	Tettigonidae	
https://biodiversity.org.au/afd/taxa/dec51bec-8943-4f43-88a1-b773cc399dc2	Eriophora biapicata	(L. Koch, 1871)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/dfff5b7a-3f00-4ca7-a9f6-1af927f14848	Limbodessus inornatus	(Sharp, 1882)	species	Animalia	Arthropoda	Insecta	Coleoptera	Dytiscidae	
https://biodiversity.org.au/afd/taxa/e01b4588-e34d-4d69-b649-077bdf31c6e4	Pterohelaeus guerini	(BrÃ®me, 1842)	species	Animalia	Arthropoda	Insecta	Coleoptera	Tenebrionidae	
https://biodiversity.org.au/afd/taxa/e01d2215-16d9-40a3-bb12-b726afd6782d	Pomatomus saltatrix	(Linnaeus, 1766)	species	Animalia	Chordata	Actinopterygii	Perciformes	Pomatomidae	Tailor
https://biodiversity.org.au/afd/taxa/e24dc381-5c20-4580-b2ad-695fefce2622	Danaus plexippus	(Linnaeus, 1758)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Wanderer
https://biodiversity.org.au/afd/taxa/e2a48c39-e04f-49ff-87de-3f93df6bd003	Sternopriscus browni	Sharp, 1882	species	Animalia	Arthropoda	Insecta	Coleoptera	Dytiscidae	
https://biodiversity.org.au/afd/taxa/e348edc7-2d35-4680-805c-56e4cb343017	Archimantis latistyla	(Serville, 1838)	species	Animalia	Arthropoda	Insecta	Mantodea	Mantidae	
https://biodiversity.org.au/afd/taxa/e357d680-1009-4849-85d5-17bdfa7959c2	Gymnapistes marmoratus	(Cuvier, 1829)	species	Animalia	Chordata	Actinopterygii	Scorpaeniformes	Tetrarogidae	Soldier
https://biodiversity.org.au/afd/taxa/e53bf0ab-d0aa-468b-bcbc-26a7ac911110	Ecnolagria aeneoviolacea	(Champion, 1895)	species	Animalia	Arthropoda	Insecta	Coleoptera	Tenebrionidae	
https://biodiversity.org.au/afd/taxa/e5af2b71-816f-467f-a2c9-b27646de6baf	Brachaluteres jacksonianus	(Quoy & Gaimard, 1824)	species	Animalia	Chordata	Actinopterygii	Tetraodontiformes	Monacanthidae	Pigmy Leatherjacket
https://biodiversity.org.au/afd/taxa/e5f4f8c5-7236-4408-bc0c-64e2fa1f724b	Cryptocheilus australis	(GuÃ©rin-MÃ©neville, 1838)	species	Animalia	Arthropoda	Insecta	Hymenoptera	Pompilidae	
https://biodiversity.org.au/afd/taxa/e626c886-e754-434a-8083-981e259b036e	Puffinus (Puffinus) assimilis	Gould, 1838	species	Animalia	Chordata	Aves	Procellariiformes	Procellariidae	Little Shearwater
https://biodiversity.org.au/afd/taxa/e635e4da-4544-4a85-acb5-e81dbe5b7160	Amitermes modicus	(Hill, 1942)	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/e68f3ea7-2535-422e-95c7-ca14e1777a0b	Xylochornitermes tomentosus	(Gay, 1971)	species	Animalia	Arthropoda	Insecta	Blattodea	Termitidae	
https://biodiversity.org.au/afd/taxa/e757d41e-9534-45f0-a162-c54f2337e01f	Zonioploca pallida	Shelford, 1909	species	Animalia	Arthropoda	Insecta	Blattodea	Blattidae	
https://biodiversity.org.au/afd/taxa/e763fb60-c489-4529-bbed-21161b6cea29	Celleporaria tridenticulata	(Busk, 1881)	species	Animalia	Bryozoa	Gymnolaemata	Cheilostomata	Lepraliellidae	Bryozoan
https://biodiversity.org.au/afd/taxa/e7b5d56f-d7a3-4b41-ac75-0892843d2f31	Dermomurex (Dermomurex) raywalkeri	Houart, 1986	species	Animalia	Mollusca	Gastropoda	Hypsogastropoda	Muricidae	Murex Shell
https://biodiversity.org.au/afd/taxa/e8636e90-3937-42af-bf79-8930315bf1cf	Lunella (Subninella) undulatus	(Lightfoot, 1786)	species	Animalia	Mollusca	Gastropoda		Turbinidae	Wavy Periwinkle
https://biodiversity.org.au/afd/taxa/e96c4568-a10f-4ea9-a741-a551b1f22bc1	Gambusia holbrooki	Girard, 1859	species	Animalia	Chordata	Actinopterygii	Cyprinodontiformes	Poeciliidae	Top Minnow
https://biodiversity.org.au/afd/taxa/e9f5efc2-9a69-4434-9473-9167f3786e4b	Celaenia excavata	(L. Koch, 1867)	species	Animalia	Arthropoda	Arachnida	Araneae	Araneidae	
https://biodiversity.org.au/afd/taxa/ea267ba4-7457-474e-af67-d1232c29e2c2	Patelloida nigrosulcata	(Reeve, 1855)	species	Animalia	Mollusca	Gastropoda		Lottiidae	Limpet
https://biodiversity.org.au/afd/taxa/ea7087ca-2b95-4b8b-bbef-3090be7a9a96	Entometa fervens	(Walker, 1855)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lasiocampidae	
https://biodiversity.org.au/afd/taxa/eaeaa5d2-2a24-4dc6-b430-a78d8ea35d8d	Vanessa itea	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Nymphalidae	Yellow Admiral
https://biodiversity.org.au/afd/taxa/eba9ef04-13e3-4a67-b359-fd21f1b146bf	Phryganoporus candidus	(L. Koch, 1872)	species	Animalia	Arthropoda	Arachnida	Araneae	Desidae	
https://biodiversity.org.au/afd/taxa/ec418eef-eaed-4456-8da5-bc1062159509	Echiopsis curta	(Schlegel, 1837)	species	Animalia	Chordata	Reptilia	Squamata	Elapidae	Bardick
https://biodiversity.org.au/afd/taxa/ec5c26fb-a3b5-405a-80ed-0d288c74661d	Zoila friendii	(Gray, 1831)	species	Animalia	Mollusca	Gastropoda	Hypsogastropoda	Cypraeidae	
https://biodiversity.org.au/afd/taxa/edec9dce-ae11-4801-8310-cb68c3a9d80b	Miltinus cinctus	Paramonov, 1955	species	Animalia	Arthropoda	Insecta	Diptera	Mydidae	
https://biodiversity.org.au/afd/taxa/ee1149d0-6e9d-485f-9862-ff25f270a857	Bianor maculatus	(Keyserling, 1883)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/ef675138-da37-43c6-87c8-359c61baec52	Orthorhinus cylindrirostris	(Fabricius, 1775)	species	Animalia	Arthropoda	Insecta	Coleoptera	Curculionidae	Elephant Weevil
https://biodiversity.org.au/afd/taxa/ef87b7c8-6d07-4ff7-b373-b0270c0eb99d	Gyromantis occidentalis	SjÃ¶stedt, 1918	species	Animalia	Arthropoda	Insecta	Mantodea	Amorphoscelidae	
https://biodiversity.org.au/afd/taxa/f0088853-6045-404b-b866-9f4d6bf15015	Glossopsitta concinna	(Shaw, 1791)	species	Animalia	Chordata	Aves	Psittaciformes	Psittacidae	Musk Lorikeet
https://biodiversity.org.au/afd/taxa/f05bd22b-e51f-49b8-8df7-026955602baf	Anthrenocerus australis	(Hope, 1843)	species	Animalia	Arthropoda	Insecta	Coleoptera	Dermestidae	Australian Carpet Beetle
https://biodiversity.org.au/afd/taxa/f0c43e9d-d571-4c0c-981a-c09792d7263a	Theclinesthes serpentatus	(Herrich-SchÃ¤ffer, 1869)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Lycaenidae	Salt-bush Blue
https://biodiversity.org.au/afd/taxa/f14dcc62-5000-4f6f-a734-0d78bbeb1ff2	Stilbopteryx napoleo	(LetÃ´ve, 1842)	species	Animalia	Arthropoda	Insecta	Neuroptera	Myrmeleontidae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://biodiversity.org.au/afd/taxa/f1853971-842f-4b6d-b94c-cd37026f4c44	Ocrisiona leucocomis	(L. Koch, 1879)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/f1c0ca04-8d30-40f4-ab25-103c74f430d2	Tyto novaehollandiae	(Stephens, 1826)	species	Animalia	Chordata	Aves	Strigiformes	Tytonidae	Masked Owl
https://biodiversity.org.au/afd/taxa/f20e734c-fc32-4474-94dd-c2e3525f2d9f	Cleidopus aloriamaris	De Vis, 1882	species	Animalia	Chordata	Actinopterygii	Beryciformes	Monocentridae	Mailfish
https://biodiversity.org.au/afd/taxa/f48ea118-2084-42d8-aa57-fe0b6c64cf9a	Cheilodactylus nigripes	Richardson, 1850	species	Animalia	Chordata	Actinopterygii	Perciformes	Cheilodactylidae	Magpie Perch
https://biodiversity.org.au/afd/taxa/f4926778-0129-4f88-9d58-00dffedf0792	Acanthistius pardalotus	Hutchins, 1981	species	Animalia	Chordata	Actinopterygii	Perciformes	Serranidae	Leopard Wirrah
https://biodiversity.org.au/afd/taxa/f4bdd4ee-47b1-4aa2-b359-81ae94e17269	Leucania diatrecta	Butler, 1886	species	Animalia	Arthropoda	Insecta	Lepidoptera	Noctuidae	
https://biodiversity.org.au/afd/taxa/f7d50b29-781a-4c2d-8ae0-fa3060c28b5b	Venatrix arenaris	(Hogg, 1905)	species	Animalia	Arthropoda	Arachnida	Araneae	Lycosidae	
https://biodiversity.org.au/afd/taxa/f86cc61c-9e0e-4c9d-8e1b-cbfc9538c8f3	Parma victoriae	(GÃ¼nther, 1863)	species	Animalia	Chordata	Actinopterygii	Perciformes	Pomacentridae	Victorian Scalyfin
https://biodiversity.org.au/afd/taxa/f87e52d9-4ff6-49e3-b8f6-95bb5ae4c1ec	Asphondylia anthocercidis	Kolesik in Kolesik, Whitmore & Stace, 1997	species	Animalia	Arthropoda	Insecta	Diptera	Cecidomyiidae	
https://biodiversity.org.au/afd/taxa/f93a76aa-784e-4539-bc0d-2a5bd16a5293	Oxyopes amoenus	L. Koch, 1878	species	Animalia	Arthropoda	Arachnida	Araneae	Oxyopidae	
https://biodiversity.org.au/afd/taxa/f954c644-8087-49ef-9545-0b8210038aea	Thvene concinna	(Keyserling, 1881)	species	Animalia	Arthropoda	Arachnida	Araneae	Salticidae	
https://biodiversity.org.au/afd/taxa/f972ba83-905d-4f8b-a956-eba1e16b5b1d	Castiarina mansueta	(Kerremans, 1898)	species	Animalia	Arthropoda	Insecta	Coleoptera	Buprestidae	
https://biodiversity.org.au/afd/taxa/fb435306-1f8a-4eb1-bb0a-d8d45d06c326	Aracana aurita	(Shaw, 1798)	species	Animalia	Chordata	Actinopterygii	Tetraodontiformes	Aracanidae	Striped Cowfish
https://biodiversity.org.au/afd/taxa/fb69e0c6-9da9-4c8b-aee8-3f342207b1ad	Nannophya occidentalis	(Tillyard, 1908)	species	Animalia	Arthropoda	Insecta	Odonata	Libellulidae	
https://biodiversity.org.au/afd/taxa/fc15908a-9930-49ff-a097-c2b4623017d1	Stenoderus suturalis	(Olivier, 1795)	species	Animalia	Arthropoda	Insecta	Coleoptera	Cerambycidae	
https://biodiversity.org.au/afd/taxa/fc20df8d-bf9b-461b-b4cd-0f33b3209529	Pollanisus empyrea	(Meyrick, 1888)	species	Animalia	Arthropoda	Insecta	Lepidoptera	Zygaenidae	
https://biodiversity.org.au/afd/taxa/fe350402-4500-445a-8642-352b148b375d	Isopedella cerussata	(Simon, 1908)	species	Animalia	Arthropoda	Arachnida	Araneae	Sparassidae	
https://biodiversity.org.au/afd/taxa/ff034710-5f08-4685-a348-ed5f58056118	Thudaca haplonota	Meyrick, 1893	species	Animalia	Arthropoda	Insecta	Lepidoptera	Hypertrophidae	
https://biodiversity.org.au/afd/taxa/ff97e394-a57a-4136-9dc0-4e1c00943f42	Petraliella magna	(D'Orbigny, 1852)	species	Animalia	Bryozoa	Gymnolaemata	Cheilostomata	Petraliellidae	Bryozoan
https://biodiversity.org.au/afd/taxa/fffb1ddc-57e9-4959-a8a6-a457a4fbdb9d	Anoplochevlus clavatus	Baker & Atveo, 1964	species	Animalia	Arthropoda	Arachnida	Trombidiformes	Pseudochevlidae	
https://id.biodiversity.org.au/name/apni/149752	Caulerpa cactoides	(Turner) C.Agardh	species	Plantae	Chlorophyta	Ulvophyceae	Bryopsidales	Caulerpaceae	Green Alga
https://id.biodiversity.org.au/name/apni/182714	Ulva australis	Aresch.	species	Plantae	Chlorophyta	Ulvophyceae	Ulvales	Ulvaceae	Sea Lettuce
https://id.biodiversity.org.au/name/apni/182742	Cladophora valonioides	Sond.	species	Plantae	Chlorophyta	Ulotrichophyceae	Siphonocladales	Cladophoraceae	
https://id.biodiversity.org.au/name/apni/208759	Caulerpa taxifolia	(Vahl) C.Agardh	species	Plantae	Chlorophyta	Ulvophyceae	Bryopsidales	Caulerpaceae	Green Alga
https://id.biodiversity.org.au/name/apni/240857	Pterostylis sp. 'limestone'		species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Limestone Snail Orchid
https://id.biodiversity.org.au/name/apni/51258526	Pterostylis orbiculata	(D.L.Jones & C.J.French) D.L.Jones & C.J.French	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	
https://id.biodiversity.org.au/name/apni/51258529	Pterostylis ectypha	(D.L.Jones & C.J.French) D.L.Jones & C.J.French	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	
https://id.biodiversity.org.au/name/apni/51292712	Diplodium crispulum	D.L.Jones & C.J.French	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	
https://id.biodiversity.org.au/name/apni/51346839	Drosera sp. Branched styles (S.C.Coffey 193)	WA Herbarium	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	
https://id.biodiversity.org.au/name/apni/51346971	Pterostylis crispula	(D.L.Jones & C.J.French) D.L.Jones & C.J.French	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	
https://id.biodiversity.org.au/name/apni/51348011	Salvia rosmarinus	Spenn.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	
https://id.biodiversity.org.au/node/apni/2886064	Stenocarpus sinuatus	Endl.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Fire Tree
https://id.biodiversity.org.au/node/apni/2886127	Lotus angustissimus	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Slender Birds-foot Trefoil
https://id.biodiversity.org.au/node/apni/2886131	Myriophyllum drummondii	Benth.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae	
https://id.biodiversity.org.au/node/apni/2886251	Petrophile axillaris	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2886346	Trachymene coerulea	Graham	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae	Rottnest Island Daisy
https://id.biodiversity.org.au/node/apni/2886731	Matthiola incana	(L.) W.T.Aiton	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Common Stock
https://id.biodiversity.org.au/node/apni/2886820	Limonium sinuatum	(L.) Mill.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Plumbaginaceae	Perennial Sea Lavender
https://id.biodiversity.org.au/node/apni/2886907	Aotus ericoides	(Vent.) G.Don	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Golden Pea
https://id.biodiversity.org.au/node/apni/2886909	Gamochaeta americana	(Mill.) Wedd.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2887197	Vulpia fasciculata	(Forssk.) Fritsch	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Dune Fescue
https://id.biodiversity.org.au/node/apni/2887332	Mesomelaena graciliceps	(C.B.Clarke) K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2887511	Alternanthera pungens	Kunth	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	Khaki Weed
https://id.biodiversity.org.au/node/apni/2887514	Melaleuca quinquenervia	(Cav.) S.T.Blake	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Paperbark
https://id.biodiversity.org.au/node/apni/2887545	Ricinocarpos tuberculatus	MÃ¼ll.Arg.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	
https://id.biodiversity.org.au/node/apni/2887555	Salvia verbenaca	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	Vervain
https://id.biodiversity.org.au/node/apni/2887575	Heteropogon contortus	(L.) P.Beauv. ex Roem. & Schult.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Bunch Speargrass
https://id.biodiversity.org.au/node/apni/2887615	Hordeum leporinum	Link	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Wall Barley
https://id.biodiversity.org.au/node/apni/2887966	Sphaerolobium medium	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2888198	Isolepis producta	(C.B.Clarke) K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Nutty Club-rush
https://id.biodiversity.org.au/node/apni/2888213	Asparagus aethiopicus	L.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Asparagus Fern
https://id.biodiversity.org.au/node/apni/2888279	Senecio multicaulis	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2888463	Solanum tuberosum	L.	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae	HÃ¤wai
https://id.biodiversity.org.au/node/apni/2888650	Carex thecata	Boott	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2888754	Banksia blechnifolia	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2888841	Trifolium hirtum	All.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Rose Clover
https://id.biodiversity.org.au/node/apni/2888856	Verticordia lindleyi	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2888893	Stylidium divaricatum	Sond.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Daddy-long-legs
https://id.biodiversity.org.au/node/apni/2888913	Leucopogon capitellatus	DC.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2889175	Conospermum triplinervium	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Tree Smokebush
https://id.biodiversity.org.au/node/apni/2889307	Baeckea robusta	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2889615	Aotus intermedia	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2889999	Austrostipa hemipogon	(Benth.) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Half-bearded Spear-grass
https://id.biodiversity.org.au/node/apni/2890304	Helminthotheca echioides	(L.) Holub	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Prickly Ox-tongue
https://id.biodiversity.org.au/node/apni/2890326	Wahlenbergia multicaulis	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Tadpell's Bluebell
https://id.biodiversity.org.au/node/apni/2890358	Dichopogon capillipes	(Endl.) Brittan	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2890500	Cyathochaeta equitans	K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2890671	Hakea costata	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Ribbed Hakea

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2890775	Baumea arthrophylla	(Nees) Boeckeler	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2891090	Cenchrus ciliaris	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Buffel Grass
https://id.biodiversity.org.au/node/apni/2891153	Digitaria sanguinalis	(L.) Scop.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Crab Grass
https://id.biodiversity.org.au/node/apni/2891170	Oenothera stricta	Ledeb. ex Link	species	Plantae	Charophyta	Equisetopsida	Myrtales	Onagraceae	Common Evening Primrose
https://id.biodiversity.org.au/node/apni/2891192	Hesperantha falcata	(L.f.) Ker Gawl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	
https://id.biodiversity.org.au/node/apni/2891195	Senecio vulgaris	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Common Groundsel
https://id.biodiversity.org.au/node/apni/2891198	Lechenaultia expansa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	
https://id.biodiversity.org.au/node/apni/2891336	Triglochin trichophora	Nees	species	Plantae	Charophyta	Equisetopsida	Alismatales	Juncaginaceae	Torpedo Arrowgrass
https://id.biodiversity.org.au/node/apni/2891356	Patersonia juncea	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Rush Leaved Patersonia
https://id.biodiversity.org.au/node/apni/2891463	Brassica fruticulosa	Cirillo	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Twiggy Turnip
https://id.biodiversity.org.au/node/apni/2891467	Erodium moschatum	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Crowfoot
https://id.biodiversity.org.au/node/apni/2891583	Pisum sativum	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Pea
https://id.biodiversity.org.au/node/apni/2891611	Ptilotus stirlingii	(Lindl.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	
https://id.biodiversity.org.au/node/apni/2891952	Podolepis nutans	Steetz	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2892038	Naias marina	L.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Hydrocharitaceae	Prickly Waternymph
https://id.biodiversity.org.au/node/apni/2892048	Carex divisa	Huds.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Divided Sedge
https://id.biodiversity.org.au/node/apni/2892175	Ranunculus sceleratus	L.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae	Celery Buttercup
https://id.biodiversity.org.au/node/apni/2892384	Hemiandra incana	Bartl.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	
https://id.biodiversity.org.au/node/apni/2892410	Crassula natans	Thunb.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae	Swamp Stonecrop
https://id.biodiversity.org.au/node/apni/2892440	Thomasia triphylla	(Labill.) J.Gay	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae	
https://id.biodiversity.org.au/node/apni/2892579	Banksia integrifolia	L.f.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Honeysuckle
https://id.biodiversity.org.au/node/apni/2893138	Rhamnus alaternus	L.	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae	Blowfly Bush
https://id.biodiversity.org.au/node/apni/2893162	Cardamine hirsuta	L.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Common Bitter Cress
https://id.biodiversity.org.au/node/apni/2893176	Casuarina obesa	Miq.	species	Plantae	Charophyta	Equisetopsida	Fagales	Casuarinaceae	Swamp Sheoak
https://id.biodiversity.org.au/node/apni/2893275	Hibbertia perfoliata	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	
https://id.biodiversity.org.au/node/apni/2893355	Trifolium angustifolium	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Narrow-leaved Clover
https://id.biodiversity.org.au/node/apni/2893370	Crassula muscosa	L.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae	
https://id.biodiversity.org.au/node/apni/2893373	Lotus subbiflorus	Lag.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2893542	Hibbertia spicata	F.Muell.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae	
https://id.biodiversity.org.au/node/apni/2893786	Austrostipa tenuifolia	(Steud.) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Long-awn Spear-grass
https://id.biodiversity.org.au/node/apni/2893819	Callistachys lanceolata	Vent.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Native Willow
https://id.biodiversity.org.au/node/apni/2893856	Leucopogon insularis	A.Cunn. ex DC.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2894036	Trifolium dubium	Sibth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Lesser Yellow Trefoil
https://id.biodiversity.org.au/node/apni/2894159	Rostraria cristata	(L.) Tzvelev	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Annual Cat's Tail
https://id.biodiversity.org.au/node/apni/2894215	Drosera glanduligera	Lehm.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	Pimpernel Sundew
https://id.biodiversity.org.au/node/apni/2894319	Phyllostachys aurea	Riviere & C.Riviere	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Fishpole Bamboo
https://id.biodiversity.org.au/node/apni/2894404	Crassula thunbergiana	Schult.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae	
https://id.biodiversity.org.au/node/apni/2894625	Retama raetam	(Forssk.) Webb & Berthel.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2894677	Typha orientalis	C.Presl	species	Plantae	Charophyta	Equisetopsida	Poales	Typhaceae	Cumbungi
https://id.biodiversity.org.au/node/apni/2894713	Linum usitatissimum	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Linaceae	Flax
https://id.biodiversity.org.au/node/apni/2894715	Sparaxis bulbifera	(L.) Ker Gawl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Harlequin Flower
https://id.biodiversity.org.au/node/apni/2894831	Solanum physalifolium	Rusby	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae	
https://id.biodiversity.org.au/node/apni/2894927	Babiana angustifolia	Sweet	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Baboon Flower
https://id.biodiversity.org.au/node/apni/2894949	Cyperus tenuiflorus	Rottb.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Scaly Sedge
https://id.biodiversity.org.au/node/apni/2895152	Tribonanthes australis	Endl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Southern Tiurndin
https://id.biodiversity.org.au/node/apni/2895177	Comesperma flavum	DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae	
https://id.biodiversity.org.au/node/apni/2895440	Austrostipa eremophila	(Reader) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Desert Spear-grass
https://id.biodiversity.org.au/node/apni/2895458	Asparagus asparagoides	(L.) W.Wight	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Bridal Creeper
https://id.biodiversity.org.au/node/apni/2896030	Hakea laurina	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Gold Dust Hakea
https://id.biodiversity.org.au/node/apni/2896155	Threlkeldia diffusa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae	Coast Bonefruit
https://id.biodiversity.org.au/node/apni/2896226	Oxalis purpurea	L.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae	Large-flower Wood-sorrel
https://id.biodiversity.org.au/node/apni/2896612	Oxalis polyphylla	Jacq.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae	
https://id.biodiversity.org.au/node/apni/2896726	Lepidosperma gladiatum	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Coast Sword-sedge
https://id.biodiversity.org.au/node/apni/2896829	Diplopeltis huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Sapindaceae	
https://id.biodiversity.org.au/node/apni/2896906	Leptospermum scoparium	J.R.Forst. & G.Forst.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	KahikÃ¤tea
https://id.biodiversity.org.au/node/apni/2897110	Schoenus pedicellatus	(R.Br.) Poir.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2897578	Dysphania ambrosioides	(L.) Mosyakin & Clemants	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae	
https://id.biodiversity.org.au/node/apni/2897584	Adansonia gregorii	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae	Australian Baobab
https://id.biodiversity.org.au/node/apni/2897935	Ipomoea cairica	(L.) Sweet	species	Plantae	Charophyta	Equisetopsida	Solanales	Convolvulaceae	Mile-a-minute
https://id.biodiversity.org.au/node/apni/2897951	Eremophila decipiens	Ostenf.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae	
https://id.biodiversity.org.au/node/apni/2898016	Olearia elaeophila	(A.Cunn. ex DC.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2898204	Arctotheca populifolia	(P.J.Bergius) Norl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Beach Pumpkin
https://id.biodiversity.org.au/node/apni/2898371	Calytrix strigosa	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2898405	Melaleuca teretifolia	Endl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Banbar
https://id.biodiversity.org.au/node/apni/2898926	Gamochaeta coarctata	(Willd.) Kerguelen	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2899003	Meionectes brownii	Hook.f.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae	Swamp Raspwort
https://id.biodiversity.org.au/node/apni/2899031	Plantago major	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	Cart-track Plantain
https://id.biodiversity.org.au/node/apni/2899048	Burchardia multiflora	Lindl.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae	Lesser Burchardia
https://id.biodiversity.org.au/node/apni/2899134	Thryptomene saxicola	(A.Cunn. ex Hook.) Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Rock Thryptomene
https://id.biodiversity.org.au/node/apni/2899172	Amyema miquelii	(Lehm. ex Miq.) Tiegh.	species	Plantae	Charophyta	Equisetopsida	Santalales	Loranthaceae	Box Mistletoe

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2899185	Acacia obovata	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2899267	Schoenus subbarbatus	KÃ¼k.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Bearded Bog-rush
https://id.biodiversity.org.au/node/apni/2899511	Posidonia angustifolia	Cambridge & J.Kuo	species	Plantae	Charophyta	Equisetopsida	Alismatales	Posidoniaceae	Seagrass
https://id.biodiversity.org.au/node/apni/2899610	Chamelaucium sp. Walpole (P.G.Wilson 6318)	WA Herbarium	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2899619	Leonotis leonurus	(L.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	Lion's Ear
https://id.biodiversity.org.au/node/apni/2899734	Isolepis oldfieldiana	(S.T.Blake) K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2899756	Baumea rubiginosa	(Spreng.) Boeckeler	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Soft Twig-rush
https://id.biodiversity.org.au/node/apni/2899758	Calytrix acutifolia	(Lindl.) Craven	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2899939	Banksia armata	(R.Br.) A.R.Mast & K.R.Thiele	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2899962	Laxmannia minor	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2900107	Thinopyrum distichum	(Thunb.) Ã¸Ã¶ve	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/node/apni/2900324	Juncus microcephalus	Kunth	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae	Smallhead Rush
https://id.biodiversity.org.au/node/apni/2900341	Petalostylis labicheoides	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Butterfly Bush
https://id.biodiversity.org.au/node/apni/2900870	Centranthus macrosiphon	Boiss.	species	Plantae	Charophyta	Equisetopsida	Dipsacales	Caprifoliaceae	
https://id.biodiversity.org.au/node/apni/2901429	Acacia barbinervis	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2901445	Schoenus griffinianus	K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2901493	Templetonia stenophylla	(F.Muell.) J.M.Black	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Leafy Templetonia
https://id.biodiversity.org.au/node/apni/2901550	Lolium multiflorum	Lam.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Italian Ryegrass
https://id.biodiversity.org.au/node/apni/2901610	Geranium retrorsum	L'HÃ©r. ex DC.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Grassland Crane's-bill
https://id.biodiversity.org.au/node/apni/2902053	Tetrapanax papyrifer	(Hook.) K.Koch	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae	Rice-paper Plant
https://id.biodiversity.org.au/node/apni/2902063	Poa poiformis	(Labill.) Druce	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Coast Tussock Grass
https://id.biodiversity.org.au/node/apni/2902145	Cenchrus clandestinus	(Hochst. ex Chiov.) Morrone	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	
https://id.biodiversity.org.au/node/apni/2902158	Stenanthemum tridentatum	(Steud.) Reissek	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae	
https://id.biodiversity.org.au/node/apni/2902290	Stylidium carnosum	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Fleshy-leaved Triggerplant
https://id.biodiversity.org.au/node/apni/2902376	Lasiopetalum floribundum	Benth.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae	Free Flowering Lasiopetalum
https://id.biodiversity.org.au/node/apni/2902426	Arthropodium fimbriatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Chocolate Lily
https://id.biodiversity.org.au/node/apni/2902467	Adenanthos meisneri	Lehm. ex Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2902607	Liparophyllum capitatum	(Nees ex Lehm.) Tippery & Les	species	Plantae	Charophyta	Equisetopsida	Asterales	Menyanthaceae	
https://id.biodiversity.org.au/node/apni/2902873	Psilotum nudum	(L.) P.Beauv.	species	Plantae	Charophyta	Equisetopsida	Psilotales	Psilotaceae	Skeleton Fork Fern
https://id.biodiversity.org.au/node/apni/2903084	Persoonia comata	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2903167	Yucca gloriosa	L.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	
https://id.biodiversity.org.au/node/apni/2903182	Daviesia pedunculata	Benth. ex Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2903256	Mesomelaena tetragona	(R.Br.) Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Semaphore Sedge
https://id.biodiversity.org.au/node/apni/2903349	Baumea juncea	(R.Br.) Palla	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Bare Twig-rush
https://id.biodiversity.org.au/node/apni/2903424	Paspalum vaginatum	Sw.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Salt Water Couch
https://id.biodiversity.org.au/node/apni/2903561	Solanum linnaeanum	Hepper & P.-M.L.Jaeger	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae	Poison Weed
https://id.biodiversity.org.au/node/apni/2903655	Solanum lycopersicum	L.	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae	
https://id.biodiversity.org.au/node/apni/2903788	Platysace filiformis	(Bunge) C.Norman	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	
https://id.biodiversity.org.au/node/apni/2903908	Marianthus paralius	L.Cayzer & Crisp	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae	
https://id.biodiversity.org.au/node/apni/2904130	Goodenia pulchella	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	
https://id.biodiversity.org.au/node/apni/2904253	Monotaxis occidentalis	Endl.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	
https://id.biodiversity.org.au/node/apni/2904302	Isotropis juncea	Turcz.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2904317	Corymbia ficifolia	(F.Muell.) K.D.Hill & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Red-flowering Gum
https://id.biodiversity.org.au/node/apni/2904436	Casuarina cunninghamiana	Miq.	species	Plantae	Charophyta	Equisetopsida	Fagales	Casuarinaceae	River Oak
https://id.biodiversity.org.au/node/apni/2904675	Vellereophyton dealbatum	(Thunb.) Hilliard & B.L.Burtt	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	White Cudweed
https://id.biodiversity.org.au/node/apni/2904827	Stenanthemum notiale	Rye	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae	
https://id.biodiversity.org.au/node/apni/2904959	Ficus carica	L.	species	Plantae	Charophyta	Equisetopsida	Rosales	Moraceae	Brown Turkey Fig
https://id.biodiversity.org.au/node/apni/2905001	Hemiphora bartlingii	(Lehm.) B.J.Conn & M.J.Henwood	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	
https://id.biodiversity.org.au/node/apni/2905076	Verticordia huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Variegated Featherflower
https://id.biodiversity.org.au/node/apni/2905084	Austrostipa mundula	(J.M.Black) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Neat Spear-grass
https://id.biodiversity.org.au/node/apni/2905235	Deyeuxia quadriseta	(Labill.) Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Reed Bentgrass
https://id.biodiversity.org.au/node/apni/2905512	Olearia rudis	(Benth.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Rough Daisy Bush
https://id.biodiversity.org.au/node/apni/2905672	Ferraria crispa	Burm.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Black Flag
https://id.biodiversity.org.au/node/apni/2905946	Gomphocarpus physocarpus	E.Mey.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Apocynaceae	Balloon Cottonbush
https://id.biodiversity.org.au/node/apni/2906120	Plantago debilis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	Shade Plantain
https://id.biodiversity.org.au/node/apni/2906198	Schoenus plumosus	Rye	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2906381	Ipomoea batatas	(L.) Lam.	species	Plantae	Charophyta	Equisetopsida	Solanales	Convolvulaceae	Sweet Potato
https://id.biodiversity.org.au/node/apni/2906431	Dittrichia viscosa	(L.) Greuter	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2906539	Scaevola anchusifolia	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	
https://id.biodiversity.org.au/node/apni/2906561	Grevillea obtusifolia	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2906724	Utricularia australis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae	Yellow Bladderwort
https://id.biodiversity.org.au/node/apni/2907019	Corrigiola litoralis	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae	Strapwort
https://id.biodiversity.org.au/node/apni/2907076	Brassica barrelieri	(L.) Janka	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	
https://id.biodiversity.org.au/node/apni/2907105	Sporobolus africanus	(Poir.) Robyns & Tournay	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Ratstail
https://id.biodiversity.org.au/node/apni/2907129	Kunzea recurva	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2907160	Gastrolobium nervosum	(Meisn.) G.Chandler & Crisp	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2907368	Hypochaeris radicata	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Dandelion
https://id.biodiversity.org.au/node/apni/2907479	Holcus lanatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Yorkshire Fog
https://id.biodiversity.org.au/node/apni/2907569	Gompholobium capitatum	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Yellow Pea

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2907658	Austrostipa mollis	(R.Br.) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Soft Spear-grass
https://id.biodiversity.org.au/node/apni/2907787	Potamogeton crispus	L.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Potamogetonaceae	Curly Pondweed
https://id.biodiversity.org.au/node/apni/2907896	Kunzea praestans	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2907962	Allocasuarina littoralis	(Salisb.) L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Fagales	Casuarinaceae	Bull Oak
https://id.biodiversity.org.au/node/apni/2908016	Phyllangium palustre	(W.Fitzg.) Dunlop	species	Plantae	Charophyta	Equisetopsida	Gentianales	Loganiaceae	
https://id.biodiversity.org.au/node/apni/2908199	Alyogyne huegelii	(Endl.) Fryxell	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae	Lilac Hibiscus
https://id.biodiversity.org.au/node/apni/2908297	Ornithopus pinnatus	(Mill.) Druce	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Slender Serradella
https://id.biodiversity.org.au/node/apni/2908467	Patersonia umbrosa	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Yellow Flags
https://id.biodiversity.org.au/node/apni/2908539	Schoenus varicellae	Rye	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2908785	Sarcocornia blackiana	(Ulbr.) A.J.Scott	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae	Thick-head Glasswort
https://id.biodiversity.org.au/node/apni/2908818	Vinca major	L.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Apocynaceae	Periwinkle
https://id.biodiversity.org.au/node/apni/2908951	Lophostemon confertus	(R.Br.) Peter G.Wilson & J.T.Waterh.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Pink Box
https://id.biodiversity.org.au/node/apni/2909184	Papaver rhoeas	L.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Papaveraceae	Corn Poppy
https://id.biodiversity.org.au/node/apni/2909229	Macarthuria apetala	Harv.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Limeaceae	
https://id.biodiversity.org.au/node/apni/2909424	Isopogon sphaerocephalus	Lindl.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Lesueur Isopogon
https://id.biodiversity.org.au/node/apni/2909517	Ixia maculata	L.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Yellow Ixia
https://id.biodiversity.org.au/node/apni/2909574	Spinifex longifolius	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Beach Spinifex
https://id.biodiversity.org.au/node/apni/2909633	Conospermum canaliculatum	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/apni/2909697	Trifolium repens	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	White Clover
https://id.biodiversity.org.au/node/apni/2909736	Grevillea wickhamii	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Araiukaliukua
https://id.biodiversity.org.au/node/apni/2909806	Stenopetalum gracile	Benge	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	
https://id.biodiversity.org.au/node/apni/2910059	Fumaria muralis	Sond. ex W.D.J.Koch	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Papaveraceae	Fumitory
https://id.biodiversity.org.au/node/apni/2910171	Cyathochaeta clandestina	(R.Br.) Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	
https://id.biodiversity.org.au/node/apni/2910238	Paspalum urvillei	Steud.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Paspalum L.
https://id.biodiversity.org.au/node/apni/2910320	Pimelea suaveolens	Meisn.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae	Scented Banjine
https://id.biodiversity.org.au/node/apni/2910515	Stenotaphrum secundatum	(Walter) Kuntze	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Buffalo Grass
https://id.biodiversity.org.au/node/apni/2910541	Solanum laciniatum	Aiton	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae	Kangaroo Apple
https://id.biodiversity.org.au/node/apni/2910549	Billardiera variifolia	DC.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae	
https://id.biodiversity.org.au/node/apni/2910721	Dischisma capitatum	Choisy	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae	
https://id.biodiversity.org.au/node/apni/2910824	Calandrinia eremaea	Ewart	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Portulacaceae	Small Purslane
https://id.biodiversity.org.au/node/apni/2910909	Genista linifolia	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Flaxleaf Broom
https://id.biodiversity.org.au/node/apni/2910985	Leucopogon strictus	Benth.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	
https://id.biodiversity.org.au/node/apni/2911294	Austrostipa nitida	(Summerh. & C.E.Hubb.) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Balcarra Grass
https://id.biodiversity.org.au/node/apni/2911324	Scaevola paludosa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae	
https://id.biodiversity.org.au/node/apni/2911343	Astroloma serratifolium	(DC.) Sond.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Kondrung
https://id.biodiversity.org.au/node/apni/2911513	Posidonia coriacea	Cambridge & J.Kuo	species	Plantae	Charophyta	Equisetopsida	Alismatales	Posidoniaceae	Seagrass
https://id.biodiversity.org.au/node/apni/2911836	Babingtonia camphorosmae	(Endl.) Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2911964	Alternanthera brasiliana	(L.) Kuntze	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	
https://id.biodiversity.org.au/node/apni/2912077	Drosera rosulata	Lehm.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	
https://id.biodiversity.org.au/node/apni/2912115	Glischrocaryon angustifolium	(Nees) M.L.Moody & Les	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae	
https://id.biodiversity.org.au/node/apni/2912148	Verticordia eriocephala	A.S.George	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Common Cauliflower
https://id.biodiversity.org.au/node/apni/2912176	Wurmbea monantha	(Endl.) T.D.Macfarl.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae	
https://id.biodiversity.org.au/node/apni/2912339	Stachystemon axillaris	A.S.George	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Picrodendraceae	
https://id.biodiversity.org.au/node/apni/2912379	Centaurium erythraea	Rafn	species	Plantae	Charophyta	Equisetopsida	Gentianales	Gentianaceae	Common Centaury
https://id.biodiversity.org.au/node/apni/2912435	Grevillea leucopteris	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Old Socks
https://id.biodiversity.org.au/node/apni/2912443	Amphipogon strictus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Greybeard Grass
https://id.biodiversity.org.au/node/apni/2912573	Wurmbea pygmaea	(Endl.) Benth.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae	
https://id.biodiversity.org.au/node/apni/2912583	Bromus arenarius	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Sand Brome
https://id.biodiversity.org.au/node/apni/2913149	Pultenaea prostrata	Benth. ex Hook.f.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Silky Bushpea
https://id.biodiversity.org.au/node/apni/2913511	Rhodanthe citrina	(Benth.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2913654	Tropaeolum majus	L.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Tropaeolaceae	Nasturtium
https://id.biodiversity.org.au/node/apni/2913766	Foeniculum vulgare	Mill.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Fennel
https://id.biodiversity.org.au/node/apni/2913788	Wahlenbergia gracilenta	Lothian	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Annual Bluebell
https://id.biodiversity.org.au/node/apni/2913945	Parthenocissus quinquefolia	(L.) Planch.	species	Plantae	Charophyta	Equisetopsida	Vitales	Vitaceae	Virginia Creeper
https://id.biodiversity.org.au/node/apni/2913946	Trachyandra divaricata	(Jacq.) Kunth	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asphodelaceae	
https://id.biodiversity.org.au/node/apni/2914002	Hyparrhenia hirta	(L.) Stapf	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Tambookie Grass
https://id.biodiversity.org.au/node/apni/2914117	Leucophyta brownii	Cass.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Cushion Bush
https://id.biodiversity.org.au/node/apni/2914299	Phyllangium divergens	(Hook.f.) Dunlop	species	Plantae	Charophyta	Equisetopsida	Gentianales	Loganiaceae	Wiry Mitrewort
https://id.biodiversity.org.au/node/apni/2914355	Lepyrodia macra	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	Large Scale Rush
https://id.biodiversity.org.au/node/apni/2914619	Lolium x hybridum	Hausskn.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	A Ryegrass
https://id.biodiversity.org.au/node/apni/2914831	Gratiola peruviana	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	Austral Brooklime
https://id.biodiversity.org.au/node/apni/2914919	Cryptandra mutila	Nees ex Reissek	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae	
https://id.biodiversity.org.au/node/apni/2915129	Aira cupaniana	Guss.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Silvery Hairgrass
https://id.biodiversity.org.au/node/apni/2915232	Sparaxis pillansii	L.Bolus	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae	Harlequin Flower
https://id.biodiversity.org.au/node/apni/2915319	Cynodon dactylon	(L.) Pers.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Star Grass
https://id.biodiversity.org.au/node/apni/2915638	Alyxia buxifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Apocynaceae	Sea Box
https://id.biodiversity.org.au/node/apni/2915990	Chenopodium glaucum	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae	Glaucous Goosefoot
https://id.biodiversity.org.au/node/apni/2916169	Washingtonia filifera	(Linden ex AndrÃ©) H.Wendl.	species	Plantae	Charophyta	Equisetopsida	Arecales	Arecaceae	American Cotton Palm
https://id.biodiversity.org.au/node/apni/2916191	Lactuca sativa	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2916688	Sagina apetala	Ard.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae	Pearlwort

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/apni/2917016	Melaleuca gibbosa	Labill.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Slender Honey-myrtle
https://id.biodiversity.org.au/node/apni/2917235	Pterochaeta paniculata	Steetz	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2917513	Stackhousia huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Celastrales	Celastraceae	
https://id.biodiversity.org.au/node/apni/2917905	Acacia xanthina	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2918377	Utricularia dichotoma	Labill.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae	Fairy Aprons
https://id.biodiversity.org.au/node/apni/2918404	Crassula alata	(Viv.) A.Berger	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae	
https://id.biodiversity.org.au/node/apni/2918471	Carex appressa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Tall Sedge
https://id.biodiversity.org.au/node/apni/2918518	Melaleuca spathulata	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	
https://id.biodiversity.org.au/node/apni/2918630	Lavandula stoechas	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae	Topped Lavander
https://id.biodiversity.org.au/node/apni/2918810	Lomandra odora	(Endl.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae	Fragrant Mat Rush
https://id.biodiversity.org.au/node/apni/2918878	Coprosma repens	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae	Looking-glass Bush
https://id.biodiversity.org.au/node/apni/2919175	Lolium rigidum	Gaudin	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Wimmera Rye Grass
https://id.biodiversity.org.au/node/apni/2919212	Gompholobium knightianum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Handsome Wedge Pea
https://id.biodiversity.org.au/node/apni/2919250	Ricinus communis	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Maple Weed
https://id.biodiversity.org.au/node/apni/2919505	Stylidium longitubum	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Jumping Jacks
https://id.biodiversity.org.au/node/apni/2919723	Schefflera actinophylla	(Endl.) Harms	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae	Umbrella Tree
https://id.biodiversity.org.au/node/apni/2920067	Sporobolus virginicus	(L.) Kunth	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Seashore Dropseed
https://id.biodiversity.org.au/node/apni/2920101	Chamaecytisus palmensis	(Christ) F.A.Bisby & K.W.Nicholls	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Tagasaste
https://id.biodiversity.org.au/node/apni/2920220	Calandrinia liniflora	Fenzl	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Portulacaceae	Parakeelya
https://id.biodiversity.org.au/node/apni/2920306	Cyperus polystachyos	Rottb.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Bunchy Flat-sedge
https://id.biodiversity.org.au/node/apni/2920431	Lobelia gibbosa	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Native Lobelia
https://id.biodiversity.org.au/node/apni/2920566	Daviesia asperula	Crisp	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/2920863	Verticordia mitchelliana	C.A.Gardner	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Rapier Featherflower
https://id.biodiversity.org.au/node/apni/2920924	Diplolaena dampieri	Desf.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae	Southern Diplolaena
https://id.biodiversity.org.au/node/apni/2921012	Olearia lehmanniana	(Steetz) Lander	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/2921084	Erodium botrys	(Cav.) Bertol.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Biz Heron's-bill
https://id.biodiversity.org.au/node/apni/6291414	Conostylis pauciflora	Hopper	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	
https://id.biodiversity.org.au/node/apni/6917219	Zantedeschia aethiopica	(L.) Spreng.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Araceae	Arum Lily
https://id.biodiversity.org.au/node/apni/7061040	Pseudognaphalium luteoalbum	(L.) Hilliard & B.L.Burtt	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Jersey Cudweed
https://id.biodiversity.org.au/node/apni/7080900	Symphyotrichum subulatum	(Michx.) G.L.Nesom	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/node/apni/7455751	Pauridia glabella	(R.Br.) Snijman & Kocyan	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hypoxidaceae	
https://id.biodiversity.org.au/node/apni/7742937	Poranthera moorokatta	R.L.Barrett	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae	
https://id.biodiversity.org.au/node/apni/7809303	Potamogeton drummondii	Benth.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Potamogetonaceae	
https://id.biodiversity.org.au/node/apni/7984728	Stylidium despectum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Small Triggerplant
https://id.biodiversity.org.au/node/apni/7988035	Stylidium inundatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Hundreds And Thousands
https://id.biodiversity.org.au/node/apni/7992083	Stylidium utricularioides	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Pink Fan Triggerplant
https://id.biodiversity.org.au/node/apni/8505665	Daviesia incrassata	Sm.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	
https://id.biodiversity.org.au/node/apni/8677669	Conospermum boreale	E.M.Benn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	
https://id.biodiversity.org.au/node/ausmoss/10073204	Ecremidium pulchellum	(Hook. & Wilson) MÃžll.Hal.	species	Plantae	Bryophyta	Bryopsida	Dicranales	Ditrichaceae	
https://id.biodiversity.org.au/node/ausmoss/10077789	Fabronia hampeana	Sond.	species	Plantae	Bryophyta	Bryopsida	Hypnales	Fabroniaceae	
https://id.biodiversity.org.au/node/ausmoss/10083898	Fissidens tenellus	Hook.f. & Wilson	species	Plantae	Bryophyta	Bryopsida	Dicranales	Fissidentaceae	
https://id.biodiversity.org.au/node/ausmoss/10114784	Syntrichia antarctica	(Hampe) R.H.Zander	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae	
https://id.biodiversity.org.au/node/ausmoss/10115469	Syntrichia ruralis	(Hedw.) F.Weber & D.Mohr	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae	
https://id.biodiversity.org.au/node/ausmoss/10122278	Trichostomum eckelianum	R.H.Zander	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae	
https://id.biodiversity.org.au/node/ausmoss/10129443	Gemmabryum preissianum	(Hampe) J.R.Spence & H.P.Ramsay	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae	
https://id.biodiversity.org.au/node/fungi/60081251	Cercospora beticola	Sacc.	species	Fungi	Ascomycota	Dothideomycetes	Capnodiales	Mycosphaerellaceae	
https://id.biodiversity.org.au/node/fungi/60087787	Peziza austrogeaster	(Rodway) Rifai	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Pezizaceae	
https://id.biodiversity.org.au/node/fungi/60087801	Peziza praetervisa	Bres.	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Pezizaceae	
https://id.biodiversity.org.au/node/fungi/60087817	Peziza varia	(Hedw.) Fr.	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Pezizaceae	
https://id.biodiversity.org.au/node/fungi/60088381	Cordyceps brittlebankii	McLennan & Cookson	species	Fungi	Ascomycota	Sordariomycetes	Hypocreales	Cordycipitaceae	
https://id.biodiversity.org.au/node/fungi/60089965	Colletotrichum acutatum	J.H.Simmonds	species	Fungi	Ascomycota	Sordariomycetes		Glomerellaceae	
https://id.biodiversity.org.au/node/fungi/60089979	Colletotrichum simmondsii	R.G.Shivas & Y.P.Tan	species	Fungi	Ascomycota	Sordariomycetes		Glomerellaceae	
https://id.biodiversity.org.au/node/fungi/60091529	Agaricus xanthodermus	Genev.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60091547	Battarrea phalloides	(Dicks.) Pers.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60091619	Chlorophyllum brunneum	(Farl. & Burt) Vellinga	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60091623	Chlorophyllum molybdites	(G.Mey.) Massee	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60091637	Coprinus comatus	(O.F.MÃžll.) Pers.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	Shaggy Ink Cap
https://id.biodiversity.org.au/node/fungi/60091909	Leucocoprinus birnbaumii	(Corda) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60091939	Lycoperdon perlatum	Pers.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60091941	Lycoperdon pratense	Pers.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60092061	Secotium coarctatum	Berk.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae	
https://id.biodiversity.org.au/node/fungi/60092483	Limacella pitereka	Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Amanitaceae	
https://id.biodiversity.org.au/node/fungi/60092489	Torrendia arenaria	E.Horak & O.K.Mill.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Amanitaceae	
https://id.biodiversity.org.au/node/fungi/60092525	Conocybe rickenii	(Jul.SchÃžff.) KÃ¼hner	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Bolbitiaceae	
https://id.biodiversity.org.au/node/fungi/60093215	Entoloma byssisedum	(Pers.) Donk	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Entolomataceae	
https://id.biodiversity.org.au/node/fungi/60093293	Entoloma moongum	Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Entolomataceae	
https://id.biodiversity.org.au/node/fungi/60093455	Laccaria canaliculata	(Sacc.) Massee	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hydnangiaceae	
https://id.biodiversity.org.au/node/fungi/60093467	Laccaria lateritia	MalenÃ§on	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Hydnangiaceae	
https://id.biodiversity.org.au/node/fungi/60093795	Panaeolus papilionaceus	(Bull.) QuÃ©l.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales		
https://id.biodiversity.org.au/node/fungi/60093897	Crepidotus variabilis	(Pers.) P.Kumm.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Inocybaceae	
https://id.biodiversity.org.au/node/fungi/60094027	Simocybe centunculus	(Fr.) P.Karst.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Inocybaceae	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/node/fungi/60094041	Tubaria furfuracea	(Pers.) Gillet	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Inocybaceae	
https://id.biodiversity.org.au/node/fungi/60094179	Gymnopus fusipes	(Bull.) Gray	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae	
https://id.biodiversity.org.au/node/fungi/60094197	Henningsomyces candidus	(Pers. ex Schleich.) Kuntze	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae	
https://id.biodiversity.org.au/node/fungi/60094479	Mycena clarkeana	Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Mycenaceae	
https://id.biodiversity.org.au/node/fungi/60094877	Hohenbuehelia petaloides	(Bull.) Schulzer	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Pleurotaceae	
https://id.biodiversity.org.au/node/fungi/60095057	Coprinellus disseminatus	(Pers.) J.E.Lange	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Psathyrellaceae	
https://id.biodiversity.org.au/node/fungi/60095071	Coprinellus micaceus	(Bull.) Vilgalys, Hopple & Jacq.Johnson	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Psathyrellaceae	
https://id.biodiversity.org.au/node/fungi/60095085	Coprinopsis atramentaria	(Bull.) Redhead, Vilgalys & Moncalvo	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Psathyrellaceae	
https://id.biodiversity.org.au/node/fungi/60095243	Agrocybe erebia	(Fr.) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60095257	Agrocybe pediades	(Fr.) Fayod	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60095335	Galerina marginata	(Batsch) KÃ¼hner	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60095389	Gymnopilus allantopus	(Berk.) Pegler	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60095655	Pholiota communis	(Cheel & Cleland) Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60095683	Pholiota highlandensis	(Peck) Quadr.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60095691	Pholiota multicingulata	E.Horak	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60095735	Psilocybe coprophila	(Bull.) P.Kumm.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae	
https://id.biodiversity.org.au/node/fungi/60096069	Melanoleuca fusca	(Cleland) Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Tricholomataceae	
https://id.biodiversity.org.au/node/fungi/60096157	Resupinatus trichotis	(Pers.) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Tricholomataceae	
https://id.biodiversity.org.au/node/fungi/60096317	Austroboletus occidentalis	Watling & N.M.Greg.	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Boletaceae	
https://id.biodiversity.org.au/node/fungi/60096339	Boletellus obscurecoccineus	(HÃ¶hn.) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Boletaceae	
https://id.biodiversity.org.au/node/fungi/60096569	Phylloporus clelandii	Watling	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Boletaceae	
https://id.biodiversity.org.au/node/fungi/60096651	Suillus granulatus	(L.) Roussel	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Boletaceae	
https://id.biodiversity.org.au/node/fungi/60096727	Phlebopus marginatus	(J.Drumm. ex Berk.) Watling & N.M.Greg.	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Boletinellaceae	
https://id.biodiversity.org.au/node/fungi/60096769	Gyrodontium sacchari	(Spreng.) Hjortstam	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Coniophoraceae	
https://id.biodiversity.org.au/node/fungi/60096879	Rhizopogon roseolus	(Corda) Th.Fr.	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Rhizopogonaceae	
https://id.biodiversity.org.au/node/fungi/60096947	Scleroderma citrinum	Pers.	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Sclerodermataceae	
https://id.biodiversity.org.au/node/fungi/60097021	Tapinella panuoides	(Fr.) E.-J.Gilbert	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Tapinellaceae	
https://id.biodiversity.org.au/node/fungi/60097089	Exidia glandulosa	(Bull.) Fr.	species	Fungi	Basidiomycota	Agaricomycetes	Auriculariales	Auriculariaceae	
https://id.biodiversity.org.au/node/fungi/60097573	Coltriciella dependens	(Berk. & M.A.Curtis) Murrill	species	Fungi	Basidiomycota	Agaricomycetes	Hymenochaetales	Hymenochaetaceae	
https://id.biodiversity.org.au/node/fungi/60097597	Fomitiporia robusta	(P.Karst.) Fiasson & NiemelÃ¤	species	Fungi	Basidiomycota	Agaricomycetes	Hymenochaetales	Hymenochaetaceae	
https://id.biodiversity.org.au/node/fungi/60098053	Laetiporus portentosus	(Berk.) Rajchenb.	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Fomitopsidaceae	
https://id.biodiversity.org.au/node/fungi/60098473	Antrodiella liebmannii	(Fr.) Ryvarden	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Phanerochaetaceae	
https://id.biodiversity.org.au/node/fungi/60098753	Laccocephalum tumulosum	(Cooke) Ryvarden & NÃ©Ã±ez	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae	
https://id.biodiversity.org.au/node/fungi/60099105	Polyporus vivax	Berk.	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae	
https://id.biodiversity.org.au/node/fungi/60099357	Lentinellus ursinus	(Fr.) KÃ¼hner	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Auriscalpiaceae	
https://id.biodiversity.org.au/node/fungi/60099571	Gymnomyces costatisporus	T.Lebel	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae	
https://id.biodiversity.org.au/node/fungi/60099689	Russula delica	(Paul.) Fr.	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae	
https://id.biodiversity.org.au/node/fungi/60099895	Stereum hirsutum	(Willd.) Pers.	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Stereaceae	
https://id.biodiversity.org.au/node/fungi/60100281	Ramaria capitata	(Lloyd) Corner	species	Fungi	Basidiomycota	Agaricomycetes	Gomphales	Gomphaceae	
https://id.biodiversity.org.au/node/fungi/60100311	Ramaria gracilis	(Pers.) QuÃ©l.	species	Fungi	Basidiomycota	Agaricomycetes	Gomphales	Gomphaceae	
https://id.biodiversity.org.au/node/fungi/60100321	Ramaria ochraceosalmonicolor	(Cleland) Corner	species	Fungi	Basidiomycota	Agaricomycetes	Gomphales	Gomphaceae	
https://id.biodiversity.org.au/node/fungi/60100613	Ileodictyon gracile	Berk.	species	Fungi	Basidiomycota	Agaricomycetes	Phallales	Phallaceae	
https://id.biodiversity.org.au/node/fungi/60100699	Calocera sinensis	McNabb	species	Fungi	Basidiomycota	Dacrymycetes	Dacrymycetales	Dacrymycetaceae	
https://id.biodiversity.org.au/node/fungi/60100835	Tremella mesenterica	Retz.	species	Fungi	Basidiomycota	Tremellomycetes	Tremellales	Tremellaceae	
https://id.biodiversity.org.au/node/fungi/60101289	Puccinia boroniae	Henn.	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniaceae	
https://id.biodiversity.org.au/node/fungi/60101321	Puccinia chrysanthemi	Roze	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniaceae	
https://id.biodiversity.org.au/node/fungi/60101393	Puccinia hordei	G.H.Otth	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniaceae	
https://id.biodiversity.org.au/node/fungi/60101395	Puccinia horiana	Henn.	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniaceae	
https://id.biodiversity.org.au/node/fungi/60101505	Puccinia stylidii	McAlpine	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniaceae	
https://id.biodiversity.org.au/node/fungi/60101533	Puccinia ursiniae	R.G.Shivas	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniaceae	
https://id.biodiversity.org.au/node/fungi/60101643	Pucciniastrum epilobii	G.H.Otth	species	Fungi	Basidiomycota	Pucciniomycetes	Pucciniales	Pucciniastraceae	
https://id.biodiversity.org.au/node/fungi/60102463	Ustilago trichophora	(Link) Kunze ex KÃ¶rn.	species	Fungi	Basidiomycota	Ustilaginomycetes	Ustilaginales	Ustilaginaceae	
https://id.biodiversity.org.au/node/fungi/60102877	Batrachochytrium dendrobatidis	Longcore, Pessier & D.K.Nichols	species	Fungi	Chytridiomycota	Chytridiomycetes	Rhizophydiales		
https://id.biodiversity.org.au/node/fungi/60103155	Entomophthora muscae	(Cohn) Fresen.	species	Fungi	Zygomycota		Entomophthorales	Entomophthoraceae	
https://id.biodiversity.org.au/node/fungi/60103555	Cribraria argillacea	(Pers.) Pers.	species	Protista	Amoebozoa	Myxogastrea	Liceida	Cribrariaceae	
https://id.biodiversity.org.au/node/fungi/60103673	Didymium bahiense	Gottsb.	species	Protista	Amoebozoa	Myxogastrea	Physarida	Didymiaceae	
https://id.biodiversity.org.au/node/fungi/60103677	Didymium difforme	(Pers.) Gray	species	Protista	Amoebozoa	Myxogastrea	Physarida	Didymiaceae	
https://id.biodiversity.org.au/node/fungi/60103725	Badhamia panicea	(Fr.) Rostaf.	species	Protista	Amoebozoa	Myxogastrea	Physarida	Physaraceae	
https://id.biodiversity.org.au/node/fungi/60103741	Crateriumminutum	(Leers) Fr.	species	Protista	Amoebozoa	Myxogastrea	Physarida	Physaraceae	
https://id.biodiversity.org.au/node/fungi/60103821	Physarum pusillum	(Berk. & M.A.Curtis) G.Lister	species	Protista	Amoebozoa	Myxogastrea	Physarida	Physaraceae	
https://id.biodiversity.org.au/node/fungi/60103831	Physarum viride	(Bull.) Pers.	species	Protista	Amoebozoa	Myxogastrea	Physarida	Physaraceae	
https://id.biodiversity.org.au/node/fungi/60103989	Arcyria incarnata	(Pers. ex J.F.Gmel.) Pers.	species	Protista	Amoebozoa	Myxogastrea	Trichiida	Arcyriaceae	
https://id.biodiversity.org.au/node/fungi/60103995	Arcyria minuta	Buchet	species	Protista	Amoebozoa	Myxogastrea	Trichiida	Arcyriaceae	
https://id.biodiversity.org.au/node/fungi/60104047	Perichaena depressa	Lib.	species	Protista	Amoebozoa	Myxogastrea	Trichiida	Trichiaceae	
https://id.biodiversity.org.au/node/fungi/60104051	Perichaena vermicularis	(Schwein.) Rostaf.	species	Protista	Amoebozoa	Myxogastrea	Trichiida	Trichiaceae	
https://id.biodiversity.org.au/node/fungi/60104095	Ceratiomyxa fruticulosa	(O.F.MÃ¼ll.) T.Macbr.	species	Protista	Amoebozoa	Protostelea	Protostelida	Ceratiomyxaceae	
https://id.biodiversity.org.au/taxon/apni/51266598	Narcissus tazetta	L.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Amaryllidaceae	Tazetta
https://id.biodiversity.org.au/taxon/apni/51267247	Arctotis stoechadifolia	P.J.Bergius	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Silver Arctotis
https://id.biodiversity.org.au/taxon/apni/51268414	Cotula coronopifolia	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Water-buttons

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name
https://id.biodiversity.org.au/taxon/apni/51268996	Sonchus asper	(L.) Hill	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Kautara
https://id.biodiversity.org.au/taxon/apni/51269020	Taraxacum khatoonae	Abedin	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	
https://id.biodiversity.org.au/taxon/apni/51269064	Verbesina encelioides	(Cav.) Benth. & Hook.f. ex A.Gray	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Crownbeard
https://id.biodiversity.org.au/taxon/apni/51269204	Spathodea campanulata	P.Beauv.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Bignoniaceae	Tulip Tree
https://id.biodiversity.org.au/taxon/apni/51269785	Diplotaxis muralis	(L.) DC.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Sand Rocket
https://id.biodiversity.org.au/taxon/apni/51271090	Athrotaxis selaginoides	D.Don	species	Plantae	Charophyta	Equisetopsida	Pinales	Cupressaceae	King Billy Pine
https://id.biodiversity.org.au/taxon/apni/51283232	Calectasia grandiflora	L.Preiss	species	Plantae	Charophyta	Equisetopsida	Dasypogonales	Dasypogonaceae	Blue Tinsel Lily
https://id.biodiversity.org.au/taxon/apni/51283561	Drosera gigantea	Lindl.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	Giant Sundew
https://id.biodiversity.org.au/taxon/apni/51283612	Drosera minutiflora	Planch.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	
https://id.biodiversity.org.au/taxon/apni/51286820	Paraserianthes lophantha	(Willd.) I.C.Nielsen	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Plume Albizia
https://id.biodiversity.org.au/taxon/apni/51290049	Eucalyptus sideroxylon	A.Cunn. ex Woolls	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Ironbark
https://id.biodiversity.org.au/taxon/apni/51291410	Neurachne alopecuroidea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Fox-tail Mulga-grass
https://id.biodiversity.org.au/taxon/apni/51291704	Rumex hypogaeus	T.M.Schust. & Reveal	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Polygonaceae	
https://id.biodiversity.org.au/taxon/apni/51293816	Leptocarpus tenax	(Labill.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae	Slender Twine-rush
https://id.biodiversity.org.au/taxon/apni/51294367	Stylidium hesperium	Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Western Reed Triggerplant
https://id.biodiversity.org.au/taxon/apni/51298315	Drosera menziesii	R.Br. ex DC.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae	Pink Rainbow
https://id.biodiversity.org.au/taxon/apni/51300296	Lythrum hyssopifolia	L.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Lythraceae	Hyssop Loosestrife
https://id.biodiversity.org.au/taxon/apni/51311048	Xanthium occidentale	Bertol.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Clotburr
https://id.biodiversity.org.au/taxon/apni/51398940	Caladenia denticulata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Wispy Spider Orchid
https://id.biodiversity.org.au/taxon/apni/51399090	Caladenia huegelii	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	King Spider-orchid
https://id.biodiversity.org.au/taxon/apni/51399184	Caladenia macrostylis	Fitzg.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Leaping Spider Orchid
https://id.biodiversity.org.au/taxon/apni/51404181	Diuris brumalis	D.L.Jones	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Winter Donkey Orchid
https://id.biodiversity.org.au/taxon/apni/51404655	Drakaea elvatodon	Fitzg.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	King-in-his-carriage
https://id.biodiversity.org.au/taxon/apni/51405036	Epiblema grandiflorum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Babe-in-a-cradle
https://id.biodiversity.org.au/taxon/apni/51406612	Microtis atrata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Yellow Onion-orchid
https://id.biodiversity.org.au/taxon/apni/51406650	Microtis unifolia	(G.Forst.) Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Common Mignonette Orchid
https://id.biodiversity.org.au/taxon/apni/51409759	Prasophyllum fimbria	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Fringed Leek Orchid
https://id.biodiversity.org.au/taxon/apni/51409835	Prasophyllum ovale	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Little Leek Orchid
https://id.biodiversity.org.au/taxon/apni/51412290	Pterostylis pyramidalis	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Tall Snail Orchid
https://id.biodiversity.org.au/taxon/apni/51414432	Thelymitra variegata	(Lindl.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Queen Of Sheba
https://id.biodiversity.org.au/taxon/ausmoss/10144503	Bryum lanatum	(P.Beauv.) Brid.	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae	
https://id.biodiversity.org.au/taxon/fungi/60081644	Morchella rufobrunnea	GuzmÃ¡n & F.Tapia	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Morchellaceae	

APPENDIX 3

Protected Matter Search Tool Report

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 22-Dec-2022

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat
Acknowledgements

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or ma relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	31
Listed Migratory Species:	15

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	10
Commonwealth Heritage Places:	None
Listed Marine Species:	22
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	7
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	30
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area	In feature area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species [Resource Information

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In feature area

Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In feature area
Zanda latirostris listed as Calyptorhynchus latirostris Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Breeding known to occur within area	In feature area
INSECT			
Hesperocolletes douglasi Douglas' Broad-headed Bee, Rottnest Bee [66734]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat may occur within area	In buffer area only
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
PLANT			
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat likely to occur within area	In feature area
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw [3435]	Vulnerable	Species or species habitat may occur within area	In feature area

Banksia mimica Summer Honeypot [82765]	Endangered	Species or species habitat may occur within area	In feature area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat may occur within area	In feature area
Caleana dixonii listed as Paracaleana dixonii Sandplain Duck Orchid [87944]	Endangered	Species or species habitat may occur within area	In buffer area only
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area	In feature area
Drakaea elastica Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area	In feature area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area	In feature area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat may occur within area	In feature area
Eucalyptus argutifolia Yanchep Mallee, Wabling Hill Mallee [24263]	Vulnerable	Species or species habitat may occur within area	In feature area
Grevillea curviloba subsp. incurva Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat may occur within area	In buffer area only
Macarthuria keigheryi Keighery's Macarthuria [64930]	Endangered	Species or species habitat may occur within area	In feature area

Marianthus paralius			
[83925]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Synaphea sp. Fairbridge Farm (D. Papenfus 696)			
Selena's Synaphea [82881]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Thelymitra dedmaniarum			
Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat may occur within area	In buffer area only
SHARK			
Pristis pristis			
Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area

Listed Migratory Species		[Resource Information	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Marine Species			
Pristis pristis			
Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area
Migratory Terrestrial Species			
Motacilla cinerea			
Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area	In feature area
Calidris canutus			
Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area	In feature area

Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area	In feature area
Calidris subminuta Long-toed Stint [861]		Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Tringa glareola Wood Sandpiper [829]		Species or species habitat known to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands	[Resource Information

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due t the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Unknown		

Commonwealth Land - [50689]	WA	In buffer area only
Commonwealth Land - [50667]	WA	In buffer area only
Commonwealth Land - [50705]	WA	In buffer area only
Commonwealth Land - [50312]	WA	In buffer area only
Commonwealth Land - [50747]	WA	In buffer area only
Commonwealth Land - [50682]	WA	In buffer area only
Commonwealth Land - [50711]	WA	In buffer area only
Commonwealth Land - [50668]	WA	In buffer area only
Commonwealth Land - [50713]	WA	In buffer area only
Commonwealth Land - [51130]	WA	In buffer area only

Listed Marine Species			[Resource Information
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area overfly marine area	In feature area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area overfly marine area	In feature area
Calidris subminuta Long-toed Stint [861]		Species or species habitat known to occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In feature area
Charadrius ruficapillus Red-capped Plover [881]		Species or species habitat known to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Species or species habitat known to occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area

Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Recurvirostra novaehollandiae Red-necked Avocet [871]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat may occur within area overfly marine area	In feature area
Tringa glareola Wood Sandpiper [829]		Species or species habitat known to occur within area overfly marine area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves			[Resource Information
Protected Area Name	Reserve Type	State	Buffer Status
Jandabup	Nature Reserve	WA	In feature area
Lake Joondalup	Nature Reserve	WA	In buffer area only
Unnamed WA21176	5(1)(h) Reserve	WA	In buffer area only
Unnamed WA46756	Conservation Park	WA	In buffer area only
Unnamed WA46926	5(1)(h) Reserve	WA	In buffer area only

Unnamed WA50514	5(1)(h) Reserve	WA	In buffer area only
Woodvale	5(1)(h) Reserve	WA	In buffer area only

Nationally Important Wetlands		[Resource Information
Wetland Name	State	Buffer Status
Joondalup Lake	WA	In buffer area only

EPBC Act Referrals				[Resource Information
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Alkimos Seawater Desalination	2019/8453	Controlled Action	Assessment Approach	In feature area
East Landsdale Residential Development	2008/4676	Controlled Action	Post-Approval	In buffer area only
East Wanneroo Cell 9 residential subdivision - Lots 50,51,52,154 & 404	2010/5772	Controlled Action	Completed	In buffer area only
Land Development, James Street and Well Street, East Wanneroo, Elberton Property	2021/9106	Controlled Action	Assessment Approach	In buffer area only
Lot 1665 Wanneroo Road, Sinagra.	2017/7921	Controlled Action	Post-Approval	In buffer area only
Lot 9000 Wanneroo Road Sinagra Mixed Use Development, Western Australia	2020/8798	Controlled Action	Proposed Decision	In buffer area only
Mitchell Freeway Principal Shared Path Gaps Project Ocean Reef Road to Hepburn Avenue	2020/8833	Controlled Action	Post-Approval	In buffer area only
National Lifestyle Villages Development	2011/6020	Controlled Action	Post-Approval	In buffer area only
Residential Subdivision development	2011/6040	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Development of 39 (Lot 3000) Hardcastle Avenue, Landsdale, WA	2017/8100	Not Controlled Action	Completed	In buffer area only
Development of ECU Engineering Annex, Joondalup Campus, WA	2017/7995	Not Controlled Action	Completed	In buffer area only
Eradication of the European House Borer, Perth metropolitan area, WA	2009/5027	Not Controlled Action	Completed	In feature area
Groundwater Replenishment Scheme (GWRS) Stage 2	2016/7786	Not Controlled Action	Completed	In buffer area only

Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Landsdale Residential Subdivision Development	2011/6027	Not Controlled Action	Completed	In buffer area only
Lot 594 Wanneroo Road development, Hocking	2020/8621	Not Controlled Action	Completed	In buffer area only
Lots 71 & 72 Queensway Rd, East Landsdale	2012/6541	Not Controlled Action	Completed	In buffer area only
Pearsall Primary School, Lots 62, 269, 1008, 1009 & Part Lot 23, Pearsall, WA	2012/6405	Not Controlled Action	Completed	In buffer area only
Residential and commercial development, Lot 1981 Alexander Drive & Lot 152 Gnangara Road, Landsdale,	2013/6982	Not Controlled Action	Completed	In buffer area only
Residential Development, 50 Lot 2 Driver Road, Darch, Western Australia	2020/8677	Not Controlled Action	Completed	In buffer area only
Residential development, Landsdale, WA	2013/6964	Not Controlled Action	Completed	In buffer area only
Residential Development, Lot 4 Coogee Road, Mariginiup, WA	2019/8452	Not Controlled Action	Completed	In buffer area only
Residential development, Lot 55 Alexander Drive, Landsdale, WA	2013/6971	Not Controlled Action	Completed	In buffer area only
Residential Development, Lots 10 Dundebar Road and 28 and 29 Belgrade Road, East Wanneroo, WA	2019/8521	Not Controlled Action	Completed	In buffer area only
Residential Subdivision - Lots 12, 36 & 38 Capron St, Wanneroo	2012/6409	Not Controlled Action	Completed	In buffer area only
Wangara Industrial Extension Area, WA	2012/6501	Not Controlled Action	Completed	In buffer area only
Wanneroo Road/Ocean Reef Road Grade Separation, Pearsall, WA	2017/8110	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
Ocean Reef Road Extension Works in Wangara	2010/5388	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Road realignment and widening	2009/4926	Not Controlled Action (Particular	Post-Approval	In buffer area only

Not controlled action (particular manner)				
		Manner)		
Referral decision				
Boundary Road Sand Quarry	2019/8560	Referral Decision	Completed	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referra of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine tl existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the repor or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known an if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together wi point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets t rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact us page.

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APPENDIX 4

Conservation Codes

Conservation Codes for Western Australian Flora and Fauna

Specially protected fauna or flora are species* which have been adequately searched for and are deemed to be, in the wild, either rare, at risk of extinction, or otherwise in need of special protection, and have been gazetted as such. Conservation codes have been transitioned under regulations 170, 171 and 172 of the *Biodiversity Conservation Regulations 2018.*

T Threatened species – Schedules 1-4

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

- **Threatened fauna** is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.
- **Threatened flora** is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR Critically endangered species

Threatened species considered to be "*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN Endangered species

Threatened species considered to be "*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU Vulnerable species

Threatened species considered to be "*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife*

Conservation (Specially Protected Fauna) Notice 2018 for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

EX Presumed extinct species

Species where "*there is no reasonable doubt that the last member of the species has died*", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW Extinct in the wild species

Species that "*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018.*

CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P Priority species

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

Priority 1: Poorly-known species

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

Priority 2: Poorly-known species

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

Priority 3: Poorly-known species

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

Priority 4: Rare, Near Threatened and other species in need of monitoring

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

*Species includes all taxa (plural of taxon - a classificatory group of any taxonomic rank, e.g. a family, genus, species or any infraspecific category i.e. subspecies or variety, or a distinct population).

Western Australian Ecological Communities

Threatened Ecological Communities

The BC Act provides for the statutory listing of threatened ecological communities (TECs) by the Minister.

Presumed Totally Destroyed (PD)

An ecological community that has been adequately searched for but for which no representative occurrences have been located. The community has been found to be totally destroyed or so extensively modified throughout its range that no occurrence of it is likely to recover its species composition and/or structure in the foreseeable future.

Critically Endangered (CR)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated.

Endangered (EN)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future.

Vulnerable (VU)

An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range.

Priority Ecological Communities

Possible threatened ecological communities that do not meet survey criteria or that are not adequately defined are added to the Priority Ecological Community List under priorities 1, 2 and 3. These three categories are ranked in order of priority for survey and/or definition of the community. Ecological communities that are adequately known, and are rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring. Conservation Dependent ecological communities are placed in Priority 5.

Priority One: Poorly-known ecological communities

Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤ 100ha).

Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.

Priority Two: Poorly-known ecological communities

Communities that are known from few occurrences with a restricted distribution (generally ≤10 occurrences or a total area of ≤200ha). At least some occurrences are not believed to be under immediate threat (within approximately 10 years) of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.

Priority Three: Poorly known ecological communities

(i) Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or:

(ii) communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat (within approximately 10 years), or;

(iii) munities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, inappropriate fire regimes, clearing, hydrological change etc.

Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.

Priority Four: Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring.

(i) Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands.

(ii) Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for a higher threat category.

(iii) Ecological communities that have been removed from the list of threatened communities during the past five years.

Priority Five: Conservation Dependent ecological communities

Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Commonwealth of Australia Conservation Codes

Threatened Flora and Fauna

Threatened fauna and flora may be listed under Section 178 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) in any one of the following six categories:

Extinct

A native species is eligible to be included in the extinct category at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.

Extinct in the wild

A native species is eligible to be included in the extinct in the wild category at a particular time if, at that time:

a) it is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
b) it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

Critically endangered

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing an extremely high risk of extinction in the wild.

Endangered

A taxon is Endangered when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing a very high risk of extinction in the wild.

Vulnerable

A taxon is Vulnerable when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing a high risk of extinction in the wild.

Conservation dependent

A native species is eligible to be included in the conservation dependent category at a particular time if, at that time:

a) the species is the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or
b) the following subparagraphs are satisfied:
   i. the species is a species of fish;

ii. the species is the focus of a plan of management that provides for management actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long term survival in nature are maximised;
iii. the plan of management is in force under a law of the Commonwealth or of a State or Territory;
iv. cessation of the plan of management would adversely affect the conservation status of the species.

The EPBC Act does not provide for listing in a data deficient category. Where sufficient data (evidence) is unavailable to allow assessment by the Threatened Species Scientific Committee against the criteria for listing, the species are found to be ineligible. A recommendation is made to the Minister to not include the species in any category under the EPBC Act. For reasons of transparency and to inform future research, the Threatened Species Scientific Committee publishes the names of those species found to be data deficient. As data deficient is not a listing category under the EPBC Act, this has no statutory implications and the species is not considered to be listed under the EPBC Act.

Threatened Ecological Communities

Threatened Ecological communities under the EPBC Act are listed in three categories.

Critically endangered

If, at that time, an ecological community is facing an extremely high risk of extinction in the wild in the immediate future (indicative timeframe being the next 10 years).

Endangered

If, at that time, an ecological community is not critically endangered but is facing a very high risk of extinction in the wild in the near future (indicative timeframe being the next 20 years).

Vulnerable

If, at that time, an ecological community is not critically endangered or endangered, but is facing a high risk of extinction in the wild in the medium–term future (indicative timeframe being the next 50 years).

APPENDIX 5

DBCA TEC and PEC Database Search Report

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
883	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	Telstra05	500	No	243	139
884	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	Telstra06	500	No	244	140
885	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	2	TELSTRA PLOT2	500	No	245	141
886	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	Telstra08	500	No	246	142
882	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	5	TELSTRA PLOT1	500	No	247	143
5	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	LAND01	500	No	249	144
2	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	3	GOLF01	500	No	3213	145
649	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	2	ERRINA01	500	No	251	146
1886	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	2	ALEXANDER PLOT1	500	No	550	373
4	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	2	KOON01	500	No	554	374
1906	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	ERRINA06	500	No	561	379
1907	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	2	ERRINA STH PLOT1	500	No	562	380
1895	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	2	PALOMA PLOT1	500	No	571	386
1931	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	APPLEBY01	500	No	600	402
1896	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	2	MIDDLETON PLOT1	500	No	1125	811
2526	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	NeerabupEast	500	No	1137	823
2646	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		1	Neer01	500	No	1386	1004
4058	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	MARIJINUP01	500	No	2091	1500
17227	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	JosephBanksBlvd	500	No	14908	14325
17310	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	Hardcastle	750	No	15399	14817
107255	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01537	200	No	104254	16376
107258	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01540	200	No	104257	16379
107259	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01541	200	No	104258	16380
107263	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01545	200	No	104262	16384
107273	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01555	200	No	104272	16394
107287	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01569	200	No	104286	16408
107290	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01572	200	No	104289	16411
107302	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01584	200	No	104301	16423
107303	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01585	200	No	104302	16424
107304	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01586	200	No	104303	16425
107305	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01587	200	No	104304	16426
107306	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01588	200	No	104305	16427
107311	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01593	200	No	104310	16432

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
107312	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01594	200	No	104311	16433
107318	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01600	200	No	104317	16438
107362	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01644	200	No	104361	16482
107363	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01645	200	No	104362	16483
107364	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01646	200	No	104363	16484
107365	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01647	200	No	104364	16485
107366	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01648	200	No	104365	16486
107367	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01649	200	No	104366	16487
107370	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01652	200	No	104369	16490
107371	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01653	200	No	104370	16491
107372	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01654	200	No	104371	16492
107373	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01655	200	No	104372	16493
107374	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01656	200	No	104373	16494
107375	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01657	200	No	104374	16495
107383	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01665	200	No	104382	16503
107384	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01666	200	No	104383	16504
107393	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01675	200	No	104392	16513
107450	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01732	200	No	104449	16570
107456	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01738	200	No	104455	16576
107459	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01741	200	No	104458	16579
107462	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01744	200	No	104461	16582
107463	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01745	200	No	104462	16583
107465	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01747	200	No	104464	16585
107466	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01748	200	No	104465	16586
107467	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01749	200	No	104466	16587
107468	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01750	200	No	104467	16588
107469	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01751	200	No	104468	16589
107478	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01760	200	No	104477	16598
107479	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01761	200	No	104478	16599
107480	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01762	200	No	104479	16600
107481	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01763	200	No	104480	16601
107482	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01764	200	No	104481	16602
107483	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01765	200	No	104482	16603
107484	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01766	200	No	104483	16604
107485	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01767	200	No	104484	16605
107486	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01768	200	No	104485	16606
107487	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01769	200	No	104486	16607
107489	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01771	200	No	104488	16609
107496	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01778	200	No	104495	16616
107497	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01779	200	No	104496	16617
107498	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01780	200	No	104497	16618
107499	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01781	200	No	104498	16619
107500	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01782	200	No	104499	16620
107501	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01783	200	No	104500	16621
107502	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01784	200	No	104501	16622
107521	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01803	200	No	104520	16641
107524	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01806	200	No	104523	16644
107525	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01807	200	No	104524	16645
107526	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01808	200	No	104525	16646
107527	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01809	200	No	104526	16647
107528	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01810	200	No	104527	16648
107529	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01811	200	No	104528	16649

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
107530	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01812	200	No	104529	16650
107537	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01819	200	No	104536	16657
107543	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01825	200	No	104542	16662
107544	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01826	200	No	104543	16663
107557	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01839	200	No	104556	16676
107558	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01840	200	No	104557	16677
107559	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01841	200	No	104558	16678
107560	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01842	200	No	104559	16679
107566	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01848	200	No	104565	16685
107569	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01851	200	No	104568	16688
107570	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01852	200	No	104569	16689
107579	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01861	200	No	104578	16697
107614	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01896	200	No	104613	16732
107664	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01946	200	No	104663	16782
107665	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01947	200	No	104664	16783
107671	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01953	200	No	104670	16789
107672	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01954	200	No	104671	16790
108687	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02969	200	No	105686	17806
108688	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02970	200	No	105687	17807
108689	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02971	200	No	105688	17808
108690	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02972	200	No	105689	17809
108691	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02973	200	No	105690	17810
108692	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02974	200	No	105691	17811
108695	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02977	200	No	105694	17814
108696	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02978	200	No	105695	17815
108697	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02979	200	No	105696	17816
108698	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02980	200	No	105697	17817
108700	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02982	200	No	105699	17819
108702	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02984	200	No	105701	17820
108703	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02985	200	No	105702	17821
108704	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02986	200	No	105703	17822
108705	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02987	200	No	105704	17823
108706	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02988	200	No	105705	17824
108709	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02991	200	No	105708	17827
108710	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02992	200	No	105709	17828
108711	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02993	200	No	105710	17829
108712	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02994	200	No	105711	17830
108713	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02995	200	No	105712	17831
108716	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02998	200	No	105715	17834
108717	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02999	200	No	105716	17835
108718	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03000	200	No	105717	17836
108719	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03001	200	No	105718	17837
108720	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03002	200	No	105719	17838
108721	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03003	200	No	105720	17839
108722	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03004	200	No	105721	17840
108723	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03005	200	No	105722	17841
108724	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03006	200	No	105723	17842
108725	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03007	200	No	105724	17843
108726	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03008	200	No	105725	17844
108727	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03009	200	No	105726	17845
108743	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03025	200	No	105742	17861
108744	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03026	200	No	105743	17862

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
108745	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03027	200	No	105744	17863
108746	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03028	200	No	105745	17864
108747	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03029	200	No	105746	17865
108748	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03030	200	No	105747	17866
108750	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03032	200	No	105749	17868
108751	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03033	200	No	105750	17869
108752	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03034	200	No	105751	17870
108753	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03035	200	No	105752	17871
108754	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03036	200	No	105753	17872
108755	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03037	200	No	105754	17873
108756	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03038	200	No	105755	17874
108757	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03039	200	No	105756	17875
108758	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03040	200	No	105757	17876
108759	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03041	200	No	105758	17877
108760	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03042	200	No	105759	17878
108761	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03043	200	No	105760	17879
108762	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03044	200	No	105761	17880
108763	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03045	200	No	105762	17881
108764	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03046	200	No	105763	17882
108765	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03047	200	No	105764	17883
108766	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03048	200	No	105765	17884
108767	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03049	200	No	105766	17885
108768	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03050	200	No	105767	17886
108769	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03051	200	No	105768	17887
108772	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03054	200	No	105771	17890
108774	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03056	200	No	105773	17892
108779	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03061	200	No	105778	17897
108780	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03062	200	No	105779	17898
108781	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03063	200	No	105780	17899
108782	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03064	200	No	105781	17900
108783	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03065	200	No	105782	17901
108784	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03066	200	No	105783	17902
108785	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03067	200	No	105784	17903
108786	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03068	200	No	105785	17904
108787	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03069	200	No	105786	17905
108789	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03071	200	No	105788	17907
108790	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03072	200	No	105789	17908
108791	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03073	200	No	105790	17909
108792	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03074	200	No	105791	17910
108797	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03079	200	No	105796	17915
108798	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03080	200	No	105797	17916
108799	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03081	200	No	105798	17917
108801	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03083	200	No	105800	17919
108802	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03084	200	No	105801	17920
108809	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03091	200	No	105808	17924
108816	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03098	200	No	105815	17931
108817	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03099	200	No	105816	17932
108821	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03103	200	No	105820	17936
108822	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03104	200	No	105821	17937
108826	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03108	200	No	105825	17941
108827	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03109	200	No	105826	17942
108828	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03110	200	No	105827	17943

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
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108831	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03113	200	No	105830	17946
108832	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03114	200	No	105831	17947
108833	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03115	200	No	105832	17948
108834	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03116	200	No	105833	17949
108835	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03117	200	No	105834	17950
108838	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03120	200	No	105837	17953
108839	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03121	200	No	105838	17954
108841	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03123	200	No	105840	17956
108870	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03152	200	No	105869	17985
108871	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03153	200	No	105870	17986
108872	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03154	200	No	105871	17987
108873	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03155	200	No	105872	17988
108874	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03156	200	No	105873	17989
108875	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03157	200	No	105874	17990
108876	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03158	200	No	105875	17991
108877	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03159	200	No	105876	17992
108878	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03160	200	No	105877	17993
108879	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03161	200	No	105878	17994
108880	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03162	200	No	105879	17995
108881	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03163	200	No	105880	17996
108882	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03164	200	No	105881	17997
109012	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03294	200	No	106011	18127
109013	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03295	200	No	106012	18128
109014	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03296	200	No	106013	18129
109015	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03297	200	No	106014	18130
109016	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03298	200	No	106015	18131
109017	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03299	200	No	106016	18132
109020	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03302	200	No	106019	18135
109021	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03303	200	No	106020	18136
109023	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03305	200	No	106022	18138
109024	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03306	200	No	106023	18139
109025	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03307	200	No	106024	18140
113224	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07506	200	No	110223	22332
113225	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07507	200	No	110224	22333
113226	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07508	200	No	110225	22334
113227	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07509	200	No	110226	22335
113228	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07510	200	No	110227	22336
113229	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07511	200	No	110228	22337
113230	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07512	200	No	110229	22338
113231	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07513	200	No	110230	22339
113232	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07514	200	No	110231	22340
113233	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07515	200	No	110232	22341
113234	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07516	200	No	110233	22342
113236	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07518	200	No	110235	22344
113237	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07519	200	No	110236	22345
113238	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07520	200	No	110237	22346
113239	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07521	200	No	110238	22347
113240	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07522	200	No	110239	22348
113241	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07523	200	No	110240	22349
113242	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07524	200	No	110241	22350
113243	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07525	200	No	110242	22351

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113244	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07526	200	No	110243	22352
113246	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07528	200	No	110245	22354
113247	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07529	200	No	110246	22355
113248	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07530	200	No	110247	22356
113249	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07531	200	No	110248	22357
113250	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07532	200	No	110249	22358
113251	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07533	200	No	110250	22359
113252	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07534	200	No	110251	22360
113253	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07535	200	No	110252	22361
113254	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07536	200	No	110253	22362
113255	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07537	200	No	110254	22363
113256	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07538	200	No	110255	22364
113257	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07539	200	No	110256	22365
113258	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07540	200	No	110257	22366
113259	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07541	200	No	110258	22367
113260	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07542	200	No	110259	22368
113261	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07543	200	No	110260	22369
113262	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07544	200	No	110261	22370
113263	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07545	200	No	110262	22371
113264	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07546	200	No	110263	22372
113265	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07547	200	No	110264	22373
113266	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07548	200	No	110265	22374
113267	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07549	200	No	110266	22375
113268	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07550	200	No	110267	22376
113269	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07551	200	No	110268	22377
113270	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07552	200	No	110269	22378
113272	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07554	200	No	110271	22380
113273	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07555	200	No	110272	22381
113274	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07556	200	No	110273	22382
113275	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07557	200	No	110274	22383
113276	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07558	200	No	110275	22384
113277	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07559	200	No	110276	22385
113278	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07560	200	No	110277	22386
113279	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07561	200	No	110278	22387
113280	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07562	200	No	110279	22388
113281	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07563	200	No	110280	22389
113283	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07565	200	No	110282	22391
113284	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07566	200	No	110283	22392
113285	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07567	200	No	110284	22393
113286	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07568	200	No	110285	22394
113287	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07569	200	No	110286	22395
113288	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07570	200	No	110287	22396
113289	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07571	200	No	110288	22397
113290	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07572	200	No	110289	22398
113291	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07573	200	No	110290	22399
113292	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07574	200	No	110291	22400
113293	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07575	200	No	110292	22401
113294	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07576	200	No	110293	22402
113295	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07577	200	No	110294	22403
113296	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07578	200	No	110295	22404
113297	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07579	200	No	110296	22405
113298	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07580	200	No	110297	22406

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
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113300	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07582	200	No	110299	22408
113301	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07583	200	No	110300	22409
113302	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07584	200	No	110301	22410
113303	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07585	200	No	110302	22411
113304	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07586	200	No	110303	22412
113305	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07587	200	No	110304	22413
113306	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07588	200	No	110305	22414
113307	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07589	200	No	110306	22415
113308	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07590	200	No	110307	22416
113309	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07591	200	No	110308	22417
113310	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07592	200	No	110309	22418
113311	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07593	200	No	110310	22419
113312	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07594	200	No	110311	22420
113313	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07595	200	No	110312	22421
113314	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07596	200	No	110313	22422
113315	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07597	200	No	110314	22423
113316	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07598	200	No	110315	22424
113317	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07599	200	No	110316	22425
113318	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07600	200	No	110317	22426
113319	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07601	200	No	110318	22427
113320	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07602	200	No	110319	22428
113321	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07603	200	No	110320	22429
113322	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07604	200	No	110321	22430
113323	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07605	200	No	110322	22431
113324	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07606	200	No	110323	22432
113325	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07607	200	No	110324	22433
113326	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07608	200	No	110325	22434
113327	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07609	200	No	110326	22435
113328	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07610	200	No	110327	22436
113329	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07611	200	No	110328	22437
113330	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07612	200	No	110329	22438
113331	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07613	200	No	110330	22439
113411	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07693	200	No	110410	22519
113412	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07694	200	No	110411	22520
113415	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07697	200	No	110414	22523
113418	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07700	200	No	110417	22526
113433	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07715	200	No	110432	22541
117553	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11835	200	No	114552	26657
117554	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11836	200	No	114553	26658
117555	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11837	200	No	114554	26659
117556	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11838	200	No	114555	26660
117557	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11839	200	No	114556	26661
117558	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11840	200	No	114557	26662
117559	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11841	200	No	114558	26663
117560	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11842	200	No	114559	26664
117561	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11843	200	No	114560	26665
117562	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11844	200	No	114561	26666
117564	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11846	200	No	114563	26668
117565	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11847	200	No	114564	26669
117573	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11855	200	No	114572	26677
117574	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11856	200	No	114573	26678

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
117576	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11858	200	No	114575	26680
117577	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11859	200	No	114576	26681
117578	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11860	200	No	114577	26682
117579	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11861	200	No	114578	26683
117580	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11862	200	No	114579	26684
117586	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11868	200	No	114585	26690
117587	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11869	200	No	114586	26691
117588	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11870	200	No	114587	26692
117589	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11871	200	No	114588	26693
117590	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11872	200	No	114589	26694
117591	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11873	200	No	114590	26695
117592	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11874	200	No	114591	26696
117599	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11881	200	No	114598	26703
117600	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11882	200	No	114599	26704
117602	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11884	200	No	114601	26706
117603	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11885	200	No	114602	26707
117604	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11886	200	No	114603	26708
117608	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11890	200	No	114607	26712
117609	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11891	200	No	114608	26713
117612	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11894	200	No	114611	26716
117613	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11895	200	No	114612	26717
117614	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11896	200	No	114613	26718
117615	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11897	200	No	114614	26719
117616	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11898	200	No	114615	26720
117618	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11900	200	No	114617	26722
117626	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11908	200	No	114625	26730
117627	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11909	200	No	114626	26731
117628	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11910	200	No	114627	26732
117629	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11911	200	No	114628	26733
117630	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11912	200	No	114629	26734
117632	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11914	200	No	114631	26736
117633	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11915	200	No	114632	26737
117634	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11916	200	No	114633	26738
117635	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11917	200	No	114634	26739
117639	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11921	200	No	114638	26743
117640	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11922	200	No	114639	26744
117641	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11923	200	No	114640	26745
117642	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11924	200	No	114641	26746
117670	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11952	200	No	114669	26774
117671	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11953	200	No	114670	26775
117672	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11954	200	No	114671	26776
117673	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11955	200	No	114672	26777
117674	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11956	200	No	114673	26778
117675	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11957	200	No	114674	26779
117676	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11958	200	No	114675	26780
117677	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11959	200	No	114676	26781
117678	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11960	200	No	114677	26782
117679	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11961	200	No	114678	26783
117681	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11963	200	No	114680	26785
117682	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11964	200	No	114681	26786
117683	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11965	200	No	114682	26787
117685	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11967	200	No	114684	26789

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
117686	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11968	200	No	114685	26790
117687	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11969	200	No	114686	26791
117688	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11970	200	No	114687	26792
117689	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11971	200	No	114688	26793
117690	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11972	200	No	114689	26794
117691	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11973	200	No	114690	26795
117692	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11974	200	No	114691	26796
117693	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11975	200	No	114692	26797
117694	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11976	200	No	114693	26798
117699	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11981	200	No	114698	26803
117700	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11982	200	No	114699	26804
117701	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11983	200	No	114700	26805
117702	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11984	200	No	114701	26806
117703	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11985	200	No	114702	26807
117704	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11986	200	No	114703	26808
117705	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11987	200	No	114704	26809
117706	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11988	200	No	114705	26810
117707	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11989	200	No	114706	26811
117708	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11990	200	No	114707	26812
117709	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11991	200	No	114708	26813
117710	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11992	200	No	114709	26814
117711	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11993	200	No	114710	26815
117712	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11994	200	No	114711	26816
117715	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11997	200	No	114714	26819
117716	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11998	200	No	114715	26820
117717	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld11999	200	No	114716	26821
117718	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12000	200	No	114717	26822
117719	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12001	200	No	114718	26823
117720	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12002	200	No	114719	26824
117721	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12003	200	No	114720	26825
117722	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12004	200	No	114721	26826
117723	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12005	200	No	114722	26827
117724	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12006	200	No	114723	26828
117725	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12007	200	No	114724	26829
117726	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12008	200	No	114725	26830
117727	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12009	200	No	114726	26831
117728	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12010	200	No	114727	26832
117729	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12011	200	No	114728	26833
117730	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12012	200	No	114729	26834
117731	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12013	200	No	114730	26835
117732	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12014	200	No	114731	26836
117733	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12015	200	No	114732	26837
117734	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12016	200	No	114733	26838
117735	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12017	200	No	114734	26839
117751	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12033	200	No	114750	26854
117752	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12034	200	No	114751	26855
117753	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12035	200	No	114752	26856
117755	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12037	200	No	114754	26857
117756	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12038	200	No	114755	26858
117757	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12039	200	No	114756	26859
117758	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12040	200	No	114757	26860
117759	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12041	200	No	114758	26861

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
117760	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12042	200	No	114759	26862
117772	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12054	200	No	114771	26874
117773	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12055	200	No	114772	26875
117780	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12062	200	No	114779	26882
117783	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12065	200	No	114782	26885
117784	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12066	200	No	114783	26886
117785	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12067	200	No	114784	26887
117786	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12068	200	No	114785	26888
117787	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12069	200	No	114786	26889
117788	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12070	200	No	114787	26890
117789	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12071	200	No	114788	26891
117790	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12072	200	No	114789	26892
117791	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12073	200	No	114790	26893
117792	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12074	200	No	114791	26894
117793	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12075	200	No	114792	26895
117794	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12076	200	No	114793	26896
117795	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12077	200	No	114794	26897
117796	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12078	200	No	114795	26898
117797	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12079	200	No	114796	26899
117798	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12080	200	No	114797	26900
117799	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12081	200	No	114798	26901
117800	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12082	200	No	114799	26902
117801	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12083	200	No	114800	26903
117802	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12084	200	No	114801	26904
117805	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12087	200	No	114804	26907
117806	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12088	200	No	114805	26908
117807	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12089	200	No	114806	26909
117808	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12090	200	No	114807	26910
117809	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12091	200	No	114808	26911
117810	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12092	200	No	114809	26912
117811	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12093	200	No	114810	26913
117812	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12094	200	No	114811	26914
117813	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12095	200	No	114812	26915
117817	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12099	200	No	114816	26919
117818	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12100	200	No	114817	26920
117819	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12101	200	No	114818	26921
117820	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12102	200	No	114819	26922
117821	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12103	200	No	114820	26923
117822	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12104	200	No	114821	26924
117823	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12105	200	No	114822	26925
117825	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12107	200	No	114824	26927
117826	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12108	200	No	114825	26928
117827	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12109	200	No	114826	26929
117828	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12110	200	No	114827	26930
117829	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12111	200	No	114828	26931
117830	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12112	200	No	114829	26932
117832	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12114	200	No	114831	26934
117833	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12115	200	No	114832	26935
117834	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12116	200	No	114833	26936
117835	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12117	200	No	114834	26937
117836	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12118	200	No	114835	26938
117837	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12119	200	No	114836	26939

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
117838	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12120	200	No	114837	26940
117839	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12121	200	No	114838	26941
117840	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12122	200	No	114839	26942
117842	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12124	200	No	114841	26944
117843	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12125	200	No	114842	26945
117844	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12126	200	No	114843	26946
117845	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12127	200	No	114844	26947
117846	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12128	200	No	114845	26948
117847	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12129	200	No	114846	26949
117848	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12130	200	No	114847	26950
117849	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12131	200	No	114848	26951
117850	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12132	200	No	114849	26952
117851	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12133	200	No	114850	26953
117852	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12134	200	No	114851	26954
117854	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12136	200	No	114853	26956
117855	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12137	200	No	114854	26957
117856	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12138	200	No	114855	26958
117857	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12139	200	No	114856	26959
117858	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12140	200	No	114857	26960
117867	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12149	200	No	114866	26969
117868	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12150	200	No	114867	26970
117869	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12151	200	No	114868	26971
117870	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12152	200	No	114869	26972
117871	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12153	200	No	114870	26973
117872	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12154	200	No	114871	26974
117873	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12155	200	No	114872	26975
117892	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12174	200	No	114891	26994
117893	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12175	200	No	114892	26995
117894	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12176	200	No	114893	26996
117895	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12177	200	No	114894	26997
117896	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12178	200	No	114895	26998
117897	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12179	200	No	114896	26999
117898	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12180	200	No	114897	27000
117899	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12181	200	No	114898	27001
117900	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12182	200	No	114899	27002
117901	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12183	200	No	114900	27003
117902	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12184	200	No	114901	27004
117903	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12185	200	No	114902	27005
117904	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12186	200	No	114903	27006
117905	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12187	200	No	114904	27007
117906	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12188	200	No	114905	27008
117907	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12189	200	No	114906	27009
117908	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12190	200	No	114907	27010
117909	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12191	200	No	114908	27011
117910	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12192	200	No	114909	27012
117911	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12193	200	No	114910	27013
117912	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12194	200	No	114911	27014
117913	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12195	200	No	114912	27015
117914	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12196	200	No	114913	27016
117915	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12197	200	No	114914	27017
117916	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12198	200	No	114915	27018
117917	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12199	200	No	114916	27019

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
117918	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12200	200	No	114917	27020
117919	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12201	200	No	114918	27021
117920	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12202	200	No	114919	27022
117921	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12203	200	No	114920	27023
117922	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12204	200	No	114921	27024
117923	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12205	200	No	114922	27025
117924	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12206	200	No	114923	27026
117925	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12207	200	No	114924	27027
117926	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12208	200	No	114925	27028
117927	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12209	200	No	114926	27029
117928	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12210	200	No	114927	27030
117929	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12211	200	No	114928	27031
117930	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12212	200	No	114929	27032
117931	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12213	200	No	114930	27033
117932	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12214	200	No	114931	27034
117933	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12215	200	No	114932	27035
117934	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12216	200	No	114933	27036
117935	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12217	200	No	114934	27037
117936	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12218	200	No	114935	27038
117937	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12219	200	No	114936	27039
117938	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12220	200	No	114937	27040
117939	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12221	200	No	114938	27041
117940	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12222	200	No	114939	27042
117941	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12223	200	No	114940	27043
117942	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12224	200	No	114941	27044
117943	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12225	200	No	114942	27045
117944	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12226	200	No	114943	27046
117945	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12227	200	No	114944	27047
117946	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12228	200	No	114945	27048
117947	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12229	200	No	114946	27049
117948	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12230	200	No	114947	27050
117949	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12231	200	No	114948	27051
117950	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12232	200	No	114949	27052
117951	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12233	200	No	114950	27053
117952	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12234	200	No	114951	27054
117953	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12235	200	No	114952	27055
117954	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12236	200	No	114953	27056
117955	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12237	200	No	114954	27057
117956	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12238	200	No	114955	27058
117957	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12239	200	No	114956	27059
117958	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12240	200	No	114957	27060
117959	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12241	200	No	114958	27061
117960	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12242	200	No	114959	27062
117961	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12243	200	No	114960	27063
117962	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12244	200	No	114961	27064
117963	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12245	200	No	114962	27065
117964	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12246	200	No	114963	27066
117965	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12247	200	No	114964	27067
117966	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12248	200	No	114965	27068
117967	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12249	200	No	114966	27069
117968	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12250	200	No	114967	27070
117969	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12251	200	No	114968	27071

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
117970	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12252	200	No	114969	27072
117971	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12253	200	No	114970	27073
117972	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12254	200	No	114971	27074
117973	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12255	200	No	114972	27075
117974	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12256	200	No	114973	27076
117975	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12257	200	No	114974	27077
117976	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12258	200	No	114975	27078
117977	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12259	200	No	114976	27079
117978	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12260	200	No	114977	27080
117979	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12261	200	No	114978	27081
117980	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12262	200	No	114979	27082
117981	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12263	200	No	114980	27083
117983	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12265	200	No	114982	27085
117984	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12266	200	No	114983	27086
117985	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12267	200	No	114984	27087
117986	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12268	200	No	114985	27088
117987	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12269	200	No	114986	27089
117988	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12270	200	No	114987	27090
117989	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12271	200	No	114988	27091
117990	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12272	200	No	114989	27092
117991	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12273	200	No	114990	27093
117993	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12275	200	No	114992	27095
117994	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12276	200	No	114993	27096
117995	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12277	200	No	114994	27097
117996	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12278	200	No	114995	27098
117997	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12279	200	No	114996	27099
117998	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12280	200	No	114997	27100
117999	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12281	200	No	114998	27101
118000	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12282	200	No	114999	27102
118001	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12283	200	No	115000	27103
118002	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12284	200	No	115001	27104
118003	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12285	200	No	115002	27105
118004	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12286	200	No	115003	27106
118005	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12287	200	No	115004	27107
118006	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12288	200	No	115005	27108
118007	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12289	200	No	115006	27109
118008	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12290	200	No	115007	27110
118009	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12291	200	No	115008	27111
118010	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12292	200	No	115009	27112
118012	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12294	200	No	115011	27114
118013	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12295	200	No	115012	27115
118014	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12296	200	No	115013	27116
118015	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12297	200	No	115014	27117
118016	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12298	200	No	115015	27118
118017	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12299	200	No	115016	27119
118018	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12300	200	No	115017	27120
118019	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12301	200	No	115018	27121
118020	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12302	200	No	115019	27122
118021	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12303	200	No	115020	27123
118022	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12304	200	No	115021	27124
118024	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12306	200	No	115023	27126
118029	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12311	200	No	115028	27131

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118030	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12312	200	No	115029	27132
118031	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12313	200	No	115030	27133
118032	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12314	200	No	115031	27134
118033	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12315	200	No	115032	27135
118034	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12316	200	No	115033	27136
118035	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12317	200	No	115034	27137
118036	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12318	200	No	115035	27138
118037	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12319	200	No	115036	27139
118038	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12320	200	No	115037	27140
118042	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12324	200	No	115041	27144
118043	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12325	200	No	115042	27145
118045	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12327	200	No	115044	27147
118046	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12328	200	No	115045	27148
118048	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12330	200	No	115047	27150
118049	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12331	200	No	115048	27151
118050	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12332	200	No	115049	27152
118051	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12333	200	No	115050	27153
118052	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12334	200	No	115051	27154
118053	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12335	200	No	115052	27155
118056	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12338	200	No	115055	27158
118057	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12339	200	No	115056	27159
118058	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12340	200	No	115057	27160
118059	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12341	200	No	115058	27161
118060	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12342	200	No	115059	27162
118061	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12343	200	No	115060	27163
118064	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12346	200	No	115063	27166
118065	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12347	200	No	115064	27167
118066	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12348	200	No	115065	27168
118068	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12350	200	No	115067	27170
118069	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12351	200	No	115068	27171
118070	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12352	200	No	115069	27172
118071	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12353	200	No	115070	27173
118072	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12354	200	No	115071	27174
118073	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12355	200	No	115072	27175
118074	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12356	200	No	115073	27176
118075	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12357	200	No	115074	27177
118076	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12358	200	No	115075	27178
118077	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12359	200	No	115076	27179
118078	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12360	200	No	115077	27180
118079	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12361	200	No	115078	27181
118080	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12362	200	No	115079	27182
118081	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12363	200	No	115080	27183
118082	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12364	200	No	115081	27184
118083	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12365	200	No	115082	27185
118084	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12366	200	No	115083	27186
118085	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12367	200	No	115084	27187
118086	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12368	200	No	115085	27188
118087	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12369	200	No	115086	27189
118088	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12370	200	No	115087	27190
118089	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12371	200	No	115088	27191
118090	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12372	200	No	115089	27192
118091	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12373	200	No	115090	27193

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118092	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12374	200	No	115091	27194
118093	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12375	200	No	115092	27195
118094	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12376	200	No	115093	27196
118095	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12377	200	No	115094	27197
118096	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12378	200	No	115095	27198
118097	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12379	200	No	115096	27199
118098	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12380	200	No	115097	27200
118099	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12381	200	No	115098	27201
118100	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12382	200	No	115099	27202
118101	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12383	200	No	115100	27203
118102	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12384	200	No	115101	27204
118103	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12385	200	No	115102	27205
118104	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12386	200	No	115103	27206
118105	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12387	200	No	115104	27207
118106	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12388	200	No	115105	27208
118107	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12389	200	No	115106	27209
118108	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12390	200	No	115107	27210
118109	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12391	200	No	115108	27211
118110	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12392	200	No	115109	27212
118113	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12395	200	No	115112	27215
118114	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12396	200	No	115113	27216
118115	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12397	200	No	115114	27217
118116	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12398	200	No	115115	27218
118117	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12399	200	No	115116	27219
118118	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12400	200	No	115117	27220
118119	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12401	200	No	115118	27221
118120	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12402	200	No	115119	27222
118121	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12403	200	No	115120	27223
118122	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12404	200	No	115121	27224
118123	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12405	200	No	115122	27225
118124	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12406	200	No	115123	27226
118126	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12408	200	No	115125	27228
118127	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12409	200	No	115126	27229
118128	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12410	200	No	115127	27230
118129	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12411	200	No	115128	27231
118130	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12412	200	No	115129	27232
118131	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12413	200	No	115130	27233
118132	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12414	200	No	115131	27234
118133	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12415	200	No	115132	27235
118134	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12416	200	No	115133	27236
118135	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12417	200	No	115134	27237
118136	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12418	200	No	115135	27238
118137	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12419	200	No	115136	27239
118139	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12421	200	No	115138	27241
118140	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12422	200	No	115139	27242
118141	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12423	200	No	115140	27243
118142	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12424	200	No	115141	27244
118143	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12425	200	No	115142	27245
118144	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12426	200	No	115143	27246
118145	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12427	200	No	115144	27247
118146	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12428	200	No	115145	27248
118147	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12429	200	No	115146	27249

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118148	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12430	200	No	115147	27250
118149	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12431	200	No	115148	27251
118150	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12432	200	No	115149	27252
118151	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12433	200	No	115150	27253
118152	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12434	200	No	115151	27254
118153	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12435	200	No	115152	27255
118154	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12436	200	No	115153	27256
118155	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12437	200	No	115154	27257
118156	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12438	200	No	115155	27258
118157	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12439	200	No	115156	27259
118158	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12440	200	No	115157	27260
118159	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12441	200	No	115158	27261
118160	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12442	200	No	115159	27262
118161	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12443	200	No	115160	27263
118162	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12444	200	No	115161	27264
118163	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12445	200	No	115162	27265
118164	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12446	200	No	115163	27266
118165	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12447	200	No	115164	27267
118166	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12448	200	No	115165	27268
118169	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12451	200	No	115168	27271
118170	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12452	200	No	115169	27272
118171	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12453	200	No	115170	27273
118172	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12454	200	No	115171	27274
118175	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12457	200	No	115174	27277
118176	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12458	200	No	115175	27278
118177	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12459	200	No	115176	27279
118178	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12460	200	No	115177	27280
118179	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12461	200	No	115178	27281
118180	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12462	200	No	115179	27282
118181	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12463	200	No	115180	27283
118182	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12464	200	No	115181	27284
118183	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12465	200	No	115182	27285
118184	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12466	200	No	115183	27286
118185	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12467	200	No	115184	27287
118186	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12468	200	No	115185	27288
118187	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12469	200	No	115186	27289
118188	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12470	200	No	115187	27290
118189	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12471	200	No	115188	27291
118190	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12472	200	No	115189	27292
118191	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12473	200	No	115190	27293
118192	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12474	200	No	115191	27294
118195	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12477	200	No	115194	27297
118196	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12478	200	No	115195	27298
118197	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12479	200	No	115196	27299
118199	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12481	200	No	115198	27301
118201	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12483	200	No	115200	27303
118202	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12484	200	No	115201	27304
118203	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12485	200	No	115202	27305
118204	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12486	200	No	115203	27306
118205	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12487	200	No	115204	27307
118206	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12488	200	No	115205	27308
118208	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12490	200	No	115207	27310

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118209	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12491	200	No	115208	27311
118210	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12492	200	No	115209	27312
118211	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12493	200	No	115210	27313
118212	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12494	200	No	115211	27314
118213	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12495	200	No	115212	27315
118215	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12497	200	No	115214	27317
118216	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12498	200	No	115215	27318
118217	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12499	200	No	115216	27319
118218	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12500	200	No	115217	27320
118219	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12501	200	No	115218	27321
118220	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12502	200	No	115219	27322
118221	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12503	200	No	115220	27323
118222	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12504	200	No	115221	27324
118223	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12505	200	No	115222	27325
118224	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12506	200	No	115223	27326
118229	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12511	200	No	115228	27331
118231	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12513	200	No	115230	27333
118232	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12514	200	No	115231	27334
118233	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12515	200	No	115232	27335
118237	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12519	200	No	115236	27339
118302	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12584	200	No	115301	27404
118303	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12585	200	No	115302	27405
118304	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12586	200	No	115303	27406
118305	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12587	200	No	115304	27407
118306	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12588	200	No	115305	27408
118307	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12589	200	No	115306	27409
118308	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12590	200	No	115307	27410
118309	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12591	200	No	115308	27411
118310	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12592	200	No	115309	27412
118311	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12593	200	No	115310	27413
118312	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12594	200	No	115311	27414
118313	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12595	200	No	115312	27415
118314	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12596	200	No	115313	27416
118315	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12597	200	No	115314	27417
118316	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12598	200	No	115315	27418
118317	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12599	200	No	115316	27419
118318	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12600	200	No	115317	27420
118319	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12601	200	No	115318	27421
118320	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12602	200	No	115319	27422
118321	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12603	200	No	115320	27423
118322	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12604	200	No	115321	27424
118323	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12605	200	No	115322	27425
118324	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12606	200	No	115323	27426
118325	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12607	200	No	115324	27427
118326	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12608	200	No	115325	27428
118327	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12609	200	No	115326	27429
118330	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12612	200	No	115329	27432
118331	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12613	200	No	115330	27433
118332	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12614	200	No	115331	27434
118333	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12615	200	No	115332	27435
118334	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12616	200	No	115333	27436
118335	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12617	200	No	115334	27437

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
118336	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12618	200	No	115335	27438
118337	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12619	200	No	115336	27439
118338	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12620	200	No	115337	27440
118340	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12622	200	No	115339	27442
118341	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12623	200	No	115340	27443
118342	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12624	200	No	115341	27444
118343	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12625	200	No	115342	27445
118348	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12630	200	No	115347	27450
118349	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12631	200	No	115348	27451
118350	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12632	200	No	115349	27452
118351	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12633	200	No	115350	27453
118352	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12634	200	No	115351	27454
118353	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12635	200	No	115352	27455
118354	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12636	200	No	115353	27456
118355	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12637	200	No	115354	27457
118356	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12638	200	No	115355	27458
118357	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12639	200	No	115356	27459
118358	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12640	200	No	115357	27460
118359	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12641	200	No	115358	27461
118360	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12642	200	No	115359	27462
118361	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12643	200	No	115360	27463
118362	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12644	200	No	115361	27464
118363	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12645	200	No	115362	27465
118364	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12646	200	No	115363	27466
118365	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12647	200	No	115364	27467
118366	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12648	200	No	115365	27468
118367	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12649	200	No	115366	27469
118368	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12650	200	No	115367	27470
118369	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12651	200	No	115368	27471
118370	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12652	200	No	115369	27472
118371	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12653	200	No	115370	27473
118373	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12655	200	No	115372	27475
118374	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12656	200	No	115373	27476
118376	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12658	200	No	115375	27478
120829	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld15111	200	No	117828	29924
120832	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld15114	200	No	117831	29927
124844	SCP30a	Callitris preissii (or Melaleuca lanceolata) forests and woodlands, Swan Coastal Plain (floristic community type 30a as originally described in Gibson et al. (1994))	Vulnerable		1	Craigie01	300	No	121864	32799
125103	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0002	500	No	122172	#####
125104	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0003	500	No	122173	#####
125113	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0012	500	No	122182	#####
125114	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0013	500	No	122183	#####
125115	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0014	500	No	122184	#####
125116	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0015	500	No	122185	#####

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
125117	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0016	500	No	122186	#####
125121	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0020	500	No	122190	#####
125122	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0021	500	No	122191	#####
125123	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0022	500	No	122192	#####
125124	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0023	500	No	122193	#####
125125	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0024	500	No	122194	#####
125126	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0025	500	No	122195	#####
125130	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0029	500	No	122199	#####
125131	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0030	500	No	122200	#####
125132	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0031	500	No	122201	#####
125317	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0216	500	No	122386	#####
125318	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0217	500	No	122387	#####
125319	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0218	500	No	122388	#####
125320	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0219	500	No	122389	#####
125321	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0220	500	No	122390	#####
125336	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0235	500	No	122405	#####
125337	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0236	500	No	122406	#####
125477	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0376	500	No	122546	#####
125478	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0377	500	No	122547	#####
125479	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0378	500	No	122548	#####
125480	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0379	500	No	122549	#####
125483	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0382	500	No	122552	#####
125485	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0384	500	No	122554	#####
125486	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0385	500	No	122555	#####
125490	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0389	500	No	122559	#####
125491	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0390	500	No	122560	#####

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
125492	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0391	500	No	122561	#####
125493	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0392	500	No	122562	#####
125494	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld0393	500	No	122563	#####
126128	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1027	500	No	123197	#####
126129	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1028	500	No	123198	#####
126130	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1029	500	No	123199	#####
126131	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1030	500	No	123200	#####
126132	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1031	500	No	123201	#####
126133	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1032	500	No	123202	#####
126134	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1033	500	No	123203	#####
126135	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1034	500	No	123204	#####
126136	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1035	500	No	123205	#####
126570	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1469	500	No	123639	#####
126571	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1470	500	No	123640	#####
126572	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1471	500	No	123641	#####
126573	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1472	500	No	123642	#####
126574	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1473	500	No	123643	#####
126575	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1474	500	No	123644	#####
126576	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1475	500	No	123645	#####
126577	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1476	500	No	123646	#####
126578	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1477	500	No	123647	#####
126579	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1478	500	No	123648	#####
126580	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1479	500	No	123649	#####
126581	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1480	500	No	123650	#####
126582	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1481	500	No	123651	#####
126583	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1482	500	No	123652	#####

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
126584	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1483	500	No	123653	#####
126585	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1484	500	No	123654	#####
126586	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1485	500	No	123655	#####
126587	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1486	500	No	123656	#####
126588	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1487	500	No	123657	#####
126598	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1497	500	No	123667	#####
126599	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1498	500	No	123668	#####
126604	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1503	500	No	123673	#####
126605	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1504	500	No	123674	#####
126606	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1505	500	No	123675	#####
126607	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1506	500	No	123676	#####
126608	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1507	500	No	123677	#####
126609	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1508	500	No	123678	#####
126610	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1509	500	No	123679	#####
126611	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1510	500	No	123680	#####
126612	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1511	500	No	123681	#####
126613	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1512	500	No	123682	#####
126614	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1513	500	No	123683	#####
126615	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1514	500	No	123684	#####
126616	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1515	500	No	123685	#####
126617	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1516	500	No	123686	#####
126637	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1536	500	No	123706	#####
126639	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1538	500	No	123708	#####
126640	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1539	500	No	123709	#####
126641	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1540	500	No	123710	#####
126642	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1541	500	No	123711	#####

OCC_UNIQUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	S_ID_COUNT	FIRST_S_ID	BUFFER	OCC_CONFID	BDY_ID	ORIG_FID
126656	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	1	TuartWld1555	500	No	123725	#####
1894	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	2	MONTROSE PLOT1	500	No	570	#####
107301	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01583	200	No	104300	16422
107320	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01602	200	No	104319	16440
107368	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01650	200	No	104367	16488
107369	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01651	200	No	104368	16489
107488	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01770	200	No	104487	16608
107662	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01944	200	No	104661	16780
107666	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01948	200	No	104665	16784
107667	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01949	200	No	104666	16785
107669	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01951	200	No	104668	16787
107670	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01952	200	No	104669	16788
107674	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld01956	200	No	104673	16792
108699	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld02981	200	No	105698	17818
108770	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03052	200	No	105769	17888
108771	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03053	200	No	105770	17889
108773	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld03055	200	No	105772	17891
113235	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07517	200	No	110234	22343
113245	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07527	200	No	110244	22353
113271	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07553	200	No	110270	22379
113282	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07564	200	No	110281	22390
113413	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07695	200	No	110412	22521
113414	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld07696	200	No	110413	22522
117816	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12098	200	No	114815	26918
117824	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12106	200	No	114823	26926
117831	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12113	200	No	114830	26933
118011	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12293	200	No	115010	27113
118028	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12310	200	No	115027	27130
118125	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12407	200	No	115124	27227
118138	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12420	200	No	115137	27240
118207	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld12489	200	No	115206	27309
120819	Banksia WL SCP	Banksia Woodlands of the Swan Coastal Plain ecological community	Priority 3	Endangered	1	BanksiaWld15101	200	No	117818	29914
3006	SCP23b	Swan Coastal Plain Banksia attenuata - Banksia menziesii woodlands	Priority 3	Endangered	1	BAW7	200	No	0	128
2976	SCP22	Banksia ilicifolia woodlands	Priority 3	Endangered	1	BIW10	200	No	0	131
2977	SCP22	Banksia ilicifolia woodlands	Priority 3	Endangered	1	BIW11	200	No	0	132
2986	SCP22	Banksia ilicifolia woodlands	Priority 3	Endangered	1	BIW20	200	No	0	139
124864	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	1	Goldsworthy01	500	No	0	544
4997	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		1	Hepb03	500	No	0	688
3181	SCP21c	Low lying Banksia attenuata woodlands or shrublands	Priority 3	Endangered	1	BAS27	200	No	0	759
3182	SCP21c	Low lying Banksia attenuata woodlands or shrublands	Priority 3	Endangered	1	BAS28	200	No	0	760
105698	SCP23b	Swan Coastal Plain Banksia attenuata - Banksia menziesii woodlands	Priority 3	Endangered	1	SVB028	500	No	0	1005
5021	SCP22	Banksia ilicifolia woodlands	Priority 3	Endangered	1	pinj12	500	No	0	1291
3116	SCP25	Southern Eucalyptus gomphocephala-Agonis flexuosa woodlands	Priority 3		1	yela03	700	No	0	1333
5022	SCP29a	Coastal shrublands on shallow sands	Priority 3		1	Pinn02	500	No	0	1468

APPENDIX 6

Species List

SPECIES LIST – East Wanneroo Precinct 3

GYMNOSPERMS

CUPPRESSACEAE
**Callitris preissii*

ZAMIACEAE
Macrozamia riedlei

MONOCOTYLEDONS

ANACARDIACEAE
Lyginia barbata

ASPARAGACEAE
Lomandra hermaphrodita
Lomandra caespitosa
Sowerbaea laxiflora
Thysanotus manglesianus
Thysanotus thyrsoideus

COLCHICACEAE
Burchardia congesta

CYPERACEAE
Alexgeorgea nitens
Chaetospora curvifolia
Isolepis marginata
Lepidosperma leptostachyum
Lepidosperma pubisquameum
Lepidosperma squamatum
Mesomelaena pseudostygia
Morelotia octandra
Schoenus grandiflorus

DASYPOGONACEAE
Calectasia narragara
Dasypogon bromeliifolius

HAEMODORACEAE
Anigozanthos humilis
Anigozanthos manglesii
Conostylis aurea
Conostylis juncea
Conostylis setigera subsp. *setigera*
Haemodorum laxum
Phlebocarya ciliata

HEMEROCALLIDACEAE
Caesia micrantha
Dianella revoluta var. *divaricata*
Tricoryne elatior

IRIDACEAE
**Freesia alba x leichtlinii*
**Gladiolus caryophyllaceus*
**Moraea flaccida*
Orthrosanthus laxus
Patersonia occidentalis
**Romulea rosea*

ORCHIDACEAE
Caladenia arenicola
Caladenia discoidea
Caladenia flava
Caladenia latifolia
Diuris corymbosa
Elythranthera brunonis
Leporella fimbriata
Microtis media
Pterostylis recurva
Pterostylis vittata
Pyrorchis nigricans
Thelymitra campanulata
Thelymitra crinita

POACEAE
Austrostipa flavescens
**Avena fatua*
**Briza maxima*
**Bromus diandrus*
**Ehrharta calycina*
**Ehrharta longiflora*
**Lolium perenne*
**Pentameris airoides*

RESTIONACEAE
Desmocladus flexuosus
Hypolaena exsulca

XANTHORRHOEACEAE
Xanthorrhoea brunonis
Xanthorrhoea preissii

DICOTYLEDONS

AIZOACEAE
**Carpobrotus edulis*

AMARANTHACEAE
Ptilotus polystachyus

APIACEAE
Xanthosia huegelii

ARALIACEAE
Trachymene pilosa

ASTERACEAE
**Arctotheca calendula*
**Cotula turbinata*
Hyalosperma cotula
**Hypochaeris glabra*
Millotia myosotidifolia
**Monoculus monstrosus*
**Osteospermum ecklonis*
Podotheca angustifolia
Podotheca gnaphalioides
**Sonchus oleraceus*
**Taraxacum officinale*
**Urospermum picroides*
**Ursinia anthemoides*
Waitzia suaveolens

BRASSICACEAE
**Heliophila pusilla*

CAMPANULACEAE
**Wahlenbergia capensis*
Wahlenbergia preissii

CARYOPHYLLACEAE
**Petrorhagia dubia*

CASUARINACEAE
Allocasuarina fraseriana
Allocasuarina humilis

CRASSULACEAE
Crassula colorata

DILLENIACEAE
Hibbertia huegelii
Hibbertia hypericoides
Hibbertia racemosa
Hibbertia subvaginata

DROSERACEAE
Drosera erythrorhiza
Drosera macrantha
Drosera menziesii

ERICACEAE
Conostephium pendulum
Conostephium preissii
Styphelia propinqua

EUPHORBIACEAE
Monotaxis grandiflora var. *grandiflora*

FABACEAE
**Acacia iteaphylla*
Acacia applanata
Acacia cyclops
Acacia huegelii
Acacia pulchella
Acacia saligna
Bossiaea eriocarpa
**Chamaecytisus palmensis*
Daviesia divaricata
Daviesia nudiflora
Daviesia triflora
Gastrolobium capitatum
Gompholobium tomentosum
Hardenbergia comptoniana
Hovea pungens
Hovea trisperma var. *trisperma*
Isotropis cuneifolia subsp. *cuneifolia*
Jacksonia sternbergiana

Kennedia prostrata
**Lupinus cosentinii*
**Trifolium campestre*

GERANIACEAE
**Erodium botrys*
**Pelargonium capitatum*

GOODENIACEAE
Dampiera linearis
Scaevola repens var. *repens*

LAMIACEAE
Hemiandra pungens

LOGANIACEAE
Phyllangium paradoxum

LORANTHACEAE
Nuytsia floribunda

MELIACEAE
**Melia azedarach*

MONTIACEAE
Calandrinia corrigioloides

MYRTACEAE
**Agonis flexuosa*
Calothamnus sanguineus
Calytrix flavescens
Calytrix fraseri
**Chamelaucium uncinatum*
Eremaea pauciflora
Eucalyptus marginata
Hypocalymma robustum
**Leptospermum laevigatum*
Scholtzia involucrata

OXALIDACEAE
**Oxalis pes-caprae*

PAPAVERACEAE
**Fumaria capreolata*

PHYLLANTHACEAE
Poranthera microphylla

PITTOSPORACEAE
Billardiera heterophylla

POLYGALACEAE
Comesperma calymega

PRIMULACEAE
**Lysimachia arvensis*

PROTEACEAE
Adenanthos cygnorum var. *cygnorum*
Banksia attenuata
Banksia dallanneyi
Banksia menziesii
Banksia prionotes
Banksia sessilis
Grevillea vestita
Hakea prostrata
Hakea ruscifolia
Persoonia saccata
Petrophile linearis
Petrophile macrostachya
Stirlingia latifolia

RUBIACEAE
Opercularia vaginata

RUTACEAE
Philotheca spicata

STYLIDIACEAE
Levenhookia stipitata
Stylidium adpressum
Stylidium brunonianum
Stylidium calcaratum
Stylidium carnosum
Stylidium piliferum
Stylidium schoenoides

THYMELEACEAE
Pimelea floribunda
Pimelea sulphurea

VIOLACEAE
Hybanthus calycinus

APPENDIX 7

Quadrat Data

QUADRAT EW1

50 389054 E 6485569 N

Vegetation: *Banksia attenuata/B. menziesii/Allocasuarina fraseriana* Low Open Woodland over *Hibbertia hypericoides* Open Low Heath
Condition: Very Good
Soil Type: Dark grey-brown sand
Landform: Gentle slope down to the south-east
Date: 26.9.22 and 25.10.22
Recorded by: Paul van der Moezel

QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Allocasuarina fraseriana	6	5
Banksia menziesii	4	2
Banksia attenuata	3.5	2
**Leptospermum laevigatum*	2.5	1
Acacia pulchella	1	1
Xanthorrhoea preissii	0.8	1
**Gladiolus caryophyllaceus*	0.8	<1
Haemodorum laxum	0.7	<1
Lepidosperma pubisquameum	0.7	<1
Hibbertia hypericoides	0.6	20
Daviesia divaricata	0.6	<1
Jacksonia sternbergiana	0.6	<1
Sowerbaea laxiflora	0.5	<1
Burchardia congesta	0.5	<1
Mesomelaena pseudostygia	0.4	1
Lyginia barbata	0.4	<1
Pterostylis recurva	0.4	<1
8Ehrharta calycina	0.4	<1

SPECIES	HEIGHT (m)	COVER (%)
**Briza maxima*	0.3	10
Eremaea pauciflora	0.3	5
**Ehrharta longiflora*	0.3	2
**Ursinia anthemoides*	0.3	1
Conostylis aurea	0.3	<1
Stirlingia latifolia	0.3	<1
Hypocalymma robustum	0.3	<1
Lomandra caespitosa	0.3	<1
Stylidium piliferum	0.3	<1
Hibbertia huegelii	0.3	<1
Wahlenbergia preissii	0.3	<1
Daviesia triflora	0.3	<1
Patersonia occidentalis	0.3	<1
Dianella revoluta var. *divaricata*	0.3	<1
Thelymitra crinita	0.3	<1
Austrostipa flavescens	0.3	<1
**Pentameris airoides*	0.3	<1
Alexgeorgea nitens	0.2	1
Bossiaea eriocarpa	0.2	<1
Hybanthus calycinus	0.2	<1
Xanthosia huegelii	0.2	<1
Scaevola repens	0.2	<1
Conostephium pendulum	0.2	<1
Lomandra hermaphrodita	0.2	<1
Gompholobium tomentosum	0.2	<1
Hovea trisperma	0.2	<1
Anigozanthos humilis	0.2	<1
Trachymene pilosa	0.1	1
Millotia myosotidifolia	0.1	<1
**Oxalis pes-caprae*	0.1	<1
Desmocladus flexuosus	0.1	<1
Stylidium calcaratum	0.1	<1
Caladenia flava	0.1	<1
Monotaxis grandiflora	0.1	<1
Dampiera linearis	0.1	<1
Levenhookia stipitata	<0.1	<1
Hyalosperma cotula	<0.1	<1
**Hypochaeris glabra*	Flat	<1
Drosera erythrorhiza	Flat	<1
Billardiera heterophylla	Climber	<1

* introduced species

QUADRAT EW2

50 389122 E 6485493 N

Vegetation: *Eucalyptus marginata/Allocasuarina fraseriana/Banksia menziesii/B. attenuata/B. prionotes* Low Open Woodland over *Calytrix fraseri/Xanthorrhoea preissii/Hibbertia hypericoides/Mesomelaena pseudostygia* Open Low Heath

Condition: Excellent

Soil Type: Dark orange-brown sand

Landform: Very gentle slope down to the east

Date: 26.9.22 and 25.10.22

Recorded by: Paul van der Moezel

QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Eucalyptus marginata	10	5
Banksia menziesii	6	5
Banksia prionotes	5	1
Banksia attenuata	4	2
Allocasuarina fraseriana	3	1
Calytrix fraseri	1.1	5
Acacia pulchella	1	1
Xanthorrhoea brunonis	1	1
Xanthorrhoea preissii	0.7	10
Mesomelaena pseudostygia	0.7	10
Daviesia nudiflora	0.7	<1
Hibbertia hypericoides	0.5	2
**Ehrharta calycina*	0.5	1
Morelotia octandra	0.4	1
Burchardia congesta	0.4	<1

SPECIES	HEIGHT (m)	COVER (%)
Petrophile linearis	0.4	<1
Stirlingia latifolia	0.4	<1
**Gladiolus caryophyllaceus*	0.4	<1
Daviesia divaricata	0.4	<1
Orthrosanthus laxus	0.4	<1
Stylidium brunonianum	0.4	<1
**Ursinia anthemoides*	0.3	2
**Lolium perenne*	0.3	<1
Sowerbaea laxiflora	0.3	<1
Pimelea sulphurea	0.3	<1
Hybanthus calycinus	0.3	<1
Haemodorum laxum	0.3	<1
Dampiera linearis	0.3	<1
Conostylis aurea	0.3	<1
Austrostipa flavescens	0.3	<1
**Briza maxima*	0.2	1
Tricoryne elatior	0.2	<1
Hovea trisperma	0.2	<1
Bossiaea eriocarpa	0.2	<1
Lomandra hermaphrodita	0.2	<1
Hibbertia huegelii	0.2	<1
Gompholobium tomentosum	0.2	<1
Lomandra caespitosa	0.2	<1
Trachymene pilosa	0.1	1
Hyalosperma cotula	0.1	1
Caladenia flava	0.1	<1
Scaevola repens	0.1	<1
Pterostylis vittata	0.1	<1
Alexgeorgea nitens	0.1	<1
Anigozanthos humilis	0.1	<1
Xanthosia huegelii	0.1	<1
**Pentameris airoides*	0.1	<1
Levenhookia stipitata	<0.1	<1
Millotia myosotidifolia	<0.1	<1
Poranthera microphylla	<0.1	<1
Stylidium piliferum	Flat	<1
Drosera erythrorhiza	Flat	<1
**Hypochaeris glabra*	Flat	<1
Drosera menziesii	Climber	<1
Thysanotus manglesianus	Climber	<1

* introduced species

QUADRAT EW3

50 389260 E 6484715 N

Vegetation: *Allocasuarina fraseriana/Banksia attenuata/B. menziesii* Low Open Woodland over *Calytrix fraseri/Hibbertia hypericoides/Lyginia barbata/Mesomelaena pseudostygia* Closed Low Heath
Condition: Excellent
Soil Type: Orange-brown sand
Landform: Flat
Date: 26.9.22 and 25.10.22
Recorded by: Paul van der Moezel

Quadrat (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Banksia attenuata	5	5
Allocasuarina fraseriana	5	2
Nuytsia floribunda	4.5	1
Banksia menziesii	3	2
Calytrix fraseri	1.5	5
Xanthorrhoea preissii	0.8	5
**Ehrharta calycina*	0.7	<1
**Gladiolus caryophyllaceus*	0.6	<1
Haemodorum laxum	0.6	<1
Hibbertia hypericoides	0.5	15
Daviesia triflora	0.5	<1
Daviesia divaricata	0.5	<1
Mesomelaena pseudostygia	0.4	5
**Briza maxima*	0.4	1
Stirlingia latifolia	0.4	1
Patersonia occidentalis	0.4	1

Petrophile linearis	0.4	<1
Burchardia congesta	0.4	<1
Tricoryne elatior	0.4	<1
Daviesia nudiflora	0.4	<1
Thysanotus thyrsoideus	0.4	<1
Lyginia barbata	0.3	10
Desmocladus flexuosus	0.3	2
**Ursinia anthemoides*	0.3	1
Hybanthus calycinus	0.3	<1
Philotheca spicata	0.3	<1
Sowerbaea laxiflora	0.3	<1
Gompholobium tomentosum	0.3	<1
Elythranthera brunonis	0.3	<1
Austrostipa flavescens	0.3	<1
Hypocalymma robustum	0.3	<1
Hovea trisperma	0.3	<1
Phlebocarya ciliata	0.3	<1
Stylidium brunonianum	0.2	<1
Hemiandra pungens	0.2	<1
**Wahlenbergia capensis*	0.2	<1
Conostephium pendulum	0.2	<1
Bossiaea eriocarpa	0.2	<1
Acacia applanata	0.2	<1
Scaevola repens	0.1	2
Hyalosperma cotula	0.1	2
Stylidium calcaratum	0.1	<1
Waitzia suaveolens	0.1	<1
Lomandra hermaphrodita	0.1	<1
Alexgeorgea nitens	0.1	<1
Hibbertia huegelii	0.1	<1
Dasypogon bromeliifolius	0.1	<1
Monotaxis grandiflora	0.1	<1
**Pentameris airoides*	0.1	<1
Caladenia flava	0.1	<1
Wahlenbergia preissii	0.1	<1
Conostylis setigera	0.1	<1
Crassula colorata	<0.1	<1
Trachymene pilosa	<0.1	<1
Phyllangium paradoxum	<0.1	<1
**Sonchus oleraceus*	<0.1	<1
Levenhookia stipitata	<0.1	<1
Stylidium adpressum	<0.1	<1
Drosera erythrorhiza	Flat	<1
**Hypochaeris glabra*	Flat	<1
Drosera menziesii	Climber	<1

* introduced species

QUADRAT EW4

50 389235 E 6485029 N

Vegetation: *Allocasuarina fraseriana/Banksia attenuata/B. menziesii* Low Open Woodland over *Mesomelaena pseudostygia/Eremaea pauciflora* Open Low Heath
Condition: Very Good
Soil Type: Light orange-brown sand
Landform: Very gentle slope down to the north
Date: 26.9.22 and 25.10.22
Recorded by: Paul van der Moezel

QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Allocasuarina fraseriana	4	2
Banksia menziesii	4	2
Jacksonia sternbergiana	2.5	2
**Ehrharta calycina*	1	<1
Stirlingia latifolia	0.7	<1
Daviesia nudiflora	0.6	1
Daviesia divaricata	0.6	<1
Mesomelaena pseudostygia	0.5	50
Eremaea pauciflora	0.5	5
Hibbertia hypericoides	0.5	1
Burchardia congesta	0.5	<1
Daviesia triflora	0.5	<1
Sowerbaea laxiflora	0.4	<1
**Gladiolus caryophyllaceus*	0.4	<1
Stylidium piliferum	0.4	<1
**Ursinia anthemoides*	0.3	4

SPECIES	HEIGHT (m)	COVER (%)
**Briza maxima*	0.3	2
Calytrix fraseri	0.3	<1
Haemodorum laxum	0.3	<1
Chaetospora curvifolia	0.3	<1
Tricoryne elatior	0.2	<1
Lomandra caespitosa	0.2	<1
Conostylis aurea	0.2	<1
**Wahlenbergia capensis*	0.2	<1
Bossiaea eriocarpa	0.2	<1
Anigozanthos humilis	0.2	<1
**Petrorhagia dubia*	0.2	<1
Podotheca angustifolia	0.1	1
Scaevola repens	0.1	1
**Pentameris airoides*	0.1	1
Conostylis setigera	0.1	<1
Trachymene pilosa	0.1	<1
Levenhookia stipitata	<0.1	<1
Hyalosperma cotula	<0.1	<1
**Hypochaeris glabra*	Flat	1
Drosera erythrorhiza	Flat	<1

* introduced species

QUADRAT EW5

50 389152 E 6484926 N

Vegetation: *Allocasuarina fraseriana/Banksia attenuata/B. menziesii* Low Open Woodland over *Hibbertia hypericoides/Mesomelaena pseudostygia* Open Low Heath
Condition: Very Good
Soil Type: orange-brown sand
Landform: Gentle slope down to the north
Date: 26.9.22 and 25.10.22
Recorded by: Paul van der Moezel

QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Allocasuarina fraseriana	10	4
Banksia attenuata	4.5	10
Banksia menziesii	4	2
Xanthorrhoea preissii	0.8	4
Gastrolobium capitatum	0.5	<1
Daviesia nudiflora	0.5	<1
Lepidosperma leptostachyum	0.5	<1
Hibbertia hypericoides	0.4	30
Mesomelaena pseudostygia	0.4	10
Stirlingia latifolia	0.4	1
Patersonia occidentalis	0.4	<1
Daviesia divaricata	0.4	<1
Gladiolus caryophyllaceus	0.4	<1
Haemodorum laxum	0.4	<1
Burchardia congesta	0.4	<1
Pimelea floribunda	0.4	<1

SPECIES	HEIGHT (m)	COVER (%)
Comesperma calymega	0.4	<1
Bossiaea eriocarpa	0.3	1
**Briza maxima*	0.3	1
Conostylis aurea	0.3	<1
Calectasia narragara	0.3	<1
Petrophile linearis	0.3	<1
Stylidium piliferum	0.3	<1
Stylidium schoenoides	0.3	<1
Lepidosperma squamatum	0.3	<1
Elythranthera brunonis	0.3	<1
Hibbertia huegelii	0.3	<1
Austrostipa flavescens	0.3	<1
Hypocalymma robustum	0.3	<1
**Ursinia anthemoides*	0.2	2
Hybanthus calycinus	0.2	<1
Gompholobium tomentosum	0.2	<1
Scaevola repens	0.1	10
Alexgeorgea nitens	0.1	5
Stylidium brunonianum	0.1	<1
Conostylis setigera	0.1	<1
Caladenia flava	0.1	<1
Hibbertia racemosa	0.1	<1
Podotheca angustifolia	0.1	<1
Waitzia suaveolens	0.1	<1
Xanthosia huegelii	0.1	<1
Trachymene pilosa	<0.1	<1
Poranthera microphylla	<0.1	<1
Phyllangium paradoxum	<0.1	<1
Hyalosperma cotula	<0.1	<1
Levenhookia stipitata	<0.1	<1
Stylidium adpressum	<0.1	<1
**Hypochaeris glabra*	Flat	<1
Drosera erythrorhiza	Flat	<1
Thysanotus manglesianus	Climber	<1

* introduced species

QUADRAT EW6

50 389470 E 6484908 N

Vegetation: *Allocasuarina fraseriana/Banksia attenuata/B. menziesii* Low Open Woodland over *Allocasuarina humilis/Hibbertia hypericoides/Mesomelaena pseudostygia* Open Low Heath
Condition: Very Good
Soil Type: grey-brown sand
Landform: Flat
Date: 30.9.22 and 25.10.22
Recorded by: Paul van der Moezel

QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Banksia menziesii	5	3
Allocasuarina fraseriana	3	3
Banksia attenuata	3	2
Allocasuarina humilis	1	20
Xanthorrhoea brunonis	0.8	<1
Lepidosperma leptostachyum	0.7	<1
**Ehrharta calycina*	0.6	2
**Gladiolus caryophyllaceus*	0.6	<1
Hibbertia hypericoides	0.5	8
Mesomelaena pseudostygia	0.4	5
**Ursinia anthemoides*	0.4	5
Eremaea pauciflora	0.4	2
**Briza maxima*	0.4	1
Dianella revoluta var. *divaricata*	0.4	<1
Stirlingia latifolia	0.4	<1
Daviesia nudiflora	0.4	<1

SPECIES	HEIGHT (m)	COVER (%)
Hovea trisperma	0.4	<1
Thysanotus thyrsoideus	0.4	<1
Conostylis aurea	0.4	<1
Petrophile linearis	0.3	<1
Burchardia congesta	0.3	<1
Daviesia divaricata	0.3	<1
Haemodorum laxum	0.3	<1
Styphelia propinqua	0.3	<1
Austrostipa flavescens	0.3	<1
Desmocladus flexuosus	0.3	<1
Hypocalymma robustum	0.3	<1
Pterostylis vittata	0.3	<1
**Petrorhagia dubia*	0.3	<1
Elythranthera brunonis	0.2	<1
Lomandra caespitosa	0.2	<1
Calectasia narragara	0.2	<1
**Pentameris airoides*	0.2	<1
Trachymene pilosa	0.1	1
Anigozanthos humilis	0.1	<1
Conostylis setigera	0.1	<1
Banksia dallanneyi	0.1	<1
**Wahlenbergia capensis*	0.1	<1
Hyalosperma cotula	0.1	<1
Alexgeorgea nitens	0.1	<1
Conostephium pendulum	0.1	<1
**Sonchus oleraceus*	0.1	<1
Xanthosia huegelii	0.1	<1
Scaevola repens	<0.1	<1
Poranthera microphylla	<0.1	<1
Phyllangium paradoxum	<0.1	<1
Isolepis marginata	<0.1	<1
Crassula colorata	0.1	<1
Levenhookia stipitata	<0.1	<1
**Hypochaeris glabra*	Flat	2
Stylidium piliferum	Flat	<1
Drosera erythrorhiza	Flat	<1
Billardiera heterophylla	Climber	<1

* introduced species

APPENDIX 8

Quadrat Computer Analysis

Plantecology CONSULTING

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ABN 18 849 210 133

8 November 2022

Paul van der Moezel
Managing Director
PGV Environmental
Suite 3, 67 Howe St
Osborne Park Western Australia 6017

Dear Paul,

Plantecology Consulting was commissioned to undertake the numerical analysis and assignment of plot data to existing Floristic Community Types of the Swan Coastal Plain for a site at east Wanneroo. The methods and results outlined below are based on the data as supplied on the 2nd November 2022.

1 Introduction

The remnant vegetation of the southern Swan Coastal Plain (SCP) was surveyed by Gibson et al. (1994) to provide an understanding of the major floristic gradients across the region. The major plant communities (or FCTs) were defined by classifying the data according to the similarities in species composition between plots. When determining the FCT of a new record, a floristic analysis of species composition provides the most robust method that is consistent with the original classification. Presently, a single consistent method for the determination of FCTs for vegetation data in the Swan Coastal Plain is not available. Therefore, it is preferable to use multiple methods and compare the output for the most likely result. All analyses described below were undertaken using R packages Cluster (Maechler et al 2019), Vegclust (De Cáceres et al. 2010), indicspecies (De Cáceres and Legendre 2009), optpart (Roberts 2020) and Vegan (Oksanen et al. 2020).

2 Methods

2.1. Hierarchical Clustering Assignments

Hierarchical agglomerative clustering is the usual first stage in classifying vegetation data into community types. This involves calculating the similarity (or more often, the dissimilarity) between plots within the dataset and then sequentially fusing the plots into groups according to their similarity. This type of method was used in the analysis of the original Swan Coastal Plain dataset (Gibson et al. 1994) and to determine the conservation status of additional plots, data is often added to the original dataset and the analysis re-run (Environmental Protection Authority 2016) . The direct use of the original dataset as the basis for assigning new plot data to the regional classification has some drawbacks, however. Firstly, a hierarchical clustering only applies to the relationships between plots, and the relative distances between them, within that particular dataset. The addition of new data often alters the relative cophenetic distances and disrupts the clustering output. Secondly, as an unsupervised method, hierarchical clustering does not define rules for the membership of the defined groups, and so the addition of new plots requires the rebuilding of the entire hierarchy (De Cáceres and Wiser 2012).

The data for the Swan Coastal Plain regional survey (Gibson et al. 1994) was downloaded from the NatureMap website. This is largely similar to the original survey except for one site (OATES-1), which has now been excluded, resulting in a dataset of 508 plots. The species nomenclature of the original

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dataset was updated to be consistent with current usage. Where original names could not be matched clearly to the updated usage, those taxa were removed from the analysis.

The new data from the East Wanneroo survey was added to the Swan Coastal Plain dataset and the new dataset was then analysed calculating the Bray-Curtis distance coefficient (or resemblance measure) and the flexible beta linkage method (beta = -0.1). Assignment of the East Wanneroo plots was to the nearest distinct group by inspection of the resulting dendrogram. To remove any effect of spatial correlation between the new plots, data was also added to the matrix one plot a time and the analysis re-run.

In practice, there is often less similarity between new plots and the plots of the original group to which it is assigned than between the original plots themselves. That is, new plots are usually most similar to fringing members of the original group.

2.2. Non-hierarchical Clustering Assignments

Non-hierarchical clustering methods often allow new plot data to be added to previous classifications because they are based on the concept that each group or cluster is represented by a prototype i.e. either a centroid or a medoid (a 'type' plot) (De Cáceres and Wiser 2012). Therefore, new observations can be assigned to an existing classification by calculating the distance to the nearest prototype (which may be considered a membership criterion). This approach is conceptually preferable to the hierarchical reconstruction approach because it defines numerical rules that can be consistently applied. However, it also means the original classification needs to be re-analysed using a different method, which can be problematic because not all sites from the original classification may be diagnostic for their respective clusters.

For the analysis of the East Wanneroo data, an updated SCP dataset of core diagnostic plots was used as for the non-hierarchical clustering analysis. The dataset was then analysed using Fuzzy C-Means clustering in the R package Vegclust (De Cáceres et al. 2010). A fuzziness coefficient of 1.1 was chosen to minimise influence from noisy data points. FCTs with too few plots to reliably define or determine a prototype (e.g. FCT 14 with two plots) were removed from the analysis. Similarly, some plots that were regularly being misclassified (such as those from clusters with large internal heterogeneity) were also removed. The final dataset consisted of 344 plots with 1316 taxa representing 38 FCTs. Each site of the East Wanneroo data was then assigned a FCT using function 'vegclass' in the Vegclust (De Cáceres et al. 2010) package.

It should be noted the non-hierarchical clustering approach can provide excellent results when the new plot data is in a near natural state i.e. in 'Excellent' or better condition with an alpha diversity near to that of the Swan Coastal Plain dataset. When the subject vegetation has been disturbed or when there is a high proportion of weed species in the data, non-hierarchical clustering results are often less reliable than those of hierarchical clustering.

3 Results

Cluster analysis of the East Wanneroo plots indicate two associations are present, with one comprising Plots 4 and 6, and the other Plots EW 1, EW 2, 3 EW, and EW 5 (Figure 1). Dividing the dendrogram into 3 groups produced apparent misclassifications and suggested over-splitting rather than any ecologically valid clusters.

The hierarchical clustering assignments indicated that the native vegetation units within the site are most similar to SCP28 – 'Spearwood *Banksia attenuata* or *Banksia attenuata* - *Eucalyptus* woodlands' (Figure 3). Assigning all plots to the Swan Coastal Plain dataset in the same analysis demonstrated the spatial correlation between the plots (Figure 3). All plots cluster together and then are fused with SCP28 in the dendrogram.

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Individual clustering assignments for Plots EW 2, EW 3 and EW 6 were all assigned to SCP28, which is consistent with the assignment of the grouped plots shown in Figure 3. The assignment for Plots EW 1 and EW 5 was to SCP20a - '*Banksia attenuata* woodlands over species rich dense shrublands'. This is inconsistent with other results and the assignment to SCP20a for Plots EW 1 and EW 5 while Plots EW 2 and EW 3 from the same local association is anomalous. Plot EW 4 was assigned to Swan Coastal Plain 20c 'Eastern shrublands and woodlands' in the hierarchical clustering, although it initially fuses with a plot from SCP21c.

The results for the non-hierarchical clustering were consistent with the hierarchical clustering of the grouped plots (Table 1). All but EW 4 were assigned to SCP28 with strengths of membership (a similar concept to probability) exceeding 30%. The secondary membership for these plots was to SCP21c, a pattern which is consistent with plots from SCP28 in the original Swan Coastal Plain dataset. A similarity to SCP20a was demonstrated for Plots EW 1 and EW 3, with strengths of membership of 11.2%.

The non-hierarchical clustering assignment for Plot EW 4 was equivocal. The plot assigned to SCP6 - 'Weed dominated wetlands in heavy soils', which is often seen where species richness within a plot is comparatively low compared to the original Swan Coastal Plain dataset, and the strengths of membership only ranged from 15.5% for SCP28 to 18.2% for SCP6.

Table 1: Results of non - hierarchical analysis for plots from the East Wanneroo survey (Strength of membership shown in brackets).

Plot	FCT of nearest group	FCT of 2nd nearest group	FCT of 3rd nearest group
EW 1	28 (31.4%)	21c (14.2%)	20a (11.2%)
EW 2	28 (38.1%)	21c (17.1%)	23a (4.8%)
EW 3	28 (31.1%)	20a (11.2%)	21c (10.8%)
EW 4	6 (18.2%)	21c (15.8%)	28 (15.5%)
EW 5	28 (35.7%)	21c (15.5%)	5 (6.1%)
EW 6	28 (30.2%)	21c (11.1%)	5 (8.0%)

4 Discussion

The results of the numerical analysis indicate that the most likely FCT for the East Wanneroo site is SCP28 – 'Spearwood *Banksia attenuata* or *Banksia attenuata* - *Eucalyptus* woodlands'. This result is consistent between the hierarchical clustering result for the grouped plots and the non-hierarchical clustering results, as well as for three plots when assigning the plots individually.

There is some relationship with SCP20a - '*Banksia attenuata* woodlands over species rich dense shrublands' with Plots EW 1 and EW 5 assigned to this FCT in the individual analysis. Second and third tier relationships were also observed for Plots EW 1 and EW 3 in the non-hierarchical clustering. However, these results are inconsistent with the cluster analysis for the local groups and as Plots EW 1 and EW 5 are members of the same group as EW 2 and EW 3, which were both assigned to SCP28. The uncertainty in some assignments may be partly due to SCP28 and SCP20a having many species in common, and both show some similarity to communities of the Spearwood Dune System (Gibson et al. (1994). It is more likely that a correct FCT assignment for East Wanneroo site is to SCP28 as the majority of the various analyses point to this. Although less likely, SCP20a may occur within the site.

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5 Conclusion

In summary, the results of numerical analysis indicate that SCP28 – 'Spearwood *Banksia attenuata* or *Banksia attenuata* - *Eucalyptus* woodlands' is the most likely floristic community type present within the site at East Wanneroo. It is less likely that SCP20a occurs within the vegetation at the East Wanneroo site, but the possibility cannot be dismissed given the results of the analysis.

Should you require any further information or have any other queries, please feel free to contact me.

Sincerely yours,

Dr. Shane Chalwell

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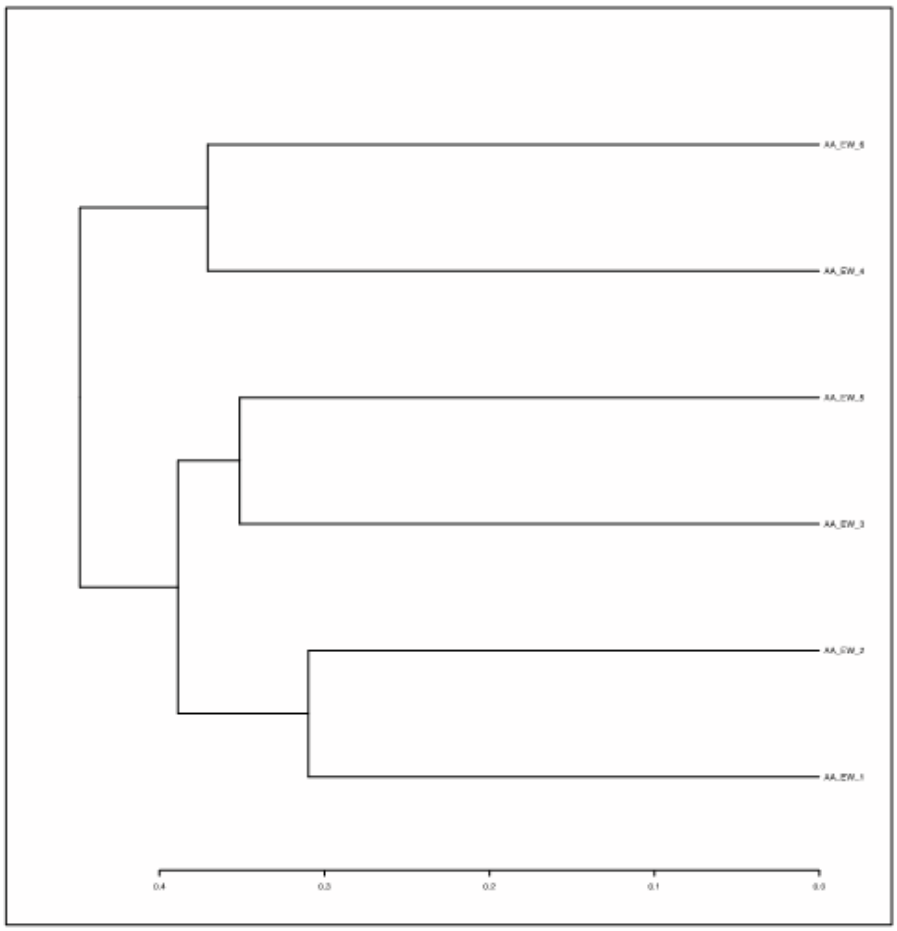

Figure 1: Dendrogram of East Wanneroo plots.

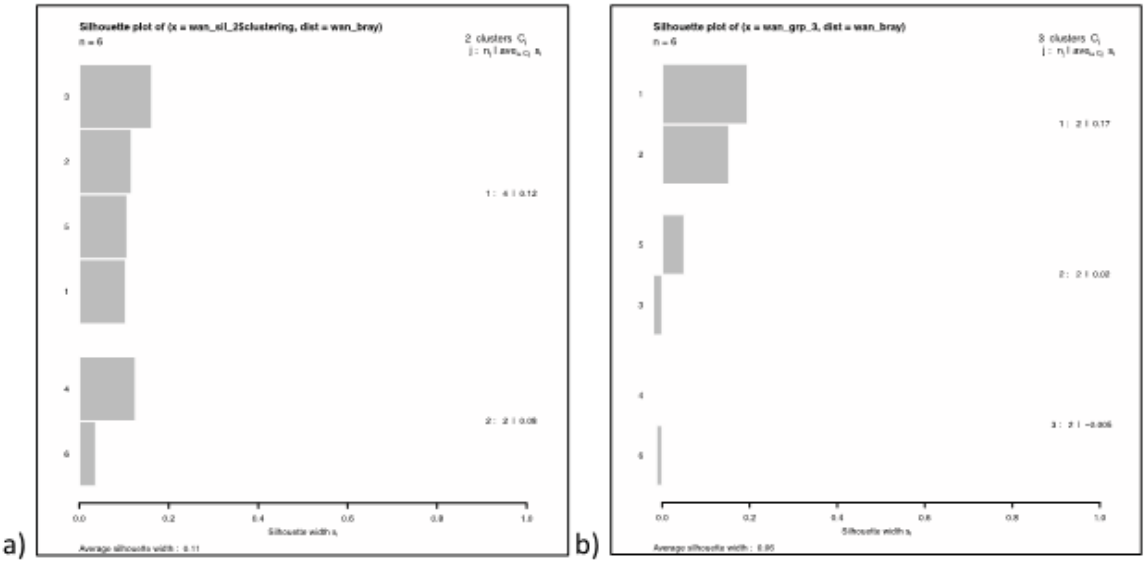

Figure 2: Silhouette plots for a 2 cluster (a) and 3 cluster (b) solution of the dendrogram above. The 3 cluster solution introduces misclassifications by over-splitting.

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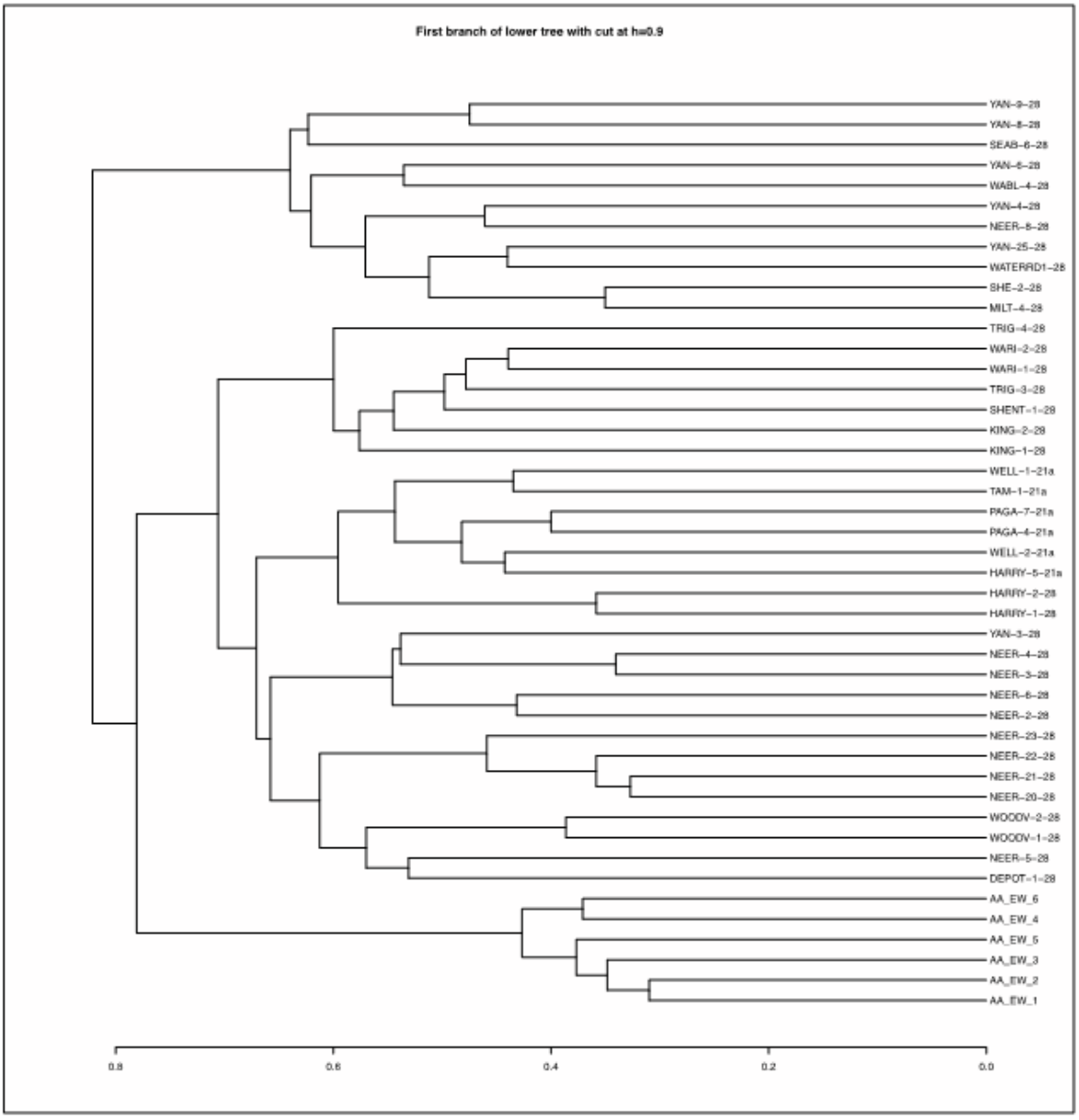

Figure 3: Partial dendrogram for the assignment of all East Wanneroo plots to the Swan Coastal Plain floristic community types.

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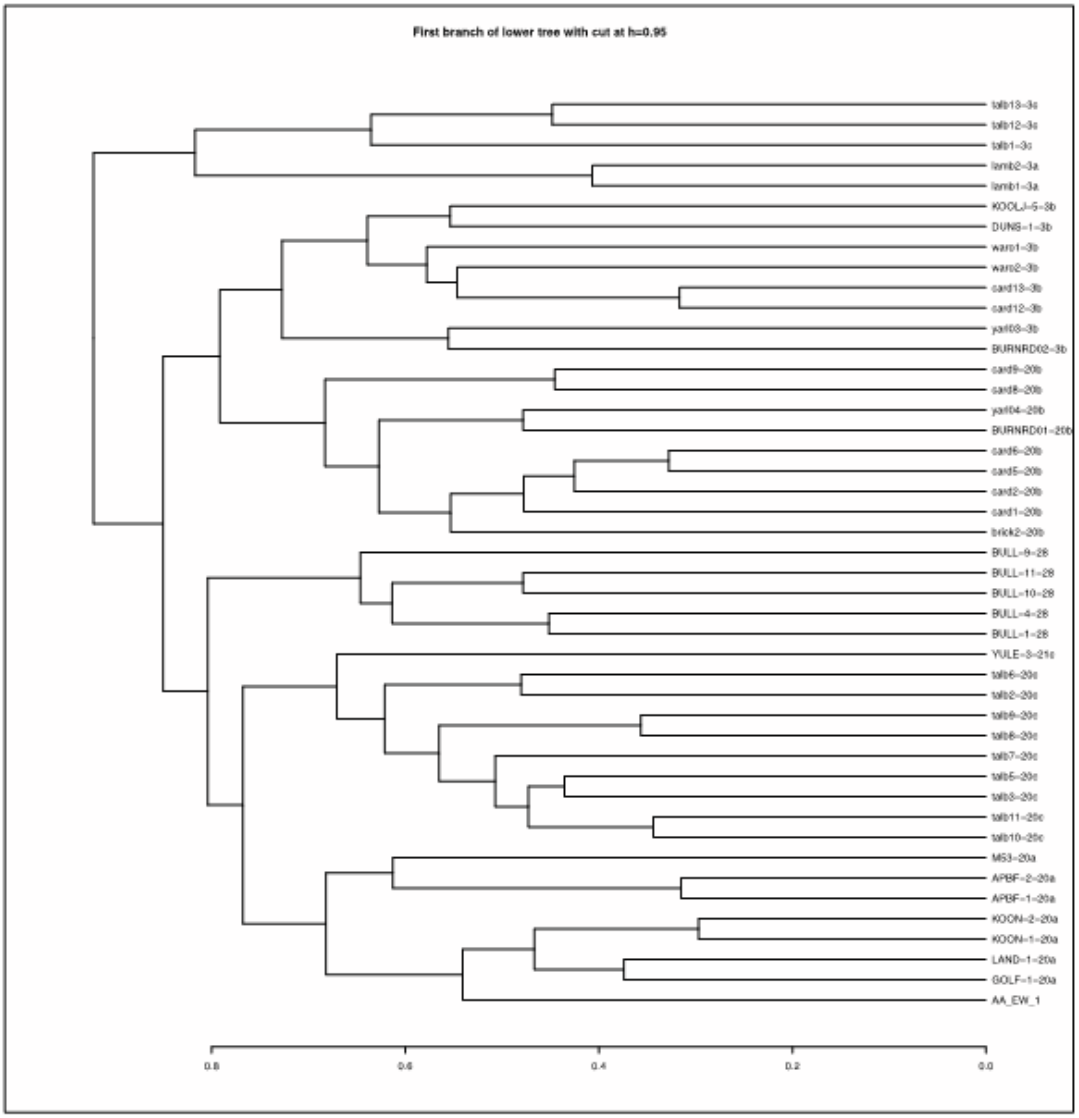

Figure 4: Partial dendrogram for the assignment of Plot EW 1 to Swan Coastal Plain floristic community types.

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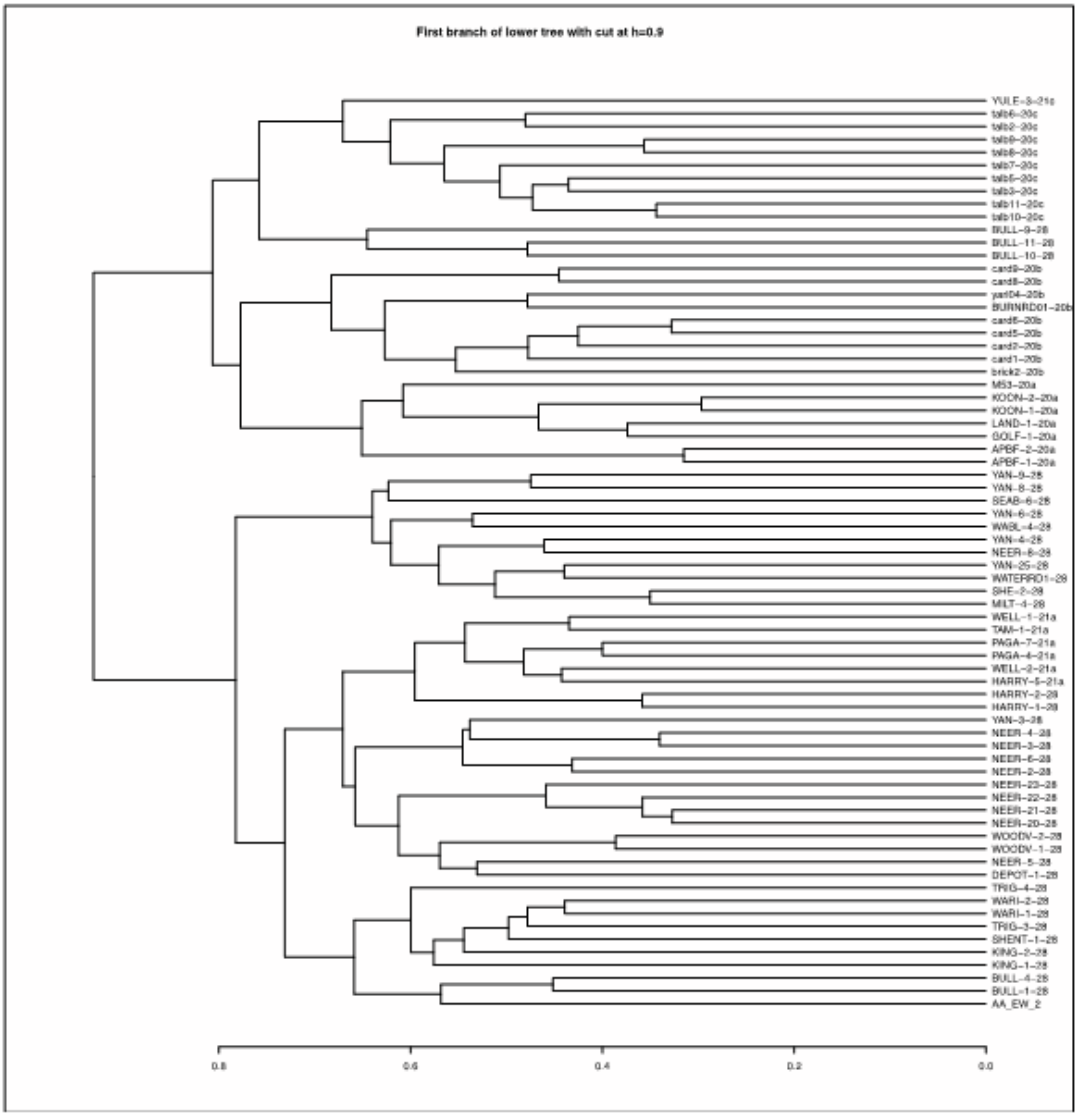

Figure 5: Partial dendrogram for the assignment of Plot EW 2 to Swan Coastal Plain floristic community types.

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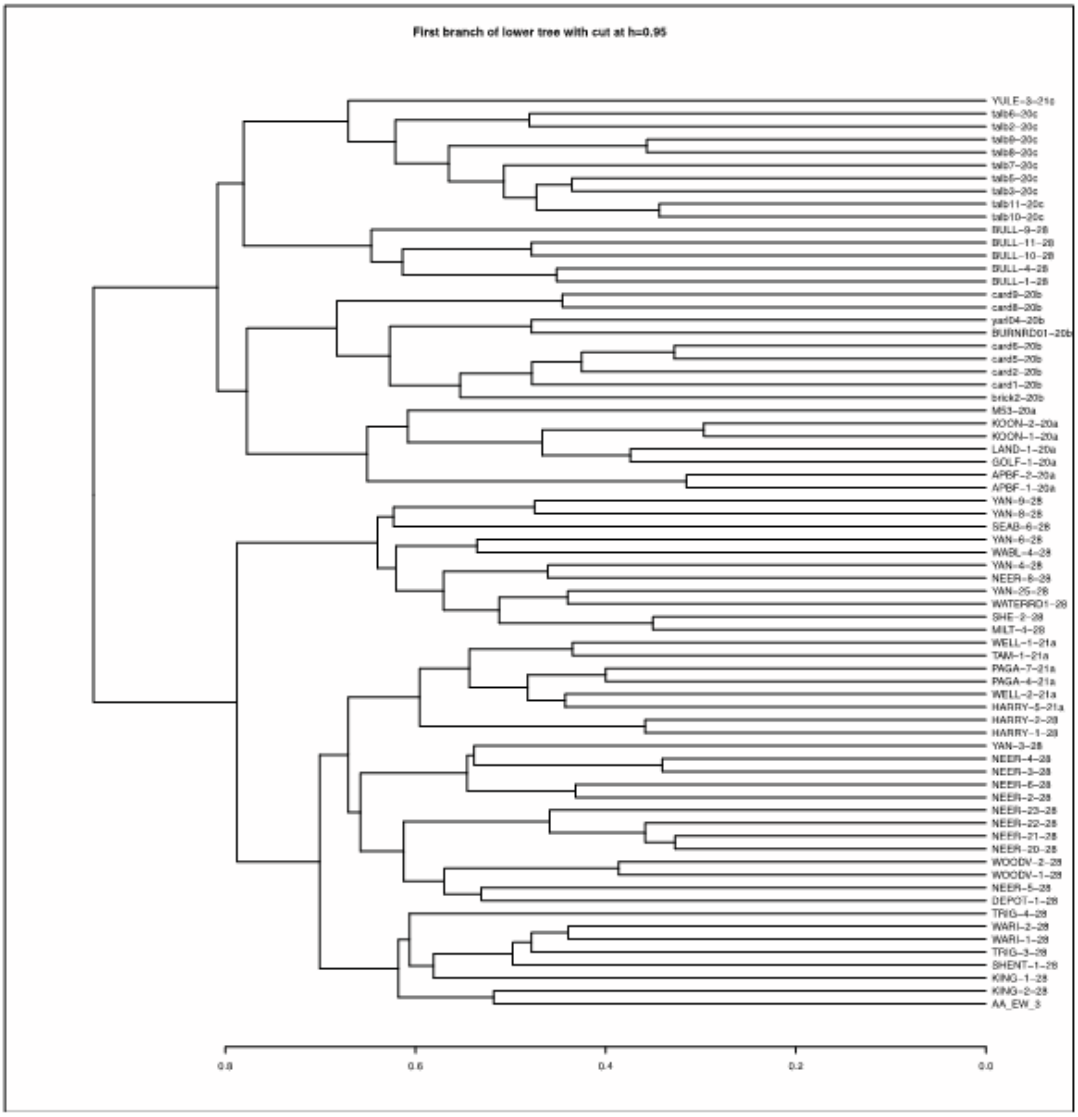

Figure 6: Partial dendrogram for the assignment of Plot EW 3 to Swan Coastal Plain floristic community types.

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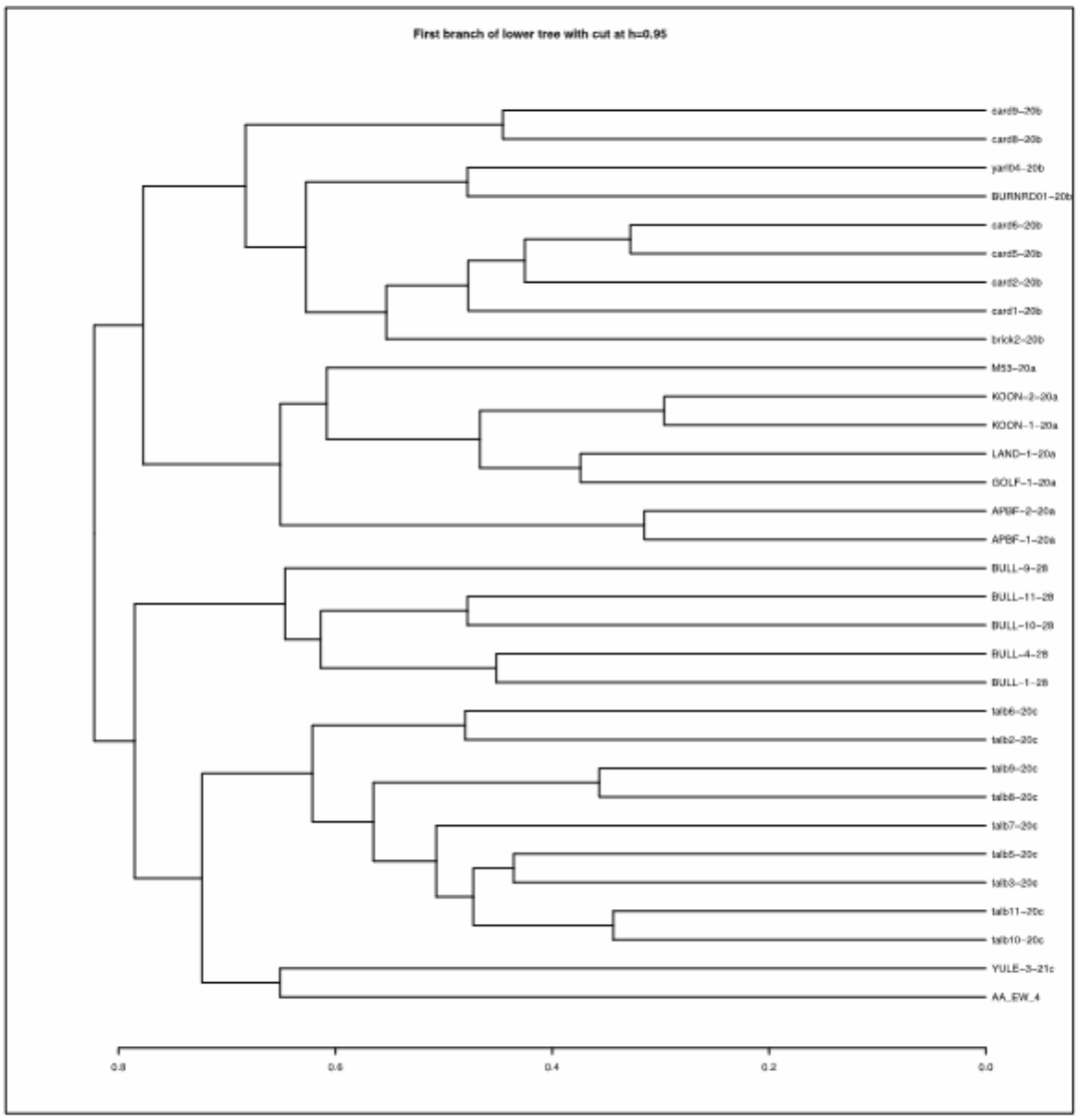

Figure 7: Partial dendrogram for the assignment of Plot EW 4 to Swan Coastal Plain floristic community types.

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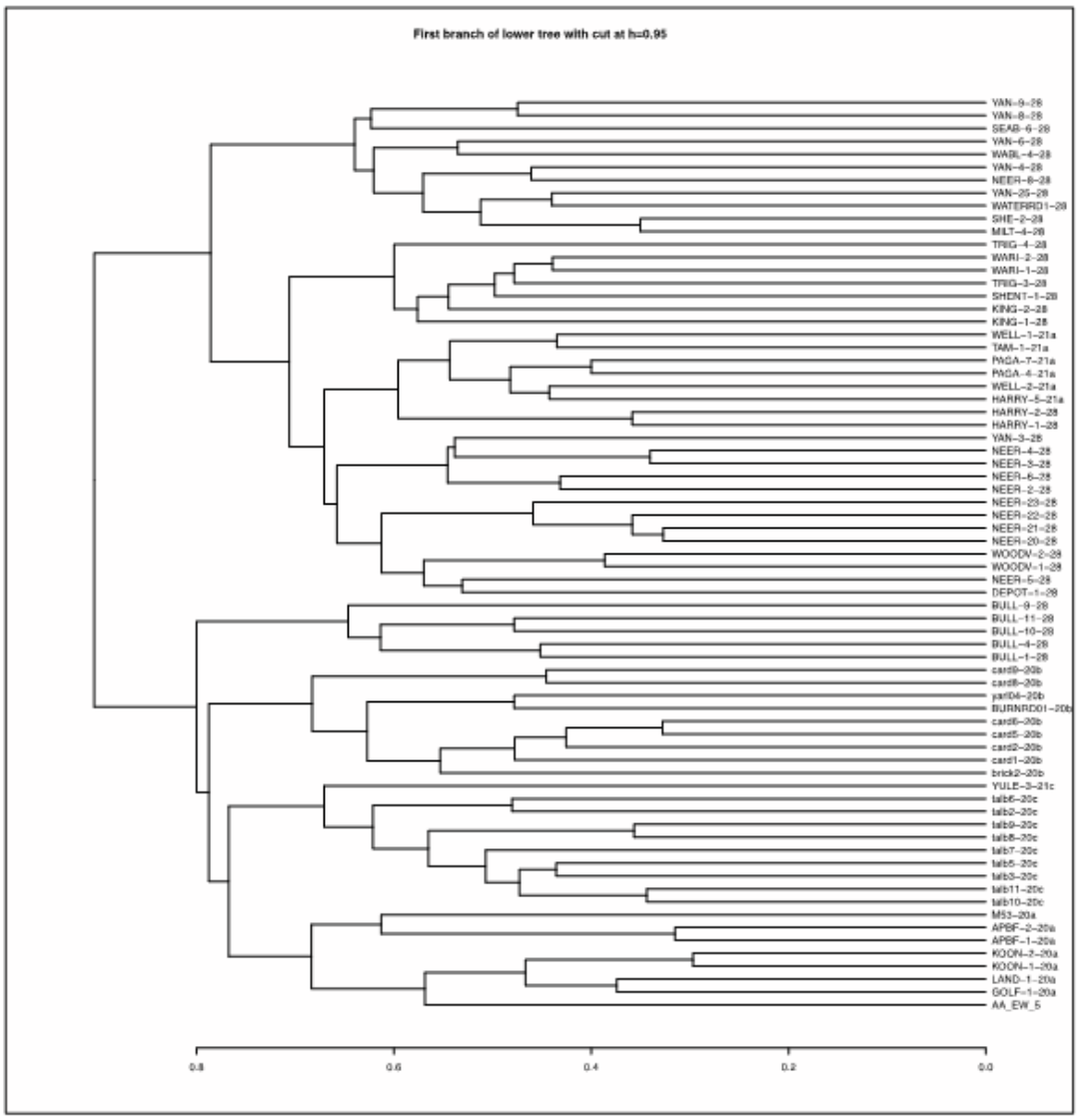

Figure 8: Partial dendrogram for the assignment of Plot EW 5 to Swan Coastal Plain floristic community types.

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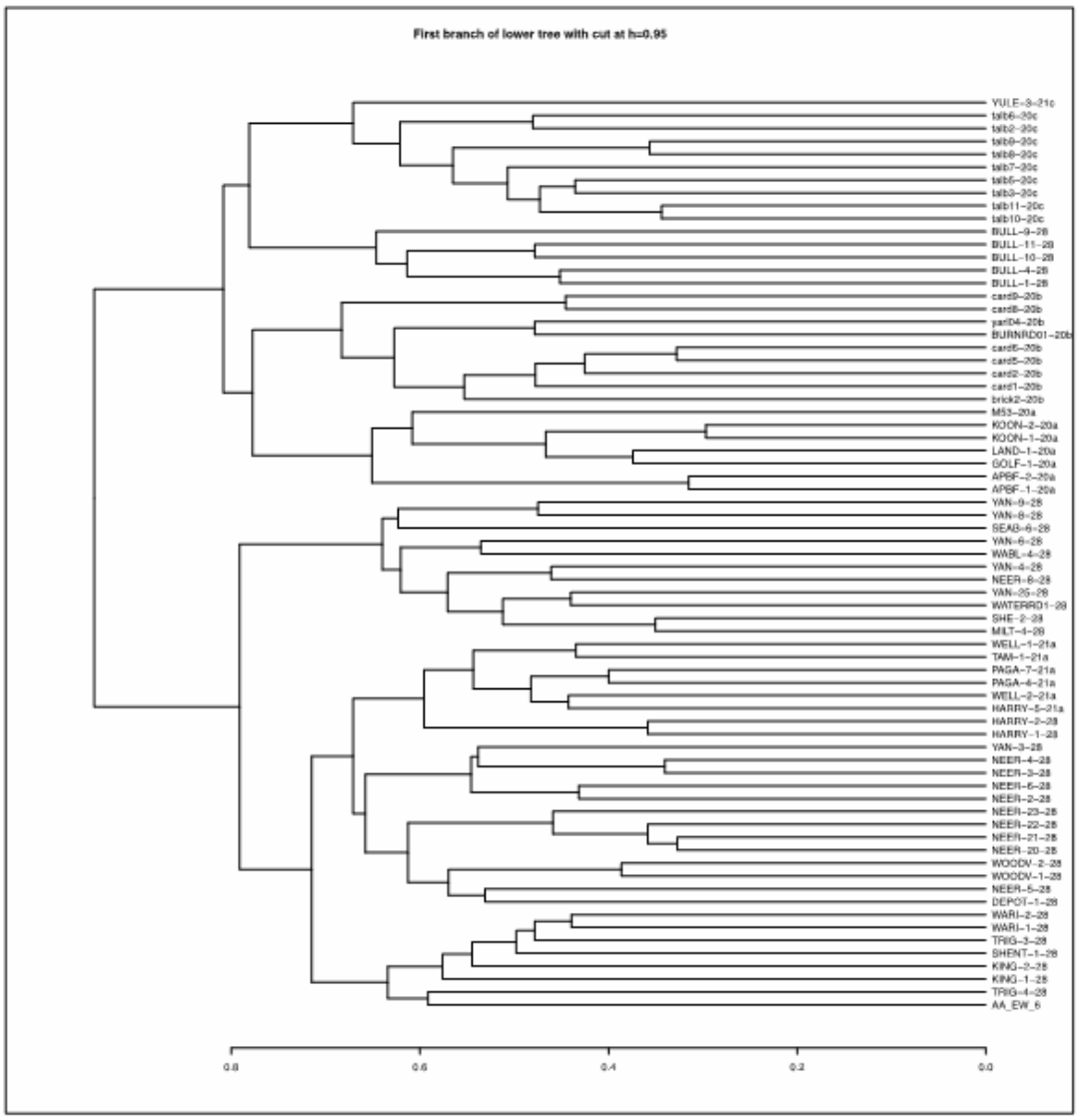

Figure 9: Partial dendrogram for the assignment of Plot EW 6 to Swan Coastal Plain floristic community types.

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6 References

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APPENDIX 9

DBCA Fauna Database Search

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/07/2012	0	CARNABYSCOBS	Very Certain	Targeted Survey	Sighting	0	ALEXANDER HEIGHTS	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/02/2013	12	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	HAMERSLEY	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/03/2013	23	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	GIRRAWHEEN	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/05/2012	30	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BALLAJURA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/05/2013	31	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BALLAJURA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/05/2013	33	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BAYSWATER	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/05/2013	34	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BAYSWATER	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2013	35	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	NORANDA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/06/2013	37	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	PADBURY	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/06/2013	38	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	NORTH BEACH	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/05/2013	40	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BELHUS	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/2012	41	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	MENORA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/05/2013	45	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BALLAJURA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/03/2013	46	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BALGA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/2013	50	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	NORANDA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/05/2013	51	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	MELALEUCA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/05/2013	52	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BAYSWATER	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/05/2013	53	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	INGLEWOOD	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/2013	54	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	MORLEY	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/06/2013	56	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	MENDRA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2013	57	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	STIRLING	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/06/2013	58	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	MORLEY	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/06/2013	62	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	WANGARA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/06/2013	63	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	CARINE	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/06/2013	64	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	DARCH	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2013	65	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	DARCH	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/06/2013	66	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	DARCH	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/06/2013	67	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	LANDSDALE	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/06/2013	68	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	MADELEY	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/08/2013	80	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	GNANGARA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/08/2013	81	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	GNANGARA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/07/2013	84	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BULLSBROOK	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/06/2013	85	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BULLSBROOK	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2013	91	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	ELLENBROOK	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2013	92	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	LEDA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/07/2013	93	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	WANNEROO	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2013	103	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	WEST PERTH	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/02/2013	122	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	KARRINYUP	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/08/2013	125	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	WANNEROO	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/06/2013	126	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	HENLEY BROOK	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/06/2013	127	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	HENLEY BROOK	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2013	129	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	BENNETT SPRINGS	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/05/2013	130	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	MORLEY	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/06/2013	131	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	MORLEY	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/06/2013	132	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	MELALEUCA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/06/2013	133	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	CARINE	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/06/2013	134	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	LANDSDALE	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/03/2013	136	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	GIRRAWHEEN	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/07/2013	137	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	HENLEY BROOK	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/02/2013	139	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	HAMERSLEY	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/03/2013	140	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	HAMERSLEY	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/03/2013	141	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	EDEN HILL	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/06/2013	142	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	DIANELLA	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/06/2013	144	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	EDEN HILL	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/02/2013	148	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	FLOREAT	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2013	154	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	YOKINE	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/05/2013	155	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	LOCKRIDGE	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/10/2016	168	FAUNASURVEY_WLS	Certain		Observation	11	Craigie Bushland	20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/06/2012	169	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	PINJAR	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/10/2016	169	FAUNASURVEY_WLS	Certain		Observation	3	Craigie Bushland	20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/10/2016	170	FAUNASURVEY_WLS	Certain		Observation	1	Craigie Bushland	20
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2016	172	FAUNASURVEY_WLS	Certain		Detected on motion camera	1	Craigie Bushland	20
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2016	173	FAUNASURVEY_WLS	Certain		Detected on motion camera	1	Craigie Bushland	20
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2016	174	FAUNASURVEY_WLS	Certain		Detected on motion camera	1	Craigie Bushland	20
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2016	175	FAUNASURVEY_WLS	Certain		Caught in trap	1	Craigie Bushland	20
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2016	176	FAUNASURVEY_WLS	Certain		Caught in trap	1	Craigie Bushland	20
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2016	177	FAUNASURVEY_WLS	Certain		Caught in trap	1	Craigie Bushland	20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/06/2012	184	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	NOWERGUP	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/06/2012	185	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	NOWERGUP	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/2012	186	CARNABYSROOSTS	Very Certain	Targeted survey	Remote sensing	0	NOWERGUP	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/10/2016	186	FAUNASURVEY_WLS	Certain		Observation	3	Craigie Bushland	20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/10/2016	187	FAUNASURVEY_WLS	Certain		Observation	1	Craigie Bushland	20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/2016	188	FAUNASURVEY_WLS	Certain		Observation	2	Craigie Bushland	20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/2016	190	FAUNASURVEY_WLS	Certain		Observation	2	Craigie Bushland	20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/10/2016	192	FAUNASURVEY_WLS	Certain		Observation	1	Craigie Bushland	20
Caretta caretta	loggerhead turtle	REPTILE	Threatened - Endangered	EN	EN	8/06/1990	258	TFAUNA	Certain	Opportunistic sighting	Dead	1	Floreat	1000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2016	362	FAUNASURVEY_WLS	Certain		Caught in trap	1	Craigie Bushland	20
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2016	363	FAUNASURVEY_WLS	Certain		Caught in trap	1	Craigie Bushland	20
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2016	364	FAUNASURVEY_WLS	Certain		Caught in trap	1	Craigie Bushland	20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/2016	371	FAUNASURVEY_WLS	Certain		Observation	1	Craigie Bushland	400
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/10/1989	675	TFAUNA	Certain	Opportunistic sighting	Sighting	0	Ellenbrook	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/11/1995	1390	TFAUNA	Certain	Survey	Caught or trapped	1	GUMBLOSSOM PARK RESERVE	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/12/1997	1512	TFAUNA	Certain	Survey	Day sightine	1	Landsdale	1000

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Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/04/1993	1513	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup	1000
Ixobrychus flavicollis australis (southwest subsp.)	black bittern (southwest subpop.)	BIRD	Priority	P2		8/08/1987	1514	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/01/1999	1579	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Henley Brook	500
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/11/2016	2823	FAUNASURVEY_WLS	Not Sure		Elliot trap	1	Mindarie	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/11/2016	2827	FAUNASURVEY_WLS	Not Sure		Elliot trap	1	Mindarie	30
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	28/11/2016	2839	FAUNASURVEY_WLS	Certain		Observed	1	Joondalup	300
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/11/1999	3051	TFAUNA	Certain	Survey	Caught or trapped	15	Carramham	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		25/05/2000	3086	TFAUNA	Certain	Survey	Secondary sign	1	Neeralbup National Park	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/05/2000	3087	TFAUNA	Certain	Survey	Secondary sign	1	Neeralbup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/05/2000	3088	TFAUNA	Certain	Survey	Day sighting	10	Neeralbup National Park	1000
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		28/05/2000	3089	TFAUNA	Certain	Survey	Day sighting	1	Neeralbup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/06/2000	3218	TFAUNA	Certain	Opportunistic sighting	Day sighting	100	Currumbine	500
Falco peregrinus	peregrine falcon	BIRD	Specially Protected - other specially protected	OS		20/08/1994	3220	TFAUNA	Certain	Survey	Day sighting	1	Lake Monger	1000
Ixobrychus dubius	Australian little bittern	BIRD	Priority	P4		1/01/1986	3270	TFAUNA	Certain		Day sighting	4	Jandabup	1000
Thalassarche cauta cauta	shy albatross	BIRD	Threatened - Vulnerable	VU	MI	9/08/1998	3321	TFAUNA	Certain		Day sighting	4	Hillarys	10000
Ixobrychus dubius	Australian little bittern	BIRD	Priority	P4		16/03/1997	3370	TFAUNA	Certain		Day sighting	1	Lake Gwelup	1000
Australotomurus morbidus	cemetery sarinatail, Guildford sarinatail	INVERTEBRATE	Priority	P3		20/06/1993	3465	TFAUNA	Certain	Survey	Caught or trapped	3	Tuart Hill	500
Leioproctus contranius	a short-tongued bee	INVERTEBRATE	Priority	P3		1/01/1982	3471	TFAUNA	Certain	Survey	Caught or trapped	1	GNANGARA	10000
Thalassarche cauta cauta	shy albatross	BIRD	Threatened - Vulnerable	VU	MI	5/09/1999	3615	TFAUNA	Certain		Day sighting	9		10000
Ninox connivens connivens (southwest subpop.)	barking owl (southwest subpop.)	BIRD	Priority	P3		8/05/1902	4066	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Herdsman Lake	1000
Thalassarche carteri	Indian yellow-nosed albatross	BIRD	Threatened - Endangered	EN	VU	15/04/1968	4118	TFAUNA	Certain	Historical (written)	Dead	1	Scarborough	1000
Caretta caretta	loggerhead turtle	REPTILE	Threatened - Endangered	EN	EN	11/12/1998	5131	TFAUNA	Certain	Opportunistic sighting	Dead	1	Sorrento	500
Caretta caretta	loggerhead turtle	REPTILE	Threatened - Endangered	EN	EN	16/05/2000	5133	TFAUNA	Certain	Opportunistic sighting	Dead	1	Hillarys	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		9/02/1997	5151	TFAUNA	Certain	Survey	Caught or trapped	2	Whiteman	1000
Eubalaena australis	southern right whale	MAMMAL	Threatened - Vulnerable	VU	EN	14/07/1994	5221	TFAUNA	Certain	Opportunistic sighting	Day sighting	2	Mullaloo	1000
Eubalaena australis	southern right whale	MAMMAL	Threatened - Vulnerable	VU	EN	27/08/1994	5223	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Floreat Beach	1000
Megaptera novaeangliae	humpback whale	MAMMAL	Specially Protected - conservation dependent	CD	VU	6/11/1998	5361	TFAUNA	Certain	Opportunistic sighting	Dead	1	Quinns Rocks	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/12/2000	5565	TFAUNA	Certain	Survey	Caught or trapped	1	Neeralbup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/2000	5566	TFAUNA	Certain	Survey	Caught or trapped	6	Neeralbup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/2000	5567	TFAUNA	Certain	Survey	Caught or trapped	3	Neeralbup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/2000	5568	TFAUNA	Certain	Survey	Caught or trapped	2	Neeralbup	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/12/1997	5730	TFAUNA	Certain	Opportunistic sighting	Sighting	1	Wanneroo	1000
Ixobrychus dubius	Australian little bittern	BIRD	Priority	P4		28/10/2001	5817	TFAUNA	Moderately certain		Secondary sign	0	Wanneroo	1000
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/01/1991	6052	TFAUNA	Certain	Survey	Sighting	40	Whiteman Park	10000
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/01/1996	6053	TFAUNA	Certain	Opportunistic sighting	Dead	1	Whiteman	1000
Austrosaga spinifer	spiny katydid (Swan Coastal Plain)	INVERTEBRATE	Priority	P2		25/12/1981	6302	TFAUNA	Certain	Survey	Caught or trapped	1	Neeralbup National Park	10000
Austrosaga spinifer	spiny katydid (Swan Coastal Plain)	INVERTEBRATE	Priority	P2		9/01/1982	6303	TFAUNA	Certain	Survey	Caught or trapped	1	Neeralbup National Park	10000
Dasyurus geoffroii	chuditch, western quoll	MAMMAL	Threatened - Vulnerable	VU	VU	6/06/2002	6453	TFAUNA	Certain	Survey	Caught or trapped	1	Ellenbrook Estate	1000
Ixobrychus dubius	Australian little bittern	BIRD	Priority	P4		21/12/2001	6465	TFAUNA	Certain			1	Wanneroo	1000
Hylaeus alcibuliferus	woolybush bee	INVERTEBRATE	Priority	P3		11/12/1995	6480	TFAUNA	Certain	Targeted survey	Caught or trapped	0	Neeralbup	10000
Hylaeus globuliferus	woolybush bee	INVERTEBRATE	Priority	P3		29/10/1995	6481	TFAUNA	Certain	Targeted survey	Caught or trapped	0	Neeralbup	10000
Hylaeus globuliferus	woolybush bee	INVERTEBRATE	Priority	P3		7/02/1996	6482	TFAUNA	Certain	Targeted survey	Caught or trapped	0	Neeralbup	10000
Hylaeus globuliferus	woolybush bee	INVERTEBRATE	Priority	P3		8/03/1995	6483	TFAUNA	Certain	Targeted survey	Caught or trapped	0	Neeralbup	10000
Hylaeus globuliferus	woolybush bee	INVERTEBRATE	Priority	P3		11/01/1996	6484	TFAUNA	Certain	Targeted survey	Caught or trapped	0	Melaleuca Conservation Park	10000
Hylaeus globuliferus	woolybush bee	INVERTEBRATE	Priority	P3		12/01/1996	6485	TFAUNA	Certain	Targeted survey	Caught or trapped	0	Melaleuca Conservation Park	10000
Hylaeus globuliferus	woolybush bee	INVERTEBRATE	Priority	P3		26/01/1957	6498	TFAUNA	Certain	Survey	Caught or trapped	1	Mt Yokine	10000
Rostratula australis	Australian painted snipe	BIRD	Threatened - Endangered	EN	EN	18/05/2002	6545	TFAUNA	Certain		Day sighting	1	Glendalough	500
Ixobrychus dubius	Australian little bittern	BIRD	Priority	P4		28/11/1983	6585	TFAUNA	Certain		Day sighting	2	Jandabup Lake Nature Reserve	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		27/03/2002	7111	TFAUNA	Certain	Survey	Day sighting	1	Koondoola	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		27/02/2003	7112	TFAUNA	Certain	Survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		27/03/2002	7113	TFAUNA	Certain	Survey	Day sighting	1	Koondoola	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		27/03/2002	7114	TFAUNA	Certain	Survey	Day sighting	1	Koondoola	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		12/03/2003	7115	TFAUNA	Certain	Survey	Day sighting	1	Koondoola	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		25/03/2003	7116	TFAUNA	Certain	Survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		25/03/2003	7117	TFAUNA	Certain	Survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		11/03/2003	7118	TFAUNA	Certain	Survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		11/03/2003	7119	TFAUNA	Certain	Survey	Day sighting	2	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		11/03/2003	7120	TFAUNA	Certain	Survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		11/03/2003	7121	TFAUNA	Certain	Survey	Day sighting	2	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		11/03/2003	7122	TFAUNA	Certain	Survey	Day sighting	4	Warwick	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/1996	7204	TFAUNA	Certain	Survey	Caught or trapped	5	Whiteman	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/1996	7205	TFAUNA	Certain	Survey	Caught or trapped	6	Whiteman	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/12/1996	7206	TFAUNA	Certain	Survey	Caught or trapped	1	Whiteman	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/12/1996	7207	TFAUNA	Certain	Survey	Caught or trapped	28	Whiteman	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/03/1997	7208	TFAUNA	Certain	Survey	Caught or trapped	4	Whiteman	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/03/1997	7209	TFAUNA	Certain	Survey	Caught or trapped	21	Whiteman	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/1997	7210	TFAUNA	Certain	Survey	Caught or trapped	1	Whiteman	500
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/12/1996	7211	TFAUNA	Certain	Survey	Night sighting	1	Ellenbrook	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/08/2003	7389	TFAUNA	Certain	Opportunistic sighting	Day sighting	2	Wanneroo	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		19/03/1996	7664	TFAUNA	Certain	Survey	Caught or trapped	14	Neeralbup	10000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		1/01/1995	7665	TFAUNA	Certain	Survey	Caught or trapped	0	Neeralbup	10000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		21/03/1996	7666	TFAUNA	Certain	Survey	Caught or trapped	7	Neeralbup	10000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		19/03/1985	7672	TFAUNA	Certain	Survey	Caught or trapped	2	Wanneroo	50000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		18/03/1984	7673	TFAUNA	Certain	Survey	Caught or trapped	18	Wanneroo	50000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/07/2003	7921	TFAUNA	Certain	Community survey	Day sighting	6	Nowergup	10000
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/01/1999	8075	TFAUNA	Certain	Survey	Caught or trapped	160	Whiteman	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8182	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Darch	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2003	8183	TFAUNA	Certain	Opportunistic sighting	Sighting	0	Darch	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8184	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Gnangara	500

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2003	8185	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Gnangara	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8186	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Koondoola	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2003	8187	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	Koondoola	500
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/09/2003	8188	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Koondoola	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2003	8189	TFAUNA	Certain	Opportunistic sighting	Sighting	0	Landsdale	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8190	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Marangaroo	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8191	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Mindarie	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8192	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Mindarie	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8193	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Neerabup	500
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/09/2003	8194	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Neerabup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8195	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Nowergup	500
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/09/2003	8196	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Nowergup	500
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/09/2003	8197	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Nowergup	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2003	8198	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	Pinjar	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8199	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Tamala Park	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2003	8202	TFAUNA	Certain	Opportunistic sighting	Sighting	0	Wanneroo	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2003	8203	TFAUNA	Certain	Opportunistic sighting	Sighting	0	Wanneroo	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8204	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Wanneroo	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8205	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Wanneroo	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2003	8206	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	Wanneroo	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2003	8207	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	Wanneroo	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	8208	TFAUNA	Certain	Opportunistic sighting	Day sighting	0	Ridgewood	500
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	1/07/1982	8404	TFAUNA	Certain	Opportunistic sighting	Sighting	1	Jandabup Lake Nature Reserve	1000
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	1/12/1983	8405	TFAUNA	Certain	Opportunistic sighting	Sighting	1	Jandabup Lake Nature Reserve	1000
Petrogale lateralis lateralis	black-flanked rock-wallaby, black-footed rock-wallaby, mearnorong	MAMMAL	Threatened - Endangered	EN	EN		8557	TFAUNA	Certain	Historical (written)	Fossil	0	Nowergup	10000
Dasyurus geoffroii	chuditch, western quoll	MAMMAL	Threatened - Vulnerable	VU	VU		8558	TFAUNA	Certain	Historical (written)	Fossil	0	Nowergup	10000
Bettongia penicillata ogilbyi	woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN		8559	TFAUNA	Certain	Historical (written)	Fossil	0	Nowergup	10000
Bettongia lesueur graii	boodie (inland), burrowing bettong (inland)	MAMMAL	Extinct	EX	EX		8560	TFAUNA	Certain	Historical (written)	Fossil	0	Nowergup	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4			8561	TFAUNA	Certain	Historical (written)	Fossil	0	Nowergup	10000
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU		8562	TFAUNA	Certain	Historical (written)	Fossil	0	Nowergup	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/08/2001	9181	TFAUNA	Certain	Survey	Caught or trapped	1	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/09/2001	9182	TFAUNA	Certain	Survey	Caught or trapped	1	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/10/2001	9183	TFAUNA	Certain	Survey	Caught or trapped	2	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/10/2001	9184	TFAUNA	Certain	Survey	Caught or trapped	2	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/11/2001	9185	TFAUNA	Certain	Survey	Caught or trapped	3	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/11/2001	9186	TFAUNA	Certain	Survey	Caught or trapped	2	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/11/2001	9187	TFAUNA	Certain	Survey	Caught or trapped	7	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/11/2001	9188	TFAUNA	Certain	Survey	Caught or trapped	5	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/08/2003	9189	TFAUNA	Certain	Survey	Caught or trapped	6	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/08/2003	9190	TFAUNA	Certain	Survey	Caught or trapped	4	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/08/2003	9191	TFAUNA	Certain	Survey	Caught or trapped	6	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/08/2003	9192	TFAUNA	Certain	Survey	Caught or trapped	9	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/08/2003	9193	TFAUNA	Certain	Survey	Caught or trapped	7	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/08/2003	9194	TFAUNA	Certain	Survey	Caught or trapped	9	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/08/2003	9195	TFAUNA	Certain	Survey	Caught or trapped	7	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		29/08/2003	9196	TFAUNA	Certain	Survey	Caught or trapped	7	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		30/09/2003	9197	TFAUNA	Certain	Survey	Caught or trapped	3	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/10/2003	9198	TFAUNA	Certain	Survey	Caught or trapped	8	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/10/2003	9199	TFAUNA	Certain	Survey	Caught or trapped	8	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/10/2003	9200	TFAUNA	Certain	Survey	Caught or trapped	6	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/08/2004	9201	TFAUNA	Certain	Survey	Caught or trapped	7	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/08/2004	9202	TFAUNA	Certain	Survey	Caught or trapped	5	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/08/2004	9203	TFAUNA	Certain	Survey	Caught or trapped	6	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/08/2004	9204	TFAUNA	Certain	Survey	Caught or trapped	8	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/09/2004	9205	TFAUNA	Certain	Survey	Caught or trapped	4	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/09/2004	9206	TFAUNA	Certain	Survey	Caught or trapped	6	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/09/2004	9207	TFAUNA	Certain	Survey	Caught or trapped	3	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/09/2004	9208	TFAUNA	Certain	Survey	Caught or trapped	7	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/09/2004	9209	TFAUNA	Certain	Survey	Caught or trapped	8	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/09/2004	9210	TFAUNA	Certain	Survey	Caught or trapped	5	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/09/2004	9211	TFAUNA	Certain	Survey	Caught or trapped	7	Unnamed Nature Reserve	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		24/06/2004	9212	TFAUNA	Certain	Survey	Caught or trapped	2	Unnamed Nature Reserve	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2017	9623	FAUNASURVEY_WLS	Not Sure		observation	5	Neerabup	30
Falco peregrinus	peregrine falcon	BIRD	Specially Protected - other specially protected	OS		11/06/2003	9785	TFAUNA	Certain	Survey	Caught or trapped	1	Pinjar/Banksia Grove	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/01/2002	9993	TFAUNA	Moderately certain	Survey	Day sighting	1	Caversham	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/01/2002	9994	TFAUNA	Certain	Survey	Dead	1	Noranda	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/01/2002	9995	TFAUNA	Certain	Survey	Dead	1	Beechboro	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/01/2002	9996	TFAUNA	Moderately certain	Survey	Secondary sign	1	Cullacabardee	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/06/2002	9997	TFAUNA	Certain	Survey	Dead	1	Beechboro	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/07/2002	9998	TFAUNA	Certain	Survey	Secondary sign	1	Beechboro	1000
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/01/2002	9999	TFAUNA	Certain	Survey	Day sighting	1	Cullacabardee	1000
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/01/2002	10000	TFAUNA	Certain	Survey	Day sighting	1	Koondoola	1000
Hydromys chrysogaster	water-rat, rakali	MAMMAL	Priority	P4		1/01/2002	10001	TFAUNA	Certain	Survey	Day sighting	0	Caversham	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/08/2003	10002	TFAUNA	Certain	Survey	Caught or trapped	6	Whiteman/West Swan	1000
Hydromys chrysogaster	water-rat, rakali	MAMMAL	Priority	P4		1/08/2003	10003	TFAUNA	Certain	Survey	Dead	1	Caversham	1000
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/08/2003	10004	TFAUNA	Certain	Survey	Dead	5	Cullacabardee	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2004	10387	TFAUNA	Certain	Survey	Caught or trapped	4	Whiteman	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2004	10388	TFAUNA	Certain	Survey	Caught or trapped	8	Whiteman	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/08/2005	10402	TFAUNA	Certain	Survey	Caught or trapped	27	Ellenbrook	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2004	10668	TFAUNA	Certain	Targeted survey	Day sighting	1	Wanwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2004	10669	TFAUNA	Certain	Targeted survey	Day sighting	1	Wanwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2004	10670	TFAUNA	Certain	Targeted survey	Day sighting	1	Wanwick	50

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2004	10671	TFAUNA	Certain	Targeted survey	Day sighting	3	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2004	10672	TFAUNA	Certain	Targeted survey	Day sighting	3	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2004	10673	TFAUNA	Certain	Targeted survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2004	10674	TFAUNA	Certain	Targeted survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2004	10675	TFAUNA	Certain	Targeted survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		25/03/2004	10676	TFAUNA	Certain	Targeted survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		18/03/2005	10677	TFAUNA	Certain	Targeted survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		19/03/2005	10678	TFAUNA	Certain	Targeted survey	Day sighting	2	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		19/03/2005	10679	TFAUNA	Certain	Targeted survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		8/04/2004	10680	TFAUNA	Certain	Targeted survey	Day sighting	1	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2004	10681	TFAUNA	Certain	Targeted survey	Day sighting	1	Alexander Heights	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2004	10682	TFAUNA	Certain	Targeted survey	Day sighting	1	Marangaroo	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2004	10683	TFAUNA	Certain	Targeted survey	Day sighting	1	Marangaroo	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2004	10684	TFAUNA	Certain	Targeted survey	Day sighting	1	Marangaroo	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		23/03/2004	10686	TFAUNA	Certain	Targeted survey	Day sighting	1	Koondoola	50
Falco peregrinus	peregrine falcon	BIRD	Specially Protected - other specially protected	OS		26/02/2005	11003	TFAUNA	Certain	Community survey	Day sighting	1	Lake Joondalup Nature Reserve	10000
Physeter macrocephalus	sperm whale	MAMMAL	Threatened - Vulnerable	VU	MI	2/05/1987	11060	TFAUNA	Certain	Opportunistic sighting	Dead	1	Quinns Rocks	10000
Procellaria aequinoctialis	white-chinned petrel	BIRD	Threatened - Vulnerable	VU	MI	21/06/2000	11191	TFAUNA	Certain	Survey	Caught or trapped	1	Mullaloo	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		18/03/2006	11960	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Warwick	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/05/2006	11963	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Burns Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/04/2005	11424	TFAUNA	Certain	Survey	Caught or trapped	24	Whiteman	1000
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		1/04/2006	11784	TFAUNA	Certain	Survey	Day sighting	1	Pinjar	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/2006	11785	TFAUNA	Certain	Survey	Day sighting	1	Pinjar	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/2006	11786	TFAUNA	Certain	Survey	Day sighting	1	Pinjar	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/2006	11787	TFAUNA	Certain	Survey	Day sighting	1	Pinjar	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/2006	11788	TFAUNA	Certain	Survey	Day sighting	1	Pinjar	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/04/2006	11789	TFAUNA	Certain	Survey	Secondary sign	0	Pinjar	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/04/2006	11790	TFAUNA	Certain	Survey	Secondary sign	0	Pinjar	1000
Falco peregrinus	peregrine falcon	BIRD	Specially Protected - other specially protected	OS		31/07/2005	11920	TFAUNA	Certain	Community survey	Day sighting	1	Whiteman Park	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		15/05/2005	11921	TFAUNA	Certain	Community survey	Day sighting	550	Pinjar	1000
Dasyurus geoffroii	chuditch, western quoll	MAMMAL	Threatened - Vulnerable	VU	VU	1/08/2006	12151	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Bullsbrook	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/07/2003	12212	TFAUNA	Certain	Survey	Dead	1	West Swan	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/09/2003	12217	TFAUNA	Certain	Survey	Dead	1	Osbourne Park	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/02/2006	12589	TFAUNA	Certain	Survey	Caught or trapped	1	Ellenbrook	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		30/03/2006	12590	TFAUNA	Certain	Survey	Caught or trapped	1	Ellenbrook	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/04/2007	13092	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/04/2007	13093	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/04/2007	13094	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/04/2007	13095	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/04/2007	13096	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/04/2007	13097	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/04/2007	13098	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/04/2007	13099	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/04/2007	13100	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/04/2007	13101	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/04/2007	13102	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/04/2007	13103	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/04/2007	13104	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/04/2007	13105	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/04/2007	13106	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/04/2007	13107	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/04/2007	13108	TFAUNA	Certain	Survey	Caught or trapped	1	Cawersham	500
Hydromys chrysogaster	water-rat, rakali	MAMMAL	Priority	P4		18/07/2007	13116	TFAUNA	Certain	Survey	Caught or trapped	1	Ellenbrook	500
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		1/10/1999	14715	TFAUNA	Certain	Survey	Caught or trapped	4	Ellenbrook	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		16/11/1971	15106	TFAUNA	Certain	Survey	Caught or trapped	1	Whitfords	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		16/02/1970	15108	TFAUNA	Certain	Survey	Caught or trapped	1	Scarborough	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		1/01/1964	15109	TFAUNA	Certain	Survey	Caught or trapped	1	Sorrento	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		14/07/1972	15110	TFAUNA	Certain	Survey	Caught or trapped	1	Wanneroo	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		11/07/1978	15113	TFAUNA	Certain	Survey	Caught or trapped	1	Mullaloo	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		1/06/1959	15115	TFAUNA	Certain	Survey	Caught or trapped	1	Reabold Hill	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		12/05/1967	15116	TFAUNA	Certain	Survey	Caught or trapped	1	Quinns Rocks	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		8/10/1959	15119	TFAUNA	Certain	Survey	Caught or trapped	1	North Beach	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		8/03/2000	15120	TFAUNA	Certain	Survey	Caught or trapped	1	Ellenbrook	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		22/05/1964	15127	TFAUNA	Certain	Survey	Caught or trapped	1	Dianella	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		22/02/1978	15129	TFAUNA	Certain	Survey	Caught or trapped	1	Melaleuca Park	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		27/11/1958	15133	TFAUNA	Certain	Survey	Caught or trapped	1	Dianella	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		26/07/2003	15134	TFAUNA	Certain	Survey	Caught or trapped	1	Muchea	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		30/03/1965	15141	TFAUNA	Certain	Survey	Caught or trapped	1	Mt Lawley	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		28/11/1995	15143	TFAUNA	Certain	Survey	Caught or trapped	1	Trigg	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		1/01/1952	15144	TFAUNA	Certain	Survey	Caught or trapped	1	Inglewood	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		30/10/1962	15145	TFAUNA	Certain	Survey	Caught or trapped	1	Embleton	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		1/08/1971	15148	TFAUNA	Certain	Survey	Caught or trapped	2	Sorrento	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		2/06/1983	15149	TFAUNA	Certain	Survey	Caught or trapped	1	Gnangara	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		1/01/1954	15151	TFAUNA	Certain	Survey	Caught or trapped	1	Mt Yokine	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		3/04/1976	15153	TFAUNA	Certain	Survey	Caught or trapped	1	Melaleuca Park	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		5/11/2003	15154	TFAUNA	Certain	Survey	Caught or trapped	1	Muchea	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		5/08/1969	15155	TFAUNA	Certain	Survey	Caught or trapped	1	Dianella	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		6/09/1986	15156	TFAUNA	Certain	Survey	Caught or trapped	1	Padbury	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15157	TFAUNA	Certain	Historical (written)	Caught or trapped	4	Mt Lawley	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15158	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Maylands	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15159	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Maylands	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15164	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Bedford Park	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15166	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Scarborough	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15168	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Leederville	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15172	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Bayswater	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15173	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Bayswater	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15174	TFAUNA	Certain	Historical (written)	Caught or trapped	8	Bayswater	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15177	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Wanneroo	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15178	TFAUNA	Certain	Historical (written)	Caught or trapped	1	North Perth	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15180	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Bedford Park	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15182	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Inglewood	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15184	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Beechboro	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15185	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Mt Lawley	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15186	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Mt Lawley	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15187	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Guildford	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15188	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Caversham	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15190	TFAUNA	Certain	Historical (written)	Caught or trapped	1	North Beach	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15191	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Bedford Park	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3			15192	TFAUNA	Certain	Historical (written)	Caught or trapped	2	Mt Lawley	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/12/2007	15210	TFAUNA	Certain	Survey	Day sighting	2	Muchea	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/12/2007	15211	TFAUNA	Certain	Survey	Caught or trapped	2	Muchea	500
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		11/03/2008	15311	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Sorrento	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/05/2008	15391	TFAUNA	Certain	Survey	Caught or trapped	5	Caversham	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		11/03/2008	15399	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	6	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2008	15400	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Koondoola	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		12/03/2008	15401	TFAUNA	Certain	Opportunistic sighting	Day sighting	2	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2008	15402	TFAUNA	Certain	Opportunistic sighting	Day sighting	7	Warwick	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2009	16545	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Kallaroo	500
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2009	16546	TFAUNA	Certain	Opportunistic sighting	Day sighting	2	Ocean Reef	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		9/03/2009	16547	TFAUNA	Certain	Opportunistic sighting	Day sighting	4	Warwick	500
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2009	16548	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		15/03/2009	16549	TFAUNA	Certain	Opportunistic sighting	Day sighting	2	Kallaroo	500
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		15/03/2009	16550	TFAUNA	Certain	Opportunistic sighting	Day sighting	4	Craigie	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		16/03/2009	16551	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		16/03/2009	16552	TFAUNA	Certain	Opportunistic sighting	Day sighting	4	Craigie	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		16/03/2009	16553	TFAUNA	Certain	Opportunistic sighting	Day sighting	7	Craigie	500
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		16/03/2009	16554	TFAUNA	Certain	Opportunistic sighting	Day sighting	4	Craigie	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		22/03/2009	16555	TFAUNA	Certain	Opportunistic sighting	Day sighting	5	Warwick	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		27/03/2009	16556	TFAUNA	Certain	Opportunistic sighting	Day sighting	12	Burns Beach	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2009	16657	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2009	16658	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2009	16659	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2009	16660	TFAUNA	Certain	Targeted survey	Day sighting	2	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2009	16661	TFAUNA	Certain	Targeted survey	Day sighting	2	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		16/03/2009	16662	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		16/03/2009	16663	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		16/03/2009	16664	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		16/03/2009	16665	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		16/03/2009	16666	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		24/03/2009	16667	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		24/03/2009	16668	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		24/03/2009	16669	TFAUNA	Certain	Targeted survey	Day sighting	2	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		24/03/2009	16670	TFAUNA	Certain	Targeted survey	Day sighting	1	Ocean Reef	50
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		24/03/1971	16674	TFAUNA	Certain	Survey	Caught or trapped	1	Sorrento	10000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		1/01/2004	16676	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Darch	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		1/04/2005	16677	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Quinns Rocks	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2002	16747	TFAUNA	Certain	Opportunistic sighting	Day sighting	16	Westminster	50
Cacatua pastinator pastinator	Muir's corella	BIRD	Specially Protected - conservation dependent	CD			18040	TFAUNA	Moderately certain	Historical (written)	Day sighting	0	MOUNT LAWLEY	50000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/09/2009	18589	TFAUNA	Certain	Opportunistic sighting	Day sighting	3	Hocking	50
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	30/08/2003	18723	TFAUNA	Certain	Community survey	Secondary sign	0	Herdsman	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2004	18850	TFAUNA	Moderately certain	Monitoring	Day sighting	12	Wanneroo	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/2004	18851	TFAUNA	Not sure	Monitoring	Secondary sign	0	GNANGARA	10000
Dasyurus geoffroii	chuditch, western quoll	MAMMAL	Threatened - Vulnerable	VU	VU	21/10/2010	19140	TFAUNA	Certain	Opportunistic sighting	Day sighting	1		1000
Megaptera novaeangliae	humpback whale	MAMMAL	Specially Protected - conservation dependent	CD	VU	11/06/2002	19249	TFAUNA	Certain	Survey	Caught or trapped	1		1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	23/12/2011	19254	TFAUNA	Certain	Opportunistic sighting	Day sighting	1		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/01/2012	19270	TFAUNA	Certain	Opportunistic sighting	Day sighting	10		50
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	1/01/2012	19280	TFAUNA	Certain	Opportunistic sighting	Day sighting	6		1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	1/01/2012	19281	TFAUNA	Not defined	Opportunistic sighting	Day sighting	8		1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		1/05/2012	19435	TFAUNA	Certain	Opportunistic sighting	Day sighting	12		1000
Chelonia mydas	green turtle	REPTILE	Threatened - Vulnerable	VU	VU	22/06/2010	19565	TFAUNA	Certain	Opportunistic sighting	Dead	1		1000
Macronectes giganteus	southern giant petrel	BIRD	Specially Protected - migratory	MI	EN	17/07/2009	19566	TFAUNA	Certain	Survey	Caught or trapped	1		1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/06/2012	19573	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	0		1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	19/12/2011	19829	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	20		1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	1/12/2010	19851	TFAUNA	Certain	Opportunistic sighting	Day sighting	1		1000
Chelonia mydas	green turtle	REPTILE	Threatened - Vulnerable	VU	VU	28/07/2008	20017	TFAUNA	Certain	Opportunistic sighting	Dead	1		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20042	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20049	TFAUNA	Moderately certain	Community survey	Day sighting	275	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20050	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20053	TFAUNA	Moderately certain	Community survey	Day sighting	500	Gnangara-Moore River State Forest	1000
Calonectris leucomelas	streaked shearwater	BIRD	Specially Protected - migratory	MI	MI	7/04/2010	20065	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20089	TFAUNA	Moderately certain	Community survey	Day sighting	562	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/05/2010	20090	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20091	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20093	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000

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Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20100	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20102	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/05/2010	20103	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20113	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20114	TFAUNA	Moderately certain	Community survey	Secondary sign	185	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20118	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20123	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/05/2010	20124	TFAUNA	Moderately certain	Community survey	Secondary sign	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/07/2010	20125	TFAUNA	Moderately certain	Community survey	Day sighting	12		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20127	TFAUNA	Moderately certain	Community survey	Day sighting	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20131	TFAUNA	Moderately certain	Community survey	Day sighting	0		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/04/2010	20141	TFAUNA	Moderately certain	Community survey	Day sighting	400	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/04/2010	20146	TFAUNA	Moderately certain	Community survey	Day sighting	100	Jandabup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20166	TFAUNA	Moderately certain	Community survey	Day sighting	275	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20167	TFAUNA	Moderately certain	Community survey	Day sighting	27	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/04/2010	20176	TFAUNA	Moderately certain	Community survey	Day sighting	858	Marijinup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20177	TFAUNA	Moderately certain	Community survey	Day sighting	15	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20178	TFAUNA	Moderately certain	Community survey	Day sighting	604	Kwinana	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2010	20181	TFAUNA	Moderately certain	Community survey	Day sighting	64	Gnangara-Moore River State Forest	1000
Caretta caretta	loggerhead turtle	REPTILE	Threatened - Endangered	EN	EN	11/01/2003	20184	TFAUNA	Moderately certain	Survey	Caught or trapped	1		1000
Notamacropus irma	western brush wallaby	MAMMAL	Priority	P4		18/05/2012	20191	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Mirrabooka	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	23/07/2012	20640	TFAUNA	Certain	Opportunistic sighting	Day sighting	12	Kinsley	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/09/2017	20873	FAUNASURVEY WLS	Certain		observation	3	Neerabup National Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/08/2012	20979	TFAUNA	Certain	Opportunistic sighting	Day sighting	3	Beechboro	50
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	11/09/2012	21158	TFAUNA	Certain	Opportunistic sighting	Day sighting	23	Maylands	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	5/09/2012	21159	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	5	Maylands	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/08/2012	21170	TFAUNA	Certain	Opportunistic sighting	Day sighting	5	Joondalup	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		1/10/1999	21219	TFAUNA	Certain	Survey	Caught or trapped	3	Ellenbrook	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		1/10/1999	21220	TFAUNA	Certain	Survey	Caught or trapped	1	Ellenbrook	1000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		1/10/1999	21221	TFAUNA	Certain	Survey	Caught or trapped	1	Ellenbrook	1000
Ctenotus gemmula (Swan Coastal Plain population)	jewelled southwest Ctenotus (Swan Coastal Plain population)	REPTILE	Priority	P3		1/10/1999	21222	TFAUNA	Certain	Survey	Caught or trapped	1	Ellenbrook	1000
Ctenotus gemmula (Swan Coastal Plain population)	jewelled southwest Ctenotus (Swan Coastal Plain population)	REPTILE	Priority	P3		1/10/1999	21223	TFAUNA	Certain	Survey	Caught or trapped	1	Ellenbrook	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2012	21225	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	3	Gnangara	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/10/2012	21226	TFAUNA	Moderately certain	Opportunistic sighting	Dead	1	Gnangara	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/10/2012	21227	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Gnangara	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		25/10/2012	21229	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Gnangara	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/10/2012	21265	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1		1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2003	21353	TFAUNA	Certain	Targeted survey	Day sighting	6500	Tamala Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/2004	21356	TFAUNA	Certain	Targeted survey	Day sighting	7000	Mariginup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/02/2005	21357	TFAUNA	Certain	Targeted survey	Day sighting	1000	Ellenbrook	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/02/2005	21358	TFAUNA	Certain	Targeted survey	Day sighting	3000	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/03/2012	21359	TFAUNA	Certain	Targeted survey	Day sighting	3000	Landsdale	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2006	21360	TFAUNA	Certain	Targeted survey	Day sighting	500	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/06/2009	21365	TFAUNA	Certain	Targeted survey	Day sighting	250	Beechboro	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/05/2010	21366	TFAUNA	Certain	Targeted survey	Day sighting	600	Wanneroo	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2005	21368	TFAUNA	Certain	Targeted survey	Day sighting	800	Burns Beach	10000
Neelaps calonotos	black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		4/11/2012	21390	TFAUNA	Moderately certain	Opportunistic sighting	Dead	1	Mirrabooka	1000
Falco peregrinus	peregrine falcon	BIRD	Specially Protected - other specially protected	OS		14/12/2012	21465	TFAUNA	Certain	Opportunistic sighting	Day sighting	3	Wanneroo	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/01/2013	22160	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Wanneroo	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/10/2012	22166	TFAUNA	Certain	Opportunistic sighting	Dead	1	Mindarie	1000
Chelonia mydas	green turtle	REPTILE	Threatened - Vulnerable	VU	VU	6/10/2012	22257	TFAUNA	Not sure	Opportunistic sighting	Day sighting	1	Marmion Marine Park	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/01/2013	22703	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	The Vines	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/02/2013	22834	TFAUNA	Certain	Opportunistic sighting	Day sighting	100	Pinjar	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/02/2013	22835	TFAUNA	Certain	Opportunistic sighting	Day sighting	100	Pinjar	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/02/2013	22879	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Ocean Reef	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/05/2013	23053	TFAUNA	Moderately certain	Opportunistic sighting	Night sighting	1	Aveley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		29/05/2013	23153	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Burns Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/05/2013	23175	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Wanneroo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		25/01/2013	23186	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Pearsall	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2006	23248	TFAUNA	Certain	Survey	Day sighting	10	Neerabup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/06/2013	23427	TFAUNA	Certain	Opportunistic sighting	Day sighting	200	Kinross	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/07/2013	23436	TFAUNA	Moderately certain	Survey	Caught or trapped	1	Jandabup	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		24/07/2013	23438	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Kinsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/07/2013	23439	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Kinsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/06/2013	23442	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Burns Beach	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/12/2005	23527	TFAUNA	Certain	Targeted survey	Day sighting	20	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/12/2005	23529	TFAUNA	Certain	Targeted survey	Day sighting	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/12/2005	23535	TFAUNA	Certain	Targeted survey	Day sighting	70	Wanjara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/12/2005	23536	TFAUNA	Certain	Targeted survey	Day sighting	50	Kingsley	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/12/2005	23539	TFAUNA	Certain	Targeted survey	Day sighting	36	Nollamara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23544	TFAUNA	Certain	Targeted survey	Day sighting	7	Wembley	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23545	TFAUNA	Certain	Targeted survey	Day sighting	469	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23546	TFAUNA	Certain	Targeted survey	Day sighting	29	Jandabup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23547	TFAUNA	Certain	Targeted survey	Day sighting	22	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23552	TFAUNA	Certain	Targeted survey	Day sighting	1	Gnangara-Moore River State Forest	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23553	TFAUNA	Certain	Targeted survey	Day sighting	321	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23557	TFAUNA	Certain	Targeted survey	Day sighting	275	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23559	TFAUNA	Certain	Targeted survey	Day sighting	50	Marigimup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23561	TFAUNA	Certain	Targeted survey	Day sighting	320	Carabooda	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23572	TFAUNA	Certain	Targeted survey	Day sighting	2	Koondoola	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23574	TFAUNA	Certain	Targeted survey	Day sighting	1	Edgewater	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23585	TFAUNA	Certain	Targeted survey	Day sighting	50	Joondalup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23587	TFAUNA	Certain	Targeted survey	Day sighting	11	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23593	TFAUNA	Certain	Targeted survey	Day sighting	20	Sinagra	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	23594	TFAUNA	Certain	Targeted survey	Day sighting	31	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23605	TFAUNA	Certain	Targeted survey	Day sighting	18	Warwick	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23609	TFAUNA	Certain	Targeted survey	Day sighting	25	Carine	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23613	TFAUNA	Certain	Targeted survey	Day sighting	3	Wembley	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23616	TFAUNA	Certain	Targeted survey	Day sighting	45	Sinagra	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23618	TFAUNA	Certain	Targeted survey	Day sighting	2	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23626	TFAUNA	Certain	Targeted survey	Day sighting	15	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23628	TFAUNA	Certain	Targeted survey	Day sighting	48	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23632	TFAUNA	Certain	Targeted survey	Day sighting	19	Nedlands	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23633	TFAUNA	Certain	Targeted survey	Day sighting	30	Menora	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	23634	TFAUNA	Certain	Targeted survey	Day sighting	25	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2006	23641	TFAUNA	Certain	Targeted survey	Day sighting	40	Whiteman	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2006	23648	TFAUNA	Certain	Targeted survey	Day sighting	10	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2006	23652	TFAUNA	Certain	Targeted survey	Day sighting	2	City Beach	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2006	23653	TFAUNA	Certain	Targeted survey	Day sighting	397	Gnangara-Moore River SF	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2006	23654	TFAUNA	Certain	Targeted survey	Day sighting	1208	Gnangara-Moore River SF	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2006	23662	TFAUNA	Certain	Targeted survey	Day sighting	2	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2006	23672	TFAUNA	Certain	Targeted survey	Day sighting	100	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2006	23673	TFAUNA	Certain	Targeted survey	Day sighting	615	Nowergup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2012	24156	TFAUNA	Certain	Community survey	Day sighting	60	Dunsraig	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2012	24157	TFAUNA	Certain	Community survey	Day sighting	1	Padbury	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24158	TFAUNA	Certain	Community survey	Day sighting	17	Padbury	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24159	TFAUNA	Certain	Community survey	Day sighting	60	Warwick	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24355	TFAUNA	Certain	Community survey	Day sighting	121	Karrinyup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/08/2012	24356	TFAUNA	Certain	Community survey	Day sighting	53	Menora	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24357	TFAUNA	Certain	Community survey	Day sighting	230	North Beach	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/07/2011	24358	TFAUNA	Certain	Community survey	Day sighting	120	North Beach	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24359	TFAUNA	Certain	Community survey	Day sighting	267	North Beach	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/05/2013	24360	TFAUNA	Certain	Community survey	Day sighting	33	North Beach	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2009	24361	TFAUNA	Certain	Community survey	Day sighting	30	Yokine	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/03/2010	24362	TFAUNA	Certain	Community survey	Day sighting	60	Yokine	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24364	TFAUNA	Certain	Community survey	Day sighting	40	Ballajurra	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/07/2012	24365	TFAUNA	Certain	Community survey	Day sighting	20	Ballajurra	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/07/2013	24366	TFAUNA	Certain	Community survey	Day sighting	44	Ballajurra	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24367	TFAUNA	Certain	Community survey	Day sighting	92	Ballajurra	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24382	TFAUNA	Certain	Community survey	Day sighting	80	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24383	TFAUNA	Certain	Community survey	Day sighting	41	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/01/2013	24384	TFAUNA	Certain	Community survey	Day sighting	200	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/01/2013	24385	TFAUNA	Certain	Community survey	Day sighting	288	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/05/2013	24386	TFAUNA	Certain	Community survey	Day sighting	850	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24387	TFAUNA	Certain	Community survey	Day sighting	20	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/04/2009	24388	TFAUNA	Certain	Community survey	Day sighting	40	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24389	TFAUNA	Certain	Community survey	Day sighting	69	Whiteman Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2012	24390	TFAUNA	Certain	Community survey	Day sighting	15	Whiteman Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24403	TFAUNA	Certain	Community survey	Day sighting	191	Neerabup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24404	TFAUNA	Certain	Community survey	Day sighting	14	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24405	TFAUNA	Certain	Community survey	Day sighting	100	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/05/2013	24406	TFAUNA	Certain	Community survey	Day sighting	33	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/08/2010	24407	TFAUNA	Certain	Community survey	Day sighting	5	Jandabup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24408	TFAUNA	Certain	Community survey	Day sighting	16	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24409	TFAUNA	Certain	Community survey	Day sighting	20	Marigimup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2012	24410	TFAUNA	Certain	Community survey	Day sighting	2	Marigimup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24411	TFAUNA	Certain	Community survey	Day sighting	3	Marigimup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24412	TFAUNA	Certain	Community survey	Day sighting	152	Marigimup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2012	24413	TFAUNA	Certain	Community survey	Day sighting	10	Marianmup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24414	TFAUNA	Certain	Community survey	Day sighting	16	Marianmup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24415	TFAUNA	Certain	Community survey	Day sighting	29	Neerabup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2012	24416	TFAUNA	Certain	Community survey	Day sighting	35	Nowergup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24417	TFAUNA	Certain	Community survey	Day sighting	10	Nowergup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/07/2010	24426	TFAUNA	Certain	Community survey	Day sighting	23	Gnangara-Moore River State Forest	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/08/2010	24427	TFAUNA	Certain	Community survey	Day sighting	200	Pinjar	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/06/2011	24428	TFAUNA	Certain	Community survey	Day sighting	2	Gnangara-Moore River state forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/08/2011	24429	TFAUNA	Certain	Community survey	Day sighting	1	Gnangara-Moore River state forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24430	TFAUNA	Certain	Community survey	Day sighting	800	Gnangara-Moore River state forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/05/2013	24431	TFAUNA	Certain	Community survey	Day sighting	800	Gnangara-Moore River state forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/08/2011	24432	TFAUNA	Certain	Community survey	Day sighting	107	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/06/2012	24433	TFAUNA	Certain	Community survey	Day sighting	81	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/07/2012	24434	TFAUNA	Certain	Community survey	Day sighting	370	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/08/2012	24435	TFAUNA	Certain	Community survey	Day sighting	123	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/09/2012	24436	TFAUNA	Certain	Community survey	Day sighting	35	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/10/2012	24437	TFAUNA	Certain	Community survey	Day sighting	30	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/11/2012	24438	TFAUNA	Certain	Community survey	Day sighting	5	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/12/2012	24439	TFAUNA	Certain	Community survey	Day sighting	61	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2013	24440	TFAUNA	Certain	Community survey	Day sighting	103	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/05/2013	24441	TFAUNA	Certain	Community survey	Day sighting	260	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2011	24450	TFAUNA	Certain	Community survey	Day sighting	11	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2012	24451	TFAUNA	Certain	Community survey	Day sighting	6	Wanneroo	1000
Macrotis lagotis	bilby, dalgyte, rimu	MAMMAL	Threatened - Vulnerable	VU	VU	1/01/1925	24529	TFAUNA	Moderately certain	Historical (written)	Sighting	1	Henley Brook	1000
Chelonia mydas	green turtle	REPTILE	Threatened - Vulnerable	VU	VU	28/08/2013	24563	TFAUNA	Not sure	Opportunistic sighting	Dead	1	Watermans Bay	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/07/2013	24569	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Buka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2013	24570	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Buka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2013	24571	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Ocean Reef	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/10/2013	24784	TFAUNA	Moderately certain	Opportunistic sighting	Dead	1	Stirling	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/11/2012	24943	TFAUNA	Moderately certain	Community survey	Day sighting	1	Burns Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/11/2013	24955	TFAUNA	Moderately certain	Community survey	Day sighting	1	Burns Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/02/2014	24960	TFAUNA	Moderately certain	Opportunistic sighting	Dead	1	Wanneroo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/01/2014	24964	TFAUNA	Moderately certain	Community survey	Night sighting	1	The Vines	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/03/2014	24969	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Buka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/03/2014	24973	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Leederville	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/03/2014	24977	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Buka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/03/2014	24978	TFAUNA	Certain	Opportunistic sighting	Night sighting	1	Hocking	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2014	25044	TFAUNA	Certain	Opportunistic sighting	Day sighting	30	Floreat	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/04/2014	25052	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Burns beach	1000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/05/2009	25073	FAUNASURVEY	Not Sure	Survey	Unknown	12	AVELEY	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/04/2014	25076	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	Harrersley	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	25088	TFAUNA	Certain	Survey	Day sighting	1	YOKINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2004	25089	TFAUNA	Certain	Survey	Day sighting	1	NOLLAMARA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/06/2003	25090	TFAUNA	Certain	Survey	Day sighting	1	NOLLAMARA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	25208	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	25209	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	25248	TFAUNA	Certain	Monitoring	Secondary sign	1	CARABOODA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	25249	TFAUNA	Certain	Monitoring	Secondary sign	1	CARABOODA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	25467	TFAUNA	Certain	Monitoring	Secondary sign	1	BRABHAM	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/03/2010	25468	TFAUNA	Certain	Survey	Day sighting	40	WOODVALE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/03/2010	25469	TFAUNA	Certain	Survey	Day sighting	40	WOODVALE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2003	25475	TFAUNA	Certain	Survey	Day sighting	1	DOUBLEVIEW	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/05/2003	25749	TFAUNA	Certain	Survey	Day sighting	1	WESTMINSTER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/08/2005	25750	TFAUNA	Certain	Survey	Day sighting	1	WESTMINSTER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2004	25751	TFAUNA	Certain	Survey	Day sighting	1	WESTMINSTER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/07/2004	25752	TFAUNA	Certain	Survey	Day sighting	1	WESTMINSTER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/07/2004	25753	TFAUNA	Certain	Survey	Day sighting	1	WESTMINSTER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/09/2003	25755	TFAUNA	Certain	Survey	Day sighting	1	WEST SWAN	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/07/2003	25756	TFAUNA	Certain	Survey	Day sighting	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/07/2003	25757	TFAUNA	Certain	Survey	Day sighting	10	BENNETT SPRINGS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/07/2003	25758	TFAUNA	Certain	Survey	Day sighting	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/08/2007	25761	TFAUNA	Certain	Survey	Day sighting	1	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/02/2007	25762	TFAUNA	Certain	Survey	Day sighting	1	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/12/2006	25763	TFAUNA	Certain	Survey	Day sighting	1	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/02/2004	25764	TFAUNA	Certain	Survey	Day sighting	1	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/02/2004	25765	TFAUNA	Certain	Survey	Day sighting	1	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/02/2004	25766	TFAUNA	Certain	Survey	Day sighting	8	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/02/2004	25767	TFAUNA	Certain	Survey	Day sighting	1	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/2003	25768	TFAUNA	Certain	Survey	Day sighting	1	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/06/2003	25769	TFAUNA	Certain	Survey	Day sighting	1	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/02/2004	25773	TFAUNA	Certain	Survey	Day sighting	1	WEST LEEDERVILLE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/2004	25774	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/02/2004	25775	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/02/2004	25776	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/12/2004	25777	TFAUNA	Certain	Survey	Day sighting	1	OSBORNE PARK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/09/2003	25782	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY DOWNS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/07/2003	25783	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY DOWNS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2002	25784	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY DOWNS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/05/2006	25785	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/05/2006	25786	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/02/2006	25787	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/12/2005	25788	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/07/2003	25789	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/06/2003	25790	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/06/2003	25791	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/2003	25792	TFAUNA	Certain	Survey	Day sighting	30	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/05/2003	25793	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/2003	25794	TFAUNA	Certain	Survey	Day sighting	200	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2003	25795	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500

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Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/04/2003	25796	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/04/2003	25797	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/04/2002	25798	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/11/1985	25799	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/08/1984	25800	TFAUNA	Certain	Survey	Secondary sign	12	FLOREAT	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/08/1982	25801	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/08/1977	25802	TFAUNA	Certain	Survey	Day sighting	1000	FLOREAT	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/10/1965	25803	TFAUNA	Certain	Historical (written)	Day sighting	6	WEMBLEY	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/05/2003	25804	TFAUNA	Certain	Survey	Day sighting	25	HERDSMAN	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/2005	25851	TFAUNA	Certain	Survey	Day sighting	1	DUNCRAIG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/08/2003	25852	TFAUNA	Certain	Survey	Day sighting	1	DUNCRAIG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/06/2003	25853	TFAUNA	Certain	Survey	Day sighting	1	DUNCRAIG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	25860	TFAUNA	Certain	Survey	Day sighting	1	PINJAR	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	25861	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	25862	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	25863	TFAUNA	Certain	Survey	Day sighting	20	PINJAR	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/03/2008	25864	TFAUNA	Certain	Monitoring	Secondary sign	1	NEERABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/03/2008	25865	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/02/2008	25866	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	25867	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	25868	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	25869	TFAUNA	Certain	Monitoring	Secondary sign	131	Gnangara-Moore River State Forest	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	25870	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	25871	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/07/1975	25873	TFAUNA	Certain	Survey	Day sighting	1	ASHBY	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25874	TFAUNA	Certain	Monitoring	Secondary sign	1	WOODVALE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25875	TFAUNA	Certain	Monitoring	Secondary sign	1	WOODVALE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25876	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	25877	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	25878	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	25879	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25880	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25881	TFAUNA	Certain	Monitoring	Secondary sign	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25882	TFAUNA	Certain	Monitoring	Secondary sign	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25883	TFAUNA	Certain	Monitoring	Secondary sign	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25884	TFAUNA	Certain	Monitoring	Secondary sign	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25885	TFAUNA	Certain	Monitoring	Secondary sign	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25886	TFAUNA	Certain	Monitoring	Secondary sign	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25887	TFAUNA	Certain	Monitoring	Secondary sign	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	25888	TFAUNA	Certain	Monitoring	Secondary sign	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/11/1999	25900	TFAUNA	Certain	Survey	Day sighting	7	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/05/2010	25901	TFAUNA	Certain	Survey	Day sighting	600	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/11/1999	25902	TFAUNA	Certain	Survey	Day sighting	60	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/09/2009	25903	TFAUNA	Certain	Survey	Day sighting	25	SINAGRA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/09/2009	25904	TFAUNA	Certain	Survey	Day sighting	30	SINAGRA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/09/2009	25905	TFAUNA	Certain	Survey	Day sighting	25	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/09/2009	25906	TFAUNA	Certain	Survey	Day sighting	30	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/08/2009	25907	TFAUNA	Certain	Survey	Day sighting	15	TAPPING	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/08/2009	25908	TFAUNA	Certain	Survey	Day sighting	15	TAPPING	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/08/2009	25909	TFAUNA	Certain	Survey	Day sighting	20	TAPPING	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/08/2009	25910	TFAUNA	Certain	Survey	Day sighting	20	TAPPING	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/08/2009	25911	TFAUNA	Certain	Survey	Day sighting	15	TAPPING	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/08/2009	25912	TFAUNA	Certain	Survey	Day sighting	15	TAPPING	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/05/2006	25913	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/06/2005	25914	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2005	25915	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2005	25916	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/10/2004	25917	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2004	25918	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2004	25919	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/04/2004	25920	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/04/2004	25921	TFAUNA	Certain	Survey	Day sighting	380	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2004	25922	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/01/2004	25923	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/2003	25924	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/10/2003	25925	TFAUNA	Certain	Survey	Day sighting	7	ASHBY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	25926	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2003	25927	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/06/2003	25928	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/02/2003	25929	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/1984	25930	TFAUNA	Certain	Survey	Day sighting	1	ASHBY	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/1984	25931	TFAUNA	Certain	Survey	Day sighting	1	ASHBY	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/1984	25932	TFAUNA	Certain	Survey	Day sighting	1	ASHBY	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/1984	25933	TFAUNA	Certain	Survey	Day sighting	1	ASHBY	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/02/1954	25934	TFAUNA	Certain	Historical (written)	Day sighting	2	ASHBY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/02/1954	25935	TFAUNA	Certain	Historical (written)	Day sighting	2	ASHBY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/02/2004	25936	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/08/2002	25939	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/04/2008	25947	TFAUNA	Certain	Monitoring	Secondary sign	1	DUNCRAIG	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/04/2008	25948	TFAUNA	Certain	Monitoring	Secondary sign	1	DUNCRAIG	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/04/2008	25949	TFAUNA	Certain	Monitoring	Secondary sign	1	DUNCRAIG	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/04/2008	25950	TFAUNA	Certain	Monitoring	Secondary sign	1	DUNCRAIG	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/04/2008	25951	TFAUNA	Certain	Monitoring	Secondary sign	1	DUNCRAIG	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2005	25964	TFAUNA	Certain	Survey	Day sighting	8	MOUNT LAWLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2005	25965	TFAUNA	Certain	Survey	Day sighting	8	MOUNT LAWLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	25972	TFAUNA	Certain	Monitoring	Secondary sign	1	THE VINES	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	25973	TFAUNA	Certain	Monitoring	Secondary sign	1	THE VINES	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2005	26045	TFAUNA	Certain	Survey	Day sighting	1	TRIGG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2005	26046	TFAUNA	Certain	Survey	Day sighting	1	TRIGG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/07/2005	26047	TFAUNA	Certain	Survey	Day sighting	1	TRIGG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/07/2005	26048	TFAUNA	Certain	Survey	Day sighting	1	TRIGG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/09/2003	26049	TFAUNA	Certain	Survey	Day sighting	1	TRIGG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/07/2003	26050	TFAUNA	Certain	Survey	Day sighting	1	TRIGG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/06/2003	26051	TFAUNA	Certain	Survey	Day sighting	1	TRIGG	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/02/2009	26065	TFAUNA	Certain	Survey	Day sighting	8	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	26097	TFAUNA	Certain	Monitoring	Secondary sign	1	WOODVALE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	26098	TFAUNA	Certain	Monitoring	Secondary sign	1	WOODVALE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	26099	TFAUNA	Certain	Monitoring	Secondary sign	1	WOODVALE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/05/2008	26113	TFAUNA	Certain	Monitoring	Secondary sign	1	FLOREAT	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/05/2008	26114	TFAUNA	Certain	Monitoring	Secondary sign	1	CITY BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/05/2009	26121	TFAUNA	Certain	Survey	Day sighting	10	BURNS BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/05/2009	26122	TFAUNA	Certain	Survey	Day sighting	10	BURNS BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/08/2004	26123	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/09/2003	26124	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/09/2003	26125	TFAUNA	Certain	Survey	Day sighting	100	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/08/2003	26126	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2003	26127	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/2002	26128	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2006	26249	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/2006	26250	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2004	26251	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/04/2002	26252	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2003	26299	TFAUNA	Certain	Survey	Day sighting	1	WESTMINSTER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/08/2003	26300	TFAUNA	Certain	Survey	Day sighting	1	INNALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2009	26303	TFAUNA	Certain	Survey	Day sighting	30	NORTH BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2009	26304	TFAUNA	Certain	Survey	Day sighting	30	NORTH BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	26305	TFAUNA	Certain	Monitoring	Secondary sign	1	NORTH BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	26306	TFAUNA	Certain	Monitoring	Secondary sign	1	NORTH BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	26307	TFAUNA	Certain	Monitoring	Secondary sign	1	NORTH BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/05/2010	26308	TFAUNA	Certain	Survey	Day sighting	40	NORTH BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/08/2005	26309	TFAUNA	Certain	Survey	Day sighting	1	NORTH BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2004	26310	TFAUNA	Certain	Survey	Day sighting	1	NORTH BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2003	26311	TFAUNA	Certain	Survey	Day sighting	1	NORTH BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/05/2010	26312	TFAUNA	Certain	Survey	Day sighting	60	WATERMANS BAY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2004	26471	TFAUNA	Certain	Survey	Day sighting	1	SORRENTO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/09/2004	26472	TFAUNA	Certain	Survey	Day sighting	1	SORRENTO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/09/2004	26473	TFAUNA	Certain	Survey	Day sighting	1	SORRENTO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2004	26474	TFAUNA	Certain	Survey	Day sighting	1	SORRENTO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2004	26475	TFAUNA	Certain	Survey	Day sighting	1	SORRENTO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2004	26476	TFAUNA	Certain	Survey	Day sighting	1	SORRENTO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/10/2003	26477	TFAUNA	Certain	Survey	Day sighting	1	SORRENTO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/09/2004	26478	TFAUNA	Certain	Survey	Day sighting	1	SORRENTO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2001	26479	TFAUNA	Certain	Survey	Day sighting	65	SORRENTO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2005	26480	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/10/2005	26481	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/10/2005	26482	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/10/2005	26483	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2005	26484	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/09/2005	26485	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/09/2005	26486	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/09/2005	26487	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/09/2005	26488	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2005	26489	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/08/2005	26490	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/08/2005	26491	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/08/2005	26492	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/08/2005	26493	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/08/2005	26494	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/06/2005	26495	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	26520	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	26521	TFAUNA	Certain	Survey	Day sighting	21	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	26522	TFAUNA	Certain	Survey	Day sighting	16	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	26523	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	26524	TFAUNA	Certain	Survey	Day sighting	21	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	26525	TFAUNA	Certain	Survey	Secondary sign	2	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	26526	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/06/2010	26719	TFAUNA	Certain	Survey	Day sighting	20	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/07/2010	26720	TFAUNA	Certain	Survey	Day sighting	2	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/07/2010	26721	TFAUNA	Certain	Survey	Day sighting	2	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/06/2010	26722	TFAUNA	Certain	Survey	Day sighting	20	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/04/2007	26743	TFAUNA	Certain	Survey	Day sighting	12	INNALOO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/09/2007	26744	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/09/2007	26745	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/11/2005	26746	TFAUNA	Certain	Survey	Day sighting	22	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/11/2005	26747	TFAUNA	Certain	Survey	Day sighting	7	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/11/2005	26748	TFAUNA	Certain	Survey	Day sighting	26	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/11/2005	26749	TFAUNA	Certain	Survey	Day sighting	26	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/11/2005	26750	TFAUNA	Certain	Survey	Day sighting	21	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/11/2005	26751	TFAUNA	Certain	Survey	Day sighting	21	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2005	26752	TFAUNA	Certain	Survey	Day sighting	50	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2005	26753	TFAUNA	Certain	Survey	Day sighting	26	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2005	26754	TFAUNA	Certain	Survey	Day sighting	50	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2005	26755	TFAUNA	Certain	Survey	Day sighting	26	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2005	26756	TFAUNA	Certain	Survey	Day sighting	7	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2005	26757	TFAUNA	Certain	Survey	Day sighting	7	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/10/2005	26758	TFAUNA	Certain	Survey	Day sighting	4	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/10/2005	26759	TFAUNA	Certain	Survey	Day sighting	4	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/10/2005	26760	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/10/2005	26761	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/09/2005	26762	TFAUNA	Certain	Survey	Day sighting	4	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/09/2005	26763	TFAUNA	Certain	Survey	Day sighting	4	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2005	26764	TFAUNA	Certain	Survey	Day sighting	2	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2005	26765	TFAUNA	Certain	Survey	Day sighting	2	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/08/2005	26766	TFAUNA	Certain	Survey	Day sighting	7	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/08/2005	26767	TFAUNA	Certain	Survey	Day sighting	7	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/07/2005	26768	TFAUNA	Certain	Survey	Day sighting	4	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/07/2005	26769	TFAUNA	Certain	Survey	Day sighting	4	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/07/2005	26770	TFAUNA	Certain	Survey	Day sighting	14	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/07/2005	26771	TFAUNA	Certain	Survey	Day sighting	14	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/09/2004	26772	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/04/2004	26773	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/11/2003	26774	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/11/2003	26775	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/01/2003	26776	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/01/2003	26777	TFAUNA	Certain	Survey	Day sighting	1	SCARBOROUGH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2009	26992	TFAUNA	Certain	Survey	Day sighting	20	BALCATTA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2009	26993	TFAUNA	Certain	Survey	Day sighting	20	BALCATTA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/08/2003	27064	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/08/2003	27065	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/06/2003	27066	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/05/2003	27067	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/2003	27068	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/08/2005	27069	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/09/2003	27070	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/09/2003	27071	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/05/2003	27072	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/09/2002	27073	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/09/2002	27074	TFAUNA	Certain	Survey	Day sighting	1	QUINNS ROCKS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	27079	TFAUNA	Certain	Monitoring	Secondary sign	1	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/11/2005	27221	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/03/2008	27231	TFAUNA	Certain	Survey	Day sighting	1	BANKSIA GROVE	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	27232	TFAUNA	Certain	Monitoring	Secondary sign	1	ASHBY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	27233	TFAUNA	Certain	Monitoring	Secondary sign	1	ASHBY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	27234	TFAUNA	Certain	Survey	Day sighting	33	ASHBY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/01/2004	27235	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/04/2007	27236	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/03/2007	27237	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/03/2007	27238	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/03/2007	27239	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	27240	TFAUNA	Certain	Survey	Day sighting	16	PINJAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2006	27241	TFAUNA	Certain	Survey	Day sighting	15	PINJAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/02/2006	27242	TFAUNA	Certain	Survey	Day sighting	1	PINJAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/08/2003	27243	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27340	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27341	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27342	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27343	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27344	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27345	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27346	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27347	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27348	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27349	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27350	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27351	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27352	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27353	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27354	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	27355	TFAUNA	Certain	Monitoring	Secondary sign	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/03/2004	27356	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/04/2003	27358	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	27368	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	27369	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	27434	TFAUNA	Certain	Survey	Day sighting	46	HENLEY BROOK	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	27435	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	27436	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2007	27487	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/10/2005	27488	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/08/2005	27489	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/10/2004	27490	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/10/2004	27491	TFAUNA	Certain	Survey	Day sighting	3000	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/10/2004	27492	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2004	27493	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/11/2003	27494	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2003	27495	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2003	27496	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/10/2003	27497	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/10/2003	27498	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2003	27499	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/09/2003	27500	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/09/2002	27501	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/07/2002	27502	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2002	27503	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/04/2010	27508	TFAUNA	Certain	Survey	Day sighting	42	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/09/2003	27509	TFAUNA	Certain	Survey	Day sighting	1	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/04/2010	27510	TFAUNA	Certain	Survey	Day sighting	42	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2009	27511	TFAUNA	Certain	Survey	Day sighting	20	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2009	27512	TFAUNA	Certain	Survey	Day sighting	20	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/03/2009	27513	TFAUNA	Certain	Survey	Day sighting	8	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/03/2009	27514	TFAUNA	Certain	Survey	Day sighting	8	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/03/2009	27515	TFAUNA	Certain	Survey	Day sighting	16	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/03/2009	27516	TFAUNA	Certain	Survey	Day sighting	16	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/04/2005	27517	TFAUNA	Certain	Survey	Day sighting	1	INNALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2005	27518	TFAUNA	Certain	Survey	Day sighting	1	INNALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/09/2003	27519	TFAUNA	Certain	Survey	Day sighting	30	INNALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/09/2003	27520	TFAUNA	Certain	Survey	Day sighting	1	INNALOO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/08/2003	27521	TFAUNA	Certain	Survey	Day sighting	1	INNALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/08/2005	27646	TFAUNA	Certain	Survey	Day sighting	1	Neerabup National Park	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	28134	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/08/2005	28135	TFAUNA	Certain	Survey	Day sighting	1	OCEAN REEF	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/07/2005	28136	TFAUNA	Certain	Survey	Day sighting	1	OCEAN REEF	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2003	28137	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2005	28138	TFAUNA	Certain	Survey	Day sighting	1	OCEAN REEF	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/08/2005	28139	TFAUNA	Certain	Survey	Day sighting	1	OCEAN REEF	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN		28363	TFAUNA	Certain	Historical (written)	Day sighting	1	Neerabup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/09/2005	28364	TFAUNA	Certain	Survey	Day sighting	1	Neerabup National Park	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/08/2005	28365	TFAUNA	Certain	Survey	Day sighting	1	Neerabup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/03/2005	28366	TFAUNA	Certain	Survey	Day sighting	1	Neerabup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/08/2000	28367	TFAUNA	Certain	Survey	Day sighting	3	Neerabup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/09/2004	28369	TFAUNA	Certain	Survey	Day sighting	1	NORTH PERTH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/03/2004	28370	TFAUNA	Certain	Survey	Day sighting	1	NORTH PERTH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/03/2004	28371	TFAUNA	Certain	Survey	Day sighting	1	NORTH PERTH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/03/2004	28372	TFAUNA	Certain	Survey	Day sighting	1	NORTH PERTH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/03/2004	28373	TFAUNA	Certain	Survey	Day sighting	1	NORTH PERTH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/03/2004	28374	TFAUNA	Certain	Survey	Day sighting	1	NORTH PERTH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/06/2004	28450	TFAUNA	Certain	Survey	Day sighting	1	NORTH PERTH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/03/2003	28451	TFAUNA	Certain	Survey	Day sighting	1	NORTH PERTH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2007	28492	TFAUNA	Certain	Survey	Day sighting	1	NORTH BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/12/2003	28493	TFAUNA	Certain	Survey	Day sighting	1	NORTH BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/11/2003	28494	TFAUNA	Certain	Survey	Day sighting	1	NORTH BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2003	28495	TFAUNA	Certain	Survey	Day sighting	1	NORTH BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/04/2003	28496	TFAUNA	Certain	Survey	Day sighting	1	NORTH BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	28497	TFAUNA	Certain	Survey	Day sighting	1	NORTH BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2006	28499	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/11/2005	28500	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/11/2005	28501	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2005	28502	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/06/2004	28503	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/06/2004	28504	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/10/2003	28505	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/10/2003	28506	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/08/2003	28507	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/07/2003	28508	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2004	28509	TFAUNA	Certain	Survey	Day sighting	1	WESTMINSTER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/12/2002	28510	TFAUNA	Certain	Survey	Day sighting	1	WESTMINSTER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/11/2001	28511	TFAUNA	Certain	Survey	Day sighting	1	WESTMINSTER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/09/2003	28558	TFAUNA	Certain	Survey	Day sighting	1	BUTLER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/1978	28559	TFAUNA	Certain	Survey	Day sighting	1	BUTLER	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/1978	28560	TFAUNA	Certain	Survey	Day sighting	1	BUTLER	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/1978	28561	TFAUNA	Certain	Survey	Day sighting	1	BUTLER	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/02/2004	28562	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/03/2006	28563	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2005	28564	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/2005	28565	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2002	28566	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	29253	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	29254	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29258	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29259	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29260	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29261	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29262	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29263	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29264	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29265	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29266	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29267	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29268	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29269	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29270	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29271	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29272	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29273	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29274	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29275	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29276	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	29277	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	29278	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2010	29305	TFAUNA	Certain	Survey	Day sighting	100	NORTH BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29322	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29323	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29324	TFAUNA	Certain	Survey	Day sighting	40	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29325	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29326	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29327	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29328	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29329	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29330	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29331	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29332	TFAUNA	Certain	Monitoring	Secondary sign	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29335	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29336	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29337	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29338	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29339	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29340	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29341	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29342	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29343	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29344	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29345	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29346	TFAUNA	Certain	Survey	Day sighting	2	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29347	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29348	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29349	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29350	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29351	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29352	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29353	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29354	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29355	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29356	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29357	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29358	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29359	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29360	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29361	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29362	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29363	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29364	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29365	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29366	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29367	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29368	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29369	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29370	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29371	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29372	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29373	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29374	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29375	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29376	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29377	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29378	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	29379	TFAUNA	Certain	Monitoring	Secondary sign	1	BENNETT SPRINGS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29380	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29381	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29382	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29383	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29384	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29385	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29386	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29387	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29388	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29389	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29390	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29391	TFAUNA	Certain	Monitoring	Secondary sign	1	BULLSBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/10/2007	29429	TFAUNA	Certain	Survey	Secondary sign	2	GREENWOOD	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/11/2007	29432	TFAUNA	Certain	Survey	Day sighting	10	GREENWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/11/2007	29433	TFAUNA	Certain	Survey	Secondary sign	1	GREENWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	29436	TFAUNA	Certain	Monitoring	Secondary sign	1	HAMERSLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	29437	TFAUNA	Certain	Monitoring	Secondary sign	1	HAMERSLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/1977	29549	TFAUNA	Certain	Survey	Day sighting	25	JANDABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/01/1978	29550	TFAUNA	Certain	Survey	Day sighting	60	Lake Joondalup Nature Reserve	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/1978	29559	TFAUNA	Certain	Survey	Day sighting	1	WEST SWAN	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29560	TFAUNA	Certain	Monitoring	Secondary sign	1	BRABHAM	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29561	TFAUNA	Certain	Monitoring	Secondary sign	1	BRABHAM	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29562	TFAUNA	Certain	Monitoring	Secondary sign	1	BRABHAM	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/10/2005	29646	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/08/2005	29647	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/08/2005	29648	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/08/2005	29649	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2005	29650	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/10/2004	29651	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/10/2004	29652	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/09/2004	29653	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/09/2004	29654	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/09/2004	29655	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/09/2004	29656	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/09/2004	29657	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/09/2004	29658	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/09/2004	29659	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/07/2004	29660	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/07/2004	29661	TFAUNA	Certain	Survey	Day sighting	200	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/07/2004	29662	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/07/2004	29663	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/06/2004	29664	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/06/2004	29665	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/11/2003	29666	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/11/2003	29667	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/10/2003	29668	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/10/2003	29669	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/10/2003	29670	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/09/1976	29671	TFAUNA	Certain	Survey	Day sighting	20	MULLALOO	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/08/1975	29672	TFAUNA	Certain	Survey	Day sighting	5	MULLALOO	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2006	29714	TFAUNA	Certain	Survey	Day sighting	1	MOUNT LAWLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/02/2006	29715	TFAUNA	Certain	Survey	Day sighting	1	MOUNT LAWLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2005	29716	TFAUNA	Certain	Survey	Day sighting	1	MOUNT LAWLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/04/2004	29717	TFAUNA	Certain	Survey	Day sighting	1	MOUNT LAWLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/03/2004	29718	TFAUNA	Certain	Survey	Day sighting	1	MOUNT LAWLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/10/2003	29719	TFAUNA	Certain	Survey	Day sighting	1	MENORA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2003	29720	TFAUNA	Certain	Survey	Day sighting	1	MENORA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/11/2004	29721	TFAUNA	Certain	Survey	Day sighting	1	MOUNT HAWTHORN	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/06/2006	29725	TFAUNA	Certain	Survey	Day sighting	5	MORLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/08/2005	29726	TFAUNA	Certain	Survey	Day sighting	1	MORLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/03/2004	29727	TFAUNA	Certain	Survey	Day sighting	1	MORLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/08/1968	29732	TFAUNA	Certain	Historical (written)	Day sighting	1	MALAGA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/08/2004	29733	TFAUNA	Certain	Survey	Day sighting	1	MORLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/11/2005	29734	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2005	29735	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/08/2002	29736	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/08/2002	29737	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/2002	29738	TFAUNA	Certain	Survey	Day sighting	15	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/05/2002	29739	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/12/2003	29749	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/11/2002	29750	TFAUNA	Certain	Survey	Day sighting	1	MIRRABOOKA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/05/2002	29751	TFAUNA	Certain	Survey	Day sighting	3	MIRRABOOKA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/10/2001	29752	TFAUNA	Certain	Survey	Day sighting	80	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/2005	29753	TFAUNA	Certain	Survey	Day sighting	1	MINDARIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/08/2003	29754	TFAUNA	Certain	Survey	Day sighting	1	MINDARIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/08/2003	29755	TFAUNA	Certain	Survey	Day sighting	1	MINDARIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/05/2003	29756	TFAUNA	Certain	Survey	Day sighting	1	MINDARIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2005	29757	TFAUNA	Certain	Survey	Day sighting	1	MINDARIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/08/2005	29758	TFAUNA	Certain	Survey	Day sighting	1	MINDARIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/08/2005	29759	TFAUNA	Certain	Survey	Day sighting	1	MINDARIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/08/2003	29760	TFAUNA	Certain	Survey	Day sighting	1	MINDARIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29763	TFAUNA	Certain	Monitoring	Secondary sign	1	AVELEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29764	TFAUNA	Certain	Monitoring	Secondary sign	1	AVELEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29765	TFAUNA	Certain	Monitoring	Secondary sign	1	AVELEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	29766	TFAUNA	Certain	Monitoring	Secondary sign	1	AVELEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/09/2005	29769	TFAUNA	Certain	Survey	Day sighting	1	HENLEY BROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/08/2005	29805	TFAUNA	Certain	Survey	Day sighting	1	BUTLER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/11/2003	29808	TFAUNA	Certain	Survey	Day sighting	1	MENORA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2008	29819	TFAUNA	Certain	Survey	Secondary sign	2	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	29820	TFAUNA	Certain	Survey	Secondary sign	1403	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/06/2005	29891	TFAUNA	Certain	Survey	Day sighting	47	MOUNT LAWLEY	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/08/2004	29892	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2004	29893	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/07/2004	29894	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/07/2004	29895	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/05/2004	29896	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/03/2004	29897	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/03/2004	29898	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/03/2004	29899	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2003	29900	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/07/2003	29901	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/07/2003	29902	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/07/2003	29903	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/07/2003	29904	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/06/2003	29905	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/06/2003	29906	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/05/2003	29907	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/2003	29908	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/05/2003	29909	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/05/2003	29910	TFAUNA	Certain	Survey	Day sighting	15	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/05/2003	29911	TFAUNA	Certain	Survey	Day sighting	300	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/2003	29912	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/2003	29913	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2003	29914	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/04/2003	29915	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/03/2003	29916	TFAUNA	Certain	Survey	Day sighting	1	INGLEWOOD	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/10/2003	30213	TFAUNA	Certain	Survey	Day sighting	8	NORTH BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2010	30214	TFAUNA	Certain	Survey	Day sighting	80	BUTLER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2010	30215	TFAUNA	Certain	Survey	Day sighting	80	BUTLER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/05/2005	30253	TFAUNA	Certain	Survey	Day sighting	500	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/08/2004	30254	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/08/2003	30255	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/2003	30256	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/05/2002	30257	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/05/2004	30258	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/05/2004	30259	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/05/2004	30260	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2004	30261	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/04/2007	30262	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/10/2004	30279	TFAUNA	Certain	Survey	Day sighting	1	MALAGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	30376	TFAUNA	Certain	Survey	Day sighting	14	BRABHAM	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/05/2010	30382	TFAUNA	Certain	Survey	Day sighting	200	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/05/2010	30383	TFAUNA	Certain	Survey	Secondary sign	1	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/05/2010	30384	TFAUNA	Certain	Survey	Secondary sign	1	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/05/2010	30385	TFAUNA	Certain	Survey	Secondary sign	1	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/05/2009	30549	TFAUNA	Certain	Survey	Day sighting	4	NORANDA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/05/2009	30550	TFAUNA	Certain	Survey	Secondary sign	1	NORANDA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/05/2009	30551	TFAUNA	Certain	Survey	Secondary sign	1	NORANDA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/05/2009	30552	TFAUNA	Certain	Survey	Day sighting	4	NORANDA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/03/2009	30553	TFAUNA	Certain	Survey	Day sighting	1	NORANDA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/03/2009	30554	TFAUNA	Certain	Survey	Day sighting	1	NORANDA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/03/2009	30555	TFAUNA	Certain	Survey	Day sighting	250	NORANDA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/03/2009	30556	TFAUNA	Certain	Survey	Day sighting	2	NORANDA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/03/2009	30557	TFAUNA	Certain	Survey	Day sighting	250	NORANDA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/04/2007	30558	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/09/2003	30575	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/07/2003	30576	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/05/2002	30577	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2002	30578	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/03/2005	30601	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/02/2005	30602	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/06/2004	30603	TFAUNA	Certain	Survey	Day sighting	1	LANDSDALE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/03/2004	30604	TFAUNA	Certain	Survey	Day sighting	1	LANDSDALE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/03/2004	30605	TFAUNA	Certain	Survey	Day sighting	1	LANDSDALE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	30696	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	30697	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	30698	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	30699	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/06/2009	30714	TFAUNA	Certain	Survey	Day sighting	70	WEMBLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/06/2009	30715	TFAUNA	Certain	Survey	Day sighting	80	WEMBLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/2003	30716	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/2003	30717	TFAUNA	Certain	Survey	Day sighting	1	WEMBLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/04/2003	30718	TFAUNA	Certain	Survey	Day sighting	1	OSBORNE PARK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/11/2003	30722	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	30723	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/1977	30724	TFAUNA	Certain	Survey	Day sighting	2	JANDABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/08/2005	30725	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2004	30726	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/09/2004	30727	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/09/2004	30728	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2004	30729	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/06/2003	30730	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/05/1977	30731	TFAUNA	Certain	Survey	Day sighting	1	JANDABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/05/1977	30732	TFAUNA	Certain	Survey	Day sighting	60	JANDABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2005	30733	TFAUNA	Certain	Survey	Day sighting	1	JANDABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2005	30734	TFAUNA	Certain	Survey	Day sighting	1	JANDABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/05/2005	30735	TFAUNA	Certain	Survey	Day sighting	1	JANDABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/01/2005	30736	TFAUNA	Certain	Survey	Day sighting	1	JANDABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/07/2008	30737	TFAUNA	Certain	Survey	Day sighting	30	GWELUP	1000

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Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2003	30738	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/01/2006	30839	TFAUNA	Certain	Survey	Day sighting	1	MARANGAROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/10/2004	30840	TFAUNA	Certain	Survey	Day sighting	1	MARANGAROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/10/2003	30841	TFAUNA	Certain	Survey	Day sighting	50	MARANGAROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	30845	TFAUNA	Certain	Monitoring	Secondary sign	1	MARANGAROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	30846	TFAUNA	Certain	Monitoring	Secondary sign	1	MARANGAROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/09/2003	30855	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2003	30856	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/05/2003	30857	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/09/2005	30858	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/09/2005	30859	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2005	30860	TFAUNA	Certain	Survey	Day sighting	3	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/2005	30861	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2004	30862	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/08/2004	30863	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/09/2003	30864	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/09/2003	30865	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/09/2003	30866	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/09/2003	30867	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/09/2003	30868	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/09/2003	30869	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/09/2003	30870	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/09/2003	30871	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/09/2003	30872	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/06/2003	30873	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/05/2003	30874	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/05/2003	30875	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/2003	30876	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2003	30877	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/05/2003	30878	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/05/2003	30879	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/04/2003	30880	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/2003	30881	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/10/2005	30882	TFAUNA	Certain	Survey	Day sighting	1	WOODVALE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/09/2005	30883	TFAUNA	Certain	Survey	Day sighting	1	WOODVALE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/10/2003	30884	TFAUNA	Certain	Survey	Day sighting	1	WOODVALE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2003	30885	TFAUNA	Certain	Survey	Day sighting	1	WOODVALE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/03/2003	30886	TFAUNA	Certain	Survey	Day sighting	1	WOODVALE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/10/2010	30924	TFAUNA	Certain	Survey	Day sighting	100	BEECHBORO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/05/2010	30925	TFAUNA	Certain	Survey	Day sighting	20	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/05/2010	30926	TFAUNA	Certain	Survey	Day sighting	20	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/05/2006	31009	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/04/2006	31010	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2006	31011	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/11/2005	31012	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/10/2005	31013	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/09/2004	31014	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2004	31015	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/09/2003	31016	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/09/2003	31017	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/07/2003	31018	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2003	31019	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/10/2005	31092	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/09/2005	31093	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/08/2005	31094	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/09/2004	31095	TFAUNA	Certain	Survey	Day sighting	1	MULLALOO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/02/2010	31101	TFAUNA	Certain	Survey	Day sighting	2000	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/02/2010	31102	TFAUNA	Certain	Survey	Day sighting	2000	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	31108	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	31109	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	31110	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	31111	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	31112	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	31113	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	31114	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	31115	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	31116	TFAUNA	Certain	Monitoring	Secondary sign	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2003	31117	TFAUNA	Certain	Survey	Day sighting	1	JOONDALUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2005	31118	TFAUNA	Certain	Survey	Day sighting	1	JOONDALUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/09/2005	31119	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/07/2003	31120	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2003	31121	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/06/2003	31122	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/10/2001	31123	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/01/2009	31124	TFAUNA	Certain	Survey	Day sighting	2	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2008	31139	TFAUNA	Certain	Survey	Day sighting	1	SORRENTO	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/03/1978	31410	TFAUNA	Certain	Survey	Day sighting	20	JANDABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/01/2006	31417	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/02/2004	31418	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/09/2003	31419	TFAUNA	Certain	Survey	Day sighting	1	DOUBLEVIEW	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/11/2005	31420	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/09/2004	31421	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/09/2004	31422	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/09/2004	31423	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/08/2003	31424	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2003	31425	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/10/2003	32116	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/10/2005	32117	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/10/2005	32118	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/2005	32119	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/11/2003	32120	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/11/2003	32121	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/06/2003	32122	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/06/2003	32123	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/06/2003	32124	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32147	TFAUNA	Certain	Monitoring	Secondary sign	1	RIDGEWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32148	TFAUNA	Certain	Monitoring	Secondary sign	1	RIDGEWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32149	TFAUNA	Certain	Monitoring	Secondary sign	1	RIDGEWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32150	TFAUNA	Certain	Monitoring	Secondary sign	1	RIDGEWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32151	TFAUNA	Certain	Monitoring	Secondary sign	1	RIDGEWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32152	TFAUNA	Certain	Monitoring	Secondary sign	1	RIDGEWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/2006	32206	TFAUNA	Certain	Survey	Day sighting	2	HERDSMAN	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/2006	32207	TFAUNA	Certain	Survey	Day sighting	2	HERDSMAN	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2003	32208	TFAUNA	Certain	Survey	Day sighting	1	HERDSMAN	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/2002	32209	TFAUNA	Certain	Survey	Day sighting	1	FLORILAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	32210	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2005	32211	TFAUNA	Certain	Survey	Day sighting	500	AVELEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/10/2003	32212	TFAUNA	Certain	Survey	Day sighting	1	AVELEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/10/2003	32213	TFAUNA	Certain	Survey	Day sighting	1	AVELEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/09/2003	32214	TFAUNA	Certain	Survey	Day sighting	1	AVELEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/01/2003	32215	TFAUNA	Certain	Survey	Day sighting	1	AVELEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/03/2006	32220	TFAUNA	Certain	Survey	Day sighting	1	CONNOLLY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/09/2004	32221	TFAUNA	Certain	Survey	Day sighting	1	CONNOLLY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/10/2003	32222	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/09/2002	32223	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/05/2010	32275	TFAUNA	Certain	Survey	Secondary sign	1	MORLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/02/2006	32276	TFAUNA	Certain	Survey	Day sighting	1	HAMERSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/06/2004	32277	TFAUNA	Certain	Survey	Day sighting	1	HAMERSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/06/2004	32278	TFAUNA	Certain	Survey	Day sighting	1	HAMERSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/07/2003	32279	TFAUNA	Certain	Survey	Day sighting	1	HAMERSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2002	32280	TFAUNA	Certain	Survey	Day sighting	1	HAMERSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/08/2003	32316	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/10/2005	32490	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/11/2004	32491	TFAUNA	Certain	Survey	Day sighting	700	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/11/2004	32492	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/11/2004	32493	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/10/2004	32494	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/10/2004	32495	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/10/2004	32496	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/10/2004	32497	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/06/2004	32498	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/06/2004	32499	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/06/2004	32500	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2004	32501	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2004	32502	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/2004	32503	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/11/2003	32504	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/11/2003	32505	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/11/2003	32506	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2003	32507	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/10/2003	32508	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/10/2003	32509	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/10/2003	32510	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/10/2003	32511	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/10/2003	32512	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/10/2003	32513	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/09/2003	32514	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/09/2003	32515	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/09/2003	32516	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/05/2003	32517	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2003	32518	TFAUNA	Certain	Survey	Day sighting	1	KINGSLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32612	TFAUNA	Certain	Monitoring	Secondary sign	1	THE VINES	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32613	TFAUNA	Certain	Monitoring	Secondary sign	1	THE VINES	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32614	TFAUNA	Certain	Monitoring	Secondary sign	1	THE VINES	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32615	TFAUNA	Certain	Monitoring	Secondary sign	1	THE VINES	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32616	TFAUNA	Certain	Monitoring	Secondary sign	1	THE VINES	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32617	TFAUNA	Certain	Monitoring	Secondary sign	1	THE VINES	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/03/2010	32620	TFAUNA	Certain	Survey	Day sighting	100	WANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/03/2010	32621	TFAUNA	Certain	Survey	Day sighting	100	WANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	32622	TFAUNA	Certain	Monitoring	Secondary sign	1	AVELEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/03/2005	32623	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/02/2005	32624	TFAUNA	Certain	Survey	Day sighting	1	WHITEMAN	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32625	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32626	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32627	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32628	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32629	TFAUNA	Certain	Survey	Day sighting	82	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/2004	32630	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32631	TFAUNA	Certain	Survey	Day sighting	1	LEXIA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32632	TFAUNA	Certain	Monitoring	Secondary sign	2	Gnangara-Moore River State Forest	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32633	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32634	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	32635	TFAUNA	Certain	Monitoring	Secondary sign	4	Gnangara-Moore River State Forest	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2006	32636	TFAUNA	Certain	Survey	Day sighting	2489	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	32637	TFAUNA	Certain	Monitoring	Secondary sign	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	32638	TFAUNA	Certain	Monitoring	Secondary sign	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	32639	TFAUNA	Certain	Monitoring	Secondary sign	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	32640	TFAUNA	Certain	Monitoring	Secondary sign	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	32641	TFAUNA	Certain	Monitoring	Secondary sign	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	32642	TFAUNA	Certain	Monitoring	Secondary sign	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	32643	TFAUNA	Certain	Survey	Secondary sign	2	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	32644	TFAUNA	Certain	Monitoring	Secondary sign	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/03/2004	32645	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/03/2004	32646	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/03/2004	32647	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32648	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32649	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32650	TFAUNA	Certain	Survey	Day sighting	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32651	TFAUNA	Certain	Survey	Day sighting	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32652	TFAUNA	Certain	Survey	Day sighting	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32653	TFAUNA	Certain	Survey	Day sighting	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32654	TFAUNA	Certain	Survey	Day sighting	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32655	TFAUNA	Certain	Survey	Day sighting	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32656	TFAUNA	Certain	Survey	Day sighting	1	PINJAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32658	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32659	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32660	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32661	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32662	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32663	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32664	TFAUNA	Certain	Survey	Day sighting	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32665	TFAUNA	Certain	Survey	Day sighting	1	NOWERGUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32666	TFAUNA	Certain	Survey	Day sighting	1	NOWERGUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32669	TFAUNA	Certain	Survey	Day sighting	1	JANDABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32670	TFAUNA	Certain	Survey	Day sighting	1	JANDABUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32671	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32672	TFAUNA	Certain	Survey	Day sighting	1	MARIGINIUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32675	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32676	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32677	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32678	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/02/2005	32681	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32682	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32684	TFAUNA	Certain	Survey	Day sighting	1	LEXIA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32685	TFAUNA	Certain	Survey	Day sighting	1	WHITEMAN	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32686	TFAUNA	Certain	Survey	Day sighting	1	BALLAJURA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32687	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32688	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32689	TFAUNA	Certain	Survey	Day sighting	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	32690	TFAUNA	Certain	Survey	Day sighting	1	EDGEWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	32764	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32819	TFAUNA	Certain	Monitoring	Secondary sign	1	NOWERGUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32820	TFAUNA	Certain	Monitoring	Secondary sign	1	NOWERGUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	32823	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BRIDGE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/06/2009	32828	TFAUNA	Certain	Survey	Day sighting	7	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/06/2009	32829	TFAUNA	Certain	Survey	Day sighting	8	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2009	32830	TFAUNA	Certain	Survey	Day sighting	20	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2009	32831	TFAUNA	Certain	Survey	Day sighting	20	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/05/2009	32832	TFAUNA	Certain	Survey	Day sighting	11	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/05/2009	32833	TFAUNA	Certain	Survey	Day sighting	11	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/04/2009	32834	TFAUNA	Certain	Survey	Day sighting	8	CARINE	1000

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Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/04/2009	32835	TFAUNA	Certain	Survey	Day sighting	8	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2009	32836	TFAUNA	Certain	Survey	Day sighting	45	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2009	32837	TFAUNA	Certain	Survey	Day sighting	45	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/03/2009	32838	TFAUNA	Certain	Survey	Day sighting	28	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/03/2009	32839	TFAUNA	Certain	Survey	Day sighting	28	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/2009	32852	TFAUNA	Certain	Survey	Day sighting	4	GREENWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/2009	32853	TFAUNA	Certain	Survey	Day sighting	4	GREENWOOD	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32935	TFAUNA	Certain	Monitoring	Secondary sign	1	CARRAMAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32936	TFAUNA	Certain	Monitoring	Secondary sign	1	CARRAMAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32937	TFAUNA	Certain	Monitoring	Secondary sign	1	CARRAMAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	32938	TFAUNA	Certain	Monitoring	Secondary sign	1	CARRAMAR	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/03/2008	32940	TFAUNA	Certain	Survey	Day sighting	6	FLOREAT	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/07/2006	32941	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2006	32942	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/06/2006	32943	TFAUNA	Certain	Survey	Day sighting	50	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/06/2006	32944	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2006	32945	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/06/2006	32946	TFAUNA	Certain	Survey	Day sighting	20	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/12/2004	32947	TFAUNA	Certain	Survey	Day sighting	1	FLORILAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/05/2004	32948	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/2004	32949	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/03/2004	32950	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/03/2004	32951	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/07/2003	32952	TFAUNA	Certain	Survey	Day sighting	1	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/2003	32953	TFAUNA	Certain	Survey	Day sighting	1	FLORILAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2002	32954	TFAUNA	Certain	Survey	Day sighting	1	FLORILAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/1954	32955	TFAUNA	Certain	Historical (written)	Day sighting	27	FLOREAT	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2009	32959	TFAUNA	Certain	Survey	Day sighting	26	MALAGA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2009	32960	TFAUNA	Certain	Survey	Day sighting	26	MALAGA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/03/2009	32979	TFAUNA	Certain	Survey	Day sighting	26	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/03/2009	32980	TFAUNA	Certain	Survey	Day sighting	26	OSBORNE PARK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/05/2008	32992	TFAUNA	Certain	Monitoring	Secondary sign	1	CITY BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/04/2003	32993	TFAUNA	Certain	Survey	Day sighting	1	MORLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	32996	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	32997	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	32998	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	32999	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33000	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33001	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33002	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33003	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33004	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33005	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33006	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33007	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33008	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33009	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33010	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33011	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33012	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33013	TFAUNA	Certain	Monitoring	Secondary sign	1	ELLENBROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	33014	TFAUNA	Certain	Monitoring	Secondary sign	1	LEDA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	33015	TFAUNA	Certain	Monitoring	Secondary sign	1	LEDA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	33016	TFAUNA	Certain	Monitoring	Secondary sign	1	LEDA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	33017	TFAUNA	Certain	Monitoring	Secondary sign	1	LEDA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	33018	TFAUNA	Certain	Monitoring	Secondary sign	1	LEDA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	33019	TFAUNA	Certain	Monitoring	Secondary sign	1	LEDA	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/02/2005	33020	TFAUNA	Certain	Survey	Day sighting	1	THE VINES	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/01/2005	33021	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/2004	33022	TFAUNA	Certain	Survey	Day sighting	3	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/04/2004	33023	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/04/2004	33024	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/02/2004	33025	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/2001	33026	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	33049	TFAUNA	Certain	Monitoring	Secondary sign	1	EDGEWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/07/2010	33050	TFAUNA	Certain	Survey	Day sighting	30	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/07/2010	33051	TFAUNA	Certain	Survey	Day sighting	80	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/07/2010	33052	TFAUNA	Certain	Survey	Day sighting	30	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/07/2010	33053	TFAUNA	Certain	Survey	Day sighting	30	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/07/2010	33054	TFAUNA	Certain	Survey	Day sighting	30	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/07/2010	33055	TFAUNA	Certain	Survey	Day sighting	30	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/07/2010	33056	TFAUNA	Certain	Survey	Day sighting	30	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/07/2010	33057	TFAUNA	Certain	Survey	Day sighting	80	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2005	33123	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2005	33124	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/2005	33125	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/10/2005	33126	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/05/2005	33127	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/09/2004	33128	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/10/2003	33129	TFAUNA	Certain	Survey	Day sighting	1	HILLARYS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/10/2003	33130	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/07/2003	33131	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/03/2003	33132	TFAUNA	Certain	Survey	Day sighting	1	PADBURY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/11/2003	33150	TFAUNA	Certain	Survey	Day sighting	1	KARRINYUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33207	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33208	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33209	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33210	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33211	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33212	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33213	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33214	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33215	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33216	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33217	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33218	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33219	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33220	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33221	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33222	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33223	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33224	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33225	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33226	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33227	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33228	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33229	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33230	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33231	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33232	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33233	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33234	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/07/2009	33235	TFAUNA	Certain	Monitoring	Secondary sign	1	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/08/2010	33236	TFAUNA	Certain	Survey	Day sighting	40	DIANELLA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/11/2003	33237	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/09/2003	33238	TFAUNA	Certain	Survey	Day sighting	1	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/06/2002	33239	TFAUNA	Certain	Survey	Day sighting	7	DIANELLA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	33328	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	33329	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	33330	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	33331	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	33332	TFAUNA	Certain	Monitoring	Secondary sign	1	CARABOODA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	33333	TFAUNA	Certain	Monitoring	Secondary sign	1	CARABOODA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2008	33334	TFAUNA	Certain	Monitoring	Secondary sign	1	CARABOODA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2005	33374	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/2003	33375	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/08/2003	33376	TFAUNA	Certain	Survey	Day sighting	1	WANNEROO	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/06/2003	33377	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2008	33378	TFAUNA	Certain	Monitoring	Secondary sign	1	CULLACABARDEE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/02/2008	33397	TFAUNA	Certain	Survey	Day sighting	20	MOUNT LAWLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/04/2009	33404	TFAUNA	Certain	Survey	Day sighting	40	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/04/2009	33405	TFAUNA	Certain	Survey	Day sighting	40	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/2001	33455	TFAUNA	Certain	Survey	Day sighting	1	CRAIGIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/10/2001	33456	TFAUNA	Certain	Survey	Day sighting	1	CRAIGIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/08/2005	33457	TFAUNA	Certain	Survey	Day sighting	1	CRAIGIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/09/2004	33458	TFAUNA	Certain	Survey	Day sighting	1	CRAIGIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/09/2004	33459	TFAUNA	Certain	Survey	Day sighting	1	CRAIGIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/12/2003	33460	TFAUNA	Certain	Survey	Day sighting	1	CONNOLLY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/06/2002	33461	TFAUNA	Certain	Survey	Day sighting	1	JOONDALUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/06/2002	33462	TFAUNA	Certain	Survey	Day sighting	1	HEATHRIDGE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/02/2010	33490	TFAUNA	Certain	Survey	Day sighting	300	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/02/2010	33491	TFAUNA	Certain	Survey	Day sighting	300	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	33499	TFAUNA	Certain	Monitoring	Secondary sign	1	BELHUS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/06/2009	33500	TFAUNA	Certain	Survey	Day sighting	27	HAMERSLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/06/2009	33501	TFAUNA	Certain	Survey	Day sighting	27	HAMERSLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/06/2009	33502	TFAUNA	Certain	Survey	Day sighting	350	INNALOO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/06/2009	33503	TFAUNA	Certain	Survey	Day sighting	350	INNALOO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/02/2008	33524	TFAUNA	Certain	Survey	Day sighting	80	SCARBOROUGH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/08/2004	33539	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/05/2003	33540	TFAUNA	Certain	Survey	Day sighting	1	CONNOLLY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2009	33632	TFAUNA	Certain	Survey	Day sighting	3	BAPSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2009	33633	TFAUNA	Certain	Survey	Day sighting	3	BAPSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/03/2009	33636	TFAUNA	Certain	Survey	Day sighting	3	MOUNT LAWLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/03/2009	33650	TFAUNA	Certain	Survey	Day sighting	7	BASSENDEAN	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/02/2006	33651	TFAUNA	Certain	Survey	Day sighting	20	MOUNT LAWLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/02/2006	33652	TFAUNA	Certain	Survey	Day sighting	20	MOUNT LAWLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/08/2005	33844	TFAUNA	Certain	Survey	Day sighting	1	CLARKSON	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/2004	33845	TFAUNA	Certain	Survey	Day sighting	1	CLARKSON	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/2004	33846	TFAUNA	Certain	Survey	Day sighting	1	CLARKSON	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/06/2003	33847	TFAUNA	Certain	Survey	Day sighting	1	CLARKSON	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	33856	TFAUNA	Certain	Survey	Day sighting	1	CITY BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/05/2003	33908	TFAUNA	Certain	Survey	Day sighting	24	FLOREAT	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	33927	TFAUNA	Certain	Monitoring	Secondary sign	1	HEATHRIDGE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	33928	TFAUNA	Certain	Monitoring	Secondary sign	1	HEATHRIDGE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	33929	TFAUNA	Certain	Monitoring	Secondary sign	1	HEATHRIDGE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	33930	TFAUNA	Certain	Monitoring	Secondary sign	1	HEATHRIDGE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	33931	TFAUNA	Certain	Monitoring	Secondary sign	1	HEATHRIDGE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	33932	TFAUNA	Certain	Monitoring	Secondary sign	1	HEATHRIDGE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/04/1978	33962	TFAUNA	Certain	Survey	Day sighting	35	BENNETT SPRINGS	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/04/1978	33963	TFAUNA	Certain	Survey	Day sighting	4	BENNETT SPRINGS	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/02/2005	34063	TFAUNA	Certain	Survey	Day sighting	1	CARRAMAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/01/2005	34064	TFAUNA	Certain	Survey	Day sighting	1	CARRAMAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/01/2005	34065	TFAUNA	Certain	Survey	Day sighting	1	CARRAMAR	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/01/2005	34066	TFAUNA	Certain	Survey	Day sighting	1	CARRAMAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/12/2004	34067	TFAUNA	Certain	Survey	Day sighting	1	CARRAMAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/09/2004	34068	TFAUNA	Certain	Survey	Day sighting	1	CARRAMAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/2004	34069	TFAUNA	Certain	Survey	Day sighting	1	CARRAMAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/07/2004	34070	TFAUNA	Certain	Survey	Day sighting	1	CARRAMAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/06/2010	34080	TFAUNA	Certain	Survey	Day sighting	20	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/05/2010	34081	TFAUNA	Certain	Survey	Day sighting	80	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/02/2010	34082	TFAUNA	Certain	Survey	Day sighting	200	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/02/2010	34083	TFAUNA	Certain	Survey	Day sighting	200	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/06/2010	34084	TFAUNA	Certain	Survey	Day sighting	20	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/05/2010	34085	TFAUNA	Certain	Survey	Day sighting	80	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/02/2010	34086	TFAUNA	Certain	Survey	Day sighting	200	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/02/2010	34087	TFAUNA	Certain	Survey	Day sighting	200	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/06/2009	34088	TFAUNA	Certain	Survey	Day sighting	50	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/06/2009	34089	TFAUNA	Certain	Survey	Day sighting	50	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/05/2009	34090	TFAUNA	Certain	Survey	Day sighting	31	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/05/2009	34091	TFAUNA	Certain	Survey	Day sighting	31	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/10/2010	34092	TFAUNA	Certain	Survey	Day sighting	100	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2009	34093	TFAUNA	Certain	Survey	Day sighting	1	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2009	34094	TFAUNA	Certain	Survey	Day sighting	1	CARINE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/07/2005	34095	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/2005	34096	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/11/2004	34097	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/06/2004	34098	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/06/2003	34099	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/05/2003	34100	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/05/2003	34101	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/04/2003	34102	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2003	34103	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/09/2007	34199	TFAUNA	Certain	Survey	Day sighting	20	JOONDALUP	1000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	18/01/2018	34236	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	61	Whiteman Park	300
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	17/01/2018	34237	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	64	Whiteman Park	300
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	16/01/2018	34238	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	71	Whiteman Park	300
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	11/01/2018	34239	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	100	Whiteman Park	300
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	10/01/2018	34240	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	87	Whiteman Park	300
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	9/01/2018	34241	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	103	Whiteman Park	300
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/01/2003	34376	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/02/1997	34377	TFAUNA	Certain	Survey	Day sighting	1	CURRAMBINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/07/2007	34378	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/07/2007	34379	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/08/2005	34380	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/06/2004	34381	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/04/2003	34382	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/04/2003	34383	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/08/2002	34384	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/08/2002	34385	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/08/2002	34386	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/08/2002	34387	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/08/2002	34388	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/08/2002	34389	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2002	34390	TFAUNA	Certain	Survey	Day sighting	1	BURNS BEACH	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/08/2006	34391	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/08/2006	34392	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/08/2006	34393	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/10/2004	34394	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2004	34395	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/2003	34396	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/2003	34397	TFAUNA	Certain	Survey	Day sighting	1	KINROSS	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	34519	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	34520	TFAUNA	Certain	Survey	Day sighting	3	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	34521	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	34522	TFAUNA	Certain	Monitoring	Secondary sign	1	HENLEY BROOK	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/06/2008	34523	TFAUNA	Certain	Monitoring	Secondary sign	1	THE VINES	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2008	35299	TFAUNA	Certain	Monitoring	Secondary sign	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/03/2006	35391	TFAUNA	Certain	Survey	Day sighting	30	CITY BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2004	35449	TFAUNA	Certain	Survey	Day sighting	1	CARINE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/10/2010	35535	TFAUNA	Certain	Survey	Day sighting	50	MIRRABOOKA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/02/1924	35536	TFAUNA	Certain	Historical (written)	Day sighting	2	PINJAR	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/06/2009	35551	TFAUNA	Certain	Survey	Day sighting	140	MORLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/06/2009	35552	TFAUNA	Certain	Survey	Day sighting	250	MORLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/12/2004	35614	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/12/2004	35615	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/11/2004	35616	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/11/2004	35617	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/10/2004	35618	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/10/2004	35619	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/10/2004	35620	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/10/2004	35621	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/10/2004	35622	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/10/2004	35623	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/10/2004	35624	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/10/2004	35625	TFAUNA	Certain	Survey	Day sighting	1	ELLENBROOK	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/10/2003	35626	TFAUNA	Certain	Survey	Day sighting	1	CRAIGIE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	35637	TFAUNA	Certain	Monitoring	Secondary sign	1	WHITEMAN	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/06/2004	35638	TFAUNA	Certain	Survey	Day sighting	1	WHITEMAN	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/07/2010	35706	TFAUNA	Certain	Survey	Day sighting	9	EDEN HILL	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	35707	TFAUNA	Certain	Monitoring	Secondary sign	1	HAMERSLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2008	35708	TFAUNA	Certain	Monitoring	Secondary sign	1	HAMERSLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/05/2004	35709	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/05/2004	35710	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/08/2003	35711	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/07/2003	35712	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/07/2003	35713	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/07/2003	35714	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/07/2003	35715	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/06/2003	35716	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/06/2003	35717	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/05/2003	35718	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/2003	35719	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/05/2003	35720	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2003	35721	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/03/2003	35722	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/03/2003	35723	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/02/2003	35724	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2003	35725	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/01/2003	35726	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2003	35727	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2003	35728	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/12/2002	35729	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/12/2002	35730	TFAUNA	Certain	Survey	Day sighting	1	BAYSWATER	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/08/1977	35731	TFAUNA	Certain	Survey	Day sighting	8	BAYSWATER	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/08/1959	35732	TFAUNA	Certain	Historical (written)	Day sighting	60	BAYSWATER	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/05/2009	35736	TFAUNA	Certain	Survey	Day sighting	4	BASSENDEAN	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/06/2009	35737	TFAUNA	Certain	Survey	Day sighting	30	MORLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/06/2009	35738	TFAUNA	Certain	Survey	Day sighting	30	MORLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/08/2005	35739	TFAUNA	Certain	Survey	Day sighting	1	MORLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/09/2004	35740	TFAUNA	Certain	Survey	Day sighting	1	MORLEY	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	35765	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	35766	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	35767	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2008	35768	TFAUNA	Certain	Monitoring	Secondary sign	1	WANNEROO	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/09/2004	35773	TFAUNA	Certain	Survey	Day sighting	1	NEERABUP	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/06/2009	35777	TFAUNA	Certain	Survey	Day sighting	40	BALLAJURA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/06/2009	35778	TFAUNA	Certain	Survey	Day sighting	40	BALLAJURA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2010	35779	TFAUNA	Certain	Survey	Day sighting	1	BALLAJURA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/2003	35780	TFAUNA	Certain	Survey	Day sighting	1	BALLAJURA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/2005	35781	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/10/2004	35782	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/12/2003	35783	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/12/2003	35784	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/12/2003	35785	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/12/2003	35786	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/12/2003	35787	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/11/2003	35788	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/11/2003	35789	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/11/2003	35790	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/11/2003	35791	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/11/2003	35792	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/11/2003	35793	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/11/2003	35794	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/11/2003	35795	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/11/2003	35796	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2003	35797	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2003	35798	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2003	35799	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/10/2003	35800	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/09/2003	35801	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/09/2003	35802	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/09/2003	35803	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/09/2003	35804	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/09/2003	35805	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/2003	35806	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/2003	35807	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/2003	35808	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/2003	35809	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/05/2003	35810	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/05/2003	35811	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/2003	35812	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2003	35813	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/04/2003	35814	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/04/2003	35815	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/2003	35816	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/03/2003	35817	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/03/2003	35818	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/02/2003	35819	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/02/2003	35820	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/02/2003	35821	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/02/2003	35822	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/02/2003	35823	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/02/2003	35824	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/01/2003	35825	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/12/2002	35826	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/12/2002	35827	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/12/2002	35828	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/12/2002	35829	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/12/2002	35830	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/12/2002	35831	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/12/2002	35832	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/12/2002	35833	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/12/2002	35834	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/12/2002	35835	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/12/2002	35836	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/12/2002	35837	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/12/2002	35838	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/12/2002	35839	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/12/2002	35840	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/12/2002	35841	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/12/2002	35842	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/11/2002	35843	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/11/2002	35844	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/11/2002	35845	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/11/2002	35846	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/11/2002	35847	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/11/2002	35848	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/11/2002	35849	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/11/2002	35850	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/11/2002	35851	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/11/2002	35852	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/11/2002	35853	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2002	35854	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/11/2002	35855	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2002	35856	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/10/2002	35857	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/10/2002	35858	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/10/2002	35859	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/10/2002	35860	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/10/2002	35861	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/08/2002	35862	TFAUNA	Certain	Survey	Day sighting	1	BALGA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/05/2010	35871	TFAUNA	Certain	Survey	Day sighting	140	WATERMANS BAY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/05/2010	35872	TFAUNA	Certain	Survey	Day sighting	140	BALCATTA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2009	35873	TFAUNA	Certain	Survey	Day sighting	18	BALCATTA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/04/2009	35874	TFAUNA	Certain	Survey	Day sighting	18	BALCATTA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2007	35875	TFAUNA	Certain	Survey	Day sighting	1	BALCATTA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/05/2005	35876	TFAUNA	Certain	Survey	Day sighting	1	BALCATTA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/04/2004	35877	TFAUNA	Certain	Survey	Day sighting	1	BALCATTA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2004	35878	TFAUNA	Certain	Survey	Day sighting	1	BALCATTA	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/05/2003	36246	TFAUNA	Certain	Survey	Day sighting	1	LANDSDALE	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/05/2010	36429	TFAUNA	Certain	Survey	Secondary sign	1	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/05/2010	36430	TFAUNA	Certain	Survey	Day sighting	50	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/05/2010	36431	TFAUNA	Certain	Survey	Day sighting	10	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/05/2010	36432	TFAUNA	Certain	Survey	Secondary sign	1	KIARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/2009	36467	TFAUNA	Certain	Survey	Day sighting	14	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/2009	36468	TFAUNA	Certain	Survey	Day sighting	14	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/04/2009	36469	TFAUNA	Certain	Survey	Day sighting	50	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/04/2009	36470	TFAUNA	Certain	Survey	Day sighting	2	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/04/2009	36471	TFAUNA	Certain	Survey	Day sighting	50	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/04/2009	36472	TFAUNA	Certain	Survey	Day sighting	2	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/03/2009	36473	TFAUNA	Certain	Survey	Secondary sign	1	MAYLANDS	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/04/1977	36474	TFAUNA	Certain	Survey	Day sighting	20	Gnangara-Moore River State Forest	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2009	36571	TFAUNA	Certain	Survey	Day sighting	6	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2009	36572	TFAUNA	Certain	Survey	Day sighting	6	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/04/1977	36573	TFAUNA	Certain	Survey	Day sighting	28	Gnangara-Moore River State Forest	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/07/1977	36708	TFAUNA	Certain	Survey	Day sighting	1	JOONDALUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/06/1977	36709	TFAUNA	Certain	Survey	Day sighting	1	Lake Joondalup Nature Reserve	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/07/1977	36710	TFAUNA	Certain	Survey	Day sighting	1	CURRAMBINE	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/07/1977	36799	TFAUNA	Certain	Survey	Day sighting	1	CURRAMBINE	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/08/1977	36828	TFAUNA	Certain	Survey	Day sighting	28	NEERABUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/04/1977	36868	TFAUNA	Certain	Survey	Day sighting	25	MARIGINIUP	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/07/1977	36869	TFAUNA	Certain	Survey	Day sighting	1	OCEAN REEF	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/04/2009	36894	TFAUNA	Certain	Survey	Day sighting	4	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/04/2009	36895	TFAUNA	Certain	Survey	Day sighting	4	BAYSWATER	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/06/1958	36903	TFAUNA	Certain	Historical (written)	Day sighting	1	NEERABUP	50
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/01/2018	41028	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	5	Whiteman Park	300

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/01/2018	41029	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	3	Whiteman Park	300
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/01/2018	41030	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	3	Whiteman Park	300
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/01/2018	41031	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	5	Whiteman Park	300
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/01/2018	41032	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	8	Whiteman Park	300
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/01/2018	41033	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	5	Whiteman Park	300
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/03/2018	41034	FAUNASURVEY_WLS	Not Sure		Traps are placed along permanent transect lines.	2	Whiteman Park	300
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/06/2017	47374	FAUNASURVEY_WLS	Not Sure		cage trapping	3	Whiteman Park	50
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	14/06/2017	47377	FAUNASURVEY_WLS	Not Sure		cage trapping	4	Whiteman Park	50
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/06/2017	47378	FAUNASURVEY_WLS	Not Sure		cage trapping	2	Whiteman Park	50
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	26/06/2017	47379	FAUNASURVEY_WLS	Not Sure		cage trapping	4	Whiteman Park	50
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/06/2017	47380	FAUNASURVEY_WLS	Not Sure		cage trapping	2	Whiteman Park	50
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	28/06/2017	47381	FAUNASURVEY_WLS	Not Sure		cage trapping	3	Whiteman Park	50
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/11/2017	47382	FAUNASURVEY_WLS	Not Sure		cage trapping	1	Whiteman Park	50
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/11/2017	47383	FAUNASURVEY_WLS	Not Sure		cage trapping	2	Whiteman Park	50
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	23/11/2017	47384	FAUNASURVEY_WLS	Not Sure		cage trapping	1	Whiteman Park	50
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/02/2018	47385	FAUNASURVEY_WLS	Not Sure		cage trapping	1	Whiteman Park	50
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/02/2018	47386	FAUNASURVEY_WLS	Not Sure		cage trapping	2	Whiteman Park	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/11/1995	64187	TFAUNA	Certain	Historical (written)	Sighting	1	DARCH	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/11/1995	64188	TFAUNA	Certain	Historical (written)	Sighting	21	DARCH	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/12/1995	64213	TFAUNA	Certain	Historical (written)	Sighting	9	MARANGAROO	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/12/1995	64214	TFAUNA	Certain	Historical (written)	Sighting	2	MARANGAROO	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/11/1995	64215	TFAUNA	Certain	Historical (written)	Sighting	6	MARANGAROO	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/11/1995	64216	TFAUNA	Certain	Historical (written)	Sighting	2	MARANGAROO	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/11/1995	64217	TFAUNA	Certain	Historical (written)	Sighting	13	MARANGAROO	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/10/1995	64234	TFAUNA	Certain	Historical (written)	Sighting	2	WARWICK	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/10/1995	64235	TFAUNA	Certain	Historical (written)	Sighting	2	WARWICK	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/10/1995	64236	TFAUNA	Certain	Historical (written)	Sighting	40	WARWICK	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/10/1995	64237	TFAUNA	Certain	Historical (written)	Sighting	45	WARWICK	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/10/1995	64238	TFAUNA	Certain	Historical (written)	Sighting	10	WARWICK	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/11/2017	65807	FAUNASURVEY_WLS	Not Sure		Elliot trap	1	Aveley, Western Australia	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/11/2017	65808	FAUNASURVEY_WLS	Not Sure		Elliot trap	6	Aveley, Western Australia	300
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/11/2017	65809	FAUNASURVEY_WLS	Not Sure		Elliot trap	5	Aveley, Western Australia	300
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/11/2017	65810	FAUNASURVEY_WLS	Not Sure		Elliot trap	7	Aveley, Western Australia	300
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/04/2011	67553	TFAUNA	Certain	Community survey	Day sighting	1	KINGSLEY	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/02/2006	67589	TFAUNA	Moderately certain	Community survey	Day sighting	1	NORANDA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/05/2012	67622	TFAUNA	Moderately certain	Community survey	Day sighting	1	THE VINES	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/05/2012	67626	TFAUNA	Certain	Community survey	Day sighting	4	GNANGARA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/06/2012	67719	TFAUNA	Moderately certain	Community survey	Day sighting	1	ILUKA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/07/2012	67740	TFAUNA	Moderately certain	Community survey	Day sighting	1	HAMERSLEY	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2017	67754	FAUNASURVEY_WLS	Certain		sighting	1	Lexia	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/07/2012	67759	TFAUNA	Moderately certain	Community survey	Day sighting	4	THE VINES	1000
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		25/10/2017	67770	FAUNASURVEY_WLS	Certain		pit trap	1	Lexia	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/08/2012	67771	TFAUNA	Certain	Community survey	Dead	1	WANNEROO	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/06/2012	67820	TFAUNA	Moderately certain	Community survey	Day sighting	1	JOONDALUP	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/05/2010	67871	TFAUNA	Moderately certain	Community survey	Dead	1	MINDARIE	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/07/2012	67984	TFAUNA	Certain	Community survey	Day sighting	3	THE VINES	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/05/2012	68102	TFAUNA	Certain	Community survey	Day sighting	1	GNANGARA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/05/2012	68106	TFAUNA	Moderately certain	Community survey	Day sighting	5	NORANDA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/06/1998	68147	TFAUNA	Moderately certain	Community survey	Day sighting	3	JOONDALUP	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/05/2012	68161	TFAUNA	Moderately certain	Community survey	Dead	1	THE VINES	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/05/2011	68180	TFAUNA	Moderately certain	Community survey	Day sighting	1	ILUKA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/05/2012	68219	TFAUNA	Moderately certain	Community survey	Day sighting	1	HAMERSLEY	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/05/2012	68220	TFAUNA	Moderately certain	Community survey	Day sighting	6	BURNS BEACH	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/05/2012	68232	TFAUNA	Certain	Community survey	Day sighting	1	MINDARIE	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/05/2012	68324	TFAUNA	Moderately certain	Community survey	Day sighting	6	GNANGARA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/05/2012	68362	TFAUNA	Certain	Community survey	Day sighting	3	DAYTON	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/06/2012	68377	TFAUNA	Certain	Community survey	Day sighting	3	BURNS BEACH	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/05/2012	68379	TFAUNA	Moderately certain	Community survey	Day sighting	1	ILUKA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/06/2012	68381	TFAUNA	Certain	Community survey	Night sighting	2	ILUKA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/05/2012	68392	TFAUNA	Certain	Community survey	Day sighting	2	GNANGARA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/05/2012	68452	TFAUNA	Moderately certain	Community survey	Day sighting	2	THE VINES	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/05/2012	68455	TFAUNA	Moderately certain	Community survey	Dead	4	THE VINES	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/05/2012	68559	TFAUNA	Moderately certain	Community survey	Day sighting	1	MORLEY	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/08/2012	68577	TFAUNA	Moderately certain	Community survey	Day sighting	2	KINGSLEY	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/02/2012	68589	TFAUNA	Certain	Community survey	Secondary sign	3	DUNCRAIG	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/04/2014	68591	TFAUNA	Certain	Opportunistic sighting	Secondary sign	0	Trigg	1000
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		6/07/2009	73642	FAUNASURVEY	Certain	Survey	Unknown	2	KINGSLEY	3000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/05/2014	74814	TFAUNA	Certain	Opportunistic sighting	Secondary sign	0	Trigg	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/03/2014	74815	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	2	Burns Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/06/2014	74824	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Aveley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/06/2014	74853	TFAUNA	Not sure	Opportunistic sighting	Day sighting	3	Kinsley	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		24/06/2014	74854	TFAUNA	Not sure	Opportunistic sighting	Day sighting	1	Neerabup	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/06/2014	75150	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Kinsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/06/2014	75151	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	Kinsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		29/07/2014	75163	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Kinsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/09/2014	75573	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Burns Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		24/08/2014	75577	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/09/2013	75837	TFAUNA	Moderately certain	Survey	Day sighting	1	BASSENDEAN	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/10/2013	75849	TFAUNA	Moderately certain	Survey	Day sighting	8	NORTH BEACH	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/2013	75854	TFAUNA	Moderately certain	Survey	Day sighting	50	LANDSDALE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/06/2012	75856	TFAUNA	Moderately certain	Survey	Day sighting	12	CRAIGIE	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/09/2013	75863	TFAUNA	Moderately certain	Survey	Day sighting	15	MERRIWA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/09/2013	75864	TFAUNA	Moderately certain	Survey	Day sighting	8	MERRIWA	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		24/09/2013	75865	TFAUNA	Not sure	Survey	Day sighting	1	MERRIWA	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/10/2014	76055	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Gnangara	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	17/11/2014	76072	TFAUNA	Certain	Opportunistic sighting	Day sighting	4	Woodlands	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	10/12/2014	76187	TFAUNA	Certain	Opportunistic sighting	Day sighting	10	Beechboro	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/12/2014	79977	TFAUNA	Certain	Opportunistic sighting	Dead	1	Iluka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/11/2014	79978	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Iluka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/09/2014	79980	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Iluka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/09/2014	79981	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Iluka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/08/2014	79982	TFAUNA	Certain	Opportunistic sighting	Dead	1	Iluka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/01/2014	79983	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Iluka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		30/09/2014	80039	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	4	Gnangara	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/04/2015	80040	TFAUNA	Moderately certain	Opportunistic sighting	Dead	1	Gnangara	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/05/2015	80047	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Kinsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/04/2015	80058	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Iluka	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/04/2015	80059	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Watermans Bay	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/04/2015	80061	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Ocean reef	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/04/2015	80066	TFAUNA	Moderately certain	Opportunistic sighting	Dead	1	Wanneroo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/10/2013	80173	TFAUNA	Moderately certain	Community survey	Day sighting	1	Gnangara	0
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/11/2013	80207	TFAUNA	Moderately certain	Community survey	Day sighting	1	Gnangara	0
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/11/2013	80213	TFAUNA	Moderately certain	Community survey	Day sighting	1	The Vines	0
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/11/2013	80226	TFAUNA	Moderately certain	Community survey	Day sighting	2	Gnangara	0
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/11/2013	80227	TFAUNA	Moderately certain	Community survey	Day sighting	2	Gnangara	0
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/11/2013	80228	TFAUNA	Moderately certain	Community survey	Day sighting	2	Gnangara	0
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/11/2013	80235	TFAUNA	Moderately certain	Community survey	Day sighting	2	The Vines	0
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/11/2013	80236	TFAUNA	Moderately certain	Community survey	Day sighting	2	The Vines	0
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/10/2013	80250	TFAUNA	Moderately certain	Community survey	Day sighting	3	Gnangara	0
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/11/2013	80251	TFAUNA	Moderately certain	Community survey	Day sighting	3	Gnangara	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/03/2014	80348	TFAUNA	Moderately certain	Community survey	Day sighting	16	Tamala Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80349	TFAUNA	Moderately certain	Community survey	Day sighting	20	Tamala Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80356	TFAUNA	Moderately certain	Community survey	Day sighting	92	Karrinyup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/05/2014	80357	TFAUNA	Moderately certain	Community survey	Day sighting	35	Karrinyup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80360	TFAUNA	Moderately certain	Community survey	Day sighting	7	Padbury	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/03/2014	80370	TFAUNA	Moderately certain	Community survey	Day sighting	2	Pinjar	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80375	TFAUNA	Moderately certain	Community survey	Day sighting	2	Pinjar	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80376	TFAUNA	Moderately certain	Community survey	Day sighting	3	Marangaroo	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	6/04/2014	80386	TFAUNA	Moderately certain	Community survey	Day sighting	3	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80387	TFAUNA	Moderately certain	Community survey	Day sighting	40	Gnangara	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	6/04/2014	80388	TFAUNA	Moderately certain	Community survey	Day sighting	47	Yokine	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80393	TFAUNA	Moderately certain	Community survey	Day sighting	147	Marangaroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/04/2014	80394	TFAUNA	Moderately certain	Community survey	Day sighting	820	Marangaroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/04/2014	80397	TFAUNA	Moderately certain	Community survey	Day sighting	4	Ballajura	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80403	TFAUNA	Moderately certain	Community survey	Day sighting	480	Melaleuca	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80414	TFAUNA	Moderately certain	Community survey	Day sighting	181	Lexia	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2014	80420	TFAUNA	Moderately certain	Community survey	Day sighting	14	Ellenbrook	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/05/2015	80519	TFAUNA	Certain	Opportunistic sighting	Dead	1	Kinsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/07/2015	80568	TFAUNA	Moderately certain	Opportunistic sighting	Night sighting	1	GNANGARA	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/07/2015	80582	TFAUNA	Certain	Opportunistic sighting	Day sighting	15	Duncraig	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/05/2015	80593	TFAUNA	Certain	Opportunistic sighting	Night sighting	88	Duncraig	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/06/2015	80595	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Burns Beach	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/07/2015	80614	TFAUNA	Certain	Opportunistic sighting	Night sighting	1	Craigie	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80652	TFAUNA	Certain	Community survey	Day sighting	17	Duncraig	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80653	TFAUNA	Certain	Community survey	Day sighting	23	Edgewater	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80654	TFAUNA	Certain	Community survey	Day sighting	7	Padbury	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80672	TFAUNA	Certain	Community survey	Day sighting	2	Karrinyup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80673	TFAUNA	Certain	Community survey	Day sighting	6	North Beach	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80674	TFAUNA	Certain	Community survey	Day sighting	35	Ballajura	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80675	TFAUNA	Certain	Community survey	Day sighting	5	Ballajura	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80679	TFAUNA	Certain	Community survey	Day sighting	18	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80680	TFAUNA	Certain	Community survey	Day sighting	71	Marangaroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80681	TFAUNA	Certain	Community survey	Day sighting	560	Marangaroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80684	TFAUNA	Certain	Community survey	Day sighting	179	Pinjar	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2015	80685	TFAUNA	Certain	Community survey	Day sighting	10	Tamala Park	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	12/04/2015	80689	TFAUNA	Certain	Community survey	Day sighting	1	Yokine	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	12/04/2015	80704	TFAUNA	Certain	Community survey	Day sighting	28	Yokine	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/05/2015	80717	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Mullaloo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/05/2015	80736	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Burns Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/04/2015	80737	TFAUNA	Certain	Opportunistic sighting	Dead	1	Carramar	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/10/2014	81032	TFAUNA	Moderately certain	Community survey	Day sighting	2	Kinsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/09/2014	81036	TFAUNA	Moderately certain	Community survey	Day sighting	4	Gnangara	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		30/09/2014	81037	TFAUNA	Moderately certain	Community survey	Day sighting	4	Gnangara	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/10/2014	81038	TFAUNA	Moderately certain	Community survey	Day sighting	1	Gnangara	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/09/2014	81039	TFAUNA	Moderately certain	Community survey	Day sighting	5	Gnangara	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/11/2014	81052	TFAUNA	Moderately certain	Community survey	Day sighting	2	The Vines	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/11/2014	81053	TFAUNA	Moderately certain	Community survey	Day sighting	1	The Vines	1000

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Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		30/09/2015	81072	TFAUNA	Moderately certain	Opportunistic sighting	Night sighting	1	Kinross	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2014	81077	TFAUNA	Moderately certain	Opportunistic sighting	Night sighting	1	Kinross	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		30/04/2015	81088	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Mullaloo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/08/2015	81106	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	2	Craigie	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/11/2015	81170	TFAUNA	Certain	Opportunistic sighting	Day sighting	5	North Perth	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/04/2012	81195	TFAUNA	Certain	Opportunistic sighting	Day sighting	14	Floreat	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2012	81196	TFAUNA	Certain	Opportunistic sighting	Day sighting	6	Floreat	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/04/2012	81197	TFAUNA	Certain	Opportunistic sighting	Day sighting	3	Floreat	1000
Hylaeus globuliferus	woolybush bee	INVERTEBRATE	Priority	P3		4/01/1982	81287	TFAUNA	Certain	Survey	Caught or trapped	2	MELALEUCA	1000
Hylaeus globuliferus	woolybush bee	INVERTEBRATE	Priority	P3		4/04/1982	81288	TFAUNA	Certain	Survey	Caught or trapped	1	MELALEUCA	1000
Hylaeus globuliferus	woolybush bee	INVERTEBRATE	Priority	P3		13/01/1995	81290	TFAUNA	Certain	Survey	Caught or trapped	1	Neerabup	1000
Pandion cristatus	osprey, eastern osprey	BIRD	Specially Protected - migratory	MI	MI	21/09/2015	81364	TFAUNA	Certain		Day sighting	1	Mindarie	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/01/2016	81989	TFAUNA	Certain	Opportunistic sighting	Day sighting	99	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/01/2016	81990	TFAUNA	Certain	Opportunistic sighting	Day sighting	2	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/01/2016	81991	TFAUNA	Certain	Opportunistic sighting	Day sighting	32	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/01/2016	81992	TFAUNA	Certain	Opportunistic sighting	Day sighting	27	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/01/2016	81993	TFAUNA	Certain	Opportunistic sighting	Day sighting	6	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/01/2016	81994	TFAUNA	Certain	Opportunistic sighting	Day sighting	13	Wanneroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/07/2016	82001	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	180	Tamala Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/2016	82006	TFAUNA	Certain	Opportunistic sighting	Sighting	50	Carine	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		1/03/2016	82010	TFAUNA	Certain	Opportunistic sighting	Dusk sighting	40	Ballajura	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84684	TFAUNA	Moderately certain	Community survey	Dusk sighting	8	BULLSBROOK	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84687	TFAUNA	Moderately certain	Community survey	Dusk sighting	280	LEXIA	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	3/04/2016	84690	TFAUNA	Moderately certain	Community survey	Dusk sighting	36	KIARA	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84704	TFAUNA	Moderately certain	Community survey	Dusk sighting	454	GNANGARA	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84705	TFAUNA	Moderately certain	Community survey	Dusk sighting	105	BALLAJURA	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84707	TFAUNA	Moderately certain	Community survey	Dusk sighting	4	MARIGINIUP	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84709	TFAUNA	Moderately certain	Community survey	Dusk sighting	3	GNANGARA	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84721	TFAUNA	Moderately certain	Community survey	Dusk sighting	24	HAMERSLEY	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84728	TFAUNA	Moderately certain	Community survey	Dusk sighting	48	DUNCRAIG	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84731	TFAUNA	Moderately certain	Community survey	Dusk sighting	45	KARRINYUP	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		3/04/2016	84739	TFAUNA	Moderately certain	Community survey	Dusk sighting	3	NOWERGUP	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	26/11/2016	84964	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	6	Kingsley	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	23/11/2016	84971	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	5	North Perth	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/11/2016	84982	TFAUNA	Certain	Opportunistic sighting	Dawn sighting	10	North Perth	500
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	20/05/1905	85246	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	WHITEMAN	10000
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	3/07/1905	85262	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	THE VINES	10000
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	3/07/1905	85263	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	CAWERSHAM	10000
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	16/02/1964	85285	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	WHITEMAN	10000
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	16/02/1969	85307	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	WHITEMAN	10000
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	13/11/1971	85336	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	WHITEMAN	10000
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	13/11/1971	85337	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	WHITEMAN	10000
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	6/11/1975	85362	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	WHITEMAN	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/12/2016	88121	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	0	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/10/2016	88256	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/10/2016	88257	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	JOONDALUP	1000

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Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/10/2016	88258	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/10/2016	88259	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/12/2016	88260	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/12/2016	88261	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	JOONDALUP	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/10/2016	88262	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	JOONDALUP	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	1/03/2017	88321	TFAUNA	Certain	Opportunistic sighting	Day sighting	8	Innaloo	500
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	16/04/2017	89156	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	30	North Perth	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89445	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Inglewood	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89446	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Caversham	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89447	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Malaga	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89448	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Ballajura	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89449	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Ballajura	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89451	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Alexander Heights	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89453	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Henley Brook	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89454	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Henley Brook	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89455	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Cullacabardee	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89456	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Henley Brook	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89457	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Cullacabardee	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89458	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Henley Brook	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89459	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89460	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89461	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89462	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89463	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89464	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Lexia	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89465	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89466	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89467	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89468	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moore River State Forest	1000

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Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89469	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	89470	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moore River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89471	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89472	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Neerabup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89473	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moores River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89474	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Nowergup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89475	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Gnangara-Moores River State Forest	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89476	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Nowergup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89477	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Neerabup National Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89478	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Nowergup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89481	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Nowergup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2016	89482	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Nowergup	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/10/2016	89567	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	2	Buka	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/05/2016	89576	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Kingsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/08/2016	89584	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Kingsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/05/2016	89593	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	1	Kingsway	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/06/2016	89597	TFAUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Caught or trapped	6	North Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/08/2016	89603	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Yellagonga Regional Park	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/04/2016	89604	TFAUNA	Moderately certain	Opportunistic sighting	Night sighting	1	Burns Beach	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/04/2016	89611	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Ocean Reef	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		24/03/2016	89616	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Dead	1	Ocean Reef	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/03/2016	89620	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	3	Buka	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/04/2016	89627	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Metricup	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/04/2017	89632	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Ocean Reef	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/07/2016	89637	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Dead	1	Ocean Reef	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/05/2016	89646	TFAUNA	Moderately certain	Opportunistic sighting	Night sighting	1	Burns Beach	500
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/07/2016	89653	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Burns Beach	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2015	89663	TFAUNA	Certain	Opportunistic sighting	Day sighting	3	Joondalup	1000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		18/09/2010	91286	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	LANDSDALE	5000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	24/05/2017	92246	TFAUNA	Certain	Opportunistic sighting	Day sighting	8	Joondanna	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	27/05/2017	92257	TFAUNA	Certain	Opportunistic sighting	Sighting	5	Greenwood	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/08/2017	92321	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Ocean Reef	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/08/2017	92325	TFAUNA	Not sure	Opportunistic sighting	Sighting	1	Kings Park	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/11/2015	92329	TFAUNA	Not sure	Opportunistic sighting	Day sighting	1	Lake Goollelal	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/01/2018	93067	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Caught or trapped	1	Dianella	50
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		1/01/2018	93215	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	10	Joondalup	500

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Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		1/01/2018	93216	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	10	Edgewater	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/07/2018	93254	TFAUNA	Certain	Opportunistic sighting	Day sighting	30	Joondanna	50
Hydromys chrysogaster	water-rat, rakali	MAMMAL	Priority	P4		26/02/2018	93265	TFAUNA	Certain	Opportunistic sighting	Dusk sighting	1	Gwelup	50
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	25/02/2018	93270	TFAUNA	Certain	Opportunistic sighting	Day sighting	10	Beechboro	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/03/2018	94411	TFAUNA	Not sure	Opportunistic sighting	Day sighting	1	Mullaloo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/05/2018	94540	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Dusk sighting	1	Buka	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/05/2018	94637	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	50	South Perth	10000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	1/06/2018	94643	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	6	Buka	500
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95792	TFAUNA	Moderately certain	Community survey	Sighting	156	WANNEROO	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95801	TFAUNA	Moderately certain	Community survey	Sighting	130	KIARA	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95811	TFAUNA	Moderately certain	Community survey	Sighting	7	GNANGARA	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95812	TFAUNA	Moderately certain	Community survey	Sighting	4	GNANGARA	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95820	TFAUNA	Moderately certain	Community survey	Sighting	239	YOKINE	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95821	TFAUNA	Moderately certain	Community survey	Sighting	5	MOUNT LAWLEY	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95848	TFAUNA	Moderately certain	Community survey	Sighting	120	BALLAJURA	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95849	TFAUNA	Moderately certain	Community survey	Sighting	8	MORLEY	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95850	TFAUNA	Moderately certain	Community survey	Sighting	4	WHITEMAN	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	9/04/2017	95866	TFAUNA	Moderately certain	Community survey	Sighting	129	MELALEUCA	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95912	TFAUNA	Moderately certain	Community survey	Sighting	316	GNANGARA	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95913	TFAUNA	Moderately certain	Community survey	Sighting	260	GNANGARA	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95914	TFAUNA	Moderately certain	Community survey	Sighting	6	GNANGARA	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95915	TFAUNA	Moderately certain	Community survey	Sighting	8	MARIGINIUP	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95916	TFAUNA	Moderately certain	Community survey	Sighting	1260	MARIGINIUP	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95917	TFAUNA	Moderately certain	Community survey	Sighting	770	MARIGINIUP	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95928	TFAUNA	Moderately certain	Community survey	Sighting	28	NORTH BEACH	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95956	TFAUNA	Moderately certain	Community survey	Sighting	10	KARRINYUP	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95963	TFAUNA	Moderately certain	Community survey	Sighting	7	WHITEMAN	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95965	TFAUNA	Moderately certain	Community survey	Sighting	4	NOWERGUP	1000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2010	95970	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2010	95971	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2010	95972	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2010	95973	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2010	95974	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		9/03/2010	95975	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		9/03/2010	95976	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		9/03/2010	95977	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		9/03/2010	95978	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		9/03/2010	95979	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		9/03/2010	95980	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		9/03/2010	95981	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		9/03/2010	95982	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		15/03/2010	95983	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95983	TFAUNA	Moderately certain	Community survey	Sighting	268	MELALEUCA	1000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		15/03/2010	95984	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		15/03/2010	95985	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		15/03/2010	95986	FAUNASURVEY	Certain	Survey	Unknown	1	HAMERSLEY	100
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95986	TFAUNA	Moderately certain	Community survey	Sighting	50	HENLEY BROOK	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	95999	TFAUNA	Moderately certain	Community survey	Sighting	3	INNALOO	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		9/04/2017	96000	TFAUNA	Moderately certain	Community survey	Sighting	110	DUNCRAIG	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/06/2018	96008	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	0	Mullaloo	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		10/07/2018	96237	TFAUNA	Certain	Opportunistic sighting	Day sighting	30	Malaga	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		27/07/2018	96239	TFAUNA	Certain	Opportunistic sighting	Day sighting	12	Malaga	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		27/07/2018	96240	TFAUNA	Certain	Opportunistic sighting	Day sighting	12	Malaga	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		8/08/2018	96241	TFAUNA	Certain	Opportunistic sighting	Day sighting	12	Malaga	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		8/08/2018	96242	TFAUNA	Certain	Opportunistic sighting	Day sighting	35	Malaga	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/2018	96398	TFAUNA	Certain	Opportunistic sighting	Dusk sighting	100	North Beach	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2018	96399	TFAUNA	Certain	Opportunistic sighting	Dusk sighting	50	North Beach	1000
Phascogale tapoatafa wambenger	south-western brush-tailed phascogale, wambenger	MAMMAL	Specially Protected - conservation dependent	CD		1/01/1974	96429	TFAUNA	Certain	Survey		1	Wanneroo	10000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Myrmecobius fasciatus	numbat, walpurti	MAMMAL	Threatened - Endangered	EN	EN	1/01/1974	96490	TFAUNA	Certain	Survey	Caught or trapped	2	Joondalup	10000
Dasyurus geoffroii	chuditch, western quoll	MAMMAL	Threatened - Vulnerable	VU	VU	1/01/1974	96511	TFAUNA	Certain	Survey	Caught or trapped	2	Joondalup	10000
Dasyurus geoffroii	chuditch, western quoll	MAMMAL	Threatened - Vulnerable	VU	VU	1/01/1974	96512	TFAUNA	Certain	Survey	Caught or trapped	9	Stirling	10000
Hydromys chrysogaster	water-rat, rakali	MAMMAL	Priority	P4		1/01/1974	96612	TFAUNA	Certain	Survey	Caught or trapped	7	Joondalup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/12/2018	97036	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	2	Heathridge	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/01/1967	97098	TFAUNA	Certain	Survey	Caught or trapped	1	Quinns Rocks	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/10/1965	97099	TFAUNA	Certain	Survey	Caught or trapped	3	Pinjar	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4			97102	TFAUNA	Certain	Survey	Caught or trapped	35	Balga	10000
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	10/11/1983	97222	TFAUNA	Certain	Survey	Day sighting	2	Jandabup	1000
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	18/11/1983	97223	TFAUNA	Certain	Survey	Day sighting	1	Jandabup	1000
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	2/12/1983	97224	TFAUNA	Certain	Survey	Day sighting	6	Jandabup	1000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		11/03/2010	97236	FAUNASURVEY	Certain	Survey	Unknown	1	ILUKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		11/03/2010	97237	FAUNASURVEY	Moderately certain	Survey	Unknown	1	ILUKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2010	97238	FAUNASURVEY	Moderately certain	Survey	Unknown	1	OCEAN REEF	100
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/02/2019	97261	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Dead	1	Wanneroo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/04/2018	97403	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Secondary sign	1	Wanneroo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/11/1990	97422	TFAUNA	Certain	Opportunistic sighting	Sighting	1	Wanneroo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/02/2019	97585	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Iluka	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	27/11/2016	97821	TFAUNA	Certain	Opportunistic sighting	Sighting	0	Kinsley	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	1/04/2019	97822	TFAUNA	Certain	Opportunistic sighting	Day sighting	15	Morley	1000
Pseudemydura umbrina	western swamp tortoise	REPTILE	Threatened - Critically endangered	CR	CR	1/09/1953	97902	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Warbrook	10000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/10/1995	97911	TFAUNA	Certain	Targeted survey	Caught or trapped	21	Landsdale	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/02/1994	97915	TFAUNA	Certain	Survey	Caught or trapped	9	Ellenbrook	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/05/2019	98130	TFAUNA	Moderately certain	Opportunistic sighting	Dusk sighting	1	Mullaloo	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	10/04/2019	98136	TFAUNA	Certain	Survey	Secondary sign	0	Carine	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/06/2019	98684	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	1	Mullaloo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/06/2019	98692	TFAUNA	Certain	Opportunistic sighting	Sighting	1	Burns Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/06/2019	98695	TFAUNA	Certain	Opportunistic sighting	Dead	1	Woodvale	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/06/2019	98707	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Star Swamp	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	2/07/2019	98759	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	2	Craigie	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		21/05/2000	99136	TFAUNA	Certain	Survey	Caught or trapped	1	Clarkson	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		31/05/1971	99137	TFAUNA	Certain	Survey	Caught or trapped	1	Wanneroo	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		8/08/1983	99138	TFAUNA	Certain	Survey	Caught or trapped	1	Wanneroo	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		17/07/1990	99139	TFAUNA	Certain	Survey	Caught or trapped	1	Wanneroo	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		18/07/2019	99140	TFAUNA	Certain	Survey	Caught or trapped	1	Gnangara East	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		29/09/1986	99141	TFAUNA	Certain	Survey	Caught or trapped	1	Wangara	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		24/07/2015	99142	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Wangara	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/06/1981	99143	TFAUNA	Certain	Survey	Caught or trapped	1	Padbury	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		18/09/2008	99144	TFAUNA	Certain	Survey	Caught or trapped	1	Kinsley	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3			99145	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Wangara Bush Block	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		4/07/1976	99146	TFAUNA	Certain	Survey	Caught or trapped	1	Greenwood	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		12/05/1985	99147	TFAUNA	Certain	Survey	Caught or trapped	1	Greenwood	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/01/1998	99148	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Sorrento	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		2/05/1976	99149	TFAUNA	Certain	Survey	Caught or trapped	1	Sorrento	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/07/1977	99150	TFAUNA	Certain	Survey	Caught or trapped	1	Sorrento	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		29/04/1981	99151	TFAUNA	Certain	Survey	Caught or trapped	1	Duncraig	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		8/10/1988	99152	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Duncraig	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		14/06/1977	99153	TFAUNA	Certain	Survey	Caught or trapped	1	Girrawheen	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		17/06/1987	99154	TFAUNA	Certain	Survey	Caught or trapped	1	Girrawheen	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		30/06/1996	99155	TFAUNA	Certain	Survey	Caught or trapped	1	Warwick	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		7/06/2005	99156	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Duncraig	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		9/08/1985	99157	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Duncraig	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		18/07/1972	99158	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Girrawheen	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		12/06/1994	99159	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Alexander Heights	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		18/07/2019	99160	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Carine	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		9/07/1988	99161	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Carine	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		9/07/1988	99162	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Carine	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		16/04/1971	99163	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Balga	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		3/11/1983	99164	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Balga	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		15/08/1993	99165	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Carine	1000
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		11/06/1971	99166	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Karringup	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		9/08/1972	99167	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Karrinyup	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		10/05/1993	99168	TFAUNA	Certain	Survey	Caught or trapped	1	Tuart Hill	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3			99169	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Karrinyup	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		6/07/1979	99170	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Westminster	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/01/1997	99171	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Balga	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/01/1997	99172	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Balga	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		4/08/1994	99173	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Malaga	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		19/06/1963	99174	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Nollamarra	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		10/01/1982	99175	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Nollamarra	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		2/05/1982	99176	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Morley Park	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		16/07/1971	99177	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Morley	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/07/1972	99178	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Morley	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		30/06/1983	99179	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Dianella	50

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		11/02/1960	99180	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Scarborough	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		20/10/1964	99181	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Scarborough	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		12/04/1965	99182	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Tuart Hill	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/10/1970	99183	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Tuart Hill	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		20/06/1960	99184	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Tuart Hill	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		10/09/1998	99185	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Doubleview	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		24/04/1957	99186	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Osborne Park	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		25/06/1985	99187	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Balcatta	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		14/12/2000	99188	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Dianella	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/09/2008	99189	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Morley	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		24/10/1977	99190	TFAUNA	Certain	Survey	Caught or trapped	1	Joondanna	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		23/11/1968	99191	TFAUNA	Certain	Survey	Caught or trapped	1	Mt Yokine	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		28/05/1973	99192	TFAUNA	Certain	Survey	Caught or trapped	1	Wembley Downs	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		21/11/1983	99193	TFAUNA	Certain	Survey	Caught or trapped	1	Wembley Downs	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		21/05/1968	99194	TFAUNA	Certain	Survey	Caught or trapped	1	Wembley Downs	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		7/11/1966	99195	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Bayswater	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/08/1974	99196	TFAUNA	Certain	Survey	Caught or trapped	1	Bayswater	50
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		9/06/1956	99197	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Mount Hawthorn	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		1/11/1952	99198	TFAUNA	Certain	Survey	Caught or trapped	1	Inglewood	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		16/05/1938	99199	TFAUNA	Certain	Survey	Caught or trapped	1	Bayswater	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		27/07/1953	99201	TFAUNA	Certain	Survey	Caught or trapped	1	Floreat Park	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		19/09/1958	99202	TFAUNA	Certain	Survey	Caught or trapped	1	Floreat Park	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		24/06/1953	99203	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Floreat Park	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		26/01/1950	99204	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Wembley	500
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider	INVERTEBRATE	Priority	P3		12/08/1929	99205	TFAUNA	Certain	Opportunistic sighting	Caught or trapped	1	Mt Lawley	500
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		19/02/2010	99577	FAUNASURVEY	Certain	Survey	Unknown	1	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		19/02/2010	99578	FAUNASURVEY	Certain	Survey	Unknown	1	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		19/02/2010	99579	FAUNASURVEY	Certain	Survey	Unknown	1	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		19/02/2010	99580	FAUNASURVEY	Certain	Survey	Unknown	1	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		19/02/2010	99581	FAUNASURVEY	Certain	Survey	Unknown	1	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		24/02/2010	99588	FAUNASURVEY	Certain	Survey	Unknown	1	OCEAN REEF	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		25/02/2010	99589	FAUNASURVEY	Certain	Survey	Unknown	1	OCEAN REEF	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		25/02/2010	99590	FAUNASURVEY	Certain	Survey	Unknown	1	OCEAN REEF	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		1/03/2010	99595	FAUNASURVEY	Certain	Survey	Unknown	1	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		1/03/2010	99596	FAUNASURVEY	Certain	Survey	Unknown	1	SORRENTO	3000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	99605	TFAUNA	Certain	Survey	Remote sensing	1	North Beach	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	99606	TFAUNA	Certain	Monitoring	Remote sensing	1	Gnangara	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	99607	TFAUNA	Certain	Survey	Remote sensing	1	Gnangara	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/07/2019	99612	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	12	Heathridge	50
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	31/07/2019	99613	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	8	Heathridge	50
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		6/03/2010	99623	FAUNASURVEY	Certain	Survey	Unknown	6	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		6/03/2010	99624	FAUNASURVEY	Certain	Survey	Unknown	1	OCEAN REEF	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		6/03/2010	99625	FAUNASURVEY	Certain	Survey	Unknown	1	OCEAN REEF	3000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	99626	TFAUNA	Certain	Monitoring	Remote sensing	1	Scarborough	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	99627	TFAUNA	Certain	Monitoring	Remote sensing	1	North Beach	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	99628	TFAUNA	Certain	Monitoring	Remote sensing	1	North Beach	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	99629	TFAUNA	Certain	Monitoring	Remote sensing	1	North Beach	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/06/2016	99630	TFAUNA	Certain	Monitoring	Remote sensing	1	Trigg	50
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		13/03/2010	99637	FAUNASURVEY	Certain	Survey	Unknown	8	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		17/03/2010	99645	FAUNASURVEY	Certain	Survey	Unknown	1	ALEXANDER HEIGHTS	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		17/03/2010	99647	FAUNASURVEY	Certain	Survey	Unknown	3	KALLAROO	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		18/03/2010	99664	FAUNASURVEY	Certain	Survey	Unknown	3	WARWICK	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		20/03/2010	99677	FAUNASURVEY	Certain	Survey	Unknown	15	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		20/03/2010	99678	FAUNASURVEY	Certain	Survey	Unknown	1	CRAIGIE	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		21/03/2010	99679	FAUNASURVEY	Certain	Survey	Unknown	3	KALLAROO	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		24/03/2010	99684	FAUNASURVEY	Certain	Survey	Unknown	6	ALEXANDER HEIGHTS	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		7/04/2010	99697	FAUNASURVEY	Certain	Survey	Unknown	2	CRAIGIE	3000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		22/07/2019	99778	TFAUNA	Certain	Opportunistic sighting	Sighting	10	Ashby	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/03/2018	99929	TFAUNA	Certain	Monitoring	Sighting	1	Nowergup	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/03/2018	99930	TFAUNA	Certain	Monitoring	Sighting	1	Marangaroo	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/03/2018	99942	TFAUNA	Certain	Monitoring	Sighting	1	Nowergup	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/08/2019	100017	TFAUNA	Certain	Opportunistic sighting	Dav sighting	10	Mawlands	500
Chelonia mydas	green turtle	REPTILE	Threatened - Vulnerable	VU	VU	13/09/2019	100037	TFAUNA	Moderately certain	Opportunistic sighting	Dead	0	Padbury	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	13/08/2018	100182	TFAUNA	Certain	Community survey	Sighting	6	The Vines	50
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	13/03/2013	100186	TFAUNA	Certain	Community survey	Sighting	10	Baiga	500
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	13/08/2018	100191	TFAUNA	Certain	Opportunistic sighting	Sighting	34	Embleton	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	7/04/2013	100192	TFAUNA	Certain	Community survey	Sighting	36	West Swan	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	13/08/2018	100194	TFAUNA	Certain	Community survey	Sighting	41	Bullsbrook	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	7/04/2012	100201	TFAUNA	Certain	Community survey	Sighting	88	Yokine	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	15/04/2012	100204	TFAUNA	Certain	Community survey	Sighting	151	Ballajura	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	15/04/2012	100209	TFAUNA	Certain	Community survey	Sighting	11	Marangaroo	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	13/08/2018	100274	TFAUNA	Certain	Community survey	Sighting	129	Melaleuca	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2018	100299	TFAUNA	Certain	Community survey	Sighting	0	Embleton	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2018	100321	TFAUNA	Certain	Community survey	Sighting	0	City Beach	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2018	100370	TFAUNA	Certain	Community survey	Sighting	0	Gwelup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2018	100371	TFAUNA	Certain	Community survey	Sighting	0	Yokine	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2018	100373	TFAUNA	Certain	Community survey	Sighting	0	Caversham	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2018	100376	TFAUNA	Certain	Community survey	Sighting	30	Leederville	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2018	100377	TFAUNA	Certain	Community survey	Sighting	20	North Perth	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2018	100378	TFAUNA	Certain	Community survey	Sighting	650	Marangaroo	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2018	100379	TFAUNA	Certain	Community survey	Sighting	0	Nowergup	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2019	100380	TFAUNA	Certain	Community survey	Sighting	0	Nowergup	1000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100397	TFAUNA	Certain	Community survey	Sighting	3	Innaloo	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100399	TFAUNA	Certain	Community survey	Sighting	3	Marigimup	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100427	TFAUNA	Certain	Community survey	Sighting	8	Bullsbrook	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100453	TFAUNA	Certain	Community survey	Sighting	17	Padbury	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100466	TFAUNA	Certain	Community survey	Sighting	23	Edgewater	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100468	TFAUNA	Certain	Community survey	Sighting	24	Hamersley	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100487	TFAUNA	Certain	Community survey	Sighting	35	Nowergup	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100503	TFAUNA	Certain	Community survey	Sighting	50	Henley Brook	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100511	TFAUNA	Certain	Community survey	Sighting	60	Warwick	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100539	TFAUNA	Certain	Community survey	Sighting	92	Ballajura	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100543	TFAUNA	Certain	Community survey	Sighting	105	Ballajura	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100545	TFAUNA	Certain	Community survey	Sighting	110	Duncraig	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100551	TFAUNA	Certain	Community survey	Sighting	121	Karrinyup	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100571	TFAUNA	Certain	Community survey	Sighting	181	Lexia	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100588	TFAUNA	Certain	Community survey	Sighting	267	North Beach	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100589	TFAUNA	Certain	Community survey	Sighting	280	Ellenbrook	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100600	TFAUNA	Certain	Community survey	Sighting	350	Marigimup	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		13/08/2018	100609	TFAUNA	Certain	Community survey	Sighting	500	Melaleuca	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/09/2019	103003	TFAUNA	Certain	Opportunistic sighting	Sighting	50	Mindarie	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/09/2006	103014	TFAUNA	Certain	Survey	Caught or trapped	8	Egerton	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2006	103015	TFAUNA	Certain	Survey	Caught or trapped	23	Beerion	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/10/2019	103067	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	11	Mullaloo	1000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/08/2010	104094	FAUNASURVEY	Certain	Survey	Unknown	1	ALEXANDER HEIGHTS	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		10/03/2010	104290	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		18/03/2010	104291	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		18/03/2010	104292	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/06/2010	104773	FAUNASURVEY	Certain	Survey	Unknown	20	ELLENBROOK	0
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	16/10/2019	127088	TFAUNA	Moderately certain	Opportunistic sighting	Dav sighting	3	Banksia Grove	50
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	17/10/2019	127090	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	4	Leederville	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/10/2019	127137	TFAUNA	Certain	Opportunistic sighting	Sighting	2	Lake Yellagonga	50
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	10/11/2019	127153	TFAUNA	Certain	Opportunistic sighting	Sighting	4	Yokine Reserve	500
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	15/11/2019	127184	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Dusk sighting	3	Bedford	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		15/03/2019	127297	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	Banksia Grove, Perth	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		14/03/2019	127301	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	3	Warwick Bushland	1000
Synemon gratiosa	graceful sunmoth	INVERTEBRATE	Priority	P4		17/03/2019	127302	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	3	Warwick Bushland	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2019	127321	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Edgewater, Perth	50
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/09/2019	127322	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Woodvale, Perth	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/12/2019	127345	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Dusk sighting	1	Star Swamp Marmion	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	21/02/2020	134267	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Night sighting	5	Leederville	50
Pseudemydura umbrina	western swamp tortoise	REPTILE	Threatened - Critically endangered	CR	CR	8/06/1962	138576	TFAUNA	Certain	Opportunistic sighting	Sighting	2	Warbrook Road	1000
Pseudemydura umbrina	western swamp tortoise	REPTILE	Threatened - Critically endangered	CR	CR	11/06/1963	138577	TFAUNA	Certain	Opportunistic sighting	Dead	1	West of Warbrook Road	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/02/2020	138618	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	10	Quinns Rock	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/03/2020	138626	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	1	Star Swamp	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/03/2020	138628	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	1	Mullalls Beach	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		31/03/2020	140110	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Dusk sighting	1	Craigie	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/04/2020	140114	TFAUNA	Certain	Opportunistic sighting	Night sighting	1	Craigie	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/04/2020	140119	TFAUNA	Certain	Opportunistic sighting	Night sighting	1	North Beach	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/05/2020	140202	TFAUNA	Certain	Opportunistic sighting	Sighting	1	Craigie	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		25/05/2020	140204	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	1	Clayton's beach	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	30/05/2020	140211	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	2	Burns Beach	1000
Calyptorhynchus banksii naso	forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	14/06/2020	140289	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	7	Ellenbrook	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/06/2020	140417	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	0	Mullaloo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/07/2020	140432	TFAUNA	Moderately certain	Opportunistic sighting		0	Mullaloo	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/07/2020	140439	TFAUNA	Moderately certain	Opportunistic sighting	Day sighting	1	Caversham	50
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/07/2020	140440	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Night sighting	1	Wanneroo	1000
Calyptorhynchus sp. 'white-tailed black cockatoo'	white-tailed black cockatoo	BIRD	Threatened - Endangered	EN		22/07/2020	140477	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Day sighting	18	Sorrento	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/07/2020	140493	TFAUNA	Not sure	Opportunistic sighting	Day sighting	2	Kinsley	1000
Isoodon fusciventer	quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/06/2020	140508	TFAUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Night sighting	1	Brabham	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/09/2020	140585	TFAUNA	Moderately certain	Opportunistic sighting	Dusk sighting	6	Clarkson	1000
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	11/11/2020	140702	TFAUNA	Very Certain (photo, specimen, expert)	Biological survey		14	Caversham	0
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		28/02/2011	186579	FAUNASURVEY	Certain	Survey	Unknown	22	OCEAN REEF	10000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193748	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193749	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193750	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193751	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193752	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193753	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193754	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193755	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193756	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193757	FAUNASURVEY	Certain	Survey	Unknown	2	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193758	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193759	FAUNASURVEY	Certain	Survey	Unknown	2	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193760	FAUNASURVEY	Certain	Survey	Unknown	2	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193761	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193762	FAUNASURVEY	Certain	Survey	Unknown	4	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193763	FAUNASURVEY	Certain	Survey	Unknown	4	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193764	FAUNASURVEY	Certain	Survey	Unknown	3	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193765	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193766	FAUNASURVEY	Certain	Survey	Unknown	2	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193767	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193768	FAUNASURVEY	Certain	Survey	Unknown	2	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		8/03/2011	193769	FAUNASURVEY	Certain	Survey	Unknown	2	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		22/08/2011	193770	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		22/08/2011	193771	FAUNASURVEY	Certain	Survey	Unknown	2	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		22/08/2011	193772	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		22/08/2011	193773	FAUNASURVEY	Certain	Survey	Unknown	3	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		22/08/2011	193774	FAUNASURVEY	Certain	Survey	Unknown	3	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		22/08/2011	193775	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		22/08/2011	193776	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		22/08/2011	193777	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		29/03/2011	193778	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		29/03/2011	193779	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		31/03/2011	195419	FAUNASURVEY	Certain	Survey	Unknown	1	TAMALA PARK	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		31/03/2011	195420	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		1/11/2011	214989	FAUNASURVEY	Certain	Survey	Unknown	1	GNANGARA	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		18/05/2011	214990	FAUNASURVEY	Certain	Survey	Unknown	1	GNANGARA	3000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2011	270530	FAUNASURVEY	Certain	Survey	Unknown	1	JOONDALUP	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/08/2011	342483	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/08/2011	342484	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/08/2011	342485	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/08/2011	342486	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/08/2011	342487	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/08/2011	342488	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/08/2011	342489	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/08/2011	342490	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/08/2011	342491	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/08/2011	342493	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/08/2011	342494	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/08/2011	342495	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/08/2011	342496	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/08/2011	342497	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/08/2011	342498	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/08/2011	342499	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/08/2011	342501	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/08/2011	342502	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/08/2011	342503	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/08/2011	342504	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/08/2011	342505	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/08/2011	342506	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/08/2011	342507	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/08/2011	342508	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/08/2011	342509	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2011	342510	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2011	342511	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2011	342512	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/09/2011	342513	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/09/2011	342514	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/09/2011	342515	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/09/2011	342516	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/09/2011	342517	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/09/2011	342518	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/09/2011	342519	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/09/2011	342520	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/09/2011	342521	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/09/2011	342522	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/09/2011	342523	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/09/2011	342524	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/09/2011	342525	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/09/2011	342526	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/09/2011	342527	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/09/2011	342528	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/09/2011	342529	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/09/2011	342530	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		5/09/2011	342531	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/09/2011	342532	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		5/09/2011	342533	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2011	342534	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2011	342535	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2011	342536	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2011	342537	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2011	342538	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2011	342539	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	14/04/2011	361708	FAUNASURVEY	Certain	Survey	Unknown	16	MALAGA	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	20/05/2011	361709	FAUNASURVEY	Certain	Survey	Unknown	16	MALAGA	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	17/06/2011	361710	FAUNASURVEY	Certain	Survey	Unknown	16	MALAGA	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	19/07/2011	361711	FAUNASURVEY	Certain	Survey	Unknown	16	MALAGA	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	9/08/2011	361712	FAUNASURVEY	Certain	Survey	Unknown	16	MALAGA	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	13/09/2011	361713	FAUNASURVEY	Certain	Survey	Unknown	16	MALAGA	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	24/10/2011	361714	FAUNASURVEY	Certain	Survey	Unknown	16	MALAGA	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	17/11/2011	361715	FAUNASURVEY	Certain	Survey	Unknown	16	MALAGA	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	12/12/2011	361716	FAUNASURVEY	Certain	Survey	Unknown	16	MALAGA	3000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2011	366522	FAUNASURVEY	Certain	Survey	Unknown	1	ALEXANDER HEIGHTS	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2011	366523	FAUNASURVEY	Certain	Survey	Unknown	1	ALEXANDER HEIGHTS	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2011	366524	FAUNASURVEY	Certain	Survey	Unknown	2	ALEXANDER HEIGHTS	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2011	366525	FAUNASURVEY	Certain	Survey	Unknown	1	ALEXANDER HEIGHTS	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		1/02/2011	366527	FAUNASURVEY	Certain	Survey	Unknown	1	KALLAROO	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		25/02/2011	366528	FAUNASURVEY	Certain	Survey	Unknown	1	KALLAROO	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		25/02/2011	366529	FAUNASURVEY	Certain	Survey	Unknown	1	KALLAROO	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366530	FAUNASURVEY	Certain	Survey	Unknown	1	KALLAROO	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366531	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366532	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366533	FAUNASURVEY	Certain	Survey	Unknown	5	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366534	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366535	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366536	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366537	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366538	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366539	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366540	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366541	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		2/03/2011	366542	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		18/03/2011	366543	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		18/03/2011	366544	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366545	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366546	FAUNASURVEY	Certain	Survey	Unknown	3	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366547	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366548	FAUNASURVEY	Certain	Survey	Unknown	2	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366549	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366550	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366551	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366552	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366553	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366554	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366555	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366556	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366557	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366558	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366559	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366560	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366561	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366562	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366563	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		4/03/2011	366564	FAUNASURVEY	Certain	Survey	Unknown	3	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		26/02/2011	366565	FAUNASURVEY	Certain	Survey	Unknown	2	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		26/02/2011	366566	FAUNASURVEY	Certain	Survey	Unknown	1	MIRRABOOKA	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2011	366568	FAUNASURVEY	Certain	Survey	Unknown	1	WARWICK	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2011	366569	FAUNASURVEY	Certain	Survey	Unknown	1	WARWICK	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2011	366570	FAUNASURVEY	Certain	Survey	Unknown	1	WARWICK	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2011	366571	FAUNASURVEY	Certain	Survey	Unknown	1	WARWICK	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/03/2011	366572	FAUNASURVEY	Certain	Survey	Unknown	1	WARWICK	100
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		3/04/2011	366707	FAUNASURVEY	Certain	Survey	Unknown	1	WARWICK	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/09/2011	431742	FAUNASURVEY	Certain	Survey	Unknown	6	WHITEMAN	10000
Synemon gratiosa	Graceful sunmoth	INVERTEBRATE	Priority	P4		14/03/2012	437363	FAUNASURVEY	Certain	Survey	Unknown	8	HAMERSLEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		30/09/2009	440549	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/10/2009	440554	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/10/2009	440555	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/10/2009	440556	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/10/2009	440559	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/10/2009	440560	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/10/2009	440562	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/10/2009	440564	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/10/2009	440565	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/04/2012	447617	FAUNASURVEY	Certain	Survey	Unknown	1	NEERABUP	3000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/09/2012	498796	FAUNASURVEY	Certain	Survey	Unknown	50	EDGEWATER	3000
Calyptorhynchus banksii naso	Forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	20/09/2012	498803	FAUNASURVEY	Certain	Survey	Unknown	1	EDGEWATER	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/09/2012	498807	FAUNASURVEY	Certain	Survey	Unknown	1	EDGEWATER	3000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/09/2012	499627	FAUNASURVEY	Certain	Survey	Unknown	50	WARWICK	3000
Calyptorhynchus banksii naso	Forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	27/09/2012	499634	FAUNASURVEY	Certain	Survey	Unknown	1	WARWICK	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/09/2012	499638	FAUNASURVEY	Certain	Survey	Unknown	1	WARWICK	3000
Calyptorhynchus banksii naso	Forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	27/09/2012	499650	FAUNASURVEY	Certain	Survey	Unknown	1	WARWICK	3000
Notamacropus irma	Western brush wallaby	MAMMAL	Priority	P4		12/10/2012	528048	FAUNASURVEY	Certain	Survey	Unknown	3	MIRRABOOKA	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/10/2012	528050	FAUNASURVEY	Certain	Survey	Unknown	3	MIRRABOOKA	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/10/2012	541481	FAUNASURVEY	Certain	Survey	Unknown	2	CRAIGIE	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		24/09/2012	567201	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		25/09/2012	567202	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		25/09/2012	567203	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/09/2012	567204	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/09/2012	567205	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/09/2012	567206	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/09/2012	567207	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/09/2012	567208	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/09/2012	567209	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/09/2012	567210	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/09/2012	567211	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/09/2012	567212	FAUNASURVEY	Certain	Survey	Unknown	1	NOWERGUP	10000
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	16/08/2012	631827	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	16/08/2012	631828	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	3/12/2012	631833	FAUNASURVEY	WAM Vouchered	Survey	Specimen	6	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	3/12/2012	631834	FAUNASURVEY	WAM Vouchered	Survey	Specimen	0	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	16/08/2012	631839	FAUNASURVEY	WAM Vouchered	Survey	Specimen	11	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	16/08/2012	631840	FAUNASURVEY	WAM Vouchered	Survey	Specimen	0	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	5/07/2012	631845	FAUNASURVEY	WAM Vouchered	Survey	Specimen	5	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	5/07/2012	631846	FAUNASURVEY	WAM Vouchered	Survey	Specimen	2	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	7/07/2012	631851	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	7/07/2012	631852	FAUNASURVEY	WAM Vouchered	Survey	Specimen	2	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	4/02/2013	631858	FAUNASURVEY	WAM Vouchered	Survey	Specimen	6	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	4/02/2013	631859	FAUNASURVEY	WAM Vouchered	Survey	Specimen	0	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	15/05/2013	631865	FAUNASURVEY	WAM Vouchered	Survey	Specimen	8	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	15/05/2013	631866	FAUNASURVEY	WAM Vouchered	Survey	Specimen	8	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	3/06/2013	631871	FAUNASURVEY	WAM Vouchered	Survey	Specimen	3	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	3/06/2013	631872	FAUNASURVEY	WAM Vouchered	Survey	Specimen	3	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	5/04/2013	631877	FAUNASURVEY	WAM Vouchered	Survey	Specimen	8	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	5/04/2013	631878	FAUNASURVEY	WAM Vouchered	Survey	Specimen	8	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	1/07/2013	651909	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	KALLAROO	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/12/2012	671051	FAUNASURVEY	Certain	Survey	Unknown	2	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/12/2012	671052	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/12/2012	671053	FAUNASURVEY	Certain	Survey	Unknown	2	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/12/2012	671054	FAUNASURVEY	Certain	Survey	Unknown	1	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/12/2012	671055	FAUNASURVEY	Certain	Survey	Unknown	2	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/12/2012	671056	FAUNASURVEY	Certain	Survey	Unknown	4	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/12/2012	671057	FAUNASURVEY	Certain	Survey	Unknown	3	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/12/2012	671058	FAUNASURVEY	Certain	Survey	Unknown	5	AVELEY	100
Carcharias taurus	Grey nurse shark	FISH	Threatened - Vulnerable	VU	VU	21/05/2012	678657	FAUNASURVEY	Certain	Survey	Unknown	1	HILLARYS	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/03/2013	727050	FAUNASURVEY	Certain	Survey	Unknown	3	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/10/2013	727071	FAUNASURVEY	Certain	Survey	Unknown	5	NOWERGUP	3000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2013	755931	FAUNASURVEY	Certain	Survey	Unknown	1	NEERABUP	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/11/2013	755951	FAUNASURVEY	Certain	Survey	Unknown	3	NEERABUP	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2013	755990	FAUNASURVEY	Certain	Survey	Unknown	5	NEERABUP	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2013	756023	FAUNASURVEY	Certain	Survey	Unknown	12	NEERABUP	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2013	756055	FAUNASURVEY	Certain	Survey	Unknown	19	NEERABUP	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2013	756152	FAUNASURVEY	Certain	Survey	Unknown	12	NEERABUP	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/05/2013	789655	FAUNASURVEY	Certain	Survey	Unknown	8	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/08/2013	789656	FAUNASURVEY	Certain	Survey	Unknown	11	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/09/2013	789657	FAUNASURVEY	Certain	Survey	Unknown	11	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/12/2013	789658	FAUNASURVEY	Certain	Survey	Unknown	6	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/02/2014	789659	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/11/2013	845547	FAUNASURVEY	Certain	Survey	Unknown	4	PADBURY	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/02/2014	845892	FAUNASURVEY	Certain	Survey	Unknown	2	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/03/2014	845893	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/03/2014	845894	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/05/2014	845895	FAUNASURVEY	Certain	Survey	Unknown	4	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/05/2014	845896	FAUNASURVEY	Certain	Survey	Unknown	4	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/06/2014	845897	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/06/2014	845898	FAUNASURVEY	Certain	Survey	Unknown	4	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	26/02/2014	845929	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	26/03/2014	845930	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	27/03/2014	845931	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	6/05/2014	845932	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	12/05/2014	845933	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	3/06/2014	845934	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	4/06/2014	845935	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	13/06/2014	845936	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	16/06/2014	845937	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	6/08/2013	848821	FAUNASURVEY	WAM Vouchered	Survey	Specimen	2	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	17/10/2013	848822	FAUNASURVEY	WAM Vouchered	Survey	Specimen	11	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	18/07/2013	848823	FAUNASURVEY	WAM Vouchered	Survey	Specimen	11	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	6/11/2013	848824	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	4/02/2013	848825	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	15/05/2013	848826	FAUNASURVEY	WAM Vouchered	Survey	Specimen	2	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	3/06/2013	848827	FAUNASURVEY	WAM Vouchered	Survey	Specimen	3	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	5/03/2013	848828	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	6/08/2013	848829	FAUNASURVEY	WAM Vouchered	Survey	Specimen	2	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	6/08/2013	848830	FAUNASURVEY	WAM Vouchered	Survey	Specimen	0	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	17/10/2013	848831	FAUNASURVEY	WAM Vouchered	Survey	Specimen	2	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	18/07/2013	848832	FAUNASURVEY	WAM Vouchered	Survey	Specimen	3	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	6/11/2013	848833	FAUNASURVEY	WAM Vouchered	Survey	Specimen	3	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	4/02/2013	848834	FAUNASURVEY	WAM Vouchered	Survey	Specimen	14	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	15/05/2013	848835	FAUNASURVEY	WAM Vouchered	Survey	Specimen	4	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	3/06/2013	848836	FAUNASURVEY	WAM Vouchered	Survey	Specimen	5	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	5/03/2013	848837	FAUNASURVEY	WAM Vouchered	Survey	Specimen	2	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	6/08/2013	848838	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	BURNS BEACH	100
Arctocephalus tropicalis	Subantarctic fur-seal	MAMMAL	Threatened - Vulnerable	VU		12/09/2013	848840	FAUNASURVEY	WAM Vouchered	Survey	Specimen	1	WATERMANS BAY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/11/2013	849554	FAUNASURVEY	Certain	Survey	Unknown	2	GNANGARA	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/11/2013	849557	FAUNASURVEY	Certain	Survey	Unknown	2	KINGSLEY	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/10/2013	857387	FAUNASURVEY	Certain	Survey	Unknown	6	NOWERGUP	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/09/2014	893542	FAUNASURVEY	Certain	Survey	Unknown	1	ELLENBROOK	100
Calyptorhynchus banksii naso	Forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	11/09/2014	893550	FAUNASURVEY	Certain	Survey	Unknown	1	ELLENBROOK	100
Calyptorhynchus banksii naso	Forest red-tailed black cockatoo	BIRD	Threatened - Vulnerable	VU	VU	11/09/2014	893763	FAUNASURVEY	Certain	Survey	Unknown	1	ELLENBROOK	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/09/2014	893780	FAUNASURVEY	Certain	Survey	Unknown	1	ELLENBROOK	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/09/2014	893790	FAUNASURVEY	Certain	Survey	Unknown	1	ELLENBROOK	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/09/2014	893798	FAUNASURVEY	Certain	Survey	Unknown	1	ELLENBROOK	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/09/2014	893804	FAUNASURVEY	Certain	Survey	Unknown	1	ELLENBROOK	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/09/2014	893807	FAUNASURVEY	Certain	Survey	Unknown	1	ELLENBROOK	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/06/2014	893812	FAUNASURVEY	Certain	Survey	Unknown	1	ELLENBROOK	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/05/2014	911168	FAUNASURVEY	Certain	Survey	Unknown	13	CRAIGIE	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/05/2014	911169	FAUNASURVEY	Certain	Survey	Unknown	5	ELLENBROOK	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	16/01/2014	911204	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	18/02/2014	911205	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	25/03/2014	911206	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	23/04/2014	911207	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	27/05/2014	911208	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	24/06/2014	911209	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	29/07/2014	911210	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	27/08/2014	911211	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	30/09/2014	911212	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	23/10/2014	911213	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	19/12/2014	911215	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	26/02/2014	922093	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	6/05/2014	922094	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	12/05/2014	922095	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	3/06/2014	922096	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	13/06/2014	922097	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	16/09/2014	922098	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	13/01/2014	922099	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	16/12/2014	922100	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Notamacropus eugenii derbianus	Tammar wallaby	MAMMAL	Priority	P4		7/04/2014	985088	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Notamacropus eugenii derbianus	Tammar wallaby	MAMMAL	Priority	P4		8/04/2014	985089	FAUNASURVEY	Certain	Survey	Unknown	7	WHITEMAN	3000
Notamacropus eugenii derbianus	Tammar wallaby	MAMMAL	Priority	P4		9/04/2014	985090	FAUNASURVEY	Certain	Survey	Unknown	6	WHITEMAN	3000
Notamacropus eugenii derbianus	Tammar wallaby	MAMMAL	Priority	P4		10/04/2014	985091	FAUNASURVEY	Certain	Survey	Unknown	3	WHITEMAN	3000
Notamacropus eugenii derbianus	Tammar wallaby	MAMMAL	Priority	P4		28/04/2014	985092	FAUNASURVEY	Certain	Survey	Unknown	14	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/06/2014	1001689	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/06/2014	1001690	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/09/2014	1001691	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/12/2014	1001692	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/02/2015	1001693	FAUNASURVEY	Certain	Survey	Unknown	3	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/03/2015	1001694	FAUNASURVEY	Certain	Survey	Unknown	2	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	16/09/2014	1022977	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	15/10/2014	1022978	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	16/10/2014	1022979	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	21/10/2014	1022980	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	29/10/2014	1022981	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	11/05/2014	1022982	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	11/11/2014	1022983	FAUNASURVEY	Certain	Survey	Unknown	4	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	17/11/2014	1022984	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	18/11/2014	1022985	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	18/12/2014	1022986	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	19/12/2014	1022987	FAUNASURVEY	Certain	Survey	Unknown	4	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	29/01/2015	1022988	FAUNASURVEY	Certain	Survey	Unknown	4	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	2/10/2015	1022989	FAUNASURVEY	Certain	Survey	Unknown	2	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	19/05/2015	1022990	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	23/06/2015	1022991	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/09/2014	1023014	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/10/2014	1023015	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/10/2014	1023016	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/10/2014	1023017	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		29/10/2014	1023018	FAUNASURVEY	Certain	Survey	Unknown	2	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/05/2014	1023019	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		17/11/2014	1023020	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/11/2014	1023021	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/12/2014	1023022	FAUNASURVEY	Certain	Survey	Unknown	4	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/12/2014	1023023	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		29/01/2015	1023024	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/05/2015	1023025	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/06/2015	1023026	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/10/2014	1044934	FAUNASURVEY	Certain	Survey	Unknown	5	NOWERGUP	10000
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	13/05/2015	1047181	FAUNASURVEY	Certain	Survey	Unknown	1	BURNS BEACH	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	13/05/2015	1047182	FAUNASURVEY	Certain	Survey	Unknown	6	HILLARYS	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/11/2014	1064543	FAUNASURVEY	Certain	Survey	Unknown	9	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		12/11/2014	1064544	FAUNASURVEY	Certain	Survey	Unknown	9	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/11/2014	1064545	FAUNASURVEY	Certain	Survey	Unknown	8	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/11/2014	1064546	FAUNASURVEY	Certain	Survey	Unknown	12	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/11/2014	1064547	FAUNASURVEY	Certain	Survey	Unknown	5	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/11/2014	1064548	FAUNASURVEY	Certain	Survey	Unknown	4	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/11/2014	1064549	FAUNASURVEY	Certain	Survey	Unknown	6	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/11/2014	1064550	FAUNASURVEY	Certain	Survey	Unknown	0	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/05/2015	1064615	FAUNASURVEY	Certain	Survey	Unknown	1	NORANDA	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		29/10/2015	1112716	FAUNASURVEY	Certain	Survey	Unknown	1	HILLARYS	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Pandion cristatus	Osprey, eastern osprey	BIRD	Specially Protected - migratory	MI	MI	27/10/2015	1112766	FAUNASURVEY	Certain	Survey	Unknown	1	HILLARYS	3000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/11/2015	1127010	FAUNASURVEY	Certain	Survey	Unknown	20	KINGSLEY	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/11/2015	1127011	FAUNASURVEY	Certain	Survey	Unknown	10	KINGSLEY	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	23/01/2015	1127040	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	27/02/2015	1127041	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	18/03/2015	1127042	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	22/04/2015	1127043	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	13/05/2015	1127044	FAUNASURVEY	Certain	Survey	Unknown	1	MALAGA	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/06/2015	1127522	FAUNASURVEY	Certain	Survey	Unknown	4	MINDARIE	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/06/2015	1127523	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/06/2015	1127524	FAUNASURVEY	Certain	Survey	Unknown	2	MINDARIE	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		18/06/2015	1127525	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/06/2015	1127526	FAUNASURVEY	Certain	Survey	Unknown	2	MINDARIE	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/07/2015	1127527	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/07/2015	1127528	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/07/2015	1127529	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	100
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		26/06/2015	1127540	FAUNASURVEY	Certain	Survey	Unknown	1	MINDARIE	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	22/04/2015	1171736	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	19/05/2015	1171737	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	23/06/2015	1171738	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	4/08/2015	1171739	FAUNASURVEY	Certain	Survey	Unknown	4	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	31/08/2015	1171740	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	2/09/2015	1171741	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	19/10/2015	1171742	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	9/12/2015	1171743	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Notamacropus eugenii derbianus	Tammar wallaby	MAMMAL	Priority	P4		29/02/2016	1229135	FAUNASURVEY	Certain	Survey	Unknown	6	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/05/2015	1229136	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/06/2015	1229137	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		31/08/2015	1229138	FAUNASURVEY	Certain	Survey	Unknown	2	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/10/2015	1229139	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/12/2015	1229140	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		29/09/2015	1230656	FAUNASURVEY	Certain	Survey	Unknown	1	BRABHAM	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		30/09/2015	1230657	FAUNASURVEY	Certain	Survey	Unknown	1	BRABHAM	10000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	4/07/2015	1234784	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	4/08/2015	1234785	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	31/08/2015	1234786	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	2/09/2015	1234787	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	19/10/2015	1234788	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	27/10/2015	1234789	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	2/11/2015	1234790	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	9/12/2015	1234791	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	28/01/2016	1234792	FAUNASURVEY	Certain	Survey	Unknown	55	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	1/02/2016	1234793	FAUNASURVEY	Certain	Survey	Unknown	7	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	2/02/2016	1234794	FAUNASURVEY	Certain	Survey	Unknown	10	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	4/02/2016	1234795	FAUNASURVEY	Certain	Survey	Unknown	8	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/07/2015	1234841	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/08/2015	1234842	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		31/08/2015	1234843	FAUNASURVEY	Certain	Survey	Unknown	2	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/09/2015	1234844	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		19/10/2015	1234845	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		27/10/2015	1234846	FAUNASURVEY	Certain	Survey	Unknown	2	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/12/2015	1234847	FAUNASURVEY	Certain	Survey	Unknown	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		28/01/2016	1234848	FAUNASURVEY	Certain	Survey	Unknown	14	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/02/2016	1234849	FAUNASURVEY	Certain	Survey	Unknown	2	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/12/2015	1238374	FAUNASURVEY	Certain	Survey	Unknown	4	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/12/2015	1238375	FAUNASURVEY	Certain	Survey	Unknown	7	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/12/2015	1238376	FAUNASURVEY	Certain	Survey	Unknown	6	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		4/12/2015	1238377	FAUNASURVEY	Certain	Survey	Unknown	6	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/12/2015	1238378	FAUNASURVEY	Certain	Survey	Unknown	3	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/12/2015	1238379	FAUNASURVEY	Certain	Survey	Unknown	4	AVELEY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		10/12/2015	1238380	FAUNASURVEY	Certain	Survey	Unknown	3	AVELEY	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/12/2015	1238881	FAUNASURVEY	Certain	Survey	Unknown	3	AVELEY	100
Westralunio carteri	Carter's freshwater mussel	INVERTEBRATE	Threatened - Vulnerable	VU	VU	11/05/2016	1256656	FAUNASURVEY	Certain	Survey	Unknown	79	CAVERSHAM	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		31/05/2016	1269336	FAUNASURVEY	Certain	Survey	Unknown	1	WATERMANS BAY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/06/2016	1269337	FAUNASURVEY	Certain	Survey	Unknown	1	WATERMANS BAY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		1/06/2016	1269338	FAUNASURVEY	Certain	Survey	Unknown	1	WATERMANS BAY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/06/2016	1269339	FAUNASURVEY	Certain	Survey	Unknown	1	WATERMANS BAY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		2/06/2016	1269340	FAUNASURVEY	Certain	Survey	Unknown	1	WATERMANS BAY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/06/2016	1269341	FAUNASURVEY	Certain	Survey	Unknown	1	WATERMANS BAY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/06/2016	1269342	FAUNASURVEY	Certain	Survey	Unknown	1	WATERMANS BAY	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/06/2016	1269343	FAUNASURVEY	Certain	Survey	Unknown	1	WATERMANS BAY	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/10/2015	1282355	FAUNASURVEY	Certain	Survey	Sighting	1	DUNCRAIG	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/11/2015	1282445	FAUNASURVEY	Certain	Survey	Sighting	1	JOONDALUP	100
Hesperocolletes douglasi	Douglas's broad-headed bee	INVERTEBRATE	Threatened - Critically endangered	CR	CR	8/10/2015	1287855	FAUNASURVEY	Certain	Survey	Caught or trapped	1	PINJAR	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/11/2016	1290297	FAUNASURVEY	Certain	Survey	Caught or trapped	1	ELLENBROOK	5000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	9/01/2017	1299240	FAUNASURVEY	Certain	Survey	Caught or trapped	27	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	11/01/2017	1299241	FAUNASURVEY	Certain	Survey	Caught or trapped	42	WHITEMAN	3000
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	13/01/2017	1299242	FAUNASURVEY	Certain	Survey	Caught or trapped	37	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/03/2016	1309969	FAUNASURVEY	Not Sure	Survey	Caught or trapped	16	BULLSBROOK	25000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/02/2017	1320489	FAUNASURVEY	Certain	Survey	Caught or trapped	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/02/2017	1320490	FAUNASURVEY	Certain	Survey	Caught or trapped	1	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		21/02/2017	1320491	FAUNASURVEY	Certain	Survey	Caught or trapped	3	WHITEMAN	3000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		30/06/2016	1325846	FAUNASURVEY	Certain	Survey	Remote camera	50	CRAIGIE	100
Notamacropus irma	Western brush wallaby	MAMMAL	Priority	P4		15/09/2016	1338551	FAUNASURVEY	Certain	Survey	Remote camera	1	WHITEMAN	10000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/09/2016	1338552	FAUNASURVEY	Certain	Survey	Remote camera	1	WHITEMAN	10000
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	18/11/2016	1343596	FAUNASURVEY	Certain	Survey	Sighting	0	HILLARYS	100
Neophoca cinerea	Australian sea-lion	MAMMAL	Threatened - Vulnerable	VU	EN	18/11/2016	1343597	FAUNASURVEY	Certain	Survey	Sighting	10	BURNS BEACH	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	7/07/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/07/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/07/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/08/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/08/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/08/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/08/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/07/2000	0	BIRDATLAS2				0	184 Birkett Street, Dianella	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	6/10/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/10/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/05/2000	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/05/2000	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/10/2000	0	BIRDATLAS2				0	Park, John Sanders Drive, Glendalough	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	22/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/05/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	31/05/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	31/05/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	31/05/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	29/05/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/1981	0	BIRDATLAS1				0	CONNOLLY	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	22/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	22/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	22/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	22/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/03/1981	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	7/12/1980	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/11/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/1980	0	BIRDATLAS1				0	CITY BEACH	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/12/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/10/1980	0	BIRDATLAS1				0	CONNOLLY	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/04/1980	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	28/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	28/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	28/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	28/02/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/04/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/12/1978	0	BIRDATLAS1				0	CONNOLLY	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/01/1999	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/03/1999	0	BIRDATLAS2				0	Herdsman Lake	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	25/02/1999	0	BIRDATLAS2				0	Triggs Beach, Scarborough	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/11/2000	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	10/11/2000	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/11/2000	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/11/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Elanus scriptus	Letter-winged kite	BIRD	Priority	P4		26/12/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	6/12/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	6/12/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/12/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		2/12/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		13/01/2001	0	BIRDATLAS2				0	Whiteman Park	100
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	9/11/2000	0	BIRDATLAS2				0	Gnangara Lake	500
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	9/11/2000	0	BIRDATLAS2				0	Gnangara Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/11/2000	0	BIRDATLAS2				0	Lake Gwelup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/2000	0	BIRDATLAS2				0	Millcrest Street, Scarborough	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/10/2000	0	BIRDATLAS2				0	Lake Yakine, Ellenbrook	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/10/2000	0	BIRDATLAS2				0	Burns Beach Road, Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/11/2000	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre Boardwalk	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		23/12/2000	0	BIRDATLAS2				0	Herdsman lake Boardwalk	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	28/06/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/10/2000	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/12/2000	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/06/2000	0	BIRDATLAS2				0	Karinyup Waters	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/02/2001	0	BIRDATLAS2				0	Northshore Estate, Kallaroo	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/11/2000	0	BIRDATLAS2				0	Whitford Nodes, Hillarys	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/2000	0	BIRDATLAS2				0	Whitford Nodes, Hillarys	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/01/2001	0	BIRDATLAS2				0	Whitford Nodes, Hillarys	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	28/02/2001	0	BIRDATLAS2				0	Whitford Nodes, Hillarys	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/01/2001	0	BIRDATLAS2				0	Lake Gnangara	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/11/2000	0	BIRDATLAS2				0	Future freeway reservation, Merriwa	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/11/2000	0	BIRDATLAS2				0	Neerabup NP, Nowergup	100
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/02/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/02/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/03/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	3/02/2001	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/02/2001	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/03/2001	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/02/2001	0	BIRDATLAS2				0	Lake Joondalup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/12/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/01/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/10/1998	0	BIRDATLAS2				0	Whiteman Park walk	100
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/10/1998	0	BIRDATLAS2				0	Whiteman Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/01/1999	0	BIRDATLAS2				0	Whiteman Park	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		11/04/1999	0	BIRDATLAS2				0	Whiteman Park	100

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Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/07/1999	0	BIRDATLAS2				0	Whiteman Park walk	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/07/1999	0	BIRDATLAS2				0	Whiteman Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/10/1999	0	BIRDATLAS2				0	Whiteman Park	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		25/10/1999	0	BIRDATLAS2				0	Whiteman Park walk	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/1999	0	BIRDATLAS2				0	Whiteman Park walk	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2000	0	BIRDATLAS2				0	Whiteman Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/04/2000	0	BIRDATLAS2				0	Whiteman Park walk	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/10/2000	0	BIRDATLAS2				0	Whiteman Park	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		13/01/2001	0	BIRDATLAS2				0	Whiteman Park walk	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/01/2001	0	BIRDATLAS2				0	Lake Gwelup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	20/03/2001	0	BIRDATLAS2				0	Lake Jandabup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/05/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/03/2001	0	BIRDATLAS2				0	Millcrest Street, Scarborough	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/03/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Tringa stagnatilis	Marsh sandpiper, little greenshank	BIRD	Specially Protected - migratory	MI	MI	31/05/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/05/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Limosa lapponica	Bar-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	27/04/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		12/02/2000	0	BIRDATLAS2				0	Star Swamp, North Beach	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/05/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	24/02/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/02/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	2/05/1999	0	BIRDATLAS2				0	Ocean Reef Boat Harbour	5000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/01/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/04/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	17/03/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/03/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/01/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/04/1999	0	BIRDATLAS2				0	Lake. Iluka	5000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/04/1999	0	BIRDATLAS2				0	Lake. Iluka	5000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/09/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/09/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/09/1998	0	BIRDATLAS2				0	Herdsman Lake	5000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/08/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/08/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/07/1981	0	BIRDATLAS1				0	CONNOLLY	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/05/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		17/07/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	29/02/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	28/02/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	6/04/1981	0	BIRDATLAS1				0	CITY BEACH	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		14/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	14/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000

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Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	05		31/08/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	7/10/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	7/10/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	14/12/1981	0	BIRDATLAS1				0	CITY BEACH	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/05/2001	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/05/2001	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/09/1998	0	BIRDATLAS2				0	Carine Open Space	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/09/1998	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/10/1998	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/10/1998	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/10/1998	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/11/1998	0	BIRDATLAS2				0	Carine Open Space	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/11/1998	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/11/1998	0	BIRDATLAS2				0	Carine Open Space	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/11/1998	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/11/1998	0	BIRDATLAS2				0	Carine Open Space	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/11/1998	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/12/1998	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/12/1998	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/02/1999	0	BIRDATLAS2				0	Carine Open Space	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/02/1999	0	BIRDATLAS2				0	Carine Open Space	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/04/1999	0	BIRDATLAS2				0	Millcrest Street, Scarborough	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/1998	0	BIRDATLAS2				0	Gnangara	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/01/1999	0	BIRDATLAS2				0	Gnangara	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/01/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	1/05/1999	0	BIRDATLAS2				0	Herdsman Lake	5000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/05/1999	0	BIRDATLAS2				0	Herdsman Lake	5000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/07/2000	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/2000	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/09/2000	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/10/2000	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/2000	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/12/2000	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/01/2001	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/02/2001	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/2001	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/2001	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/2001	0	BIRDATLAS2				0	Gnangara	100
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	15/04/2001	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	15/04/2001	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		15/04/2001	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre	500
Glareola maldivarum	Oriental pratincole	BIRD	Specially Protected - migratory	MI	MI	21/02/1981	0	BIRDATLAS1				0	MELALEUCA	18000
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	21/02/1981	0	BIRDATLAS1				0	CONNOLLY	18000
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	21/02/1981	0	BIRDATLAS1				0	CONNOLLY	18000
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	21/02/1981	0	BIRDATLAS1				0	CONNOLLY	18000
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	21/02/1981	0	BIRDATLAS1				0	MELALEUCA	18000
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	21/02/1981	0	BIRDATLAS1				0	MELALEUCA	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	21/02/1981	0	BIRDATLAS1				0	MELALEUCA	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/02/1981	0	BIRDATLAS1				0	MELALEUCA	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	21/02/1981	0	BIRDATLAS1				0	MELALEUCA	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	13/07/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	13/07/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Limosa limosa	Black-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	13/07/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Limosa lapponica	Bar-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	13/07/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	30/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	30/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	30/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	31/12/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	31/12/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	31/12/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/12/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/1981	0	BIRDATLAS1				0	CITY BEACH	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	22/12/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	4/07/1981	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/05/1981	0	BIRDATLAS1				0	CITY BEACH	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		27/05/2001	0	BIRDATLAS2				0	Lake Gwelup	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		14/11/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	11/07/1981	0	BIRDATLAS1				0	CITY BEACH	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		11/07/1981	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/04/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/06/2001	0	BIRDATLAS2				0	Whiteman Park	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		7/07/2001	0	BIRDATLAS2				0	Pinnaroo Valley Memorial Park, Padbury	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	29/07/2001	0	BIRDATLAS2				0	Hillarys Boat Harbour	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	24/11/2000	0	BIRDATLAS2				0	Mettams Pool, Trigg	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	9/03/2001	0	BIRDATLAS2				0	Lake Jandabup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/03/2001	0	BIRDATLAS2				0	Lake Jandabup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	14/04/2001	0	BIRDATLAS2				0	Lake Jandabup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	14/04/2001	0	BIRDATLAS2				0	Lake Jandabup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/2001	0	BIRDATLAS2				0	Lake Jandabup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2001	0	BIRDATLAS2				0	Lake Jandabup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/06/2001	0	BIRDATLAS2				0	Lake Jandabup	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	19/04/2001	0	BIRDATLAS2				0	Hillarys Beach	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	2/07/2001	0	BIRDATLAS2				0	Hillarys Boat Harbour	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	2/07/2001	0	BIRDATLAS2				0	Hillarys Beach Park	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	29/07/2001	0	BIRDATLAS2				0	Ocean Reef Boat Harbour	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	17/06/2001	0	BIRDATLAS2				0	Hillarys Boat Harbour	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/08/1999	0	BIRDATLAS2				0	Trigg Island	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	1/07/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/07/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2001	0	BIRDATLAS2				0	Waltham Reserve, Morley	100
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	27/06/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	27/06/1977	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/1977	0	BIRDATLAS1				0	CITY BEACH	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/12/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	30/11/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	27/12/1977	0	BIRDATLAS1				0	CITY BEACH	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		27/01/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	31/12/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	31/12/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	31/12/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/11/1977	0	BIRDATLAS1				0	BAYSWATER	18000

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Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	15/11/1977	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/05/1977	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	24/09/1977	0	BIRDATLAS1				0	CITY BEACH	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/08/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/02/1999	0	BIRDATLAS2				0	Trigg Island	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/08/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/07/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/12/2000	0	BIRDATLAS2				0	Teeth Light Horse Heritage Trail, Neerabup NP	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/07/2001	0	BIRDATLAS2				0	Pinaroo	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/06/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/06/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/06/2001	0	BIRDATLAS2				0	Lake Goollelal, Kingsley	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	12/07/2001	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/07/2001	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/09/2001	0	BIRDATLAS2				0	Perth PonyClub, Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	17/09/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/09/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/09/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/09/2001	0	BIRDATLAS2				0	Star Swamp, North Beach	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		13/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		14/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/05/2008	0	FAUNAFILE		Survey		0	Gnangara Lake, north of Gnangara Road, east of Sydney Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		15/05/2008	0	FAUNAFILE		Survey		0	Little Badgerup Swamp, west of Badgerup Road, west of Gnangara Lake	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		20/05/2008	0	FAUNAFILE		Survey		0	Neaves Road NR, west of Railway Parade, cross section of Neaves Road and Kirby Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/05/2008	0	FAUNAFILE		Survey		0	Neaves Road NR, west of Railway Parade, cross section of Neaves Road and Kirby Road	30

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Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		22/05/2008	0	FAUNAFILE		Survey		0	Neaves Road NR, west of Railway Parade, cross section of Neaves Road and Kirby Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/05/2008	0	FAUNAFILE		Survey		0	Neaves Road NR, west of Railway Parade, cross section of Neaves Road and Kirby Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/05/2008	0	FAUNAFILE		Survey		0	Neaves Road NR, west of Railway Parade, cross section of Neaves Road and Kirby Road	30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		23/05/2008	0	FAUNAFILE		Survey		0	Neaves Road NR, west of Railway Parade, cross section of Neaves Road and Kirby Road	30
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		28/10/2001	0	BIRDATLAS2				0	Whiteman Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/10/2001	0	BIRDATLAS2				0	Whiteman Park	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	16/05/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/05/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/09/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/09/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/11/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	3/11/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/11/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		30/05/2008	0	FAUNAFILE		Survey		0	Nowergup NR, on Wanneroo Road, west of Nowergup Lake and Neerabup NR	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/06/1999	0	BIRDATLAS2				0	Millcrest Street, Scarborough	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/1999	0	BIRDATLAS2				0	Star Swamp, North Beach	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/06/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/06/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/06/2001	0	BIRDATLAS2				0	Star Swamp, North Beach	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/09/2001	0	BIRDATLAS2				0	Main Drain, Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	2/09/2001	0	BIRDATLAS2				0	Western Ponds, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		23/10/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	0
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	17/11/2001	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/11/2001	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/12/2000	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/12/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/12/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/12/2000	0	BIRDATLAS2				0	Maurice Haimer Park, Herdsman	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/10/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	5/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/10/2001	0	BIRDATLAS2				0	Whiteman Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/10/2001	0	BIRDATLAS2				0	Whiteman Park, WP1113	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/10/2001	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/10/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	5/11/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/11/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/11/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	21/11/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	21/11/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/11/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/11/2001	0	BIRDATLAS2				0	Carine Swamp	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/11/2001	0	BIRDATLAS2				0	Lake Joondalup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/10/2001	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	3/06/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	2/07/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	9/09/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		9/09/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	29/11/2001	0	BIRDATLAS2				0	Herdsman lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/11/2001	0	BIRDATLAS2				0	Herdsman lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/11/2001	0	BIRDATLAS2				0	Lake Monger	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	25/09/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/09/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/10/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/10/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	13/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		16/12/2011	0	FAUNAFILE		Survey		0		30
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		16/12/2011	0	FAUNAFILE		Survey		0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		15/05/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	19/06/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/06/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	8/08/2001	0	BIRDATLAS2				0	Maurice Haener Park, Herdsman	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	2/09/2001	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/09/2001	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/10/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/10/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	25/03/2001	0	BIRDATLAS2				0	Lake Jandabup	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	25/03/2001	0	BIRDATLAS2				0	Lake Jandabup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/03/2001	0	BIRDATLAS2				0	Lake Jandabup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/05/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/05/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	11/07/1999	0	BIRDATLAS2				0	Lakeside Road, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/07/1999	0	BIRDATLAS2				0	Lakeside Road, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/12/1999	0	BIRDATLAS2				0	Herdsman Lake, Moondine Drive	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	12/12/1999	0	BIRDATLAS2				0	Herdsman Lake, Lakeside Road	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	12/12/1999	0	BIRDATLAS2				0	Herdsman Lake, Lakeside Road	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/12/1999	0	BIRDATLAS2				0	Herdsman Lake, Jon Sanders Drive	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/05/2000	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/06/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/06/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/09/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	27/01/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	27/01/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Tringa stagnatilis	Marsh sandpiper, little greenshank	BIRD	Specially Protected - migratory	MI	MI	27/01/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	3/02/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	18/02/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	18/02/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	18/02/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	17/03/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	17/03/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	17/03/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/11/1998	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	13/04/2001	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		27/05/2001	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/11/1998	0	BIRDATLAS2				0	Herdsman Lake	5000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/02/2005	0	BIRDATLAS2				0	Trigg Bushland Regional Open Space (Elliot)	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2005	0	BIRDATLAS2				0	Belgrade Park	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	21/03/2005	0	BIRDATLAS2				0	Coastal swale (Hale Road to Empire Avenue)	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	20/04/2005	0	BIRDATLAS2				0	Iluka Foreshore	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	17/03/2005	0	BIRDATLAS2				0	Iluka Foreshore	100
Apus pacificus	Fork-tailed swift	BIRD	Specially Protected - migratory	MI	MI	17/03/2005	0	BIRDATLAS2				0	Iluka Foreshore	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/03/2005	0	BIRDATLAS2				0	Pinjar Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/02/2005	0	BIRDATLAS2				0	Pinjar Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/04/2005	0	BIRDATLAS2				0	Pinjar Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/02/2005	0	BIRDATLAS2				0	Viveiban Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/02/2005	0	BIRDATLAS2				0	Pinjar Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/05/2005	0	BIRDATLAS2				0	Pinjar Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/11/2005	0	BIRDATLAS2				0	Pinjar Park	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/05/2005	0	BIRDATLAS2				0	Iluka Foreshore	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/09/2005	0	BIRDATLAS2				0	Iluka Foreshore	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	24/10/2005	0	BIRDATLAS2				0	Iluka Foreshore	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/10/2005	0	BIRDATLAS2				0	Iluka Foreshore	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	17/11/2005	0	BIRDATLAS2				0	Iluka Foreshore	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	19/12/2005	0	BIRDATLAS2				0	Iluka Foreshore	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/09/2005	0	BIRDATLAS2				0	Malaga Regional Open Space	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/2005	0	BIRDATLAS2				0	Pinjar Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/2005	0	BIRDATLAS2				0	Pinjar Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/07/2005	0	BIRDATLAS2				0	Trigg Bushland Regional Open Space (Duart Arnott)	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/08/2005	0	BIRDATLAS2				0	Trigg Bushland Regional Open Space (King Albert)	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/09/2005	0	BIRDATLAS2				0	Trigg Bushland Regional Open Space (King Albert)	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/08/2005	0	BIRDATLAS2				0	Trigg Bushland Regional Open Space (Elliot)	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/09/2005	0	BIRDATLAS2				0	Trigg Bushland Regional Open Space (Elliot)	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/09/2005	0	BIRDATLAS2				0	Trigg Bushland Regional Open Space (St Mary's)	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/07/2005	0	BIRDATLAS2				0	Viveiban Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/01/2006	0	BIRDATLAS2				0	Viveiban Park	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/08/2005	0	BIRDATLAS2				0	Malaga Regional Open Space	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	19/01/2006	0	BIRDATLAS2				0	Iluka Foreshore	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/01/2006	0	BIRDATLAS2				0	Pinjar Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/12/2005	0	BIRDATLAS2				0	Viveiban Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/11/2005	0	BIRDATLAS2				0	Careniup Swamp Reserve	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/11/2005	0	BIRDATLAS2				0	Cottonwood Crescent Bushland	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/01/2006	0	BIRDATLAS2				0	Cottonwood Crescent Bushland	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/07/2005	0	BIRDATLAS2				0	Craigie Open Space	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/08/2005	0	BIRDATLAS2				0	Craigie Open Space	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/10/2005	0	BIRDATLAS2				0	Craigie Open Space	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/11/2005	0	BIRDATLAS2				0	Craigie Open Space	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	24/05/2005	0	BIRDATLAS2				0	Coastal swale (Hale Road to Empire Avenue)	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	19/07/2005	0	BIRDATLAS2				0	Coastal swale (Hale Road to Empire Avenue)	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		10/09/2005	0	BIRDATLAS2				0	Coastal swale (Hale Road to Empire Avenue)	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	16/10/2005	0	BIRDATLAS2				0	Coastal swale (Hale Road to Empire Avenue)	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	18/11/2005	0	BIRDATLAS2				0	Coastal swale (Hale Road to Empire Avenue)	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/11/2005	0	BIRDATLAS2				0	Coastal swale (Hale Road to Empire Avenue)	100
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		6/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		8/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/09/2011	0	FAUNAFILE		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		9/09/2011	0	FAUNAFILE		Survey		0		30
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	13/01/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	13/01/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris alba	sanderling	BIRD	Specially Protected - migratory	MI	MI	13/01/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/08/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	26/02/1978	0	BIRDATLAS1				0	CONNOLLY	18000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	1/12/1977	0	BIRDATLAS1				0	CONNOLLY	18000
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	1/12/1977	0	BIRDATLAS1				0	CONNOLLY	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	1/12/1977	0	BIRDATLAS1				0	CONNOLLY	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	1/12/1977	0	BIRDATLAS1				0	CONNOLLY	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/12/1977	0	BIRDATLAS1				0	CONNOLLY	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/1977	0	BIRDATLAS1				0	CONNOLLY	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	26/02/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	26/02/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris alba	sanderling	BIRD	Specially Protected - migratory	MI	MI	26/02/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/03/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	31/03/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Limosa lapponica	Bar-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	31/03/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	31/03/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	31/03/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/03/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/03/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	28/09/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	7/01/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	1/03/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	15/02/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	4/05/1978	0	BIRDATLAS1				0	MELALEUCA	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	10/05/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/01/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/01/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	21/01/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/01/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	4/02/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/02/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/02/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/02/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/02/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	11/03/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/03/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/03/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/03/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	1/04/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/04/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	8/04/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/04/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	22/04/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/04/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	29/04/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	6/05/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	13/05/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	20/05/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	27/05/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	3/06/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	10/06/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	17/06/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	24/06/2006	0	BIRDATLAS2				0	Lake Gwelup	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	1/07/2006	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/07/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		23/07/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/07/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/08/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/08/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/08/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	10/09/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/09/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/10/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/11/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/11/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/11/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/11/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/12/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/12/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/12/2005	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/04/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/07/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	27/06/1999	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/06/1999	0	BIRDATLAS2				0	Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/06/1999	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	10/07/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/07/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/07/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	24/07/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/07/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	17/07/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/07/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	11/07/1999	0	BIRDATLAS2				0	Hillarys Boat Harbour	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/12/2001	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/12/2001	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		23/12/2001	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/12/2001	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/12/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/12/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/12/2001	0	BIRDATLAS2				0	Lake Monger, Mth Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/12/2001	0	BIRDATLAS2				0	Herdsman lake	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	14/02/2002	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/02/2002	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	16/02/2002	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/01/2002	0	BIRDATLAS2				0	Lake Jandabup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/01/2002	0	BIRDATLAS2				0	Lake Jandabup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/01/2002	0	BIRDATLAS2				0	Lake Joondalup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	15/12/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		15/12/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	10/01/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/01/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/01/2002	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/02/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/02/2002	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	2/03/2002	0	BIRDATLAS2				0	Lake Jandabup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/03/2002	0	BIRDATLAS2				0	Lake Jandabup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	19/07/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/07/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/09/2001	0	BIRDATLAS2				0	Carine Open Space	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/08/2001	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/01/2002	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/02/2002	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500

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Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/02/2002	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	23/01/2002	0	BIRDATLAS2				0	Trigg Island	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	20/02/2002	0	BIRDATLAS2				0	Hillarys Beach Park	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	25/02/2002	0	BIRDATLAS2				0	Hillarys Beach Park	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/02/2000	0	BIRDATLAS2				0	Brighton Beach	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/12/2001	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	22/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/12/2001	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/01/2002	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	21/01/2002	0	BIRDATLAS2				0	Lake Joondalup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	21/01/2002	0	BIRDATLAS2				0	Lake Joondalup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	27/12/2001	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/12/2001	0	BIRDATLAS2				0	Lake Gwelup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/12/2001	0	BIRDATLAS2				0	Lake Jandabup	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		28/12/2001	0	BIRDATLAS2				0	Pinjar Road, Wanneroo	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/03/2002	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	16/03/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/03/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/02/2002	0	BIRDATLAS2				0	WEMBLEY	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/11/2001	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	26/11/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	26/11/2001	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/07/2000	0	BIRDATLAS2				0	Lake Gwelup	500
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		24/09/2000	0	BIRDATLAS2				0	Barnes Road & Morris Road corner, Innaloo	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/02/2002	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	10/03/2002	0	BIRDATLAS2				0	Lake Joondalup	500
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	10/03/2002	0	BIRDATLAS2				0	Lake Joondalup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/03/2002	0	BIRDATLAS2				0	Lake Monger	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/02/2002	0	BIRDATLAS2				0	Jackadder Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	2/04/2002	0	BIRDATLAS2				0	Herdsman Lke	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	14/04/2002	0	BIRDATLAS2				0	Lake Jandabup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/2002	0	BIRDATLAS2				0	Lake Jandabup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/2002	0	BIRDATLAS2				0	Hawkins Road	100
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	20/03/2002	0	BIRDATLAS2				0	Lake Gnangara	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2002	0	BIRDATLAS2				0	Hopkins Road Bushland	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/03/2002	0	BIRDATLAS2				0	Marangup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/2002	0	BIRDATLAS2				0	Jandabup Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2002	0	BIRDATLAS2				0	Jandabup Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/03/2002	0	BIRDATLAS2				0	Lake Neerabup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/03/2002	0	BIRDATLAS2				0	Wesco Road	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/03/2002	0	BIRDATLAS2				0	Lake Neerabup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/03/2002	0	BIRDATLAS2				0	Nowergup Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/2002	0	BIRDATLAS2				0	Nowergup Lake	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	25/04/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/06/2002	0	BIRDATLAS2				0	Hawkins Rd, Jandabup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	16/03/2002	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/03/2002	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/08/2002	0	BIRDATLAS2				0	Lake Gnangara	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	12/05/2002	0	BIRDATLAS2				0	Herdsman lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/05/2002	0	BIRDATLAS2				0	Herdsman lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	19/05/2002	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/05/2002	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/11/2001	0	BIRDATLAS2				0	Yellagonga regional park	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/11/2001	0	BIRDATLAS2				0	Neil Hawkins park	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/09/2002	0	BIRDATLAS2				0	Neil Fred Hawking Park	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/10/2002	0	BIRDATLAS2				0	Lake Herdsman, Bishop Riley Way	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/07/2002	0	BIRDATLAS2				0	Lake Herdsman Wildlife Centre	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/03/2002	0	BIRDATLAS2				0	Lake Monger	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	12/05/2002	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/05/2002	0	BIRDATLAS2				0	Herdsman Lake	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	20/06/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/06/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	20/07/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/07/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/07/2002	0	BIRDATLAS2				0	Jandabup lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		9/07/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/08/2002	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/09/2002	0	BIRDATLAS2				0	Nowergup lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/10/2002	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/10/2002	0	BIRDATLAS2				0	Nowergup lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/10/2002	0	BIRDATLAS2				0	Nowergup lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/04/2003	0	BIRDATLAS2				0	Koondoola Regional Bush	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/05/2003	0	BIRDATLAS2				0	Cadogan Reserve	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/05/2003	0	BIRDATLAS2				0	Chichester Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/02/2003	0	BIRDATLAS2				0	Trigonmetric Reserve	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/05/2003	0	BIRDATLAS2				0	Korella Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/03/2003	0	BIRDATLAS2				0	Lightning Swamp	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2003	0	BIRDATLAS2				0	Lightning Swamp	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/04/2003	0	BIRDATLAS2				0	Koondoola Regional Bush	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2003	0	BIRDATLAS2				0	Koondoola Regional Bush	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/12/2002	0	BIRDATLAS2				0	Lake Badgerup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/12/2002	0	BIRDATLAS2				0	Koondoola Bush	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/2003	0	BIRDATLAS2				0	Hawkins Rd, Jandabup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/12/2002	0	BIRDATLAS2				0	Lake Monger	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/12/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/01/2003	0	BIRDATLAS2				0	Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/01/2003	0	BIRDATLAS2				0	Hopkins Road	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/02/2003	0	BIRDATLAS2				0	Jandabup Lake	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/01/2003	0	BIRDATLAS2				0	Lake Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/01/2003	0	BIRDATLAS2				0	Jandabup Lake	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	11/01/2003	0	BIRDATLAS2				0	Jandabup Lake S	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	11/01/2003	0	BIRDATLAS2				0	Jandabup Lake S	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/02/2003	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/01/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/12/2000	0	BIRDATLAS2				0	Neil Hawkins Reserve	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/08/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	24/08/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/08/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	24/08/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/08/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/09/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/09/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	13/10/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/10/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	9/11/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		9/11/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	7/12/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/12/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/12/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	8/10/2002	0	BIRDATLAS2				0	Neerabup	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/10/2002	0	BIRDATLAS2				0	Lake Joondalup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/07/2002	0	BIRDATLAS2				0	Neerabup N.P. (South)	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	9/05/2003	0	BIRDATLAS2				0	Neil Hawkins Park	0
Apus pacificus	Fork-tailed swift	BIRD	Specially Protected - migratory	MI	MI	9/03/2003	0	BIRDATLAS2				0	Neil Hawkins Park	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/10/2002	0	BIRDATLAS2				0	Star Swamp, North Beach	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/12/2002	0	BIRDATLAS2				0	Millcrest Street, Scarborough	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/05/2003	0	BIRDATLAS2				0	Star Swamp, North Beach	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/07/2001	0	BIRDATLAS2				0	Carine open space	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/02/2002	0	BIRDATLAS2				0	Herdsman Lake (west)	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/04/2003	0	BIRDATLAS2				0	Hillarys Marina	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/09/2002	0	BIRDATLAS2				0	Herdsman Lake (sth, west)	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/09/2002	0	BIRDATLAS2				0	Herdsman Lake (sth, west)	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/01/2003	0	BIRDATLAS2				0	Neil Hawkins Park	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	23/01/2003	0	BIRDATLAS2				0	Neil Hawkins Park	500
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	23/01/2003	0	BIRDATLAS2				0	Neil Hawkins Park	500
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	23/01/2003	0	BIRDATLAS2				0	Neil Hawkins Park	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/01/2003	0	BIRDATLAS2				0	Neil Hawkins Park	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/02/2003	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/02/2003	0	BIRDATLAS2				0	Herdsman Lake	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	1/03/2003	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/03/2003	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	19/03/2003	0	BIRDATLAS2				0	Herdsman Lake	500
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	19/03/2003	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/03/2003	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/04/2003	0	BIRDATLAS2				0	Herdsman Lake (sth & west)	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/04/2003	0	BIRDATLAS2				0	Herdsman Lake (sth & west)	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	19/04/2003	0	BIRDATLAS2				0	North Hillarys Beach	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	7/05/2003	0	BIRDATLAS2				0	Herdsman Lake (sth & west)	5000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/05/2003	0	BIRDATLAS2				0	Herdsman Lake (sth & west)	5000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2003	0	BIRDATLAS2				0	Pinaroo Valley	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	11/05/2003	0	BIRDATLAS2				0	North Hillarys Beach	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/05/2003	0	BIRDATLAS2				0	Barbagallo Raceway	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	5/06/2003	0	BIRDATLAS2				0	Hillarys Marina	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	9/06/2003	0	BIRDATLAS2				0	Hillarys Marina	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	14/06/2003	0	BIRDATLAS2				0	Herdsman Lake (sth & west)	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/06/2003	0	BIRDATLAS2				0	Herdsman Lake (sth & west)	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/06/2003	0	BIRDATLAS2				0	Herdsman Lake (sth & west)	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/06/2003	0	BIRDATLAS2				0	Lake Monger	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/06/2003	0	BIRDATLAS2				0	Lake Monger	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	23/06/2003	0	BIRDATLAS2				0	Ocean Reef jetty, to sth	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/06/2003	0	BIRDATLAS2				0	Ocean Reef jetty, to sth	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	29/06/2003	0	BIRDATLAS2				0	Herdsman Lake (sth & west)	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/06/2003	0	BIRDATLAS2				0	Herdsman Lake (sth & west)	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/08/2003	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/08/2003	0	BIRDATLAS2				0	Koondoola Bush	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/01/2003	0	BIRDATLAS2				0	Herdsman Lake Floreat Waters	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	25/01/2003	0	BIRDATLAS2				0	Herdsman Lake Floreat Waters	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/01/2003	0	BIRDATLAS2				0	Herdsman Lake Dredge Pond	100
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2002	0	BIRDATLAS2				0	Jandabup Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/2002	0	BIRDATLAS2				0	Badgerup Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/08/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/08/1999	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/08/1999	0	BIRDATLAS2				0	Waltham Reserve, Morley	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	29/08/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/08/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/09/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/09/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/06/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/07/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/07/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/07/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/08/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/08/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/09/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	5/05/1977	0	BIRDATLAS1				0	CONNOLLY	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/07/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/05/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	28/06/1977	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	26/07/1977	0	BIRDATLAS1				0	CITY BEACH	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		31/08/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	21/08/1999	0	BIRDATLAS2				0	Herdsman Lake	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/08/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	16/10/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	16/10/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/10/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/1999	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/09/1999	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/09/2003	0	BIRDATLAS2				0	Star Swamp, North Beach	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/10/1999	0	BIRDATLAS2				0	Gnangara	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/10/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/09/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/09/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/09/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/10/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	19/07/2003	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/07/2003	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	27/07/2003	0	BIRDATLAS2				0	Herdsman lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/07/2003	0	BIRDATLAS2				0	Herdsman lake	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	5/07/2003	0	BIRDATLAS2				0	North Beach	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/04/2003	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/04/2003	0	BIRDATLAS2				0	Herdsman lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/04/2003	0	BIRDATLAS2				0	Herdsman lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	14/06/2003	0	BIRDATLAS2				0	Herdsman lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/06/2003	0	BIRDATLAS2				0	Herdsman lake	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		14/06/2003	0	BIRDATLAS2				0	Herdsman lake	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/06/2003	0	BIRDATLAS2				0	Herdsman lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	1/11/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/11/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/11/2002	0	BIRDATLAS2				0	Herdsman Lake	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	27/05/2004	0	BIRDATLAS2				0	Lake Joondalup	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	30/11/2003	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/11/2003	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/12/2003	0	BIRDATLAS2				0	Neil Hawkins - L Joondalup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/07/2004	0	BIRDATLAS2				0	Caraman Park	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	14/02/2004	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/09/2004	0	BIRDATLAS2				0	Star Swamp	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/07/2003	0	BIRDATLAS2				0	Lightning Swamp, Noranda	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/09/2003	0	BIRDATLAS2				0	Lightning Swamp, Noranda	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	27/08/2003	0	BIRDATLAS2				0	Herdsman Lake SW	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/08/2003	0	BIRDATLAS2				0	Herdsman Lake SW	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	4/09/2003	0	BIRDATLAS2				0	Herdsman Lake SW	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/09/2003	0	BIRDATLAS2				0	Herdsman Lake SW	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	7/10/2003	0	BIRDATLAS2				0	Herdsman Lake SW	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/10/2003	0	BIRDATLAS2				0	Herdsman Lake SW	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	29/07/2003	0	BIRDATLAS2				0	Herdsman Lake SW	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/07/2003	0	BIRDATLAS2				0	Herdsman Lake SW	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/11/2003	0	BIRDATLAS2				0	Herdsman Lake SW	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/10/2003	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/11/2003	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/08/2003	0	BIRDATLAS2				0	Carine	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/11/2003	0	BIRDATLAS2				0	Herdsman Lake W	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/07/2003	0	BIRDATLAS2				0	Ocean Reef	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	24/08/2003	0	BIRDATLAS2				0	Hillarys Marina	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/09/2003	0	BIRDATLAS2				0	Neil Hawkins Park	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/10/2003	0	BIRDATLAS2				0	Whiteman Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2003	0	BIRDATLAS2				0	Whiteman Park	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/01/2005	0	BIRDATLAS2				0	Herdsman Lake - Falcon Rd	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/07/2003	0	BIRDATLAS2				0	Reid Hwy/ Malaga Drive N corner	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/11/2004	0	BIRDATLAS2				0	Lake Gwelup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	26/02/2005	0	BIRDATLAS2				0	Lake Joondalup	5000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		26/02/2005	0	BIRDATLAS2				0	Lake Joondalup	5000
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	6/03/2005	0	BIRDATLAS2				0	Lake Monger	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	6/03/2005	0	BIRDATLAS2				0	Lake Monger	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/03/2005	0	BIRDATLAS2				0	Lake Monger	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/10/2004	0	BIRDATLAS2				0	Lake Gwelup	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	25/02/2005	0	BIRDATLAS2				0	Lake Joondalup Neil Hawking Park	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	25/02/2005	0	BIRDATLAS2				0	Lake Joondalup Neil Hawking Park	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	26/02/2005	0	BIRDATLAS2				0	Lake Joondalup Neil Hawking Park	500
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		26/02/2005	0	BIRDATLAS2				0	Lake Joondalup Neil Hawking Park	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/03/2005	0	BIRDATLAS2				0	Mindarie Beach & bushland	500
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		5/08/2005	0	BIRDATLAS2				0	PINJAR	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/08/2005	0	BIRDATLAS2				0	PINJAR	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/08/1999	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		9/09/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/10/2003	0	BIRDATLAS2				0	Herdsman Lake tennis court pond	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/10/2003	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/11/2003	0	BIRDATLAS2				0	Herdsman Lake Floreat Waters	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/12/2003	0	BIRDATLAS2				0	Herdsman Lake Floreat Waters	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/02/2004	0	BIRDATLAS2				0	Herdsman Lake Floreat Waters	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/02/2004	0	BIRDATLAS2				0	Herdsman Lake off Popeye Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/02/2004	0	BIRDATLAS2				0	Herdsman Lake off Hide near Canon Bldg	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/03/2004	0	BIRDATLAS2				0	Herdsman Lake Popeye Lake parkland	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/03/2004	0	BIRDATLAS2				0	Herdsman Lake Statue Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/07/2004	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	25/09/2004	0	BIRDATLAS2				0	Herdsman Lake Olive Seymour Dredge	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/09/2004	0	BIRDATLAS2				0	Herdsman Lake Olive Seymour Dredge	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/09/2004	0	BIRDATLAS2				0	Neaves Rd NR & Bush Forever site	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/10/2004	0	BIRDATLAS2				0	Lake Monger	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	30/10/2004	0	BIRDATLAS2				0	Herdsman lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/10/2004	0	BIRDATLAS2				0	Herdsman lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/12/2004	0	BIRDATLAS2				0	Herdsman lake Olive Seymour - Dredge	100
Calidris acuminata	Sharp-tailed sandpiper	BIRD	Specially Protected - migratory	MI	MI	13/02/2005	0	BIRDATLAS2				0	Herdsman Lake	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	13/02/2005	0	BIRDATLAS2				0	Herdsman Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/12/1978	0	BIRDATLAS1				0	MELALEUCA	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/08/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/05/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	12/08/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	28/08/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/07/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/07/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/05/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/06/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	30/06/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	30/06/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	30/06/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/06/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/06/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	28/03/1978	0	BIRDATLAS1				0	CONNOLLY	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/08/1978	0	BIRDATLAS1				0	BAYSWATER	18000

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	15/10/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/10/1978	0	BIRDATLAS1				0	CONNOLLY	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/11/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	16/12/1978	0	BIRDATLAS1				0	MELALEUCA	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	16/12/1978	0	BIRDATLAS1				0	MELALEUCA	18000
Limosa lapponica	Bar-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	16/12/1978	0	BIRDATLAS1				0	MELALEUCA	18000
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	16/12/1978	0	BIRDATLAS1				0	MELALEUCA	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	16/12/1978	0	BIRDATLAS1				0	MELALEUCA	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	16/12/1978	0	BIRDATLAS1				0	MELALEUCA	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1978	0	BIRDATLAS1				0	CONNOLLY	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/12/1978	0	BIRDATLAS1				0	CITY BEACH	18000
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	24/02/2005	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/02/2005	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/04/2005	0	BIRDATLAS2				0	Lake Monger	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/06/2005	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	26/06/2005	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/06/2005	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	31/08/2005	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/12/2005	0	BIRDATLAS2				0	Herdsman Lake East	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	8/12/2005	0	BIRDATLAS2				0	Herdsman Lake West	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/12/2005	0	BIRDATLAS2				0	Herdsman Lake West	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		26/08/2005	0	BIRDATLAS2				0	Jandakot Regional Park - Atwell	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	1/10/2005	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/10/2005	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	2/11/2005	0	BIRDATLAS2				0	Herdsman Lake	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	7/06/2006	0	BIRDATLAS2				0	Kings Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	7/06/2006	0	BIRDATLAS2				0	Kings Park	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/09/2005	0	BIRDATLAS2				0	Whitman Park	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	3/09/2005	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/09/2005	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	26/05/2005	0	BIRDATLAS2				0	Lake Herdsman	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/06/2005	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/06/2005	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	19/06/2005	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/06/2005	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	19/08/2006	0	BIRDATLAS2				0	Maurice Haener Res Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	11/06/2006	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	23/10/1999	0	BIRDATLAS2				0	Herdsman Lake south	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		23/10/1999	0	BIRDATLAS2				0	Herdsman Lake south	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	0	BIRDATLAS2				0	Wise Rd. Bullsbrook	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	0	BIRDATLAS2				0	Warbrook Rd	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2006	0	BIRDATLAS2				0	Gnangara Hill	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/10/2006	0	BIRDATLAS2				0	Whitman Park	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/11/2006	0	BIRDATLAS2				0	Perth	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/02/2007	0	BIRDATLAS2				0	Jandicot Regional Park	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/11/2006	0	BIRDATLAS2				0	Lake Goollelal	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	21/01/2007	0	BIRDATLAS2				0	Neil Hawkins Park	500
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	21/01/2007	0	BIRDATLAS2				0	Neil Hawkins Park	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	21/01/2007	0	BIRDATLAS2				0	Neil Hawkins Park	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/01/2007	0	BIRDATLAS2				0	Neil Hawkins Park	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	21/01/2007	0	BIRDATLAS2				0	Neil Hawkins Park	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	9/05/2007	0	BIRDATLAS2				0	Herdsman Lake	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/12/1999	0	BIRDATLAS2				0	Millcrest Street, Scarborough	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		9/04/2008	0	BIRDATLAS2				0	Herdsman Lake	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	27/08/2005	0	BIRDATLAS2				0	Ocean Reef Boat Harbour	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/08/2005	0	BIRDATLAS2				0	Ocean Reef Boat Harbour	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		15/11/2003	0	BIRDATLAS2				0	Lake Goollelal, Kingsley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/11/2003	0	BIRDATLAS2				0	Lake Monger	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/12/2005	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/03/2005	0	BIRDATLAS2				0	Lake Monger	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/12/2003	0	BIRDATLAS2				0	Lake Goollelal, Kingsley	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	17/06/2003	0	BIRDATLAS2				0	Herdsman Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/06/2003	0	BIRDATLAS2				0	Herdsman Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/07/2003	0	BIRDATLAS2				0	Herdsman Lake 2	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/10/2003	0	BIRDATLAS2				0	Lake Claremont	0
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	18/04/2006	0	BIRDATLAS2				0	Hillarys Boat Harbour	1000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	29/10/2006	0	BIRDATLAS2				0	Ocean Reef Boat Harbour	1000
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	23/12/2006	0	BIRDATLAS2				0	Lake Joondalup	0
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	11/04/2007	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	29/04/2007	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	27/05/2007	0	BIRDATLAS2				0	Herdsman Lake SW	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/05/2007	0	BIRDATLAS2				0	Herdsman Lake SW	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	27/04/2007	0	BIRDATLAS2				0	Perth, Trigg Beach	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	15/06/2007	0	BIRDATLAS2				0	Lake Goollelal	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/07/2007	0	BIRDATLAS2				0	Lake Goollelal	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/08/2007	0	BIRDATLAS2				0	Work	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/11/2004	0	BIRDATLAS2				0	Perth, Herdsman Lake SW	0
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	1/12/2007	0	BIRDATLAS2				0	Burns Beach	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/12/2007	0	BIRDATLAS2				0	herdsman lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/12/2007	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/01/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	11/02/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		11/02/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/02/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	15/02/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	17/02/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	20/01/2008	0	BIRDATLAS2				0	Lake Joondalup South	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/01/2008	0	BIRDATLAS2				0	herdsman lake	0
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	28/02/2008	0	BIRDATLAS2				0	home	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/02/2008	0	BIRDATLAS2				0	home	0
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/03/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/04/2008	0	BIRDATLAS2				0	Lake Goollelal	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/05/2008	0	BIRDATLAS2				0	Stirling Gardens	0
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	15/02/2008	0	BIRDATLAS2				0	Jandabup Lake southeast	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/02/2008	0	BIRDATLAS2				0	Jandabup Lake southeast	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/02/2008	0	BIRDATLAS2				0	Jandabup Lake Northwest	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/05/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/06/2008	0	BIRDATLAS2				0	Stirling Gardens	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/06/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/07/2008	0	BIRDATLAS2				0	Stirling Gardens	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/10/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/11/2008	0	BIRDATLAS2				0	Neerabup NP	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/11/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/12/2008	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	28/01/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	27/01/2009	0	BIRDATLAS2				0	Hillarys Beach Park	1000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/02/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	7/02/2009	0	BIRDATLAS2				0	Lake Joondalup South	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	11/02/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	10/05/2009	0	BIRDATLAS2				0	Rosher Park	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/08/2009	0	BIRDATLAS2				0	Kerwin Way	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	17/03/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	21/03/2009	0	BIRDATLAS2				0	Lake Joondalup	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	21/03/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/03/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	2/04/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/04/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	3/04/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	3/04/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/04/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	13/05/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	14/05/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/05/2009	0	BIRDATLAS2				0	Stirling Gardens	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/05/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	6/04/2009	0	BIRDATLAS2				0	Lake Joodalup	100
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2009	0	BIRDATLAS2				0	Lake Joodalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/04/2009	0	BIRDATLAS2				0	Lake Joodalup	100
Apus pacificus	Fork-tailed swift	BIRD	Specially Protected - migratory	MI	MI	7/04/2009	0	BIRDATLAS2				0	Killiplaw Loop	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/07/2009	0	BIRDATLAS2				0	Kerwin Way	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/02/2009	0	BIRDATLAS2				0	Lake Monger	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	22/02/2009	0	BIRDATLAS2				0	Lake Jakadder	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/04/2009	0	BIRDATLAS2				0	Herdsman Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		5/04/2009	0	BIRDATLAS2				0	Herdsman Lake	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/04/2009	0	BIRDATLAS2				0	Herdsman Lake	0
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	6/12/2008	0	BIRDATLAS2				0	Herdsman Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/12/2008	0	BIRDATLAS2				0	Herdsman Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/12/2008	0	BIRDATLAS2				0	Lake Monger	0
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/10/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	21/10/2009	0	BIRDATLAS2				0	Henley Brook	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/10/2008	0	BIRDATLAS2				0	Lake Gwelup Reserve	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/11/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/11/2006	0	BIRDATLAS2				0	Lake Gwelup Reserve	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	30/03/2006	0	BIRDATLAS2				0	Lake Gwelup Reserve	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/03/2006	0	BIRDATLAS2				0	Lake Gwelup Reserve	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/11/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/11/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/12/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/12/2009	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/01/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/01/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	05		20/01/2010	0	BIRDATLAS2				0	Koondoola Bushland	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/01/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		23/01/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/01/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/02/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	2/02/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	6/02/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/02/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		15/02/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/02/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	8/02/2010	0	BIRDATLAS2				0	Jandabup Lake southeast	0
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	6/03/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	14/03/2010	0	BIRDATLAS2				0	Lake Goollelal	0
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	16/03/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/03/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	27/03/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	25/04/2010	0	BIRDATLAS2				0	Herdsmans Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/04/2010	0	BIRDATLAS2				0	Herdsmans Lake	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	25/04/2010	0	BIRDATLAS2				0	Herdsman Lake (sth, west)	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/04/2010	0	BIRDATLAS2				0	Herdsman Lake (sth, west)	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/06/2010	0	BIRDATLAS2				0	Herdsman Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/06/2010	0	BIRDATLAS2				0	Herdsman lake, N end carpark	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/06/2010	0	BIRDATLAS2				0	Herdsman Lake	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	25/06/2010	0	BIRDATLAS2				0	Herdsman Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/06/2010	0	BIRDATLAS2				0	Herdsman Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/07/2010	0	BIRDATLAS2				0	lake monger	0

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/08/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	9/09/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/09/2010	0	BIRDATLAS2				0	Neerabup NP	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/09/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/09/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/09/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/10/2000	0	BIRDATLAS2				0	Lake Monger, Perth	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/10/2010	0	BIRDATLAS2				0	Lake Joondalup South	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/11/2010	0	BIRDATLAS2				0	Lake Joondalup Parkland Rd	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/11/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/12/2010	0	BIRDATLAS2				0	Big Carine Lake	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/12/2010	0	BIRDATLAS2				0	Biz Carine Lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/01/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	26/01/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	3/02/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/02/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	7/02/2011	0	BIRDATLAS2				0	Burns Beach	100
Limosa limosa	Black-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	20/02/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	20/02/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/03/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/03/2011	0	BIRDATLAS2				0	Mindarie Marina	1000
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	23/03/2011	0	BIRDATLAS2				0	Jandabup Lake southeast	0
Tringa stagnatilis	Marsh sandpiper, little greenshank	BIRD	Specially Protected - migratory	MI	MI	23/03/2011	0	BIRDATLAS2				0	Jandabup Lake southeast	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	2/04/2011	0	BIRDATLAS2				0	Herdsman Lake South	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/04/2011	0	BIRDATLAS2				0	Herdsman Lake South	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/04/2011	0	BIRDATLAS2				0	Popeye Lakes Herdsman	0
Charadrius leschenaultii	Greater sand plover, large sand plover	BIRD	Threatened - Vulnerable	VU	MI	23/03/2011	0	BIRDATLAS2				0	joondalup lake west jetty	0
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	23/03/2011	0	BIRDATLAS2				0	joondalup lake west jetty	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	3/04/2011	0	BIRDATLAS2				0	M hamer res	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/04/2011	0	BIRDATLAS2				0	M hamer res	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/04/2011	0	BIRDATLAS2				0	Joondalup Arena	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	13/05/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/2011	0	BIRDATLAS2				0	Trigg Bushland Reserve	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	19/05/2011	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/05/2011	0	BIRDATLAS2				0	Herdsman Lake	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	25/06/2011	0	BIRDATLAS2				0	North Hillarys Beach	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/08/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/07/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	14/08/2011	0	BIRDATLAS2				0	Hillarys Boat Harbor	1000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/08/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/08/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/08/2011	0	BIRDATLAS2				0	Jandabup Lake southeast	0
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	16/09/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/09/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/09/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/10/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/10/2011	0	BIRDATLAS2				0	Perth Lake Monga	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/10/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/11/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/11/2011	0	BIRDATLAS2				0	Perth Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/12/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/12/2011	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	27/12/2011	0	BIRDATLAS2				0	Yawl Court, Ballajura	100
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/12/2011	0	BIRDATLAS2				0	Yawl Court, Ballajura	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/02/2012	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	23/01/2012	0	BIRDATLAS2				0	Lake Gwelup	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		23/01/2012	0	BIRDATLAS2				0	Lake Gwelup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/03/2012	0	BIRDATLAS2				0	Joondalup campuses	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	31/03/2012	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	1/04/2012	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	15/04/2012	0	BIRDATLAS2				0	Rosker Park	100
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/05/2012	0	BIRDATLAS2				0	Yawl Court, Ballajura	100
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/05/2012	0	BIRDATLAS2				0	Yawl Court, Ballajura	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		16/05/2012	0	BIRDATLAS2				0	Lake Monga	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		15/04/2012	0	BIRDATLAS2				0	lake monger	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/08/2012	0	BIRDATLAS2				0	Lake Joondalup	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/10/2010	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/10/2012	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/11/2012	0	BIRDATLAS2				0	Lake Joondalup	100
Calidris acuminata	Sharp-tailed sandpiper	BIRD	Specially Protected - migratory	MI	MI	1/11/2012	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/11/2012	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/12/2012	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/11/2012	0	BIRDATLAS2				0	Perth Lake Monger	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/11/2012	0	BIRDATLAS2				0	Perth Herdsman Lake Visitors C	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/12/2012	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/01/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	20/01/2013	0	BIRDATLAS2				0	Gwelup Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/01/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/02/2013	0	BIRDATLAS2				0	Joondalup campuses	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/02/2013	0	BIRDATLAS2				0	Lake Joondalup South	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/02/2013	0	BIRDATLAS2				0	Lake Joondalup Edgewater	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		5/02/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/02/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	14/02/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	14/02/2013	0	BIRDATLAS2				0	Lake Joondalup Edgewater	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	14/02/2013	0	BIRDATLAS2				0	Lake Joondalup Edgewater	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	15/02/2013	0	BIRDATLAS2				0	Lake Joondalup Edgewater	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	15/02/2013	0	BIRDATLAS2				0	Lake Joondalup Edgewater	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/02/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	19/02/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/02/2013	0	BIRDATLAS2				0	Perth Lake Monger	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/10/2011	0	BIRDATLAS2				0	Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	25/02/2013	0	BIRDATLAS2				0	Herdsman Wildlife Centre	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/02/2013	0	BIRDATLAS2				0	Herdsman Wildlife Centre	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	2/03/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	25/02/2013	0	BIRDATLAS2				0	Herdsman Lake South	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/02/2013	0	BIRDATLAS2				0	Herdsman Lake South	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	10/03/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/03/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	20/03/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/03/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	4/04/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	10/04/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/04/2013	0	BIRDATLAS2				0	Pinaroo Point, Hillarys	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/04/2013	0	BIRDATLAS2				0	Lake Monger	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/05/2013	0	BIRDATLAS2				0	Lake Joondalup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	28/05/2013	0	BIRDATLAS2				0	Herdsman lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/05/2013	0	BIRDATLAS2				0	Herdsman lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		22/07/2013	0	BIRDATLAS2				0	Joondalup south pool	0
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	28/06/2013	0	BIRDATLAS2				0	Joondalup SE on main lake	0
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/01/1999	0	BIRDATLAS2				0	Lake Joondalup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/01/1999	0	BIRDATLAS2				0	Lake Joondalup	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	22/08/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	5/09/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Tringa stagnatilis	Marsh sandpiper, little greenshank	BIRD	Specially Protected - migratory	MI	MI	5/09/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	5/09/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris acuminata	Sharp-tailed sandpiper	BIRD	Specially Protected - migratory	MI	MI	5/09/1977	0	BIRDATLAS1				0	BAYSWATER	18000
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		27/03/2009	0	FAUNAFILE		Survey		0	Gnangara-Moore River State Forest, West of Wattton Rd, North of Warbrook Rd, East of PC1A	30

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		27/03/2009	0	FAUNAFILE		Survey		0	Gnangara-Moore River State Forest, West of Walton Rd, North of Warbrook Rd, East of PC1A	30
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		27/03/2009	0	FAUNAFILE		Survey		0	Gnangara-Moore River State Forest, West of Walton Rd, North of Warbrook Rd, East of PC1A	30
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		26/03/2009	0	FAUNAFILE		Survey		0	Gnangara-Moore River State Forest, West of Walton Rd, North of Warbrook Rd, East of PC1A	30
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		26/03/2009	0	FAUNAFILE		Survey		0	Gnangara-Moore River State Forest, West of Walton Rd, North of Warbrook Rd, East of PC1A	30
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		26/03/2009	0	FAUNAFILE		Survey		0	Gnangara-Moore River State Forest, West of Wise Rd, North of Underwood Rd, South of PC7C	30
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		24/03/2009	0	FAUNAFILE		Survey		0	Gnangara-Moore River State Forest, West of Wise Rd, North of Underwood Rd, North of PC7A	30
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		26/03/2009	0	FAUNAFILE		Survey		0	Gnangara-Moore River State Forest, West of Wise Rd, North of Underwood Rd, North of PC7A	30
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/01/1979	0	BIRDATLAS1				0	CONNOLLY	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Limosa lapponica	Bar-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/02/1979	0	BIRDATLAS1				0	CONNOLLY	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Limosa lapponica	Bar-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris acuminata	Sharp-tailed sandpiper	BIRD	Specially Protected - migratory	MI	MI	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris canutus	Red knot	BIRD	Threatened - Endangered	EN	EN	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris tenuirostris	Great knot	BIRD	Threatened - Critically endangered	CR	MI	31/12/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/08/1979	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	9/08/1979	0	BIRDATLAS1				0	CITY BEACH	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	27/02/1979	0	BIRDATLAS1				0	CONNOLLY	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	26/04/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	4/01/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		4/01/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	11/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	11/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	11/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	14/01/1977	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	11/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	11/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	11/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		9/10/1999	0	BIRDATLAS2				0	Herdsman Lake boardwalk	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	8/07/1999	0	BIRDATLAS2				0	Herdsman Lake	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		8/07/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		25/07/1999	0	BIRDATLAS2				0	Lake Joondalup	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/07/1999	0	BIRDATLAS2				0	Gnangarra	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		18/10/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/05/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/05/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	14/04/1979	0	BIRDATLAS1				0	CONNOLLY	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/11/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/12/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/12/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/12/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/12/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		31/12/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/01/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/01/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/01/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/01/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/02/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/02/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/02/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/02/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/09/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/05/2000	0	BIRDATLAS2				0	Jackadder Lake, Woodlands	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		17/01/1999	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	4/09/1998	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		4/09/1998	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/09/1998	0	BIRDATLAS2				0	Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/08/1998	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/08/1998	0	BIRDATLAS2				0	Herdsman Lake	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	10/10/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/10/1999	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		27/12/1999	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		13/11/1999	0	BIRDATLAS2				0	Herdsman Lake Wildlife Centre	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	26/12/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/12/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/01/2000	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/03/2000	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/05/2000	0	BIRDATLAS2				0	Statue pond, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/05/2000	0	BIRDATLAS2				0	Herdsman Lake bird hide	100
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	25/06/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/01/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	24/06/1979	0	BIRDATLAS1				0	CITY BEACH	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/07/1979	0	BIRDATLAS1				0	CONNOLLY	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	1/09/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		1/09/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/09/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	19/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	1/09/1979	0	BIRDATLAS1				0	CITY BEACH	18000
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	31/05/1979	0	BIRDATLAS1				0	MELALEUCA	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/10/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	21/10/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		29/02/2000	0	BIRDATLAS2				0	Floreat Waters, Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/05/2000	0	BIRDATLAS2				0	Millcrest Street, Scarborough	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1999	0	BIRDATLAS2				0	Gnangara	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/12/1999	0	BIRDATLAS2				0	Gnangara	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/01/2000	0	BIRDATLAS2				0	Gnangara	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	18/03/2000	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/05/2000	0	BIRDATLAS2				0	Neil Hawkins Park, Lake Joondalup	500
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	05		1/08/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/09/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	24/09/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/09/1979	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	6/11/2008	0	BIRDATLAS2				0	Mullaloo	1000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/11/2008	0	BIRDATLAS2				0	Lake Monger West Leederville	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/11/2008	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/11/2008	0	BIRDATLAS2				0	Lake Gwelup Karrinyup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	11/06/2009	0	BIRDATLAS2				0	Gwelup Van Park	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/03/2009	0	BIRDATLAS2				0	Lake Monger	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	12/01/2009	0	BIRDATLAS2				0	Whiteman Park - WP3219	100
Calyptorhynchus baudinii	Baudin's cockatoo	BIRD	Threatened - Endangered	EN	EN	1/03/2008	0	BIRDATLAS2				0	Waltham Reserve - Morley	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		9/12/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	14/04/2000	0	BIRDATLAS2				0	Maurice Hamer Park, Herdsman	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/04/2000	0	BIRDATLAS2				0	Maurice Hamer Park, Herdsman	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/04/2000	0	BIRDATLAS2				0	Maurice Hamer Park, Herdsman	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	7/05/2000	0	BIRDATLAS2				0	Quinns Rocks	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/05/2000	0	BIRDATLAS2				0	Lake Joondalup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	23/04/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	14/05/2000	0	BIRDATLAS2				0	Little Island, Hillarys	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	29/02/2000	0	BIRDATLAS2				0	Gnangara	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/03/2000	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/2000	0	BIRDATLAS2				0	Gnangara	100
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		14/05/2008	0	FAUNAFILE		Survey		0	Lake Joondalup, south of Burns Beach Road, NE side of Lake Joondalup	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		28/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/05/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		24/05/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		28/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	4/06/2000	0	BIRDATLAS2				0	Hale School Grounds bush, Wembley Downs	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	18/05/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/05/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		28/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		29/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		29/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		29/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		29/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		29/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		30/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		30/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	ORS_METHOD	ORS_TYPE	COUNT	LOCALITY	ACCURACY_M
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		30/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		30/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Hydromys chrysogaster	Water-rat, rakali	MAMMAL	Priority	P4		30/05/2008	0	FAUNAFILE		Survey		0	Lake Goollelal, east side of the lake, north of Hepburn Avenue, west of Wanneroo Road	30
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	21/01/1980	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	31/12/1979	0	BIRDATLAS1				0	CITY BEACH	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		11/12/1979	0	BIRDATLAS1				0	CONNOLLY	18000
Botaurus poiciloptilus	Australasian bittern	BIRD	Threatened - Endangered	EN	EN	21/10/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		21/10/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		21/10/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	21/10/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/11/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/11/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	9/12/1979	0	BIRDATLAS1				0	CITY BEACH	18000
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	2/06/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		18/05/2000	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	26/06/2000	0	BIRDATLAS2				0	Millcrest Street, Scarborough	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/07/2000	0	BIRDATLAS2				0	Lake Gwelup	500
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	5/05/2000	0	BIRDATLAS2				0	Jandabup Lake Nature Reserve	500
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	12/12/1999	0	BIRDATLAS2				0	Burns Beach	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/07/2000	0	BIRDATLAS2				0	Lake Monger, Wembley	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		2/03/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		10/03/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/03/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	24/04/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	30/05/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	9/05/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	19/05/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	24/05/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	24/05/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	31/05/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/06/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	11/06/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	23/06/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	26/06/2000	0	BIRDATLAS2				0	Lake Gwelup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	30/04/2000	0	BIRDATLAS2				0	Gnangara	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	31/05/2000	0	BIRDATLAS2				0	Gnangara	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	16/06/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/01/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	8/04/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	8/04/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/01/1999	0	BIRDATLAS2				0	Lake Monger, Wembley	100
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		25/03/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		26/10/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	6/03/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		6/03/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	7/06/2009	0	BIRDATLAS2				0	Herdsman Lake - Perth	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/06/2009	0	BIRDATLAS2				0	Herdsman Lake - Perth	500
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		28/07/1999	0	BIRDATLAS2				0	Lake Gwelup	100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	14/07/2000	0	BIRDATLAS2				0	Herdsman Lake Bird Hide	100

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	13/01/1980	0	BIRDATLAS1				0	CITY BEACH	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	7/04/1980	0	BIRDATLAS1				0	CONNOLLY	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/03/1980	0	BIRDATLAS1				0	CITY BEACH	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	23/08/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	23/03/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	23/03/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	18/05/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	1/06/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	1/06/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	1/06/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/06/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/05/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Pluvialis squatarola	Grey plover	BIRD	Specially Protected - migratory	MI	MI	30/05/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Limosa lapponica	Bar-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	30/05/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	30/05/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	30/05/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		7/06/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		7/06/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	13/06/1980	0	BIRDATLAS1				0	CITY BEACH	18000
Limosa lapponica	Bar-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	26/03/1980	0	BIRDATLAS1				0	MELALEUCA	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/03/1980	0	BIRDATLAS1				0	CITY BEACH	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	31/08/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	3/08/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris ferruginea	curlew sandpiper	BIRD	Threatened - Critically endangered	CR	MI	3/08/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calidris alba	sanderling	BIRD	Specially Protected - migratory	MI	MI	3/08/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	24/01/1979	0	BIRDATLAS1				0	BAYSWATER	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/10/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	1/10/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Calyptorhynchus sp. 'white-tailed black cockatoo'	White-tailed black cockatoo	BIRD	Threatened - Endangered	EN	EN	25/07/1978	0	BIRDATLAS1				0	BAYSWATER	18000
Thalasseus bergii	Crested tern	BIRD	Specially Protected - migratory	MI	MI	30/09/1980	0	BIRDATLAS1				0	CITY BEACH	18000
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		19/12/1998	0	BIRDATLAS2				0	Herdsman Lake	500
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	21/02/1999	0	BIRDATLAS2				0	Lake Karrinyup CC	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	28/02/1999	0	BIRDATLAS2				0	Lake Karrinyup CC	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	14/02/1999	0	BIRDATLAS2				0	Lake Karrinyup CC	100
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	7/02/1999	0	BIRDATLAS2				0	Lake Karrinyup CC	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		15/11/1998	0	BIRDATLAS2				0	Lake Gwelup	100
Calidris ruficollis	Red-necked stint	BIRD	Specially Protected - migratory	MI	MI	11/08/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Falco peregrinus	Peregrine falcon	BIRD	Specially Protected - other specially protected	OS		20/06/1980	0	BIRDATLAS1				0	BAYSWATER	18000
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	1/09/2000	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/09/2000	0	BIRDATLAS2				0	Moondine Drive, Herdsman Lake	100
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	31/08/2000	0	BIRDATLAS2				0	Herdsman Lake	500
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	5/08/2000	0	BIRDATLAS2				0	Lake Joondalup	5000
Plegadis falcinellus	Glossy ibis	BIRD	Specially Protected - migratory	MI	MI	15/07/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		15/07/2000	0	BIRDATLAS2				0	Herdsman Lake	100
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	26/03/2018	0	WA_REG17		Survey		0		15

SCI_NAME	COM_NAME	CLASS	WA_LISTING	WA_status	EPBCstatus	Date	SOURCE_ID	SOURCE	CERTAINTY	OBS_METHOD	OBS_TYPE	COUNT	LOCALITY	ACCURACY_M
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	14/06/2017	0	WL_REG17		Survey		0		50
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	21/02/2018	0	WL_REG17		Survey		0		15
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	11/01/2018	0	WL_REG17		Survey		0		300
Bettongia penicillata ogilbyi	Woylie, brush-tailed bettong	MAMMAL	Threatened - Critically endangered	CR	EN	16/01/2018	0	WL_REG17		Survey		0		300
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	17/10/2016	0	WL_REG17		Survey		0		20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	18/10/2016	0	WL_REG17		Survey		0		20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	19/10/2016	0	WL_REG17		Survey		0		20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	20/10/2016	0	WL_REG17		Survey		0		20
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/09/2017	0	WL_REG17		Survey		0		100
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	22/11/2018	0	WL_REG17		Survey		0		50000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	23/11/2018	0	WL_REG17		Survey		0		50000
Calyptorhynchus latirostris	Carnaby's cockatoo	BIRD	Threatened - Endangered	EN	EN	25/10/2017	0	WL_REG17		Survey		0		1000
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		3/11/2018	0	WL_REG17		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		5/11/2018	0	WL_REG17		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		7/11/2018	0	WL_REG17		Survey		0		30
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/05/2018	0	WL_REG17		Survey		0		15
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		26/06/2017	0	WL_REG17		Survey		0		50
Isoodon fusciventer	Quenda, southwestern brown bandicoot	MAMMAL	Priority	P4		11/11/2016	0	WL_REG17		Survey		0		30
Neelaps calonotos	Black-striped snake, black-striped burrowing snake	REPTILE	Priority	P3		25/10/2017	0	WL_REG17		Survey		0		1000
Actitis hypoleucos	Common Sandpiper	BIRD	Specially Protected - migratory	MI	MI	1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Actitis hypoleucos	Common Sandpiper	BIRD	Specially Protected - migratory	MI	MI	6/04/1990	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		12/01/1992	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/07/1991	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		26/10/1991	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/10/1990	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	19/01/1992	0	AP_SWANCPWATERBIRDS				0		30
Hydroprogne caspia	Caspian Tern	BIRD	Specially Protected - migratory	MI	MI	1/10/1990	0	AP_SWANCPWATERBIRDS				0		30
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	1/10/1990	0	AP_SWANCPWATERBIRDS				0		30
Hydroprogne caspia	Caspian Tern	BIRD	Specially Protected - migratory	MI	MI	22/04/1990	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		3/10/1991	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/10/1990	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		20/10/1991	0	AP_SWANCPWATERBIRDS				0		30
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	1/04/1991	0	AP_SWANCPWATERBIRDS				0		30
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	23/07/1991	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/04/1990	0	AP_SWANCPWATERBIRDS				0		30
Chlidonias leucopterus	White-winged black tern, white-winged tern	BIRD	Specially Protected - migratory	MI	MI	1/04/1990	0	AP_SWANCPWATERBIRDS				0		30
Botaurus poiciloptilus	Australasian Bittern	BIRD	Threatened - Endangered	EN	EN	1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Limosa limosa	Black-tailed godwit	BIRD	Specially Protected - migratory	MI	MI	1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Calidris ferruginea	Curlew Sandpiper	BIRD	Threatened - Critically endangered	CR	MI	1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Tringa nebularia	Common greenshank, greenshank	BIRD	Specially Protected - migratory	MI	MI	1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Calidris subminuta	Long-toed Stint	BIRD	Specially Protected - migratory	MI	MI	1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Tringa stagnatilis	Marsh sandpiper, little greenshank	BIRD	Specially Protected - migratory	MI	MI	1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Calidris acuminata	Sharp-tailed sandpiper	BIRD	Specially Protected - migratory	MI	MI	1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Tringa glareola	Wood sandpiper	BIRD	Specially Protected - migratory	MI	MI	1/01/1991	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		1/10/1990	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		14/07/1991	0	AP_SWANCPWATERBIRDS				0		30
Oxyura australis	Blue-billed duck	BIRD	Priority	P4		30/07/1990	0	AP_SWANCPWATERBIRDS				0		30

APPENDIX 10

Black Cockatoo Habitat Tree Information

Map and describe trees greater than 500mm in diameter at breast height				Date: 26 and 30 Sept 2022			
Tree Number	Species	Easting MGA zn50	Northing MGA zn50	Height	Diameter (mm)	Second Branch	Notes (hollows, bees etc.)
1	Jarrah	389261	6484657	8	1700		Thick at base but coppicing - not a potential habitat tree
2	Jarrah	389118	6485166	10	620		No hollows
3	Jarrah	389515	6484830	15	1020		No hollows
4	Jarrah	389479	6484835	15	2200		No hollows, burnt out at base
5	Jarrah	389469	6484855	12	910		No hollows
6	Jarrah	389472	6484855	15	730		No hollows, evidence of Forest Red-tail foraging at base
7	Jarrah	389531	6484866	11	960		No hollows
8	Jarrah	389518	6484883	17	750		No hollows
9	Jarrah	389534	6484946	19	650	450	No hollows
10	Jarrah	389521	6485023	17	750		No hollows
11	Jarrah	389515	6485039	15	1080		No hollows
12	Jarrah	389519	6485053	12	590		No hollows
13	Jarrah	389503	6485114	11	1200		No nesting hollows, hollowed out at trunk
14	Jarrah	389520	6485196	20	830		No hollows
15	Jarrah	389456	6485167	18	800		No hollows
16	Jarrah	389477	6485135	15	720		No hollows

Appendix 4 Precinct 3 LSP East Wanneroo Biological Assessment (Ecoscape, 2025)

PRECINCT 3 LSP EAST WANNEROO BIOLOGICAL ASSESSMENT

Coterra Environment

ecoscape

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SUMMARY

Coterra Environment, on behalf of Satterley Property Group, engaged Ecoscape to undertake a biological survey of Precinct 3, an urban expansion area located within East Wanneroo that currently comprises rural residential dwellings, bushland and market gardens. The biological survey incorporated a Detailed and Targeted Flora and Vegetation survey, and a Basic fauna survey and targeted Black Cockatoo habitat assessment of an area 134.86 ha in size. The survey supplements a previous assessment by PGV Environmental in 2022 and was undertaken to inform avoidance and mitigation measures that could be implemented in the course of the area's potential development.

A desktop assessment was undertaken prior to the field survey to identify the environmental values of the survey area. The key findings were:

- the survey area intersects 12.0 ha of Bush Forever sites
- two pre-European vegetation units occur within the survey area, associations 949 and 6 with estimated remaining extents within the City of Wanneroo of 46.3% and 21.9%, respectively
- eleven Threatened and Priority Ecological Communities (TECs, PECs) were identified within a 10 km radius of the survey area from the Department of Biodiversity, Conservation and Attractions (DBCA) database search. One occurs within the survey, the *Banksia Woodlands of the Swan Coastal Plain ecological community* ('Banksia Woodlands TEC'; Commonwealth-listed Endangered TEC; State-listed Priority 3 PEC).
- fifty Threatened and Priority flora (TF, PF) were identified within a 10 km radius of the survey area from the DBCA and Protected Matter Seach Tool (PMST) database searches, consisting of 24 TF, six P1, five P2, nine P3 and six P4 flora. Two PF were considered likely to occur based on the results of the likelihood assessment, *Acacia benthamii* (P2) and *Jacksonia sericea* (P4).
- fifty-nine Threatened and Priority fauna were identified within a 10 km radius of the survey area from the PMST (which includes likelihood of suitable habitat occurring) and DBCA database searches, consisting of nine mammals, 49 birds and one reptile
- a large proportion of the survey area was subject to previous assessment by PGV Environmental (2023). The assessment identified occurrences of the *Banksia Woodland* TEC and suitable habitat for Black Cockatoos.

The flora and vegetation survey was conducted during 17-19 September 2024. The key findings were:

- a total of 207 vascular flora species were recorded from seven floristic quadrats and opportunistic observations, including one P2 taxon, *Poranthera moorokatta*, and 64 introduced species
- PF assessed as likely to occur during the desktop assessment were revised post-survey. Although suitable habitat is considered present, the likelihood of both *Acacia benthamii* (P2) and *Jacksonia sericea* (P4) occurring was revised to 'unlikely' based on search effort and the results of previous assessment by PGV Environmental.
- two vegetation types were mapped in the survey area:
  - **BaLOF**: *Banksia attenuata, Allocasuarina fraseriana* and *Banksia menziesii* low open forest, occupying 14.8%
  - **EmmLW**: *Eucalyptus marginata* subsp. *marginata, Banksia prionotes* and *Allocasuarina fraseriana* low woodland, occupying 9.6%
- one TEC, the *Banksia Woodlands of the Swan Coastal Plain ecological community*, was mapped within the survey area, totalling 17.9 ha or 13.3%
- Floristic Community Type analysis indicated that both vegetation types within the survey area are most likely SCP28 'Spearwood *Banksia attenuata* or *B. attenuata-Eucalyptus* woodlands' which is representative of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC) Act-listed Banksia Woodlands TEC
- vegetation condition ranged from Completely Degraded to Very Good, with the majority of native vegetation in Good or Very Good condition.

The fauna survey was conducted during 3, 10 and 12 February 2025. The key findings were:

- thirty-six vertebrate fauna species were recorded from the survey area, consisting of five mammals (two introduced), 29 birds (four introduced) and two reptiles
- four conservation-listed species were recorded:
  - Carnaby's Cockatoo (Endangered under the Commonwealth EPBC Act and Western Australian *Biodiversity Conservation Act 2016* (BC Act))
  - Forest Red-tailed Black Cockatoo (Vulnerable under the EPBC Act and BC Act)
  - Quenda (Priority 4 as listed by the DBCA)
- one fauna habitat occurs within the survey area, described as Banksia Woodland (occupying 24.40% or 32.90 ha) with the remainder not native vegetation or cleared for rural/rural residential land uses
- the Banksia Woodland habitat type is high-quality foraging habitat for Carnaby's Cockatoos and moderate quality foraging habitat for Forest Red-tailed Black Cockatoos, according to the Bamford scale, and high-quality habitat for both species according to the Commonwealth guidelines rating tool.

ACRONYMS AND ABBREVIATIONS

Table 1: Acronyms and abbreviations

Acronyms	
BAM Act	Western Australian *Biosecurity and Agriculture Management Act 2007*
BC Act	Western Australian *Biodiversity Conservation Act 2016*
BoM	Bureau of Meteorology
C1, C2, C3	Declared Pest categories under the BAM Act
CD	Conservation Dependent (fauna; specially protected species under the Western Australian BC Act)
CR	Critically Endangered (listed under Commonwealth EPBC Act and/or Western Australian BC Act)
DAWE	Commonwealth Department of Agriculture, Water and Environment (2020-2022, now DCCEEW)
DBCA	Western Australian Department of Biodiversity, Conservation and Attractions
DBH	Diameter at Breast Height
DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water
DEWHA	Commonwealth Department of the Environment, Water, Heritage and the Arts (2007-2010, now DCCEEW)
DMIRS	Western Australian Department of Mines, Industry Regulation and Safety
DPaW	Western Australian Department of Parks and Wildlife (2013-2017, now DBCA)
DotEE	Commonwealth Department of the Environment and Energy (2016-2020)
DPIRD	Western Australian Department of Primary Industries and Regional Development
DSEWPaC	Commonwealth Department of Sustainability, Environment, Water, Population and Communities (2010-2013, now DCCEEW)
DWER	Western Australian Department of Water and Environmental Regulation
EN	Endangered (listed under Commonwealth EPBC Act and/or Western Australian BC Act)
Ecoscape	Ecoscape (Australia) Pty Ltd
EP Act	Western Australian *Environmental Protection Act 1986*
EPA	Western Australian Environmental Protection Authority
EPBC Act	Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*
FCT	Floristic Community Type
GDA 94	Geographic Datum of Australia 1994
GDE	Groundwater Dependent Ecosystem
GPS	Global Positioning System
ha	hectare/hectares
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for Conservation of Nature
km	kilometre/kilometres
m	metre/metres
MA	Marine species (fauna; protected under international agreements and EPBC Act)
MI	Migratory species (fauna; specially protected species under the Western Australian BC Act, also EPBC Act)
NVIS	National Vegetation Inventory System
MNES	Matters of National Environmental Significance
OS	Other specially protected species (fauna; specially protected species under the Western Australian BC Act)
P; P1, P2, P3, P4, P5	Priority Flora and Fauna species rankings (P1-P4) or Priority Ecological Communities (P1-P5)
PEC	Priority Ecological Community
PF	Priority Flora
PMST	Protected Matters Search Tool (hosted by DCCEEW, used to search for MNES)
SCP	Swan Coastal Plain
sp.	Species (generally referring to an unidentified taxon or when a phrase name has been applied)
subsp.	Subspecies (infrataxon)
TEC	Threatened Ecological Community
TF	Threatened Flora (formerly termed Declared Rare Flora, DRF, in Western Australia)

Acronyms	
var.	Variety (infrataxon)
VU	Vulnerable (listed under Commonwealth EPBC Act and/or Western Australian BC Act)
WAH	Western Australian Herbarium
WAOL	Western Australian Organism List
WAPC	Western Australian Planning Commission
WoNS	Weeds of National Significance
*	Introduced flora species (i.e. weed)

1 INTRODUCTION

1.1 BACKGROUND

East Wanneroo Precinct 3 is an urban expansion area identified under the North-West Sub-regional Planning Framework for Perth, located within the City of Wanneroo. The area currently comprises market gardens and rural dwellings and includes high priority vegetation (considered to have the potential to include conservation-listed *Banksia* woodland Floristic Community Type 20a) and Bush Forever sites (Western Australian Planning Commission [WAPC] 2021). Under the East Wanneroo district structure plan, detailed flora surveys of remnant vegetation are required to inform the appropriate size and configuration of bushland retention within Precinct 3.

Coterra Environment, on behalf of the project proponent Satterley Property Group, engaged Ecoscape to undertake a biological survey of the Precinct 3 area, incorporating a Detailed and Targeted Flora and Vegetation, and a Basic fauna survey and targeted Black Cockatoo habitat assessment. The survey supplements a previous assessment by PGV Environmental (2023) that was undertaken to inform avoidance and mitigation measures that could be implemented in the course of the area's potential development.

1.2 SURVEY AREA

Portions of Precinct 3 which are under contract to Satterley Property Group (known as the 'survey area' in this report), are located within the City of Wanneroo on the Swan Coastal Plain (**Figure 1**). The survey area consists of mixed-use agriculture and rural residential land, including remnant bushland with a total area of 134.86 ha.

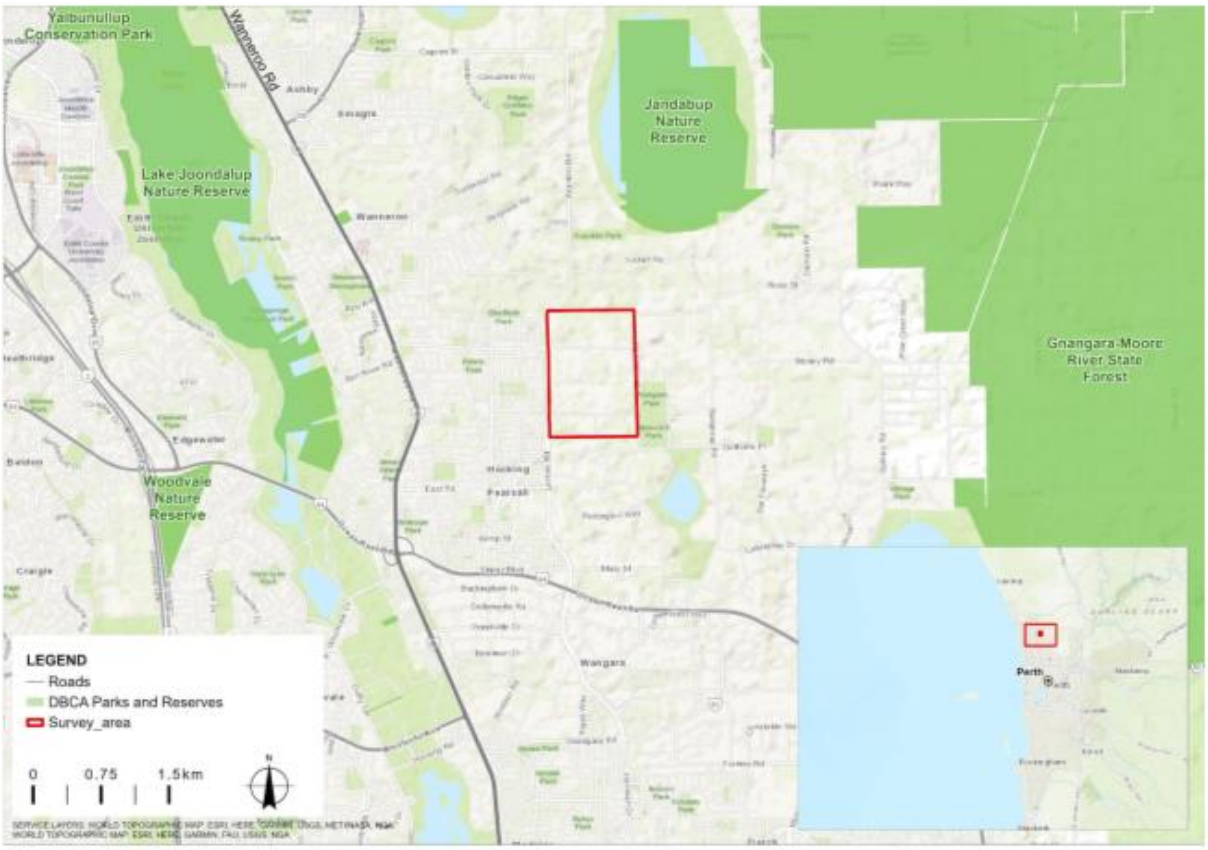

Figure 1: Survey area location

1.3 SURVEY REQUIREMENTS

The requirements of the flora and vegetation survey were to:

- undertake a single-season Detailed flora and vegetation survey, including targeted searches for conservation-listed flora and ecological communities
- map vegetation types, significant ecological communities and vegetation condition
- determine whether SCP20a '*Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. 1994)*' occurs within the survey area.

The requirements of the fauna survey were to:

- undertake a single-season Basic fauna survey
- map fauna habitat types
- undertake targeted Black Cockatoo habitat assessment.

1.4 COMPLIANCE

This biological survey was conducted in accordance with Commonwealth and State legislation and guidelines:

- Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- Western Australian *Environmental Protection Act 1986* (EP Act)
- Western Australian *Biodiversity Conservation Act 2016* (BC Act)
- Western Australian *Biodiversity Conservation Regulations 2018*
- Department of Environment, Water, Heritage and the Arts (DEWHA 2009) *Matters of National Environmental Significance. Significant impact guidelines 1.1 - Environment Protection and Biodiversity Conservation Act 1999*
- Department of Sustainability Environment Water Population and Communities (DSEWPaC 2011a) *Survey guidelines for Australia's threatened mammals*
- DSEWPaC (2011b) *Survey guidelines for Australia's threatened reptiles*
- DEWHA (2010a) *Survey guidelines for Australia's threatened bats*
- DEWHA (2010b) *Survey guidelines for Australia's threatened birds*
- Department of Agriculture Water and the Environment (DAWE 2022a) *Referral guideline for 3 WA threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black-cockatoo*
- Environmental Protection Authority (EPA 2019) *EPA Advice: Carnaby's Cockatoo in Environmental Impact Assessment in the Perth and Peel Region*
- Threatened Species Scientific Committee (TSSC 2016) *Approved conservation advice (incorporating listing advice) for the Banksia Woodlands of the Swan Coastal Plain ecological community*.

Summaries of the main Acts under which this assessment was conducted, and related criteria and definitions, are available in **Appendix One**.

As well as those listed above, the assessment complied with Environmental Protection Authority (EPA) requirements for environmental survey and reporting in Western Australia, as outlined in:

- EPA (2016a) *Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment*, known herein as the Flora and Vegetation Technical Guidance
- EPA (2020) *Technical Guidance – Terrestrial vertebrate fauna surveys for environmental impact assessment*, known herein as the Fauna Technical Guidance
- EPA (2016b) *Environmental Factor Guideline – Flora and Vegetation*
- EPA (2016c) *Environmental Factor Guideline – Terrestrial Fauna*
- EPA (2021) *Statement of environmental principles, factors, objectives and aims of EIA*.

Additional details (definitions and criteria) relevant to these works are available in **Appendix One**.

2 DESKTOP ASSESSMENT

2.1 PHYSICAL ENVIRONMENT

2.1.1 CLIMATE

The southwest of Western Australia is generally described as having a Mediterranean-type climate of mild, wet winters and warm to hot, dry summers. The climate of the region is strongly influenced by the position of a band of high pressure known as the sub-tropical ridge. For much of the year the ridge is located to the south allowing the east or south easterly winds to prevail. During the cooler months the ridge periodically moves to the north, allowing cold fronts to pass over the west coast and deliver much of the annual rainfall (Beard 1990).

According to the Köppen-Geiger climate classification, the survey area has a temperate climate with hot, dry summers (Class Csa) (Peel, Finlayson & McMahon 2007). This classification is considered to represent a Mediterranean climate where average summer maximum temperatures exceed 22°C and the average coldest month maximum is between 18° and -3°C, and summer rainfall is less than one third of winter rainfall.

The closest Bureau of Meteorology (BoM) station with long term rainfall records is Wanneroo (BoM 2024a station 009105, operating since 1905) which is located approximately 5 km northwest of the survey area. The mean annual rainfall is 786.4 mm falling in winter (May – August). The rainfall during the 6-month period prior to the field survey was 96.73% of the long-term average for this period.

The closest Bureau of Meteorology (BoM) station with long term temperature records is Pearse RAAF (BoM 2024a station 009053, operating since 1941) which is located approximately 20km northeast of the survey area.

January is the hottest month with a mean maximum temperature of 33.6°C and minimum of 17.0°C. August is the coldest month with a mean maximum of 18.5°C and minimum of 8.2°C.

Figure 2 shows the average rainfall and temperatures of the survey area, with rainfall for the year preceding the field survey. Long-term climate data (1900 to 2023) shows a decreasing trend in total annual rainfall for the Swan Coastal Plain with an average loss of 10 to 40 mm per decade (BoM 2023).

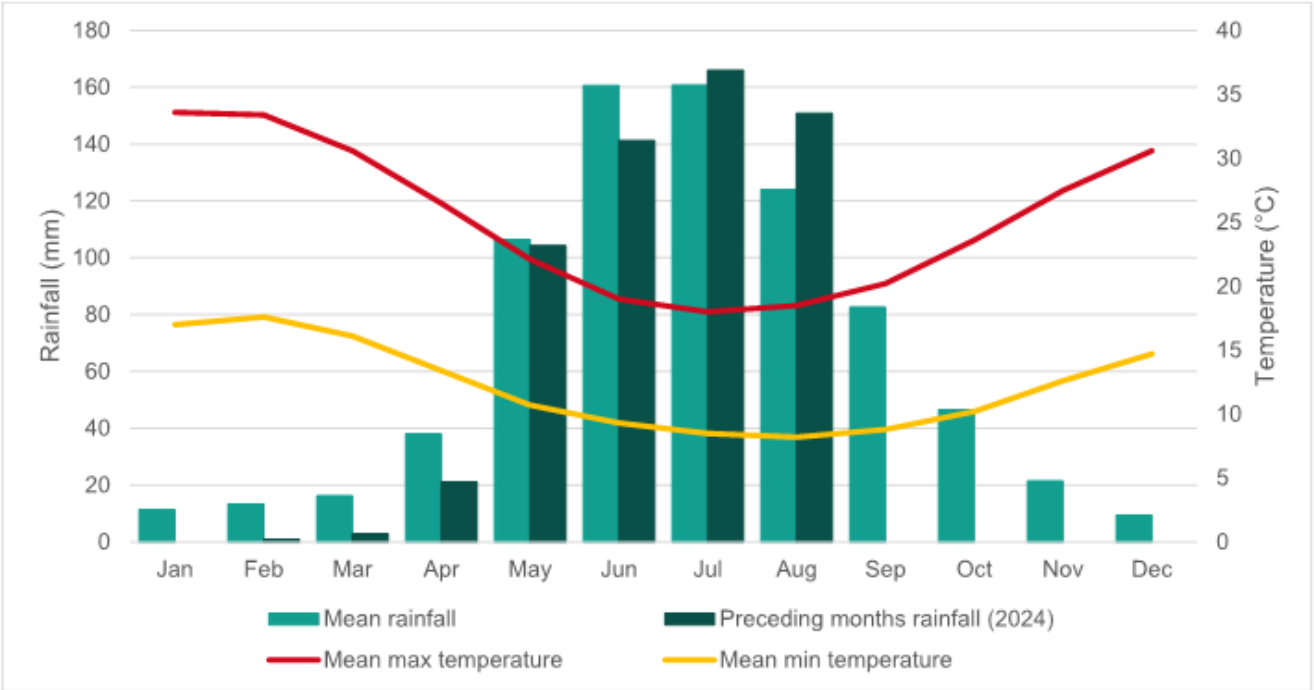

Figure 2: Rainfall and temperature data for the survey area (BoM 2024a)

2.1.2 LAND SYSTEMS

According to the Department of Primary Industries and Regional Development (DPIRD 2020) soil landscape mapping, the survey area is within the Karrakatta Sand Yellow phase land system. This land system is described as "Low hilly to gently undulating terrain. Yellow sand over limestone at 1-2 m. *Banksia* spp. woodland with scattered emergent *E. gomphocephala* and *E. marginata* and a dense shrub layer".

2.1.3 GEOLOGY

According to the 1:50,000 Geological series map for Perth (DMIRS 2020), the survey area intersects two geological units:

- S7: pale and olive-yellow medium to coarse-grained sub-angular quartz sand (134.77 ha, 99.93%)
- Csp: dark strong brown clay of alluvial origin with variable silt content and no sand (0.09 ha, 0.07%).

2.1.4 WETLANDS AND DRAINAGE

The survey area is located in the Swan Avon Lower Swan catchment (Landgate 2023). No drainage features or wetlands occur in the survey area, however, several wetlands are located nearby (**Map 2**), including:

- Badgerup Lake, located approximately 0.6 km to the southeast
- Jandabup Lake, located approximately 0.9 km to the northeast
- Lake Joondalup, located approximately 2.4 km to the west.

2.1.5 GROUNDWATER DEPENDENT ECOSYSTEMS

The Groundwater Dependent Ecosystems Atlas (BoM 2024b) indicates that the survey area is considered as low potential for terrestrial Groundwater Dependent Ecosystems (GDEs) to occur, with an Inflow Dependent Ecosystem (IDE) likelihood of 10 (low).

However, Banksia woodlands on the Swan Coastal Plain are considered to be groundwater dependent (Eamus et al. 2006).

2.1.6 ENVIRONMENTALLY SENSITIVE AREAS

The survey area intersects one mapped Environmentally Sensitive Area (ESA) in the north, corresponding with Bush Forever site 471, totalling 6.5 ha (shown on **Map 2**).

The next closest ESAs are:

- 0.2 km southeast, corresponding with Bush Forever site 327
- 0.8 km northeast, corresponding with Jandabup Nature Reserve.

2.1.7 CONSERVATION LANDS

The survey area does not intersect any legislated lands managed for conservation. The nearest conservation estates (shown on **Map 2**) are:

- Jandabup Nature Reserve, located approximately 0.8 km to the northeast
- Lake Joondalup Nature Reserve, located approximately 2.2 km to the west
- Gnangara-Moore River State Forest (managed by the DBCA), located approximately 2.5 km to the east.

2.1.8 LAND USE HISTORY

The survey area and broader East Wanneroo area have been historically rural areas, supporting market gardens, agriculture, sand quarrying, equestrian and rural residential areas, as well as conservation and crown land reserves (DPIRD 2018). Land use change has occurred over time with the expansion of urban residential housing and commercial businesses into rural areas.

2.2 BIOLOGICAL ENVIRONMENT

2.2.1 BIOGEOGRAPHIC REGION

Biogeographic regions are delineated on the basis of similar climate, geology, landforms, vegetation and fauna and are defined in the Interim Biogeographical Regionalisation for Australia (IBRA) (Department of Agriculture Water and the Environment 2020).

The survey area is located in the Swan Coastal Plain IBRA region in the Swan Coastal Plain subregion (SWA2), described by (Mitchell, Williams & Desmond 2002) as:

> *The Swan Coastal Plain is a low lying coastal plain, mainly covered with woodlands. It is dominated by Banksia or Tuart on sandy soils, Casuarina obesa on outwash plains, and paperbark in swampy areas. In the east, the plain rises to duricrusted Mesozoic sediments dominated by Jarrah woodland. The climate is Warm Mediterranean. Three phases of marine sand dune development provide relief. The outwash plains, once dominated by C. obesa-marri woodlands and Melaleuca shrublands, are extensive only in the south. The Perth subregion is composed of colluvial and aeolian sands, alluvial river flats, coastal limestone. Heath and/or Tuart woodlands on limestone, Banksia and Jarrah- Banksia woodlands on Quaternary marine dunes of various ages, Marri on colluvial and alluvials. Includes a complex series of seasonal wetlands and also includes Rottnest, Carnac and Garden Islands etc. Rainfall ranges between 600 and 1000 mm annually and the climate is Mediterranean. The subregional area is 1, 333, 901 ha.*

2.2.2 PRE-EUROPEAN VEGETATION

During the 1970s, John Beard and associates conducted a systematic survey of native vegetation, describing the vegetation systems in Western Australia at a scale of 1:250,000 in the south-west and at a scale of 1:1,000,000 in less developed areas.

Beard's vegetation maps attempted to depict the native vegetation as it was presumed to be at the time of settlement and is known as the pre-European vegetation type and extent. Beard's vegetation maps have since been developed in digital form by Shepherd, Beeston & Hopkins (2002), updated by DPIRD (2019) and published by the DBCA (2019). This mapping indicates that the survey area intersects two pre-European vegetation units:

- Association 949: Bassendean; Other *Acacia*, *Banksia*, Peppermint, Cypress Pine, *Casuarina*, York gum *Acacia* spp., *Banksia* spp., *Agonis flexuosa*, *Callitris* spp., *Allocasuarina* spp., *Eucalyptus loxophleba*.
- Association 6: Spearwood; Jarrah, Marri and Wandoo; *Eucalyptus marginata*, *Corymbia calophylla*, *E. wandoo.*

The pre-European vegetation associations identified from the survey area and their pre-European and current extents (based on vegetation statistics from 2018) are listed in **Table 2** and shown on **Map 1**.

Table 2: Pre-European vegetation association representation (DBCA 2019)

Region	Vegetation association	Original extent (ha)	Current extent (ha)	% remaining
Western Australia	949	218,193.94	123,104.02	56.42
	6	56,343.01	13,362.25	23.72
IBRA biogeographic region (SWA)	949	209,983.26	120,287.93	57.28
	6	56,343.01	13,362.25	23.72
IBRA biogeographic sub-region (SWA02)	949	184,475.82	104,128.96	56.45
	6	56,343.01	13,362.25	23.72
LGA (City of Wanneroo)	949	37,138.40	17,196.34	46.30
	6	12,662.10	2,777.67	21.94

2.2.3 HEDDLE VEGETATION COMPLEXES

Heddle *et al.* (1980) divided the Swan Coastal Plain into medium to large areas based on soil and landform units, with the vegetation within these areas defined in terms of floristic composition, growth-form dominance, species composition and stratal structure.

According to Heddle *et al.* (1980), one vegetation complex intersects the survey area, Karrakatta Complex-Central and South, described as predominantly open forest of *Eucalyptus gomphocephala*, *Eucalyptus marginata*, *Corymbia calophylla* and woodland of *Eucalyptus marginata* and *Banksia* species with *Agonis flexuosa* co-dominant south of the Capel River.

The pre-European and current extent of the vegetation complex is 52,943.69 ha and 12,589.61 ha, respectively (based on data from 2016). The proportion of the complex remaining is 23.8% (Webb et al. 2016).

2.2.4 THREATENED AND PRIORITY ECOLOGICAL COMMUNITIES

Threatened and Priority Ecological Communities intersecting the survey area and nearby were identified by a *Protected Matters Search Tool* (PMST) search (DCCEEW 2024, using a 10 km buffer) and DBCA database search request (search reference 49-082 using a 10 km buffer). The results of the PMST search are provided in **Appendix Five**.

The results of these searches are indicated in **Table 3** and, for the DBCA data, shown on **Map 2**. Some EPBC-listed TECs are known by different, similar names or are listed as PECs within Western Australia; these equivalents are indicated in **Table 3**.

One TEC (the *Banksia Woodlands of the Swan Coastal Plain ecological community*, hereafter referred to as the Banksia Woodlands TEC) is known to occur within the survey area from the DBCA database search results and from a previous survey (PGV Environmental 2023) that intersects a large portion of the survey area.

Table 3: TECs and PECs identified by PMST and DBCA database searches

PMST	DBCA database	Ecological Community	C'wealth Status	WA status
'Known' (in buffer area)	X	*Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coastal Plain* **Equivalent to:** • *Communities of Tumulus Springs (Organic Mound Springs, Swan Coastal Plain)*	EN	BCA – CR
'Likely'	X	*Banksia Woodlands of the Swan Coastal Plain ecological community* **Incorporates:** • *Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. 1994)* • *Low lying Banksia attenuata woodlands or shrublands* (SCP21c) • *Swan Coastal Plain Banksia attenuata - Banksia menziesii woodlands* (SCP23b) • *Banksia ilicifolia woodlands, southern Swan Coastal Plain* (SCP22)	EN BCA – CR P3 – PEC P3 – PEC P3 – PEC	P3 – PEC
	X	*Callitris preissii (or Melaleuca lanceolata) forests and woodlands of the Swan Coastal Plain (floristic community type 30a as originally described in Gibson et al. 1994)*		BCA – CR
	X	*Coastal shrublands on shallow sands* (SCP29a)		P3 – PEC
'May'		*Empodisma peatlands of southwestern Australia*	EN	
'Likely' (in buffer area)		*Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion* (SCP 26a)	CR	CR
	X	*Northern Spearwood shrublands and woodlands* (SCP24)		P3 – PEC

PMST	DBCA database	Ecological Community	C'wealth Status	WA status
	X	*Southern Eucalyptus gomphocephala-Agonis flexuosa woodlands* (SCP25)		P3 – PEC
'Likely'	X	*Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community*	CR	P3 – PEC
		Equivalent to: • *Tuart (Eucalyptus gomphocephala) woodlands of the Swan Coastal Plain*		

Some EPBC Act-listed TECs have detailed assessment methodologies to determine if vegetation is representative; these are summarised in **Appendix Three**.

2.2.4.1 Floristic Community Types

Floristic community types (FCTs) were identified by Gibson *et al.* (1994) to describe the major regional vegetation communities of the southern Swan Coastal Plain (SCP) based on species composition. The study sampled remnant bushland from 509 quadrats on the SCP, recording a total of 1,485 flora taxa, including 172 weeds. The presence or absence of species within quadrats were used to define floristic groupings using multivariate analysis techniques. The analysis identified four 'super' groups related to major geomorphological units and 30 floristic community types with 13 subtypes (total of 43 FCTs). The FCTs were strongly correlated with seasonal moisture regime and geomorphology; three FCTs were located on the heavy soils of the eastern coastal plain, 16 in seasonal wetlands, four on the Bassendean Dunes and seven in the Spearwood and Quindalup systems (1994)(*ibid.*).

Several FCTs are Threatened or Priority-listed ecological communities under the Western Australian BC Act and DBCA PEC list, including those listed above in **Table 3** which are synonymous with the EPBC-listed Banksia woodlands TEC.

According to a previous survey (PGV Environmental 2023), vegetation within the survey area most likely corresponds with SCP28 *Spearwood Banksia attenuata or Banksia attenuata – Eucalyptus marginata woodlands*, which is amongst the list of FCTs that (with other vegetation types not defined by FCTs) comprise the Banksia Woodlands TEC (TSSC 2016).

2.2.5 THREATENED AND PRIORITY FLORA

2.2.5.1 EPBC-listed Threatened Flora

The PMST search (as above) identified 20 EPBC-listed TF from within the 10 km search buffer area, including three 'species or habitat known to occur within area', 11 as 'species or habitat likely to occur within area' and six as 'species or species habitat may occur within area'.

2.2.5.2 DBCA Database Search

The requested DBCA databases search (search reference 79-0824FL) was conducted using a 10 km buffer around the supplied shapefiles. The results incorporate the TPFL List, taken from Threatened and Priority Flora Report Forms and DBCA surveys (eight species), and WA Herbarium, taken from vouchered specimens held in the Western Australian Herbarium (38 species), totalling 38 species identified by the DBCA database search. **Map 2** shows the locations of conservation-listed flora identified by the DBCA database search.

The combined database searches identified fifty species, listed in **Table 26** in **Appendix Four** and shown on **Map 2**, consisting of 24 TF, six P1, five P2, nine P3 and six P4. Sixteen of the TF species identified in the PMST search did not have a DBCA record, indicating that their inclusion is probably based on the likelihood of their habitat occurring, rather than species presence.

2.2.5.3 Previous Surveys

The 2022 PGV Environmental survey (2023) that corresponds with a large portion of the current survey area included targeted searches for Threatened and Priority flora. No TF or PF were recorded during the survey.

2.2.5.4 Threatened and Priority Flora Likelihood Assessment

Ecoscape conducted a likelihood assessment to identify the TF and PF species that have potential to occur within the survey area. Information to assess the likelihood of a species occurring includes the ecology as listed on *FloraBase* (2024), incorporating an assessment of habitats likely to be present in the survey area.

The attributes taken into consideration were:

- broad soil type usually associated with the species
- broad landform usually associated with the species
- usual vegetation (characteristic species) with which the species is usually associated
- species having previously been recorded near the survey area ('proximity' or 'close proximity'; see **Table 4**) taking locational accuracy into consideration
- time since recorded (i.e. within the previous 25 years), taking into consideration land use changes since collection
- reliability of record: species identified by only a TPFL record, without an accompanying verified vouchered specimen, may have been incorrectly identified or been subject to taxonomic updates since the record was entered
- number of records for the species
- if the record is for a not naturally occurring population (planted).

The likelihood rating is assigned using the categories listed in **Table 4**.

Table 4: Categories for likelihood of occurrence of TF and PF

Likelihood Category	Criteria
Known to occur	Species previously recorded within the survey area.
Likely to occur	Suitable habitat is known to occur within the survey area and multiple records of the species exist within close proximity*
May occur	Suitable habitat is expected to occur within the survey area and the species has previously been recorded within proximity**
Unlikely to occur	Suitable habitat is expected to occur within the survey area however previous records are limited and/or historic and/or not in proximity** OR Suitable habitat is not expected to occur within the survey area although previous records exist in proximity**
Very Unlikely to occur	Suitable habitat is not expected to occur in the survey area AND/OR previous records are limited and/or historic and/or not in proximity**

* close proximity = 2.5 km (¼ of the distance of the database search buffer)
** proximity = 5 km (½ of the distance of the database search buffer)

The likelihood assessment is available in **Table 26** in **Appendix Four**. None have been previously recorded from within the survey area. One P4 and one P2 were identified as being Likely to occur and two P1, two P3 and one P4 as May Occur, based on the information available during the desktop assessment and were prioritised for field survey.

The likelihood of occurrence was re-evaluated following the field survey when actual survey area characteristics (vegetation types, vegetation condition, visibility for individual species) were better understood, and the level of survey effort was considered. The post-survey likelihood is also incorporated into this table and discussed further in **Section 5.1.1.2**.

2.2.6 FLORA ASSEMBLAGE

The previous survey undertaken by PGV Environmental (2023) recorded a total of 168 flora taxa, including 38 introduced species.

A *Dandjoo* data search (DBCA 2024) identified that 795 unique species have been identified as occurring within an approximate 9 km radius of the survey area (9 km buffer around an approximate central point within

the survey area). The search results are provided in **Appendix Five**. The number of conservation-listed flora identified using this data search (62) is larger than that of the paid DBCA database search (38; **Section 2.2.5**), possibly as a result of the search areas not matching precisely, which is a limitation of search types available on this platform.

2.3 THREATENED AND PRIORITY FAUNA

The combined PMST and DBCA database search results are incorporated into **Table 27** in **Appendix Four**.

Species identified by these database searches that are excluded from the field survey and further assessments (including likelihood assessments) are listed in **Table 28** in **Appendix Four** along with the reason for their exclusion (marine species where suitable habitat does not occur within the survey area; invertebrates that are not within the scope of the survey; marine, migratory or shorebirds that may overfly the survey area but are unlikely to occur within it).

Such excluded species are not further referenced in this document.

2.3.1.1 EPBC-listed Threatened Fauna

The *Protected Matters Search Tool* (PMST) search (DCCEEW 2024, using a 10 km buffer), identified 19 species as having been recorded or having potential to occur within the search area buffer i.e. 'species or species habitat known to occur within the area' (or buffer) or 'species or species habitat likely to occur within area' (or buffer), consisting of three mammals and 16 birds.

2.3.1.2 DBCA Database Search

A search of the DBCA databases was conducted (search reference: 30-1124FA) using a 10 km buffer around the survey area. Thirty-seven conservation-listed terrestrial vertebrate species were identified as having previously been recorded from within the search area buffer, consisting of seven mammals, 29 birds and one reptile (shown on **Map 3**).

2.3.1.3 Previous Surveys

The 2022 PGV Environmental survey (2023) included a Basic fauna survey and targeted Black Cockatoo habitat assessment. Two fauna habitat types were mapped, described as Open Woodland and Cleared/Developed, both of which intersect the survey area. Open Woodland was assessed as suitable habitat for Black Cockatoos. A fauna inventory was not included in the PGV Environmental report.

2.3.1.4 Threatened and Priority Fauna Likelihood Assessment

The likelihood of conservation-listed fauna species, as identified by the database and literature searches, occurring within the survey area was assessed using the following criteria:

- suitability of habitat types likely to be present within the survey area
- distance between previous record of conservation-listed species and the survey area
- frequency and number of records in the region
- date of record of conservation-listed species (recent or historical)
- the record is naturally occurring (not from a sanctuary or translocated population).

The following were also taken into consideration during the assessment:

- sufficiency of information
- behavioural and ecological characteristics such as cryptic behaviours, size and mobility of species
- record certainty.

The categories of likelihood of occurrence, assessed using the above criteria, are shown in **Table 5**.

Table 5: Categories for likelihood of occurrence of conservation-listed fauna

Likelihood Category	Criteria
Known to occur	Species previously recorded within the survey area within 25 years.
Likely to occur	Suitable habitat is expected to occur within the survey area and records of the species within 25 years exist within close proximity*
May occur	Suitable habitat is expected to occur within the survey area and historic records of the species exist within close proximity* OR Suitable habitat is expected to occur within the survey area and recent (<25yrs) records exist within the database search buffer but not in close proximity*
Unlikely to occur	Suitable habitat is expected to occur within the survey area however previous records are limited and/or historic and/or not in proximity** OR Suitable habitat is not expected to occur within the survey area and recent (<25yrs) records do not occur in close proximity*
Very Unlikely to occur	Suitable habitat is not expected to occur in the survey area AND/OR previous records are limited and/or historic and/or not in proximity**

* close proximity = 2.5 km (¼ of the distance of the database search buffer)

** proximity = 5 km (½ of the distance of the database search buffer)

The likelihood of species occurring within the survey area are indicated in **Table 27** in **Appendix Four**. One mammal is known to occur in the survey area, *Isoodon fusciventer* (P4). Two species were assessed as being 'likely to occur' within the survey area:

- Carnaby's Cockatoo (*Zanda latirostris*; EPBC and BC Act – Endangered)
- Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii subsp. naso*; EPBC- and BC Act – Vulnerable).

The likelihood of occurrence does not take into consideration factors such as frequency that a species occurs (or may occur), the duration that such species occupies (or may occupy) the survey area or dependence on habitat or resources within the survey area. Highly mobile species potentially only occur within (or for birds, overflying) the survey area for very brief periods and/or on very infrequent intervals. If a previous observation included in the database search records corresponds with such an event the species is listed as 'Recorded'. If such a transient visitation is possible in the future it is considered as 'Likely' to occur'.

Following the field survey, when actual survey area characteristics are better understood and the level of survey effort was considered, the likelihood of occurrence was re-evaluated. The post-survey likelihood is also incorporated into this table and discussed further in **Section 5.3.2.1**, including providing an indication of dependence of species on the habitat and resources available within the survey area.

2.3.1.5 Black Cockatoos

The survey area is located:

- 15.0 km southwest of the nearest confirmed Carnaby's Cockatoo breeding area (DBCA 2018a)
- 9.0 km from an unconfirmed (indicative) Carnaby's Cockatoo breeding area (DBCA 2018b)
- 2.2 km west of confirmed Carnaby's Cockatoo roost sites (DBCA 2018c)
- 1.2 km west of unconfirmed (indicative) Carnaby's Cockatoo roost sites (DBCA 2018d)
- 530 m west of Forest Red-tailed Black Cockatoo roost site (DBCA database search reference 30-1124FA).

2.4 RELEVANT LITERATURE

The following documents have been identified as having relevance to the current survey:

- PGV Environmental (2023a), *East Wanneroo Precinct 3 Flora, Vegetation and Fauna survey.* This survey intersects a large portion of the survey area. No TF or PF were recorded. Four vegetation types were mapped, including vegetation corresponding with SCP28 and the Banksia woodlands TEC. Two fauna habitat types were mapped, including habitat for Black Cockatoos.

- SLR Consulting (2023) *East Wanneroo Environmental Assessment Report*. This survey was conducted nearby in Precinct 7 within the East Wanneroo District Structure Plan. One PF was recorded from the survey area (*Jacksonia sericea*, P4). No TF were recorded. The survey also identified Black Cockatoo habitat, mostly of Very High and High quality.
- Anders Environmental Consulting (2022) *Flora and Vegetation Survey: East Wanneroo Proposed Alignment.* This survey was conducted nearby along a proposed alternative pipeline alignment between Alkimos and the Wanneroo Reservoir. Two vegetation types, including one PEC (SCP22), was mapped within the survey area and no TF or PF were recorded.
- Emerge Associates (2018) *Environmental Assessment Study: East Wanneroo District Structure Plan.* This survey was undertaken within the East Wanneroo District Structure Plan area which includes the current survey area. A preliminary vegetation assessment identified the potential presence of the SCP20a TEC and the Banksia Woodlands TEC within the current survey area.

2.5 PREVIOUS SURVEYS

Two surveys are known to have been partially or wholly conducted within the current survey area:

- PGV Environmental (2023) *East Wanneroo Precinct 3 Flora, Vegetation and Fauna survey.*
- Emerge Associates (2018) *Environmental Assessment Study: East Wanneroo District Structure Plan.*

2.5.1 IBSA DATA SEARCH

The Department of Water and Environmental Regulation's (DWER's) *Index of Biodiversity Surveys for Assessments (IBSA)* Portal (DWER 2024) was searched for recent environmental surveys in the vicinity of the survey area.

The search, conducted on 3 February 2025, identified eight environmental surveys that have been conducted within 5 km of the survey area. None of the listings had data accessible for review i.e. contained metadata only.

The following documents had relevance to current survey:

- Biologic (in prep.) Marigin*iup Road and Old Yanchep Road Terrestrial Vertebrate Fauna Survey and Black Cockatoo Habitat Assessment.* Unpublished report prepared for the Water Corporation.
- One Tree Botanical Pty Ltd. (2023) *Lot 24 Mary Street, Wanneroo & Mather Reserve (53163), Neerabup Vegetation Monitoring Programme 2022.* Unpublished report for the City of Wanneroo.
- 360 Environmental (2022) *Alkimos Seawater Desalination Plant: Alkimos Pipeline Corridor Black Cockatoo Hollow Inspection.* Unpublished report prepared for the Water Corporation.
- Focus Vision Consulting (2021) *Biological Assessment Smart Freeways – Mitchell Southbound*. Unpublished report for Main Roads Western Australia
- Stantec Australia Pty Ltd (2020) *Alkimos Seawater Desalination Plant: Terrestrial Fauna Consolidation*. Unpublished report prepared for the Water Corporation.
- Stantec Australia Pty Ltd (2020) *Alkimos Seawater Desalination Plant: Flora and Vegetation Consolidation.* Unpublished report prepared for the Water Corporation.
- AECOM (2020) *Flora, Vegetation, Fauna and Targeted Black Cockatoo Survey.* Report prepared for Water Corporation.
- AECOM (2018) *Flora, Vegetation and Fauna Assessment*. Report prepared for Water Corporation.

2.5.2 OTHER LITERATURE

The following documents have been identified as having relevance to the current survey:

- Western Australian Planning Commission (2021) *East Wanneroo District Structure Plan.*

3 METHODS

3.1 GUIDING PRINCIPLES

The flora and vegetation survey was conducted as a Detailed survey according to the Flora and Vegetation Technical Guidance (EPA 2016a). The EPA considers that a Detailed survey requires:

- a comprehensive survey design, including giving consideration to the survey timing that should be conducted during the primary season of survey for the bioregion and disturbance events, and the potential requirement for supplementary surveys
- a minimum of three quadrats (in proportion to the extent of the vegetation unit), located throughout each preliminary vegetation types sampled throughout its geographic range, with additional quadrats and rescoring during supplementary surveys to clarify vegetation unit boundaries
- regional surveys if there is insufficient information available (identified during the desktop assessment) to provide local and regional context
- the survey may include a number of sampling techniques including quadrats, relevés, transects and traverses, as well as opportunistic observations
- the flora inventory should be comprised of data collected from quadrats and relevés, supplemented by opportunistic observations, systematic surveys and targeted inspections of various habitat areas
- it may be appropriate to increase survey effort in areas of unusual habitat
- sampling sites that are placed at representative locations throughout the survey area considering landform, geology, elevation, slope, aspect, surface or groundwater expression and soil type, as well as vegetation structure, composition and condition.

Targeted searches were also conducted in areas of habitat suitable for TF and PF identified during the desktop assessment and previous surveys as having potential to occur.

The fauna and fauna habitat survey was conducted as a Basic survey according to the Fauna Technical Guidance (EPA 2020). The EPA recommends a Basic survey should:

- be conducted as a low intensity survey to gather broad fauna and habitat information
- verify the adequacy of the desktop assessment
- map, describe and photograph habitats
- record opportunistic fauna observations
- identify possible future survey site locations, access and logistics
- determine if a Detailed survey is required.

Targeted surveys were also conducted to gather information on significant fauna and habitats. Black Cockatoos and their habitat were specifically targeted.

3.2 FLORA AND VEGETATION FIELD SURVEY

3.2.1 FIELD SURVEY METHODS

The methods utilised during the field survey followed those outlined in the Flora and Vegetation Technical Guidance (EPA 2016a), conducted as a single-phase Detailed survey.

Conservation criteria used in this assessment are outlined in **Table 15**, **Table 16** and **Table 17** in **Appendix One**.

Survey method details are outlined below.

3.2.1.1 Floristic Quadrats

Floristic quadrat ('quadrat') locations were selected using aerial photography, environmental values and field observations to represent the vegetation values existing at the site. The unmarked quadrats were 10 m x 10 m in dimension, as required according to the Flora and Vegetation Technical Guidance (EPA 2016a).

Where the vegetation consisted of a narrow linear corridor, quadrats were linear but of the same overall size i.e. 100 m².

The following information was collected from within each quadrat:

- observer
- date
- quadrat/site number
- GPS location (GDA94) of the northwest corner
- digital photograph (spatially referenced with a reference number), taken from the northwest corner, looking diagonally across the quadrat
- broad soil type and colour
- topography
- list of flora species recorded with the average height and total cover within the quadrat for each species
- vegetation description (as per below)
- vegetation condition.

At least three quadrats per vegetation type were recorded for the Detailed survey where there was sufficient extent to do so. Quadrat locations are displayed on Map 5.

3.2.1.2 Targeted Searches

Threatened and Priority Flora identified during the desktop analysis and previous surveys as known or having potential to occur were targeted for searches in areas of potential habitat. Targeted searches were conducted in potentially suitable habitat of target species, with the remainder of the site opportunistically searched during site traverses.

The locations of all targeted taxa collected were recorded using a handheld GPS with the following data recorded:

- observer, date and time
- reproductive status and other features such as health of plants, percentage flowering and fruiting
- local abundance/population size and/or population boundary, including outside the development envelopes where possible
- landform
- brief vegetation community description
- representative photos of each species and habitat
- collection of representative specimens.

3.2.1.3 Introduced Species

Introduced species (weeds) were recorded during the collection of the overall flora inventory.

3.2.1.4 Vegetation Description and Classification

Vegetation was described from each of the quadrats using the height and estimated cover of dominant and characteristic species of each stratum based on the National Vegetation Information System, recorded at Level V (NVIS Technical Working Group & DotEE 2017) (**Table 18** and **Table 19** in **Appendix Two**). Up to three species per stratum from each stratum (upper, mid and ground) were used to formulate vegetation descriptions for each quadrat and each vegetation type.

Vegetation type descriptions were created by combining quadrat descriptions and modifying, where necessary, based on the wider vegetation. Vegetation codes for these were formulated using the characteristic species of the highest stratum within the vegetation type that had >2% cover (i.e. not scattered) if present, with the first series of letter codes referring to the component species (upper case first letter referring to the genus, lower case one or two letters referring to the species, with the upper case letters at the end referring to the stratum structure e.g. **BaLOF** refers to ***B**anksia **a**ttenuata* **l**ow **o**pen **f**orest.

3.2.1.5 Vegetation Condition Assessment

Vegetation condition was assessed broadly and continuously throughout the survey area and at each quadrat using the Vegetation Condition Scale for the Southwest Botanical Province (EPA 2016a) (**Table 20** in **Appendix Two**). As quadrats are located in the best condition parts of a vegetation type, the condition rating of the quadrat may not match that of the broader vegetation type due to the scale of mapping.

3.2.1.6 Field Survey Timing

The field survey was conducted during 17-19 September 2024 which is within the optimal period for a primary survey within the bioregion according to the Flora and Vegetation Technical Guidance (EPA 2016a).

3.2.2 DATA MANAGEMENT AND ANALYSIS

3.2.2.1 Taxonomic Plant Identification

Any plants that could not be identified with certainty in the field, having potential to be conservation-listed, introduced species and having significance according to the Flora and Vegetation Technical Guidance (EPA 2016a) were collected during the field survey using Western Australian Herbarium collecting protocols.

The majority of post-survey plant collection identification was undertaken by Ecoscape taxonomists (primarily Stephen Kern) using relevant literature, taxonomic keys and reference specimens held at the Western Australian Herbarium (WAH), including seeking assistance from specialist taxonomists where necessary.

3.2.2.2 Post-survey Likelihood Assessment

Following the field survey, a post-survey likelihood assessment was conducted to identify conservation-listed species that have potential to occur on site. This assessment was based on survey results, survey effort and habitat identified within in the survey area.

3.2.2.3 Floristic Analysis

PATN© software (Blatant Fabrications Pty Ltd 2013) was used to undertake statistical analysis to generate floristic groups using the data collected from the quadrats and relevés, in order to better understand local significance of floristic units. PATN analysis has been used for several local floristic analyses including Gibson *et al.* (1994) for the Swan Coastal Plain.

PATN is a multivariate analysis tool that generates estimates of association (resemblance, affinity, distance) between sets of objects described by a suite of variables (attributes) and classifies the objects into groups and condenses the information and displays the patterns in the data graphically. It offers a choice of data transformations prior to multivariate analysis.

Floristic groups, identified using a dendrogram output of the analysis, are used as a tool to inform vegetation type groups at various levels and scales.

For this project a variety of analyses were run. The most informative analysis used the Bray Curtis similarity coefficient for rows (species) and columns (sites) as this provides a good estimation of association for ecological applications (Blatant Fabrications Pty Ltd 2013). For this analysis we used a simple square root transformation of cover values for each species.

Interpretation of these purely floristic groups into recognisable and mappable on-ground units is a tool used to identify broad vegetation types. Generally, quadrats that are closely floristically related on the dendrogram form identifiable vegetation units, however, interpretation is frequently required for imperfect results. Vegetation types are therefore determined as a combination of floristic analysis and on-ground interpretation using dominant and characteristic species.

3.2.2.4 Floristic Community Type Analysis

Quadrat data recorded during the survey was incorporated into the Gibson *et al.* (1994) dataset. Reconciliation of flora species names was undertaken to ensure consistency of nomenclature as best possible. For this

analysis we used presence/absence (0/1) data for each species. The resulting dendrogram output was used to determine the correct placement of survey area quadrats within Floristic Community Types (FCTs).

3.2.2.5 TEC Assessment Criteria

Vegetation potentially representative of the Banksia Woodlands TEC was assessed against the criteria outlined in the Approved Conservation Advice for the community (TSSC 2016). Each indicatively mapped occurrence, and areas of suitable vegetation that was not indicatively mapped, had at least one quadrat or, where clearly not representative, a descriptive waypoint and photograph recorded to document the vegetation.

Reasons that vegetation was considered clearly not representative of the TEC in an indicatively mapped occurrence include the vegetation being a different type to that of the TEC, vegetation condition clearly not meeting the condition thresholds (i.e. Degraded-Completely Degraded condition), and extents too small for inclusion.

3.2.2.6 Adequacy of Sampling

In order to demonstrate adequacy of sampling, a species accumulation curve was generated by the software Species Diversity and Richness IV (Pisces Conservation Ltd 2010) using five random selections of sample order, using quadrat data only.

3.3 FAUNA FIELD SURVEY

The methods utilised during the field survey followed those outlined in the Fauna Technical Guidance (EPA 2020), conducted as a Basic survey. Conservation criteria used in this assessment are included in **Appendix One**.

3.3.1 FAUNA SURVEY METHODS

The Basic fauna survey incorporated a number of survey techniques as per the Terrestrial Fauna Technical Guidance including habitat assessment, active searches (day time), searches for secondary evidence such as scats and tracks, as well as opportunistic searches.

Fauna species were identified opportunistically based on sightings, calls, remains, diggings and other signs. Potential habitats for conservation significant species were identified and evaluated (see **Section 3.3.1.2**) and their likelihood of occurrence re-assessed.

3.3.1.1 Bird Survey Methodology

Bird surveys were conducted as 20-minute point searches by an experienced ornithologist during peak periods of bird activity (early morning, as per Birdlife Australia standard methodology). Bird surveys (including opportunistic sampling during traverses within the survey area) were conducted in all habitat types and targeted conservation-listed species assessed as 'likely to occur' during the desktop likelihood assessment (see **Section 3.3.2.1**). Birds were identified from their call signatures, from observations of live individuals and other signs (feathers).

3.3.1.2 Fauna Habitat Assessment

The fauna habitats present within the survey areas were identified and mapped. Fauna habitats were described as an area which is distinguishable from its surrounding area by its landform, vegetation and fauna assemblage occupying the area. In addition, its likelihood to harbour specialised fauna species which are not found in adjacent areas was taken into consideration.

The following information was used to identify and map all fauna habitats within the survey area:

- previous fauna habitat mapping
- land systems
- vegetation type and condition mapping
- aerial imagery
- landforms

- soil characteristic
- fauna assemblage information.

The composition and characteristics of each fauna habitat type was recorded, including noting suitability for various fauna suites or conservation-listed species. Habitat types were delineated in the field and digitised following the field survey.

3.3.2 TARGETED SURVEY METHODS

3.3.2.1 Black Cockatoo Assessment Methods

'Black Cockatoos' refer to three threatened Western Australian species: *Zanda latirostris* (Carnaby's Cockatoo; EPBC- and BC Act EN), *Zanda baudinii* (Baudin's Cockatoo; EPBC- and BC Act EN) and *Calyptorhynchus banksii naso* (Forest Red-tailed Black Cockatoo; EPBC- and BC Act VU). The survey area is within the mapped distribution of Carnaby's Cockatoo and Forest Red-tailed Black Cockatoo (DAWE 2022a).

Potential and active (actual) Black Cockatoo breeding trees were assessed as per Commonwealth guidance (DAWE 2022a) and Bamford (2024) methods (see below).

The suitability of the survey area for breeding (additional to the specific tree survey) and as foraging was also assessed and mapped (see 'foraging habitat survey methods' below).

Tree Survey Methods

Potential and actual Black Cockatoo habitat trees are:

- tree species as listed in the Commonwealth guidance (DAWE 2022a)
- a minimum size of 500 mm diameter at breast height (DBH) for most species, or 300 mm DBH for Salmon Gum and Wandoo although neither are anticipated from the survey area.

The following are recorded for each potential and actual habitat tree:

- location, recorded using a handheld GPS device with an accuracy of approximately 5 m
- species
- identifying if tree hollows of suitable size and orientation are present, and recording evidence of use by cockatoos such as chewing at the hollow entrance
- habitat value according to the scoring system developed by Dr Mike Bamford (2024); this score reflects the existing value of the tree characteristics with respect to its potential to be used as a nesting tree (**Table 21** in **Appendix Two**)
- photographs of each Class 3 (Bamford) and above trees, showing hollows if possible
- known nesting trees as per DBCA data.

Foraging Habitat Survey Methods

The suitability of the survey area for breeding (additional to the specific tree survey) and as foraging habitat was assessed and mapped as per the Commonwealth (DAWE 2022a) scoring tool and Bamford (2020) foraging habitat methods.

The Commonwealth (DAWE 2022a) scoring tool (**Table 22** in **Appendix Two**) takes into consideration:

- the extent of the site (that must be at least 1 ha to be considered as suitable)
- preferred foraging species
- connectivity to other foraging habitat within 12 km
- proximity to known foraging and breeding habitat within 12 km
- presence of disease, such as *Phytophthora cinnamomi* or Marri Canker (*Quambalaria coyrecup*).

The Bamford (2020) scoring system (**Table 23** in **Appendix Two**) takes into consideration:

- site condition (vegetation composition, condition and structure)
- site context (the site in relation to other native vegetation within a 15 km radius of the site)

- species density (stocking rate: frequency and abundance of Black Cockatoos at the site)
- modification, if needed, for vegetation with little or no foraging value and for pine plantations that provide valuable food sources.

4 FIELD SURVEY RESULTS

4.1 FLORA AND VEGETATION SURVEY

The flora and vegetation survey was conducted by Kyla Pannell (Senior Botanist, Flora Collecting Permit FB62000261-2; Threatened Flora Collecting Permit TFL 161-2122) during 17-19 September 2024.

4.1.1 FLORA INVENTORY

Twelve floristic quadrats were recorded from within the survey area (shown on **Map 4**).

208 vascular flora taxa were recorded from 151 genera and 58 families from the quadrats, opportunistic observations and searches for conservation-listed flora. Of these, 64 were introduced (30.77%) and nine (4.33%) could not be identified to species level due to insufficient diagnostic reproductive material.

The most commonly represented families were Fabaceae (26 taxa), Asteraceae (17) and Myrtaceae (14). The most commonly represented genera were *Acacia* with eight taxa and *Banksia* (six).

The number of species per quadrat ranged from 31 in quadrat WT2402 to 51 in quadrat WT2404, with an average species diversity per quadrat of 37.1 species (29.3 excluding weeds). The most commonly recorded species were **Ursinia anthemoides* (12 quadrats), *Allocasuarina fraseriana*, *Mesomelaena pseudostygia*, *Hibbertia hypericoides* subsp. *hypericoides*, *Briza maxima* and *Xanthorrhoea brunonis* (all recorded from 11 quadrats).

The combined flora inventory is presented in **Appendix Five**. Quadrat data is presented in **Appendix Seven**.

4.1.2 CONSERVATION-LISTED FLORA

Threatened Flora

No Commonwealth EPBC Act or Western Australian BC Act-listed TF were recorded during the field survey. No taxa that was not identified with certainty resembled any currently described TF.

Priority Flora

One Priority 2 taxon was recorded during the field survey, *Poranthera moorokatta* (one plant), from quadrat WT2408 in association with *Allocasuarina fraseriana, Banksia attenuata* and *Eucalyptus marginata* subsp. *marginata* mid woodland vegetation on a low, gently undulating grey sandy plain (shown on **Map 4**). A specimen was submitted to the Western Herbarium for formal identification (ACC/11358/E).

This species is a poorly known herb growing to 2 cm in height. According to *Florabase* (2024) there are 15 records of this species in the Swan Coastal Plain region with a distribution from Cervantes to Busselton. The majority of known records are located in the Perth metropolitan region.

4.1.3 OTHER SIGNIFICANT FLORA

No flora taxa having other significance according to the Flora and Vegetation Technical Guidance (EPA 2016a) were recorded during the field survey.

4.1.4 FLORA OF TAXONOMIC INTEREST

No flora of taxonomic interest were recorded during the field survey.

4.1.5 INTRODUCED FLORA

Sixty-four introduced flora species (weeds) were recorded in the quadrats and opportunistically during traverses through the survey area, representing 30.92% of the overall flora inventory.

Weeds were present in all quadrats and density varied, ranging from a minimum of <1% cover in quadrat WT2410 to a maximum of 30% cover in quadrat WT2402. The mean weed cover per quadrat was 10.3%.

**Ursinia anthemoides* subsp. *anthemoides*, **Briza maxima*, *Hypochaeris glabra and **Gladiolus caryophyllaceus*, were the most commonly recorded weeds and mostly recorded at low densities.

4.1.5.1 Significant Weeds

Two of the weeds recorded (**Asparagus asparagoides* and **Opuntia stricta*) are WoNS and Declared Pest plants (shown on **Map 5** and **Image 1**–**Image 2** below). **Asparagus asparagoides* (Bridal Creeper) was recorded from Degraded roadside bushland along Nicholas Road, totalling one population with three plants. **Opuntia stricta* (Common Prickly Pear) was recorded in Degraded bushland in two plots, totalling two populations with four plants.

Image 1:*Asparagus asparagoides* (Bridal Creeper)

Image 2: *Opuntia stricta* (Common Prickly Pear)

4.1.6 VEGETATION

4.1.6.1 Vegetation Types

Two vegetation types were recorded from within the survey area (shown in **Table 6** below and on **Map 4**) based on a combination of structural vegetation type as identified in the field, floristic analysis (see **Section 4.1.8**) and subsequent desktop review.

Table 6: Vegetation types

Mapping unit	Vegetation type	Floristic quadrats	Representative photograph
BaLOF	**Vegetation description:** *Banksia attenuata*, *Allocasuarina fraseriana* and *Banksia menziesii* low open forest over *Eremaea pauciflora* var. pauciflora, *Xanthorrhoea brunonis* and *Daviesia divaricata* subsp. *divaricata* mid open shrubland over *Mesomelaena pseudostygia* and *Hibbertia hypericoides* subsp. *hypericoides* low open sedgeland/shrubland on a low, gently undulating grey or pale yellow sandy plain **Characteristic species:** *Adenanthos cygnorum, Alexgeorgea nitens, Banksia prionotes, *Briza maxima, Calytrix fraseri, *Ehrharta longiflora, *Ehrharta calycina, Eucalyptus marginata* subsp. *marginata, *Hypochaeris glabra, Jacksonia sternbergiana, Morelotia octandra, Patersonia occidentalis, Stirlingia latifolia *Ursinia anthemoides* subsp. *anthemoides, Xanthorrhoea preissii* **Extent:** 19.94 ha, 14.78%	**WT2401** WT2402 WT2403 WT2405 WT2407 WT2408 WT2409 WT2410	
EmmLW	**Vegetation description:** *Eucalyptus marginata* subsp. *marginata*, *Banksia prionotes* and *Allocasuarina fraseriana* low woodland over *Xanthorrhoea brunonis* and *Daviesia nudiflora* subsp. *nudiflora* mid sparse shrubland over *Hibbertia hypericoides* subsp. *hypericoides* and *Mesomelaena pseudostygia* low sparse shrubland/sedgeland on a low, gently undulating grey or pale yellow sandy plain **Characteristic species:** *Banksia attenuata, Banksia menziesii, *Briza maxima, Calytrix fraseri, *Ehrharta calycina, *Gaudium laevigatum, Patersonia occidentalis, Scaevola repens* var. *repens, *Ursinia anthemoides* subsp. *anthemoides, Verticordia densiflora* **Extent**: 12.97 ha, 9.61%	WT2404 WT2406 **WT2411** WT2412	
	Not native vegetation (cleared)		101.95 ha 75.60%
	TOTAL EXTENT		134.86 ha 100%

4.1.7 VEGETATION SIGNIFICANCE

4.1.7.1 TECs and PECs

The DBCA database search and previous survey by PGV Environmental (**Section 2.2.4**) identified the Banksia Woodlands TEC as occurring within the survey area. Both vegetation types mapped in the survey area are considered to represent this TEC based on the key diagnostic characteristics (described in **Appendix Three**), summarised in **Table 7** below:

Table 7: *Banksia* Woodlands TEC Assessment (TSSC 2016)

Category	Key characteristics	Assessment
Location and physical environment	The *Banksia* Woodlands ecological community primarily occurs in the Swan Coastal Plain IBRA bioregion.	Both vegetation types occur in the Swan Coastal Plain IBRA bioregion.
Soils and landform	The *Banksia* Woodlands ecological community typically occurs on well drained, low nutrient soils on sandplain landforms.	Both vegetation types occur on a low undulating sandy plain with leached grey or pale yellow soil.
Structure and composition	Low woodland to forest with an upper layer dominated or co-dominated by: • *Banksia attenuata* • *Banksia menziesii* • *Banksia prionotes* • *Banksia ilicifolia.*	Vegetation type **BaLOF** was co-dominated by *Banksia attenuata* and *B. menziesii* in the upper stratum. Vegetation type **EmmLW** was co-dominated by *Banksia prionotes* in the upper stratum.
	May also include an emergent tree layer with *Corymbia calophylla, Eucalyptus marginata* or less commonly *E. gomphocephala.*	Vegetation type **EmmLW** was characterised by emergent *Eucalyptus marginata* subsp. *marginata.*
	Other trees of a medium height may be present and may be codominant with the *Banksia* species, including: • *Eucalyptus todtiana* • *Nuytsia floribunda* • *Allocasuarina fraseriana* • *Callitris arenaria* • *Callitris pyramidalis* • *Xylomelum occidentale.*	*Allocasuarina fraseriana* was co-dominant with *Banksia* species in both vegetation types.
	The understorey typically contains a high to very high diversity of shrubs and herbs.	The overall floristic composition was moderate in diversity with an average of 37 understory species per quadrat (29 excluding weeds), including shrubs and herbs. Additional species (particularly ephemerals and herbs) are considered likely to occur during more favourable seasonal conditions (see **Section 0** on botanical limitations).
Vegetation condition	A patch should meet at least the Good Condition category and meet the following minimum patch sizes: • Pristine: no minimum patch size applies • Excellent: 0.5 ha or 5,000 m^2 • Very Good: 1 ha or 10,000 m^2 • Good: 2 ha or 20,000 m^2.	Three patches have vegetation in Good or better condition with total extents (6.99 ha, 8.77 ha and 2.21 ha) exceeding the minimum size criteria of 2 ha or more. Other areas in Good or Very Good condition did not meet the relevant minimum size thresholds.

Based on the above assessment, the total extent of the TEC within the survey area was mapped as occupying 17.97 ha or 13.32% (shown on **Map 4**).

4.1.7.2 Other Significant Vegetation

The *Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community* (Critically Endangered under the EPBC Act) was identified as 'likely' from the PMST search. While Tuart was recorded opportunistically within the survey area, trees were rarely encountered and did not meet the key diagnostic criteria for the ecological community as listed in the Conservation Advice (shown in

Appendix Three) (DotEE 2019), namely that the gaps between mature, living trees exceeded the minimum distance of 60 m.

4.1.8 FLORISTIC ANALYSIS

The floristic analysis dendrogram (**Figure 3**) indicates that the structural vegetation types, as interpreted during the field survey, are well supported by the floristic analysis except for quadrat WT2410. Quadrat WT2410 within the **BaLOF** vegetation type has been clustered with quadrats from **EmmLW**. Although the analysis has grouped WT2410 with **EmmLW** quadrats, the structural formation and composition of dominant species aligns with **BaLOF** and, therefore, the quadrat is retained within this vegetation type.

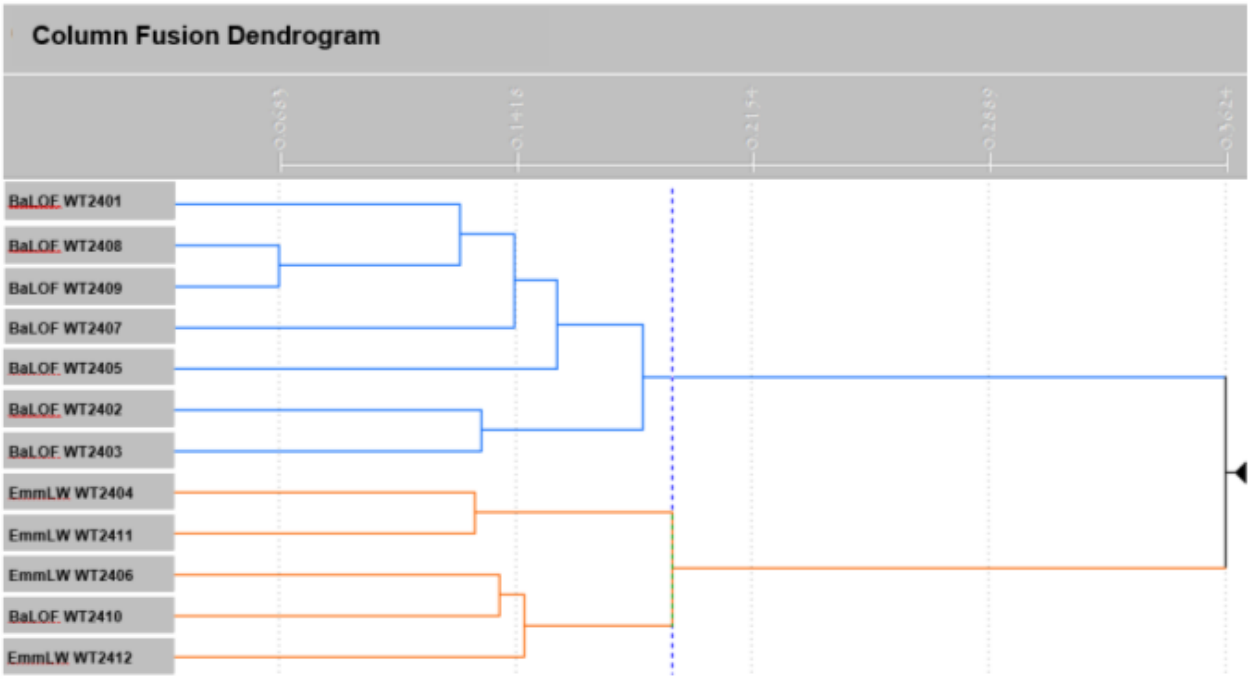

Figure 3: Floristic analysis dendrogram

4.1.8.1 Floristic Community Type Analysis

A floristic community analysis was undertaken incorporating the survey area quadrats (including PGV) into the Gibson *et al.* (1994) dataset. The floristic analysis dendrogram (segment shown in **Figure 4** below, full version shown in **Appendix Eight**) indicates that vegetation within the survey area most likely corresponds with SCP28 'Spearwood *Banksia attenuata* or *B. attenuata–Eucalyptus* woodlands'. SCP28 is included in the Banksia Woodlands TEC. Analysis was also undertaken using the Keighery *et al.* (2012) dataset, however, the SCP floristic units were not clearly clustered together in the resulting dendrogram (although the quadrats from this survey did align with SCP28). As such, this analysis is excluded from further discussion.

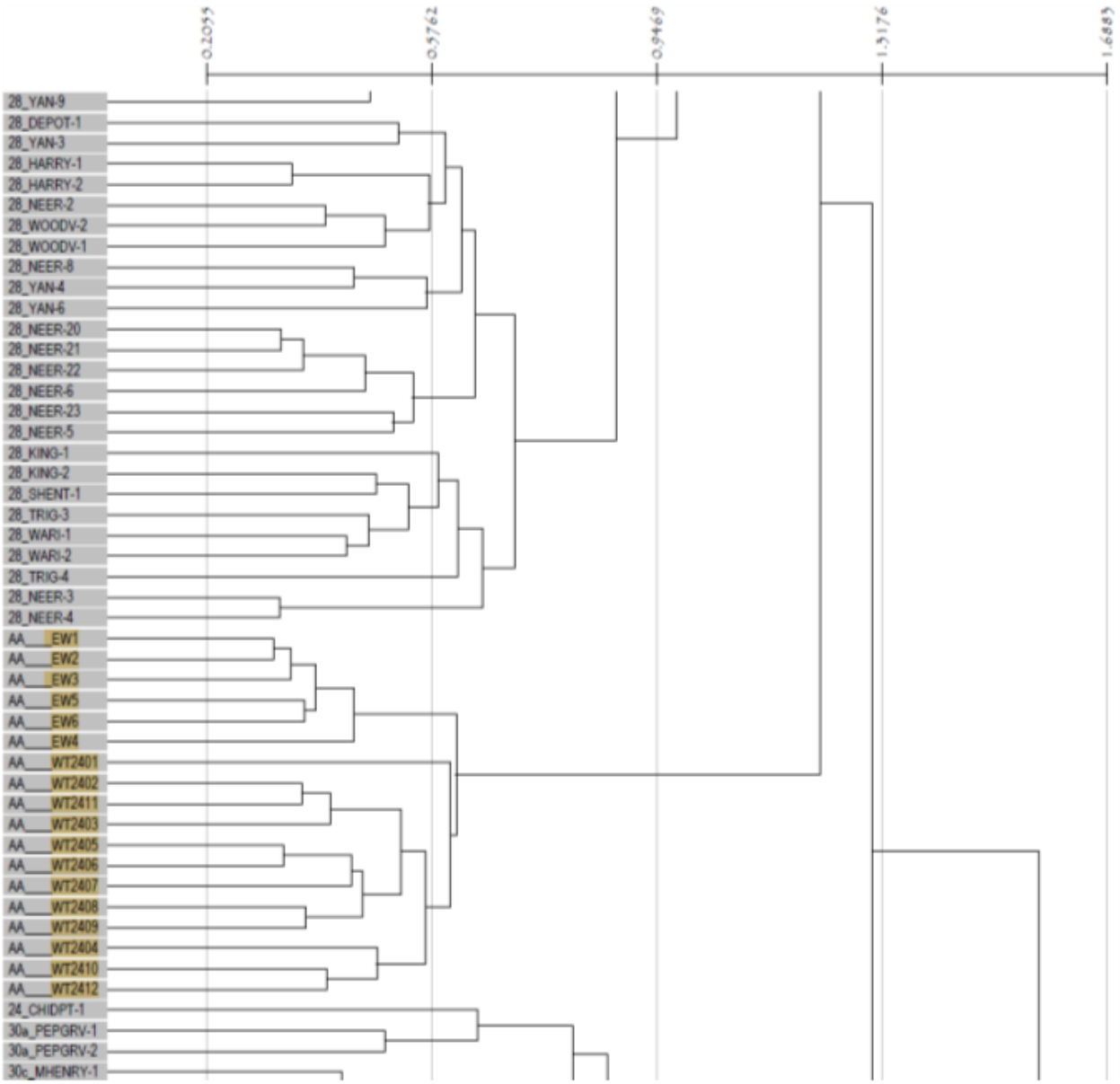

Figure 4: FCT analysis dendrogram segment

4.1.8.2 Adequacy of Survey

Adequacy of survey can be demonstrated using a species accumulation curve; if the curve has reached (or almost reached) an asymptote it is considered that most species are likely to have been recorded from the survey area.

A species accumulation curve was generated using quadrat data (**Figure 5**). Opportunistic observations which increase the number of species recorded are not included in the analysis.

The species accumulation curve suggests that an asymptote as almost been reached. The Bootstrap estimate of species richness is 146.5 which, when taking opportunistic records into account, is less than that total number of species recorded (207).

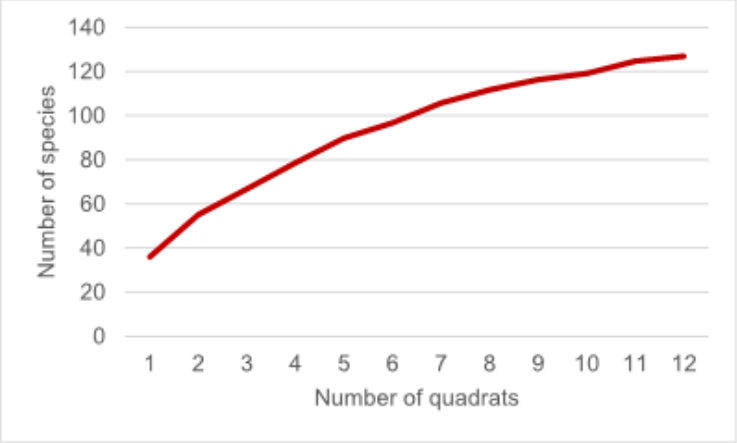

Figure 5: Species accumulation curve

4.1.9 VEGETATION CONDITION

The vegetation condition within the survey area ranged from Completely Degraded to Very Good condition, with a large proportion of vegetated areas (65.1%) mapped in Good or Very Good condition (**Table 8**). The main factors affecting vegetation condition were clearing associated with rural/rural residential land uses and the presence and abundance of weeds. Degraded and Completely Degraded areas mostly occurred adjacent to market gardens, cleared areas or rural dwellings. Areas that were completely cleared of vegetation occupied the majority of the survey area (75.6%), consisting of housing, paddocks, market gardens and roads or tracks (**Table 8**, **Map 5**).

Table 8: Vegetation condition

Vegetation condition	Extent (ha)	Proportion (%)
Pristine	-	-
Excellent	-	-
Very Good	10.98	8.14%
Good	10.43	7.73%
Degraded	9.10	6.75%
Completely Degraded	2.39	1.77%
Not vegetated	101.95	75.60%

The effects of drought on vegetation within the survey area was also observed during the field survey. Vegetation structure had been significantly impacted in some patches with the death of trees in the upper stratum (shown on **Image 3** to **Image 5** below, corresponding with waypoints 13-15 on **Map 5**). However, as drought cannot be definitely attributed to human causes it is considered as a natural phenomenon and does not significantly contribute to vegetation condition assessment. The vegetation condition scale has been developed to identify the scale of human induced change to vegetation since European settlement.

Image 3: Waypoint 13 showing dead *Allocasuarina fraseriana*

Image 4: Waypoint 14 showing dead *Allocasuarina fraseriana*

Image 5: Waypoint 15 showing dead *Banksia* sp.

4.1.10 BOTANICAL LIMITATIONS

Survey design and type: Single phase, quadrat-based flora and vegetation survey with extensive traverses searching for conservation-listed flora. Results from previous surveys were considered as part of survey design and the desktop assessment.

Type of vegetation classification system: Vegetation classified at NVIS Level V (NVIS Technical Working Group & DotEE 2017) using largely structural vegetation types defined using dominant and characteristic species and vegetation structure as recorded during the field surveys. Floristic analysis was used to identify major floristic groups and outlier groups of floristic interest.

A full summary of botanical limitations is presented in **Table 9**.

Table 9: Botanical limitations

Possible limitations	Constraints (yes/no): Significant, moderate or negligible	Comment
Availability of contextual information at a regional and local scale	No	Two previous survey reports intersecting a large portion of the survey area were available to provide contextual information. Additional sources of information on the flora and vegetation of the Swan Coastal Plain are also publicly available to provide context.
Competence/experience of the team conducting the survey, including experience in the bioregion surveyed	No	The lead botanist conducting the field survey has over 11 years botanical experience, including five years as a botanical consultant in Western Australia, servicing all regions including the Swan Coastal Plain.
Proportion of the flora recorded and/or collected, and any identification issues	No	208 vascular flora taxa were recorded during the field survey of which six (4.33%) could not be identified with certainty to species level due to the lack of diagnostic reproductive material. However. none of the unidentified taxa are considered likely to represent any conservation-listed flora from the region.
Was the appropriate area fully surveyed (effort and extent)	No	The survey area was systematically sampled using a total of seven quadrats. All vegetation types were represented by at least three quadrats each. Lengthy traverses were also conducted throughout the survey area during searches for significant flora.
Access restrictions within the survey area	No	There were no significant access constraints within the survey area.

Possible limitations	Constraints (yes/no): Significant, moderate or negligible	Comment
Survey timing, rainfall, season of survey	Yes: moderate	The field survey was conducted during 17-19 September which is within the optimal period for primary survey in the bioregion. The rainfall in the 6 months prior to the field survey was slightly below the mean for this period (**Section 2.1.1**). The rainfall deciles in the 6 and 12 months preceding the survey (see below) show below average rainfall. This represents a moderate constraint as patches of vegetation were observed to be affected by drought indicated by the loss of upper strata species (*Banksia* and *Allocasuarina*). Prolonged below average rainfall may have also affected the presence of some annual and ephemeral species.
Disturbance that may have affected the results of the survey e.g. fire, flood, clearing	No	There were no recent disturbances that would have affected the results of the survey. None of the survey area had been recently burnt.

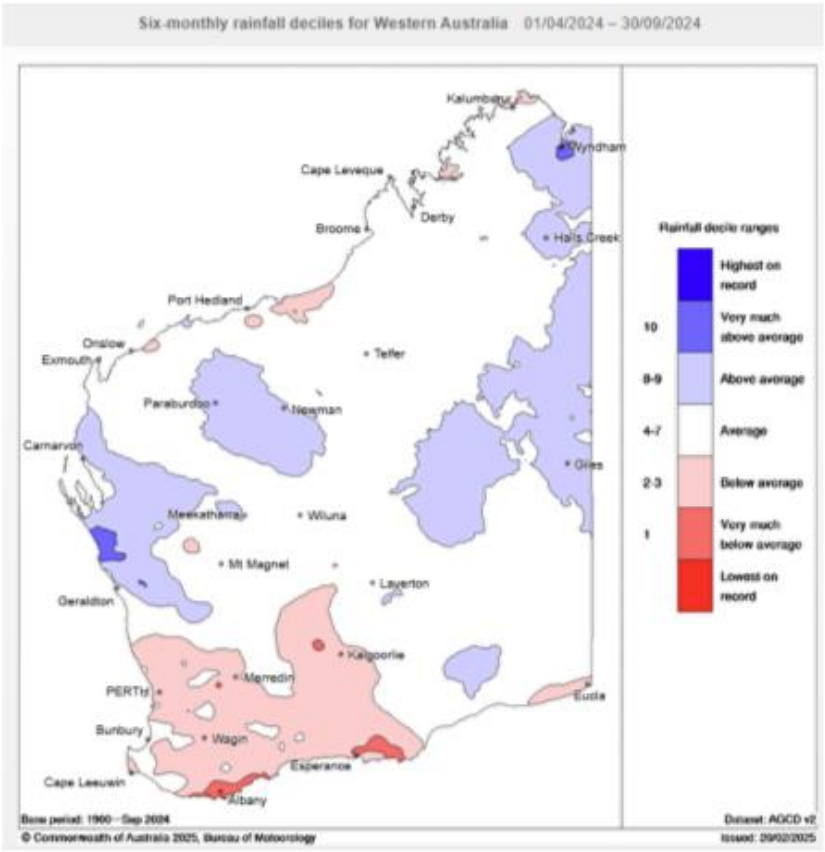

Figure 6: Rainfall deciles for the 6 months prior to the field survey (BoM 2024c)

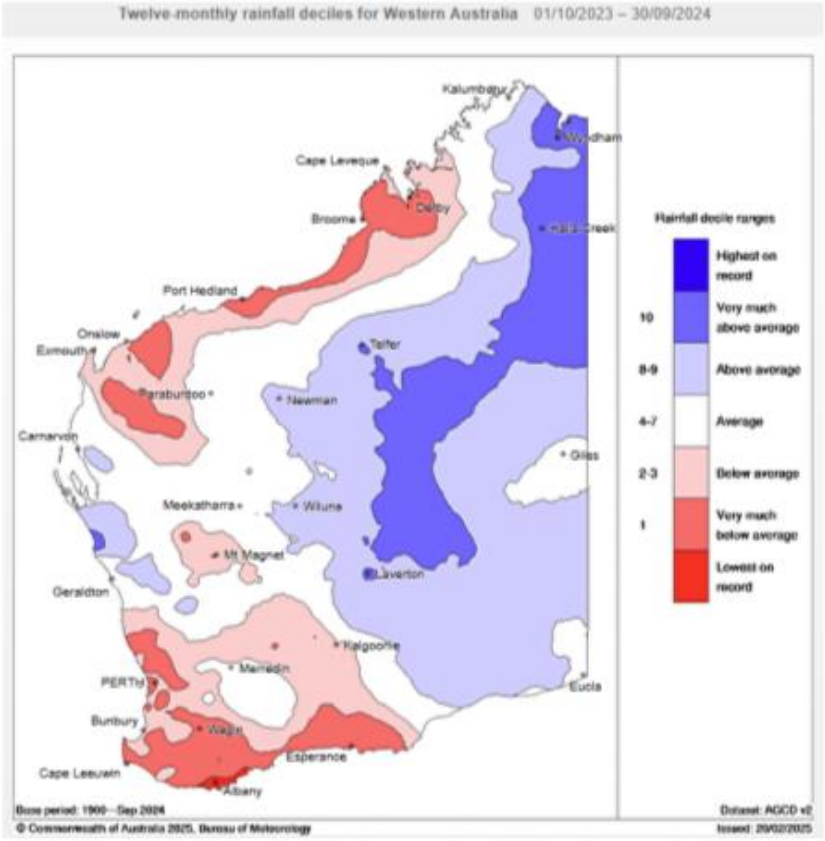

Image 6: Rainfall deciles for the 12 months prior to the field survey (BoM 2024c)

4.2 VERTEBRATE FAUNA SURVEY

The fauna survey was conducted by Tracy de Vetter (Ecologist) and Lyn Atkins (Principal Ecologist) during 3, 10 and 12 February 2025.

The survey was conducted in accordance with the requirements for a Basic survey as outlined in the Fauna Technical Guidance (EPA 2020) and included a Black Cockatoo habitat survey.

The entire site was traversed on foot and all habitats were assessed for quality and suitability for supporting both locally common and significant fauna species.

4.2.1 FAUNA HABITAT

One fauna habitat type, Banksia Woodland, was recorded within the survey area from three habitat assessment points, described in more detail below and shown in **Table 10** and on **Map 6**. The Banksia Woodland habitat type occupied 32.90 ha or 24.40% of the survey area, with the remainder cleared for rural/rural residential land uses.

Banksia Woodland

Open woodland dominated by *Banksia* species with *Allocasuarina fraseriana* (Sheoak), emergent *Eucalyptus marginata* subsp. *marginata* (Jarrah), and occasional *Eucalyptus gomphocephala* (Tuart) over mid-level shrubs with low grass trees on a grey sandy plain. This habitat provides suitable shelter and foraging resources for a common assemblage of vertebrate fauna species, reptiles and bush birds. It provides foraging resources for the conservation-listed Carnaby's and Forest Red-tailed Black Cockatoos and Quenda.

Areas of rural/rural residential land use (including market garden cultivation) were not considered as a separate habitat unit for terrestrial vertebrates. Cultivated land may support some invertebrate species and temporary food sources for some vertebrates; it may also provide temporary connectivity for small vertebrate species between remnant bushland. However, due to lack of vegetative structure to provide regular shelter and foraging resources, and frequent disturbance from human activity, these areas are not considered as habitat.

The quality of the habitat type was based on the field surveyor's experience and takes into consideration the level of disturbance to habitats from weeds, the amount of native vegetation, vegetation cover (density) and the context of the habitat with the surrounding landscape.

Table 10: Fauna habitat types

Habitat type	Description	Photograph
Banksia Woodland	**Open Banksia Woodland with *Allocasuarina fraseriana* and emergent *Eucalyptus marginata* subsp. *marginata* over shrubs and grasses on a grey sandy plain** This habitat is significant foraging habitat for Threatened Carnaby's Cockatoo and Forest Red-tailed Black Cockatoo. It provides shelter and foraging resources for small mammals, reptiles and woodland bird species. **Extent**: 32.90 ha; 24.40%	

Habitat type	Description	Photograph
Cleared/Not native vegetation	**Not habitat** Cleared areas without (or minimal) native vegetation present. Includes areas of crop land/pastures which may provide temporary food or shelter resources and periodic connectivity between areas of native habitat, particularly for Quenda. **Extent**: 101.95 ha; 75.60%	

4.2.2 FAUNA ASSEMBLAGE

Thirty-three vertebrate fauna species were recorded during the survey (**Table 29** in **Appendix Five**) from two ornithological surveys and opportunistic observations, consisting of:

- five mammals (two introduced)
- 29 birds (four introduced)
- two reptiles.

Of these, three are conservation-listed:

- *Zanda latirostris* (Carnaby's Cockatoo; EPBC- and BC Act – Endangered); two records of two individuals perching in vegetation and an estimated 20 in flight near the survey area
- *Calyptorhynchus banksii* subsp. *naso* (Forest Red-tailed Black Cockatoo; EPBC- and BC Act – Vulnerable); one record of two individuals in flight above the survey area. Additionally, two individuals were observed foraging on *Allocasuarina fraseriana* adjacent to the survey area.
- *Isoodon fusciventer* (Quenda; DBCA P4); identified from secondary evidence; four records of diggings and grass tunnelling.

Ornithological survey sites and locations of conservation-listed fauna, including evidence of presence including foraging observations, are shown on **Map 6**. Survey sites (habitat assessment points, ornithological surveys and opportunistic records) are listed in **Table 30** in **Appendix Five**.

4.2.3 SIGNIFICANT FAUNA AND ASSOCIATED HABITAT

The significant fauna species observed during the field survey are discussed below with respect to each species' habitat requirements, taking into consideration the findings of the field survey and survey effort.

4.2.3.1 Black Cockatoo Habitat Assessment

The survey area is within the mapped distribution of Carnaby's Cockatoo and Forest Red-tailed Black Cockatoo (DAWE 2022a). Both species were recorded during the field survey.

Breeding Habitat

Black Cockatoo habitat trees were assessed according to the criteria outlined in Commonwealth guidelines (DAWE 2022a), with additional information recorded using the Bamford (2024) grading classifications to identify the potential suitability of trees to be used for nesting based on the presence, size and orientation of hollows (**Table 21** in **Appendix Two**) and further notes ranking the significance of Class 3 and above trees recorded (i.e. those with hollows).

Photographs of all trees are provided in **Appendix Nine** and their locations shown on **Map 7**.

A total of 95 trees of suitable diameter to be Black Cockatoo habitat trees were recorded. The majority were Jarrah (*Eucalyptus marginata*, 84; 88.42%) and six were dead. The results of the habitat assessment for

species and size classes are summarised in **Figure 7** with details of the habitat trees included in **Table 31** in **Appendix Five**.

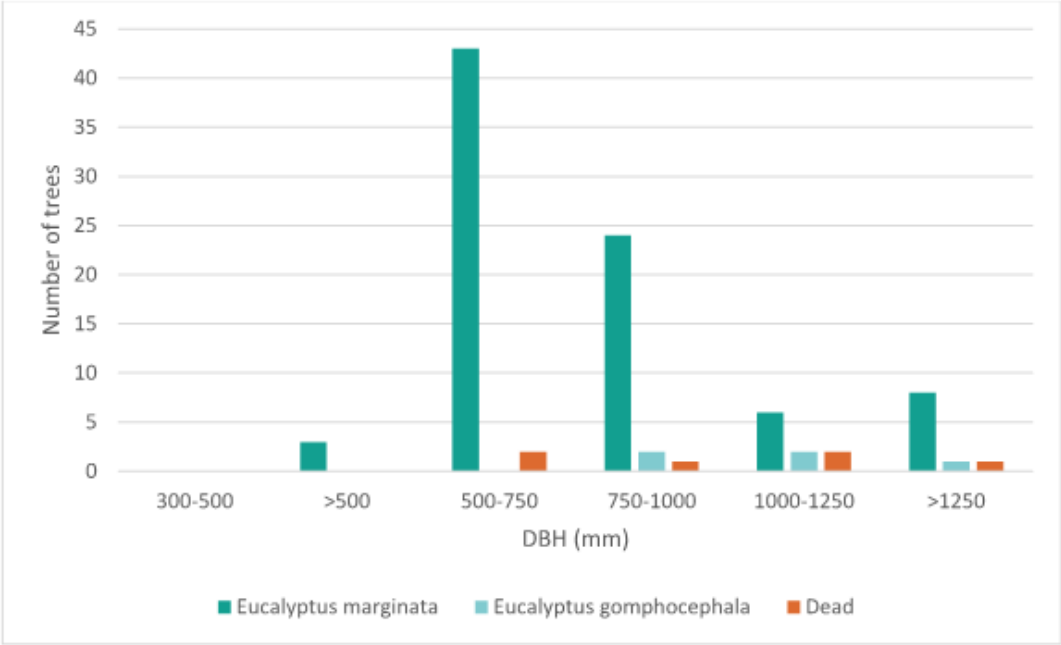

Figure 7: Black Cockatoo habitat trees (species and diameter class)

The potential for Black Cockatoo habitat trees to be used for breeding was assessed using the Bamford (2024) grading classification scale (**Table 21** in **Appendix Two**). The tree classes are summarised in **Figure 8.**

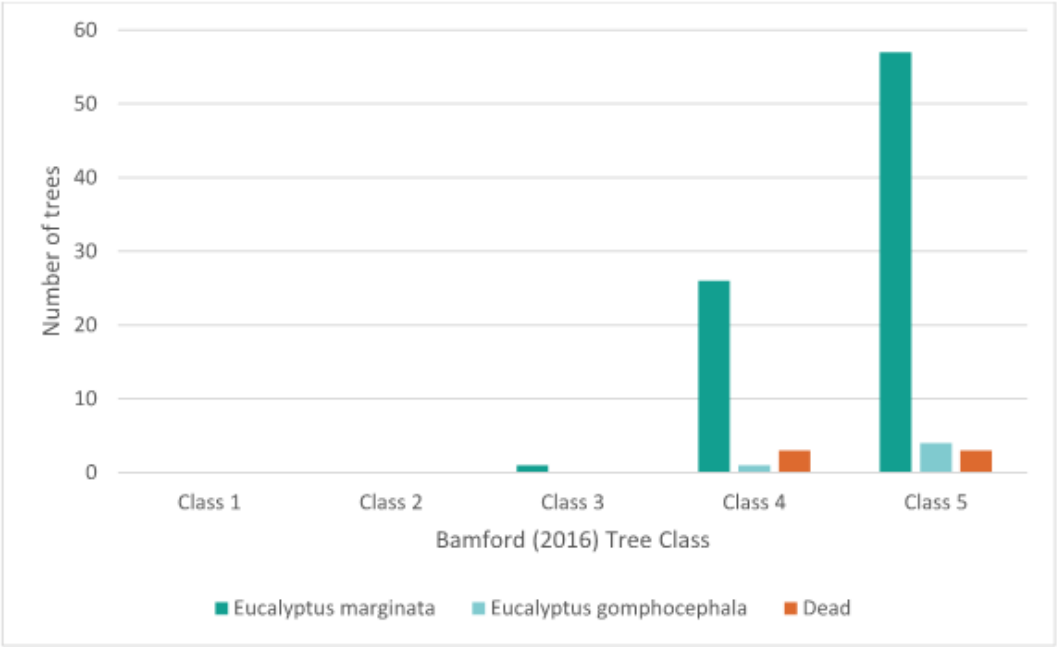

Figure 8: Black Cockatoo habitat Bamford tree classes

No trees were identified as Class 1 (trees having hollows with active nests) or Class 2 (trees having hollows showing previous use as a Black Cockatoo nest but not currently occupied). One tree was identified as Class 3 (trees having potentially suitable hollows without evidence of use), located on the eastern boundary of Lot 40.

Class 4 and 5 trees do not have hollows suitable for Black Cockatoos but are of sufficient size that they may develop them in the future. Thirty trees were classified as Class 4 (trees with large hollows that weren't suitable for Black Cockatoos) and 64 as Class 5 (trees currently without large hollows).

Three trees were visually identified as being over 500 mm diameter (of a size suitable as potential habitat trees) but could not be measured due to access limitations. All three of these trees were Class 4 or Class 5, lacking hollows suitable for Black Cockatoos.

Foraging and Roosting Habitat

No known roost locations are registered within the survey area and the closest recorded roost according to DBCA supplied data is 530 m east of the survey area (**Map 3**). The last documented use of this site was in 2022 as recorded during the Great Cocky Count (Pryor, Barrett & Williams 2023).

The Banksia Woodland habitat type within the survey area includes emergent *Eucalyptus* species, in this case mostly Jarrah with occasional Tuart. Clusters of large trees such as these have potential as roosting habitat for Black Cockatoos. One pair and one single Carnaby's Cockatoo were observed perching in the survey area (**Image 7, Map 6**), however, no evidence of roosting was observed during the survey.

Image 7: Carnaby's Cockatoos observed in the survey area

The suitability of the survey area for breeding (in addition to the specific tree survey) and as foraging habitat was assessed and mapped as per the Commonwealth scoring tool (DAWE 2022a) (**Table 22** in **Appendix Two**) and Bamford (2020) foraging habitat methods (**Table 23** in **Appendix Two**).

Foraging habitat present in the survey area includes mixed *Banksia* species (*Banksia attenuata*, *Banksia prionotes*, *Banksia menziesii*) utilised by Carnaby's, *Allocasuarina fraseriana* utilised by Forest Red-tailed Black Cockatoos and *Eucalyptus marginata* subsp. *marginata* (Jarrah) utilised by both Black Cockatoo species.

Evidence of previous foraging was identified within the survey area from chewed *Banksia* cones (**Image 8**) and by direct observation of two Forest Red-tailed Black Cockatoos foraging in *Allocasuarina* trees

(**Image 9, Map 6**). Black Cockatoo foraging species ranged from approximately 20-40% coverage throughout the survey area as estimated in field and based on detailed flora quadrat data.

Image 8: Evidence of Black Cockatoo foraging, chewed *Banksia* cones.

Image 9: Forest Red-tailed Black Cockatoo pair foraging in *Allocasuarina* sp.

Table 11: DAWE Foraging habitat scoring tool – Carnaby's Cockatoo

Habitat Summary for Carnaby's Cockatoo Foraging Habitat		Score
Starting Score:		
	10 if the site is >1 ha in extent, is within the usual range of the species, and is: • native shrubland, kwongan heathland or woodland dominated by proteaceous species • native woodland or forest containing foraging species, including roadsides, parkland cleared areas and planted native vegetation.	+10
Context adjustor (subtractions):		
	None applicable.	-0
FINAL SCORE		**10**

The final score is 10 (out of a maximum score of 10). According to the guidelines this indicates high quality foraging habitat for Carnaby's Cockatoo.

Table 12: DAWE Foraging habitat scoring too – Forest Red-tailed Black Cockatoo

Habitat Summary for Forest Red-tailed Black Cockatoo Foraging Habitat		Score
Starting Score:		
	10 if the site is >1 ha in extent, is within the usual range of the taxon, and is: • Jarrah or Marri woodland and/or forest • on the edge of Karri forest • Wandoo and Blackbutt occur on the site • includes the above if along roadsides and parkland cleared areas.	+10
Context adjustor (subtractions):		
	No known breeding areas are within 12 km of the survey area	-2
FINAL SCORE		**8**

The final score is 8 (out of a maximum score of 10). According to the guidelines this indicates high quality foraging habitat for Forest Red-tailed Black Cockatoo.

Approximately 5-10 % coverage of native bushland occurs within a 20 km radius of the survey area. The survey area is in the vicinity of one known Forest Red-tailed Black Cockatoo roost site (530 m), Carnaby's Cockatoos breeding sites (2.9 km from buffer boundary) and multiple permanent water sites (Lake Jandabup-1.1 km; Lake Badgerup-1.2 km; Lake Joondalup-2.5 km).

The Bamford (2020) scoring system (**Table 23** in **Appendix Two**) takes into consideration:

- site condition (vegetation composition, condition and structure)
- site context (the site in relation to other native vegetation within a 15 km radius of the site)
- species density (stocking rate: frequency and abundance of Black Cockatoos at the site)
- modification, if needed, for vegetation with little or no foraging value and for pine plantations that provide valuable food sources.

With the application of the Bamford (2020) foraging value tool (**Table 23** and **Appendix Two**), the survey area scores 8 of a possible total of 10 for Carnaby's Cockatoo, representing potentially high value foraging habitat, and 6 out of a possible 10 for Forest Red-tailed Black Cockatoo, representing potentially moderate value foraging habitat (**Table 13**). When considering site context values for Forest Red-tailed Black Cockatoo, (percentage of native vegetation within 15 km radius of the survey area) pine plantations were taken into account based on their value as foraging habitat

Table 13: Black Cockatoo foraging value (Bamford 2020)

Score	Carnaby's Cockatoo	Forest Red-tailed Black Cockatoo
Site condition	4: 20-40% *Banksia*	3: 5-20% foraging
Site context	3: in vicinity of known breeding area, >5% native habitat in 15 km radius	2: Breeding site unlikely, 5-10% native habitat within 15 km radius
Species density/stocking rate	1: sightings, foraging evidence	1: sightings, foraging
TOTAL SCORE	**8**	**6**

4.2.3.2 Quenda

Quenda (*Isoodon fusciventer*) are widely distributed in the southwest of Western Australia from Guilderton (north of Perth) to east of Esperance. They have a patchy distribution through the Jarrah and Karri forests, the Swan Coastal Plain and inland as far as Hyden, and have been recorded in swampy, vegetation with dense cover up to 1 m high. Quenda often feed in adjacent forest and woodland that is burnt on a regular basis and in areas of pasture and cropland lying close to dense cover. Populations inhabiting Jarrah and Wandoo forests are usually associated with watercourses. Quenda will thrive in more open habitat subject to introduced predator control (DEC 2012a).

Banksia Woodland habitat contains low shrubs, grass trees and grassy understorey which are used by Quenda for shelter and sandy soils for foraging. Evidence of this species was found in the form of diggings and

apparent tunnelling in long grass (**Image 10**: Quenda diggings). No live individuals were seen during the survey and one record of a deceased individual exists within the survey area. Quenda diggings appeared to range in age from moderate (a few years old) to recent, suggesting persistence in the survey area over time.

Image 10: Quenda diggings

4.2.4 INTRODUCED FAUNA

Five introduced vertebrate fauna species were identified during the survey from observations and secondary evidence:

- Rainbow Lorikeet (*Trichoglossus moluccanus*); one record, observed at BS01
- Rabbit (*Oryctolagus cuniculus*); one record of deceased remains
- Red Fox (*Vulpes vulpes*); two records of a burrow and deceased remains
- Laughing Kookaburra (*Dacelo novaeguineae*); one record, observed opportunistically
- Laughing Turtle-dove (*Spilopelia senegalensis*); two records, observed at BS01 and BS04
- Spotted Turtle-dove (*Spilopelia chinensis*) one record, observed opportunistically.

Red fox and Rainbow Lorikeet are Declared Pests and pose significant threats to native fauna and bird species (BAM Act 2007).

Rainbow lorikeets threaten native birds through resource competition, displacement and the spread of disease (Chapman 2005).

Red Fox predate on native mammals and birds and evidence of their presence were observed within the survey area (den and remains). During the field survey on 3 February 2025, temporary signs indicating fox trapping activity were displayed in the northern section of the survey area. Rabbit evidence included remains of partial body parts indicating predation, possibly by Fox.

The Laughing Kookaburra is well-established in Western Australia and poses a threat to native species through competition and predation.

Although Laughing and Spotted Turtle-doves are common in urban and semi-urban environments and may compete with other granivorous species, they are not considered a significant threat to native species.

4.2.5 FAUNA SURVEY LIMITATIONS

Limitations of the fauna survey are discussed below in **Table 14**.

Table 14: Fauna survey limitations

Possible limitations	Constraints (yes/no): Significant, moderate or negligible	Comment
Availability of data and information	No	Numerous previous surveys have been undertaken within the local area, providing sufficient context for the survey. Conservation-listed species information is also readily available.
Competency/experience of the survey team, including bioregion experience	No	Field Ecologists were experienced with survey methods, fauna identification and habitats assessment. The survey was overseen by a Principal Ecologist with extensive experience (>20 years) in the Swan Coastal Plain bioregion.
Scope of survey e.g. excluded fauna groups	No	The survey was undertaken as a Basic fauna survey and Black Cockatoo habitat assessment. Sufficient time was allocated to the survey to identify habitat, perform targeted searches, assess Black Cockatoo foraging, roosting and breeding habitat and adequately describe the fauna assemblage present.
Timing, weather, season	Yes: negligible	The survey was completed within the optimal period for Carnaby's Cockatoo foraging and night roost survey in the Swan Coastal Plain region (January to July), though not within the breeding period (July to December). Forest Red-tailed Black Cockatoo foraging, roost and breeding surveys may occur year-round (DAWE 2022b). Surveys were conducted on cooler days, however, warm temperatures may have lowered the likelihood of identifying some fauna species due to changes in activity.
Disturbances that may have affected results	No	There were no recent disturbances that would have affected the results of the survey. None of the survey area had been recently burnt.
Proportion of fauna identified, recorded, or collected	No	The survey effort is considered adequate for the survey level and to detect the presence of conservation-listed fauna or their suitable habitat within the survey area. The species recorded are comparable to other surveys undertaken in the area.
Adequacy of survey intensity and proportion of survey achieved	No	All accessible areas were traversed on foot and adequate time given to habitat assessment, avian surveys and targeted searches.
Access	Yes - negligible	Small portions of the native vegetation were inaccessible due to fencing or lack of permission. Native vegetation was adequately surveyed from surrounding areas in most cases, and inaccessible lots were identified as non-native or cleared via aerial imagery and as seen from accessible vantage points. Inaccessible potential habitat trees were visually identified as being over 500 mm diameter with confidence.
Data and analysis issues including sampling biases	NA	No quantitative analyses were required.

5 DISCUSSION

5.1 FLORA SIGNIFICANCE

A total of 207 vascular flora species were recorded from seven floristic quadrats and opportunistic observations, including during searches for conservation-listed flora. Sixty-four were introduced species (30.9% of the total flora inventory) reflecting the level of disturbance in the survey area.

5.1.1 FLORA SIGNIFICANCE

5.1.1.1 Conservation-listed Flora

One Priority 2 taxon was recorded during the field survey, *Poranthera moorokatta*. One plant was recorded from quadrat WT2406 in association with *Allocasuarina fraseriana, Banksia attenuata* and *Eucalyptus marginata* subsp. *marginata* mid woodland vegetation. A specimen was submitted to the Western Australian Herbarium and formally identified as *P. moorokatta* (ACC/11358/E).

Poranthera moorokatta was identified as a new species in 2012 from *Banksia* woodland in Kings Park (Barrett 2012). There are currently 15 records of this species in the Swan Coastal Plain, mostly located within the Perth metropolitan region (WAH 2024). *Poranthera moorokatta* is described as a monoecious, erect annual herb growing to 16–47 mm tall with pale-pink flowers from late September to early November (Barrett 2012). Suitable habitat includes *Eucalyptus–Banksia* or *Banksia* woodland on sandy soils and *Melaleuca–Banksia* woodland on sandy-clay soils in damplands (WAH 2024). Due to the small size of the plant and similarity to other *Poranthera* species, *P. moorokatta* can be easily overlooked and it is possible that additional plants may occur within the survey area. The difficulties identifying this species in the field have been noted in *Nuytsia* (Barrett 2012).

Based on current understanding of its population distribution, potential impacts to this species from clearing associated with the project are likely to be significant at a local scale. The nearest records to the survey area are located 7.4 km northwest in Banksia Grove (recorded in 2012) and 9.3 km southeast in Whiteman Park (recorded in 2018). No records are known from vegetation adjacent or nearby to the survey area.

At a regional scale, impacts are not likely to be significant. *Poranthera moorokatta* has an approximate range of 340 km north–south within the Swan Coastal Plain region. Several records also occur within nature reserves and other conservation lands, including Whiteman Park, Shirley Balla Swamp Reserve and Kings Park. However, it does not appear to be abundant where it grows and its preferred habitat has a high degree of historical impact from clearing for urban development, forestry and agriculture. Clearing remains an ongoing threat to this species and as well as weed invasion, altered fire regimes and changes in vegetation cover density (Barrett 2012).

According to the DBCA, Priority 2 taxa are poorly known species with records from few locations, some of which are in nature reserves. P2 species may also include those that are well known from several locations but do not meet adequacy of survey requirements and may be under threat (DBCA 2020).

5.1.1.2 Post-survey Likelihood Assessment

The likelihood of conservation significant flora occurring in the survey area was revised following the field survey. This revised likelihood, that took into account vegetation condition and disturbances, actual habitat availability and search effort, is included in **Table 26** in **Appendix Four**.

Four conservation-listed flora taxa had previously been recorded within close proximity (<2.5 km) of the survey area, namely *Acacia benthamii* (P2), *Drosera* x *badgerupii* (P2), *Cyathochaeta teretifolia* (P3) and *Jacksonia sericea* (P4). *Acacia benthamii* and *Jacksonia sericea* were considered 'Likely' to occur during the desktop likelihood assessment based on the potential for suitable habitat to occur within the survey area. These taxa were targeted for survey, discussed in more detail below.

***Acacia benthamii* (P2)**

This a poorly known species described as a shrub growing to 1 m tall with yellow globular flowers and pungent short, linear phyllodes. It grows in grey or yellow-brown sandy soils over limestone or on limestone breakaways in association with *Banksia*, *Allocasuarina* and *Eucalyptus* woodland (WAH 2024). According to *Atlas of Living Australia* (ALA) (2024), this species is restricted to the Swan Coastal Plain region, with 39 records located between Cataby and Mandurah. The nearest record to the survey area is located 0.8 km to the west in Amery Park, however, it is a historical record (from 1901) and likely no longer valid due to land use change and likely locational inaccuracy.

The field survey identified the habitat of the survey area as *Eucalyptus*, *Banksia* and *Allocasuarina* low woodland and *Banksia*, *Allocasuarina* low open forest over mixed shrubland and sedgeland on a low undulating grey or pale yellow sandy plain over limestone. Suitable habitat for *A. benthamii* is considered to occur within the survey area, however, the species is not likely present. Extensive traverses were conducted throughout the survey area and no plants were found. Previous assessment by PGV Environmental also did not record any *A. benthamii* (2023). Furthermore, the survey area is heavily cleared with native vegetation only occupying 24.4%, reducing the likelihood of this species occurring. As such, the post-survey likelihood of occurrence was revised to 'unlikely'.

***Jacksonia sericea* (P4)**

This species is a distinctive low spreading shrub growing to 0.6 m tall with orange flowers. It occurs on yellow or grey sandy plains/undulating plains over limestone in association with *Banksia*, *Eucalyptus* and *Allocasuarina* woodland (WAH 2024). According to ALA (2024), this species is mostly found on the Swan Coastal Plain between Yanchep and Mandurah. The nearest record to the survey area is located 1.3 km to the east in Golfview Park (recorded in 2007).

Suitable habitat is considered to occur within the survey area, however, the species is unlikely to be present given that extensive traverses were conducted throughout the survey area and no plants were found, including during previous assessment by PGV Environmental (2023). As such, the post-survey likelihood of occurrence was revised to 'unlikely'.

5.1.1.3 Other Significant Flora

No species having any other significance according to the Flora and Vegetation Technical Guidance (EPA 2016a) was recorded, nor any flora of taxonomic interest.

5.1.1.4 Introduced Flora

Sixty-four introduced species were recorded during the field survey, including two significant weeds, **Asparagus asparagoides* and **Opuntia stricta.* Both **A. asparagoides* and **O. stricta* are WoNS and Declared Pest plants and were recorded at relatively low densities within the survey area. There are no management requirements under the *Biosecurity and Agriculture Management Act 2007* for **A. asparagoides*, however, **O. stricta* is in the C3 (management) category requiring some form of management to alleviate the impact of the organism or prevent or contain its spread.

Most weeds recorded are common in bushland and naturalised in the Swan Coastal Plain region. Weeds were frequently encountered throughout the survey area, although at variable densities, and were present in all quadrats. The survey area is situated within a rural zone adjacent to residential and rural residential areas with housing, paddocks, market gardens and roads or tracks occupying 75.6% of the total area. This represents a high level of disturbance which favours weed invasion into native vegetation. Typically, the edges of vegetation bordering cleared or disturbed areas were more impacted by weeds with condition improving further into bushland.

5.2 VEGETATION SIGNIFICANCE

Two vegetation types were recorded from the survey area:

- **BaLOF**: *Banksia attenuata, Allocasuarina fraseriana* and *Banksia menziesii* low open forest, occupying 19.9 ha (14.8%)
- **EmmLW**: *Eucalyptus marginata* subsp. *marginata, Banksia prionotes* and *Allocasuarina fraseriana* low woodland, occupying 12.9 ha (9.6%).

Vegetation type **BaLOF** primarily occupied the southern half of the survey area and consisted of *Banksia* forest over a diverse understorey of shrubs, herbs, grasses and sedges on a low undulating grey or pale yellow sandy plain. The FCT analysis identified this vegetation type as mostly likely to be SCP28 'Spearwood *B. attenuata* or *B. attenuata* – *Eucalyptus* woodlands'. A large proportion of **BaLOF** exhibited low disturbance and was mapped in Good or Very Good condition. Areas in poorer condition were typically on the edges adjacent to tracks, roads and cleared or partially cleared areas. Locally, **BaLOF** occurs outside the survey area, although highly fragmented and cleared/partially cleared from urban or rural development. Two patches that include this vegetation type were identified as significant following assessment against the Banksia woodlands TEC criteria (discussed in more detail below).

Vegetation type **EmmLW** primarily occurred in the northern half of the survey area and consisted of *Eucalyptus* – *Banksia* woodland over a diverse understorey of shrubs, herbs, grasses and sedges on a low undulating grey or pale yellow sandy plain. This vegetation type was also best aligned with SCP28 from the FCT analysis. Similarly to **BaLOF**, a large proportion of **EmmLW** had a low level of disturbance and was mapped in Good or Very Good condition. Locally, this vegetation types occurs outside the survey area, although highly fragmented and cleared/partially cleared. Two patches that include this vegetation type were identified as significant following assessment against the Banksia Woodlands TEC criteria (discussed in more detail below).

5.2.1 TEC ASSESSMENT

The Banksia woodlands TEC was known to occur in the survey area from the DBCA database search results and from the results of a previous survey that intersected a large portion of the survey area (PGV Environmental 2023). The TEC is described as *Banksia*-dominated woodland over a species-rich understorey and with high endemism and localised variation in species composition across its range. The TEC is largely restricted to the Swan Coastal Plain which is recognised as a global biodiversity hotspot (TSSC 2016).

Patches within both vegetation types are considered to represent the TEC based on floristic composition, structural formation, landform association and vegetation condition as per the criteria outlined in the Approved Conservation Advice (TSSC 2016). The total area mapped as TEC within the survey area is 17.97 ha or 13.32%, distributed over three discrete patches where the patches met the condition and extent thresholds, and were separated by a discontinuity in ecological function of more than 30 m, as outlined in the Approved Conservation Advice. While average floristic diversity was considered moderate (and not high or very high which typically characterises the TEC), high disturbance pressures (particularly from surrounding land uses) combined with decreasing annual rainfall for the region are likely impacting diversity of the native vegetation and, therefore, the floristic diversity of the patches is considered adequate to meet the criteria of the TEC.

5.2.1.1 Local and Regional Vegetation Significance

The current extent of the Banksia Woodlands TEC is not known, however, it was estimated at the time of its listing under the EPBC Act in 2016 that 81,800 ha (24%) of the ecological community remains within its range (TSSC 2016). Key threats to the ecological community include clearing and fragmentation, degradation from public access, Dieback disease, invasive species, altered fire regimes, hydrological disturbance, climate change, grazing, decline in pollinating and seed dispersal fauna and loss of keystone *Banksia* species (TSSC 2016).

The *Banksia* Woodland ecological community has a high degree of historical impact from threatening processes with clearing and fragmentation (primarily from urbanisation, mining and agriculture/horticulture) considered the most significant threats to the ecological community, as was observed within East Wanneroo.

As such, patches mapped as the TEC within the survey area (including adjacent patches that do not meet the minimum condition threshold but retain biodiversity value (TSSC 2016)) are considered to provide an important function in the maintenance of the community's ecological integrity, as per the criteria outlined in the Flora and Vegetation Technical Guidance (2016a).

5.2.2 VEGETATION CONDITION

Native vegetation occupied 75.6% of the survey area with the remaining area cleared for rural residential properties and market garden horticulture. The vegetation condition ranged from Completely Degraded to Very Good condition, with a large proportion of vegetated areas (65.1%) mapped in Good to Very Good condition.

All vegetation within the survey area was bordered entirely or partially by cleared areas and condition was typically downgraded on the edges of patches due to higher weed presence and/or loss of vegetation structure and composition. Vegetation condition typically improved further into the patch and where patches were large relative to the surrounding cleared area. In addition to clearing and weeds, drought is also likely to have affected condition in some areas with patches of dead trees observed, including *Eucalyptus*, *Banksia* and *Allocasuarina*. Impacts from drought appeared mostly restricted to the upper stratum.

5.3 FAUNA SIGNIFICANCE

5.3.1 FAUNA HABITAT TYPES

One fauna habitat type was recorded during the field survey, Banksia Woodland, described as Open Banksia Woodland with *Allocasuarina fraseriana* and emergent *Eucalyptus marginata* subsp. *marginata* over shrubs and grasses on a grey sandy plain (**Section 4.2.1**):

The Banksia Woodland habitat type occupies 24.40% of the survey area with the remaining habitat cleared for rural residential land uses. This habitat type consists of high-quality foraging habitat for Carnaby's Cockatoo and moderate-quality foraging habitat for Forest Red-tailed Black Cockatoos according to the Bamford foraging scale which incorporates site condition, site context and species density into its score. Based on the Commonwealth foraging quality score tool, the habitat type has high quality foraging value for both species, with the presence of key foraging plants, including *Banksia* and *Allocasuarina* spp. The presence of two Forest Red-tailed Black Cockatoos feeding on *Allocasuarina* within the survey area confirms the importance of this area as foraging habitat for this species.

The survey area includes one Class 3 tree with potentially suitable hollow but with no signs of use, in addition to Class 4 and Class 5 trees that may develop suitable breeding hollows in the future. Within the Banksia Woodland habitat type, clusters of emergent *Eucalyptus* spp. have potential for use as roosting habitat by Black Cockatoos (although no evidence of roosting was observed). Furthermore, as the landscape is largely fragmented, the Banksia Woodland habitat is also likely being utilised by Black Cockatoos that roost and breed nearby, providing important connectivity between roosting and breeding sites (DAWE 2022b).

Banksia woodland, previously extensive throughout the Swan Coastal plain, has been in decline since European settlement due to clearing for land use change. A portion of the Banksia Woodland habitat type within the survey area corresponds with the Threatened Banksia Woodlands TEC (**Section 4.1.7**). This community is described as being dominated by *Banksia* spp., occasionally with emergent trees of *Corymbia calophylla*, *Eucalyptus marginata* or, less commonly, *E. gomphocephala*, and a diverse understory of shrubs and herbs (TSSC 2016). This remnant high quality Banksia woodland provides important habitat for mammals, reptiles and birds (including conservation-listed Black Cockatoos and Quenda) within a landscape that has been largely cleared (TSSC 2016, DAWE 2022b).

5.3.2 FAUNA ASSEMBLAGE

Thirty-six vertebrate fauna species were recorded during the field survey (**Section 4.2.2**).

Fauna were observed opportunistically whilst traversing the survey area, during ornithological surveys and from secondary evidence such as burrows, tracks and remains. Given the scope of a Basic fauna survey, the

species recorded do not necessarily represent the full suite of species occupying the survey area, as nocturnal and fossorial species are less likely to be detected. It is considered likely that a common suite of Swan Coastal Plain reptiles and small mammals inhabit the survey area and surrounding habitat.

Most of the species detected exhibit good mobility and are not likely to rely solely on this habitat. Pressures on the fauna assemblage that inhabit the survey area include restriction of habitat and range, predation by introduced species such as fox (recorded during the survey) and domestic pets, resource competition from introduced species and mortality from motor-vehicles strikes.

Recorded Conservation-listed species

Three conservation-listed species were recorded during the survey:

- *Zanda latirostris* (Carnaby's Cockatoo; EPBC- and BC Act Endangered)
- *Calyptorhynchus banksii subsp. naso* (Forest Red-tailed Black Cockatoo; EPBC- and BC Act – Vulnerable)
- *Isoodon fusciventer* (Quenda; DBCA P4).

Carnaby's Cockatoo

Carnaby's Cockatoo's were observed in flight close to the survey area (approximately 20 individuals) and utilising habitat in the survey area (two individuals observed perching on a dead tree branch, as well as foraging evidence). One tree potentially suitable for breeding was located with no evidence of use, however, the survey area is approximately 2.8 km from the buffer boundary of known breeding locations and is likely a regularly utilised foraging resource that is within the 12 km foraging radius from breeding sites (DAWE 2022b)

Forest Red-tailed Black Cockatoo

Forest Red-tailed Black Cockatoos were observed overflying the site and foraging on *Allocasuarina* trees. It is likely that they are also foraging on *Eucalyptus marginata* (Jarrah) within the survey area. Several lakes and wetlands (e.g. Lake Joondalup, Badgerup Lake and Jandabup Lake) also occur in close proximity to the survey area which provide an important water source for Black Cockatoos.

No known breeding locations of Forest red-tailed Black Cockatoos occur within 20 km of the survey area, however, a night roost site documented during The Great Cocky Count (last recorded in 2022) occurs approximately 530 m east of the survey area (**Map 3**). Given that this species was observed foraging, the close proximity of a recorded night roost location and the vicinity of multiple water sources (lakes and wetlands), it is considered highly likely that Banksia Woodland habitat within the survey area is being utilised regularly for foraging by this species.

Quenda

Quenda were recorded in the survey area from secondary evidence including diggings and tunnelling in grassed areas. No live animals were recorded during the survey which may be indicative of population decline from fox predation (fox trapping works were advertised in the north end of the survey area). Quenda are also most active at night and in cooler day time temperatures during winter (DBCA 2017). With reduced predator pressures (post-trapping), the habitat within the survey area and surrounds is suitable to support populations of Quenda in the future

5.3.2.1 Post-survey Likelihood Assessment

The post-survey likelihood assessment is incorporated into **Table 27** in **Appendix Four**.

Conservation-listed fauna species identified during the desktop assessment as 'likely to occur' or 'may occur' that were not recorded during the field survey are discussed below with respect to each species' habitat requirements, taking into consideration the findings of the field survey and survey effort.

***Neelaps calonotos* (Black-striped Snake; DBCA P 3)**

This species was assessed as 'may occur' during the desktop assessment. It has a restricted distribution in the sandy coastal strip from Mandurah to Cataby in Western Australia. Its preferred habitat is sandy plains

with heath vegetation or *Banksia*/*Eucalyptus* woodland and it feeds largely on the burrowing skink species *Lerista praepedita* (Blunt tailed West Coast Slider). This species has been significantly impacted by habitat loss from urban development within in its restricted distribution (Wilson & Swan 2017).

The habitat type mapped within the survey area is suitable to support this species and its prey, however, it is adjacent to urban development that reduces the likelihood of occurrence. Survey methods suited to locating burrowing species would be required to determine its presence in the survey area.

Post-survey, it's likelihood of occurring remains as 'may occur' given the suitability of the habitat.

***Falco peregrinus* (Peregrine Falcon; Other Specially Protected)**

The Peregrine Falcon was assessed as 'may occur' during the desktop assessment. It is a solitary species inhabiting cliffs, escarpments and wetlands (Debus 2012). Previous records occurring approximately 2 km east of the survey area, associated with Lake Joondalup approximately 3 km to the west. It is expected that this highly mobile species may occur periodically, flying over or hunting within the survey area, as part of an extended hunting range.

Post-survey, its likelihood has been assessed as 'may occur' although it would not be dependent on any resources available within the survey area.

***Notamacropus irma* (Western Brush Wallaby; DBCA P 4)**

The Western Brush Wallaby was assessed as 'may occur' during the desktop assessment. Its preferred habitat is open or forested woodland with open seasonally wet flats, low grass and scrubby thickets. This species was previously common within its range, but populations have significantly declined from fox predation (DEC 2012b). The closest recent records of Western Brush Wallaby are approximately 8 km from the survey area, however, it is considered unlikely to utilise the survey area due to the fragmented nature of the landscape and limited connectivity, as well as proximity to human disturbance.

It's post-survey likelihood of occurring is 'unlikely to occur' given the suitability of the habitat and proximity to disturbance.

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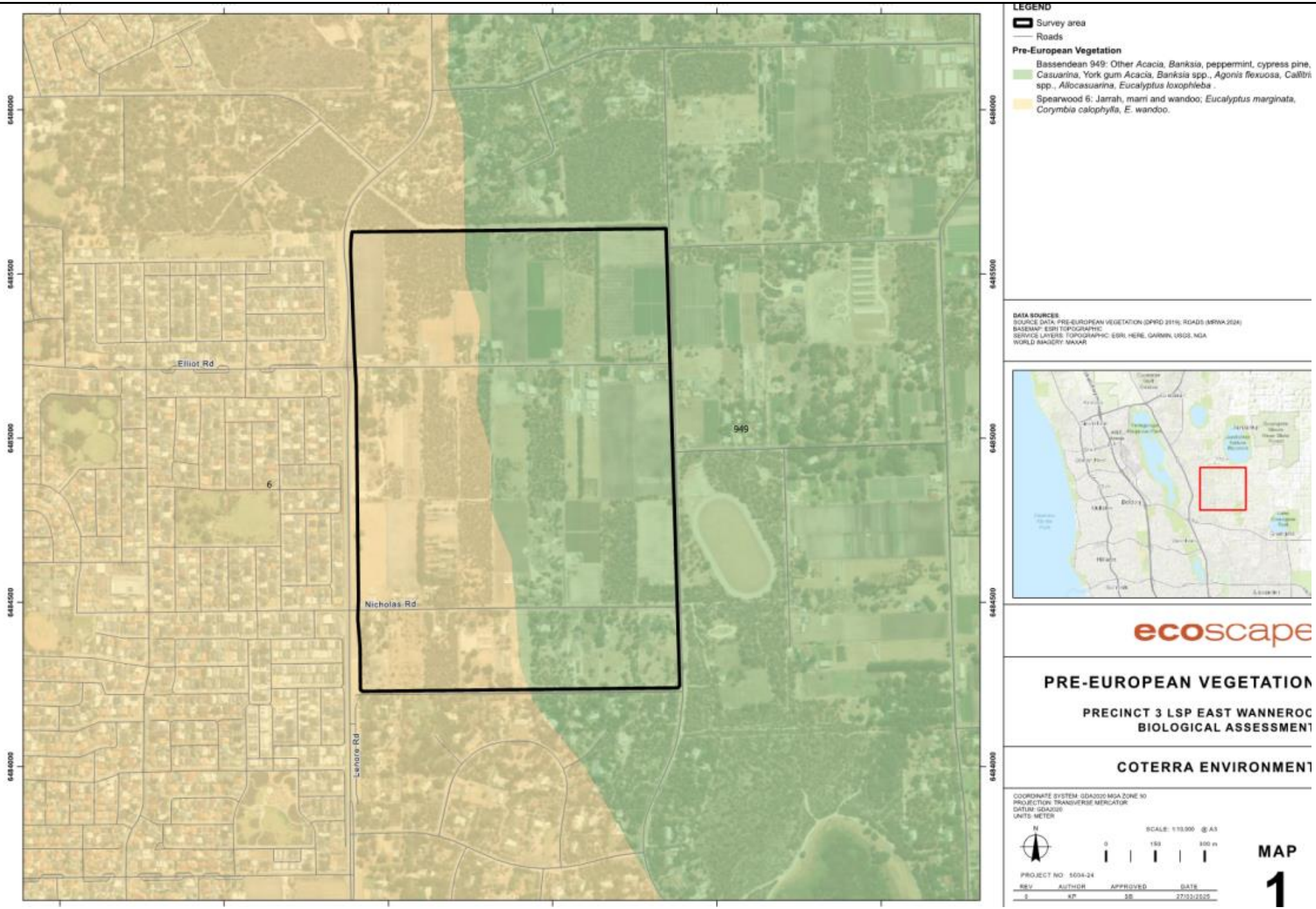
MAPS


LEGEND
Survey area
Roads
Pre-European Vegetation
Bassendean 949: Other Acacia, Banksia, peppermint, cypress pine, Casuarina, York gum Acacia, Banksia spp., Agonis flexuosa, Callitri spp., Allocasuarina, Eucalyptus loxophleba .
Spearwood 6: Jarrah, marri and wandoo; Eucalyptus marginata, Corymbia calophylla, E. wandoo.
DATA SOURCES
SOURCE DATA: PRE-EUROPEAN VEGETATION (DPIRD 2019); ROADS (MRWA 2024)
BASEMAP: ESRI TOPOGRAPHIC
SERVICE LAYERS: TOPOGRAPHIC: ESRI, HERE, GARMIN, USGS, NGA
WORLD IMAGERY: MAXAR
Elliot Rd
Nicholas Rd
Lehane Rd
949
6
6486000
6485500
6485000
6484500
6484000
ecoscape
PRE-EUROPEAN VEGETATION
PRECINCT 3 LSP EAST WANNEROO
BIOLOGICAL ASSESSMENT
COTERRA ENVIRONMENT
COORDINATE SYSTEM: GDA2020 MGA ZONE 50
PROJECTION: TRANSVERSE MERCATOR
DATUM: GDA2020
UNITS: METER
N
SCALE: 1:10,000 @ A3
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150
300 m
PROJECT NO: 5004-24
REV AUTHOR APPROVED DATE
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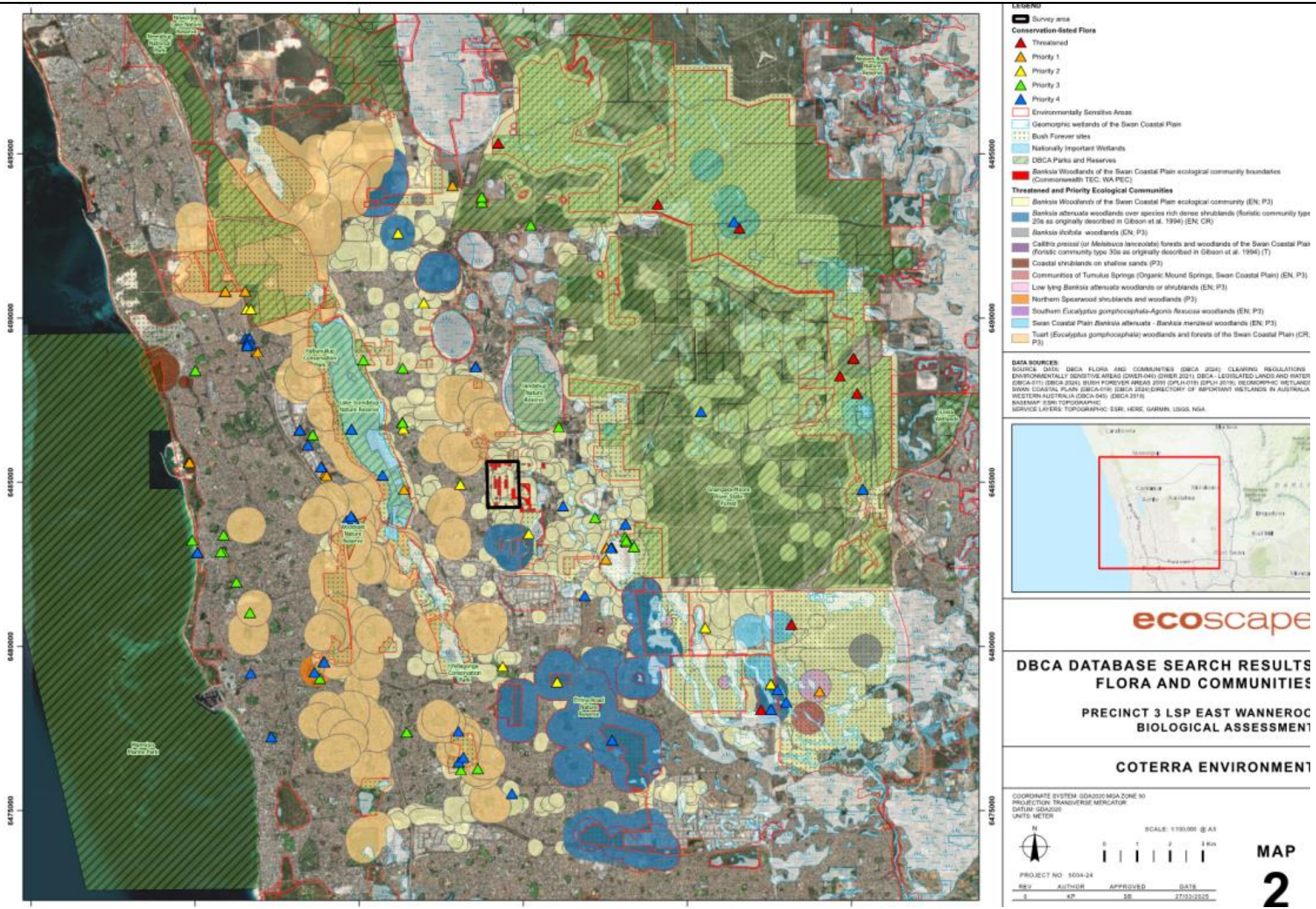
MAP
1


LEGEND
Survey area
Conservation-listed Flora
Threatened
Priority 1
Priority 2
Priority 3
Priority 4
Environmentally Sensitive Areas
Geomorphic wetlands of the Swan Coastal Plain
Bush Forever sites
Nationally Important Wetlands
DBCA Parks and Reserves
Banksia Woodlands of the Swan Coastal Plain ecological community boundaries (Commonwealth TEC; WA PEC)
Threatened and Priority Ecological Communities
Banksia Woodlands of the Swan Coastal Plain ecological community (EN; P3)
Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. 1994) (EN; CR)
Banksia ilicifolia woodlands (EN; P3)
Callitris preissii (or Melaleuca lanceolata) forests and woodlands of the Swan Coastal Plain (Floristic community type 30a as originally described in Gibson et al. 1994) (T)
Coastal shrublands on shallow sands (P3)
Communities of Tumulus Springs (Organic Mound Springs, Swan Coastal Plain) (EN, P3)
Low lying Banksia attenuata woodlands or shrublands (EN; P3)
Northern Spearwood shrublands and woodlands (P3)
Southern Eucalyptus gomphocephala-Agonis flexuosa woodlands (EN; P3)
Swan Coastal Plain Banksia attenuata - Banksia menziesii woodlands (EN; P3)
Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain (CR; P3)
DATA SOURCES:
BASEMAP: ESRI TOPOGRAPHIC
SERVICE LAYERS: TOPOGRAPHIC: ESRI, HERE, GARMIN, USGS, NGA
ecoscape
DBCA DATABASE SEARCH RESULTS
FLORA AND COMMUNITIES
PRECINCT 3 LSP EAST WANNEROO
BIOLOGICAL ASSESSMENT
COTERRA ENVIRONMENT
COORDINATE SYSTEM: GDA2020 MGA ZONE 50
PROJECTION: TRANSVERSE MERCATOR
DATUM: GDA2020
UNITS: METER
N
SCALE: 1:100,000 @ A3
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PROJECT NO: 5004-24
REV AUTHOR APPROVED DATE
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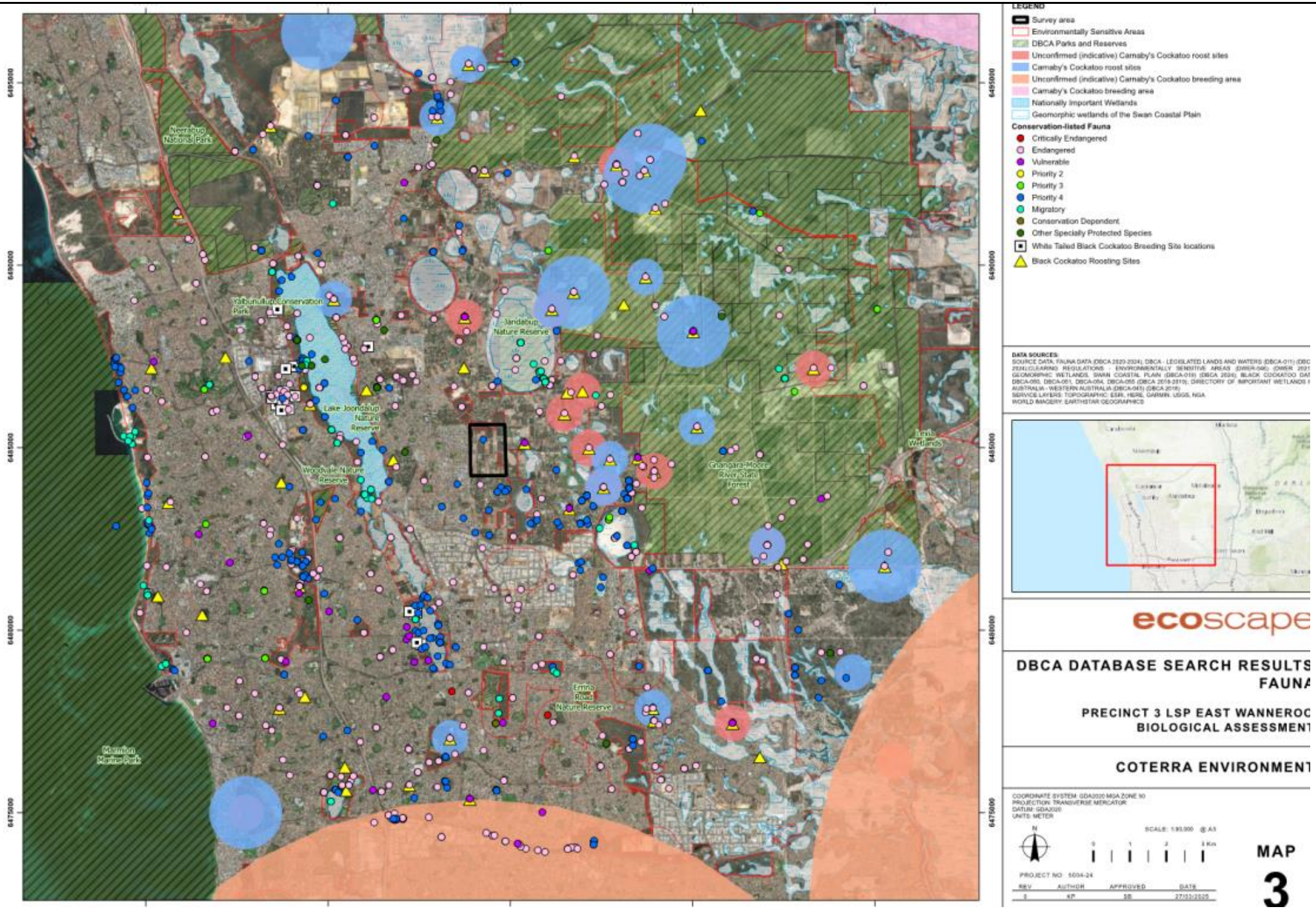
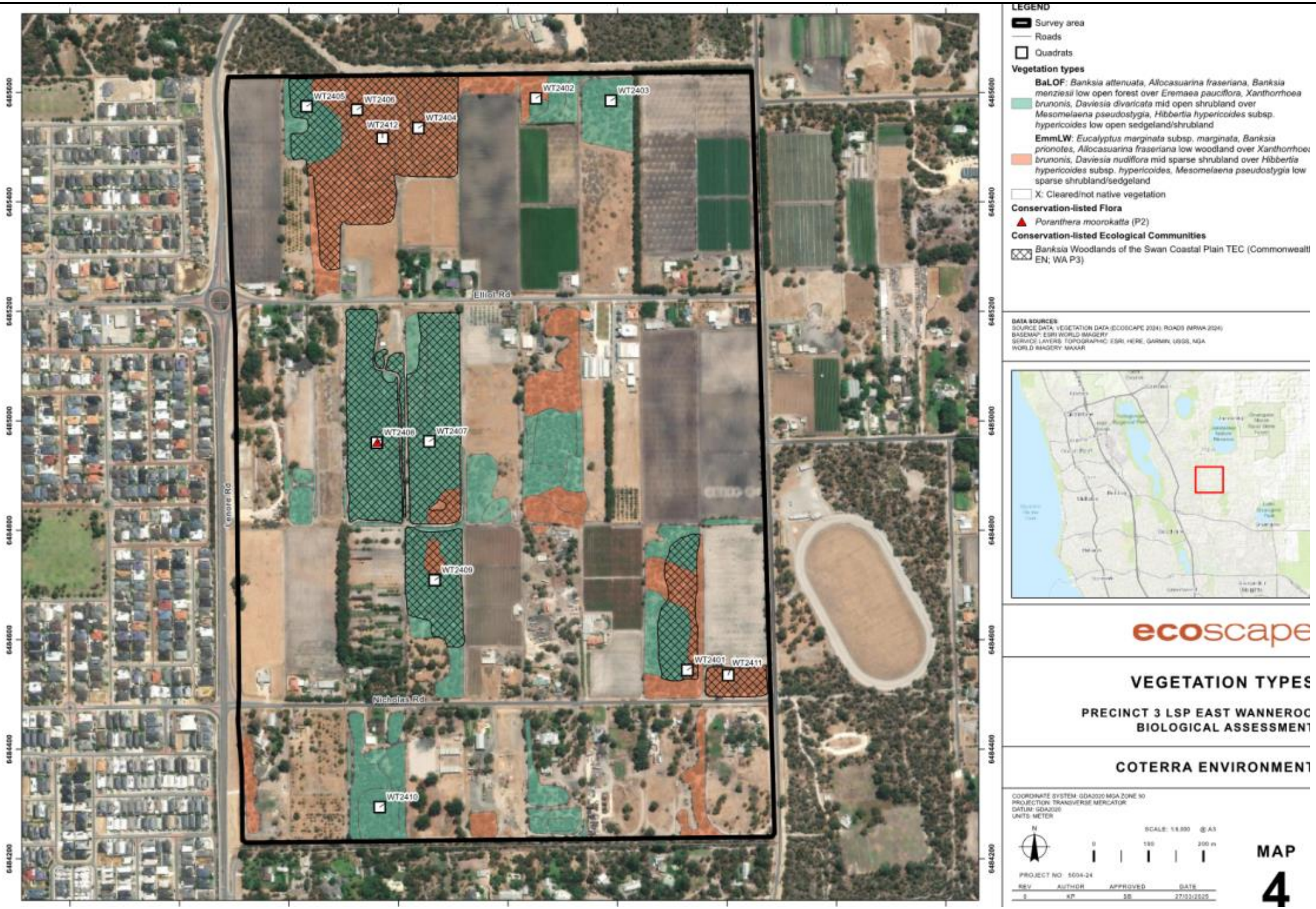
MAP
2


LEGEND
Survey area
Environmentally Sensitive Areas
DBCA Parks and Reserves
Unconfirmed (indicative) Carnaby's Cockatoo roost sites
Carnaby's Cockatoo roost sites
Unconfirmed (indicative) Carnaby's Cockatoo breeding area
Carnaby's Cockatoo breeding area
Nationally Important Wetlands
Geomorphic wetlands of the Swan Coastal Plain
Conservation-listed Fauna
Critically Endangered
Endangered
Vulnerable
Priority 2
Priority 3
Priority 4
Migratory
Conservation Dependent
Other Specially Protected Species
White Tailed Black Cockatoo Breeding Site locations
Black Cockatoo Roosting Sites
DATA SOURCES:
ecoscape
DBCA DATABASE SEARCH RESULTS
FAUNA
PRECINCT 3 LSP EAST WANNEROO
BIOLOGICAL ASSESSMENT
COTERRA ENVIRONMENT
MAP
3



LEGEND

- Survey area
- Roads
- Quadrats

Vegetation types

BaLOF: *Banksia attenuata, Allocasuarina fraseriana, Banksia menziesii* low open forest over *Eremaea pauciflora, Xanthorrhoea brunonis, Daviesia divaricata* mid open shrubland over *Mesomelaena pseudostygia, Hibbertia hypericoides* subsp. *hypericoides* low open sedgeland/shrubland

EmmLW: *Eucalyptus marginata* subsp. *marginata, Banksia prionotes, Allocasuarina fraseriana* low woodland over *Xanthorrhoea brunonis, Daviesia nudiflora* mid sparse shrubland over *Hibbertia hypericoides* subsp. *hypericoides, Mesomelaena pseudostygia* low sparse shrubland/sedgeland

- X: Cleared/not native vegetation

Conservation-listed Flora

- *Poranthera moorokatta* (P2)

Conservation-listed Ecological Communities

- *Banksia* Woodlands of the Swan Coastal Plain TEC (Commonwealth EN; WA P3)

DATA SOURCES
SOURCE DATA: VEGETATION DATA (ECOSCAPE 2024); ROADS (MRWA 2024)
BASEMAP: ESRI WORLD IMAGERY
SERVICE LAYERS: TOPOGRAPHIC: ESRI, HERE, GARMIN, USGS, NGA
WORLD IMAGERY: MAXAR

ecoscape

VEGETATION TYPES

PRECINCT 3 LSP EAST WANNEROO
BIOLOGICAL ASSESSMENT

COTERRA ENVIRONMENT

COORDINATE SYSTEM: GDA2020 MGA ZONE 50
PROJECTION: TRANSVERSE MERCATOR
DATUM: GDA2020
UNITS: METER

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SCALE: 1:6,000 @ A3

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PROJECT NO: 5004-24

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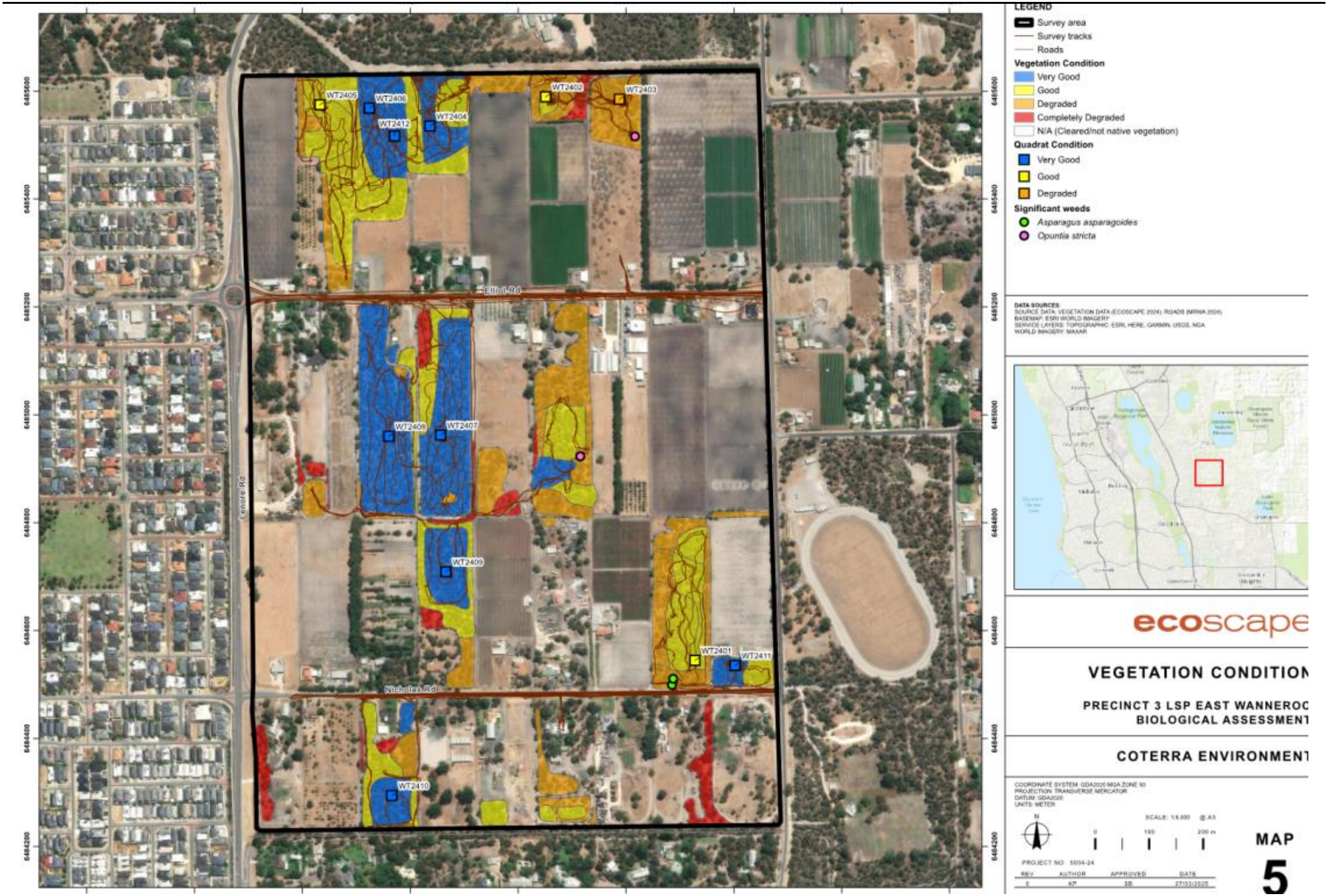
MAP 4


WT2405
WT2406
WT2412
WT2404
WT2402
WT2403
Elliot Rd
WT2408
WT2407
WT2409
WT2401
WT2411
Nicholas Rd
WT2410
Lenore Rd
6485600
6485400
6485200
6485000
6484800
6484600
6484400
6484200
LEGEND
Survey area
Survey tracks
Roads
Vegetation Condition
Very Good
Good
Degraded
Completely Degraded
N/A (Cleared/not native vegetation)
Quadrat Condition
Very Good
Good
Degraded
Significant weeds
Asparagus asparagoides
Opuntia stricta
DATA SOURCES
SOURCE DATA: VEGETATION DATA (ECOSCAPE 2024); ROADS (MRWA 2024)
BASEMAP: ESRI WORLD IMAGERY
SERVICE LAYERS: TOPOGRAPHIC: ESRI, HERE, GARMIN, USGS, NGA
WORLD IMAGERY: MAXAR
ecoscape
VEGETATION CONDITION
PRECINCT 3 LSP EAST WANNEROO
BIOLOGICAL ASSESSMENT
COTERRA ENVIRONMENT
COORDINATE SYSTEM: GDA2020 MGA ZONE 50
PROJECTION: TRANSVERSE MERCATOR
DATUM: GDA2020
UNITS: METER
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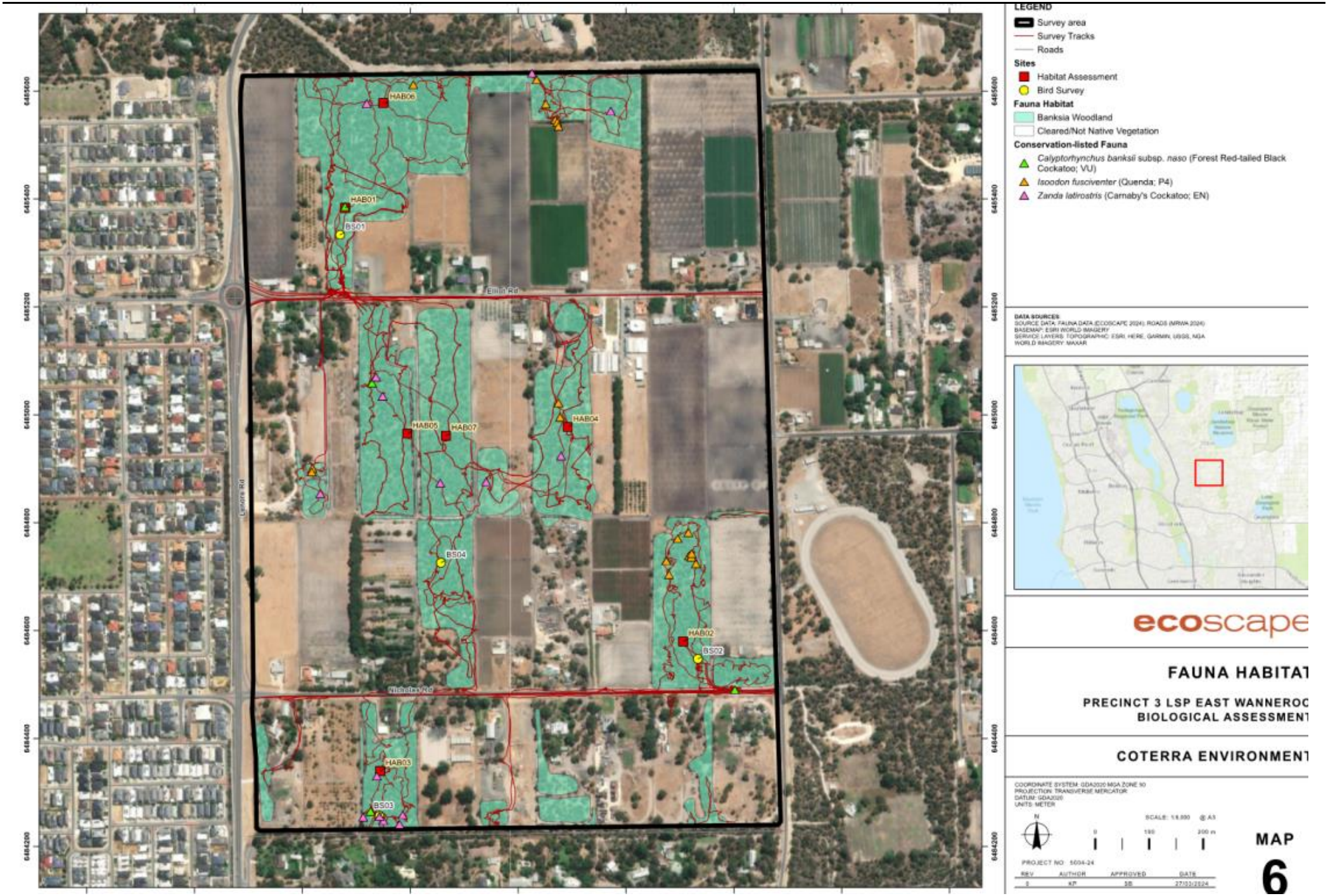
LEGEND
Survey area
Survey Tracks
Roads
Sites
Habitat Assessment
Bird Survey
Fauna Habitat
Banksia Woodland
Cleared/Not Native Vegetation
Conservation-listed Fauna
Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black Cockatoo; VU)
Isoodon fusciventer (Quenda; P4)
Zanda latirostris (Carnaby's Cockatoo; EN)
HAB06
HAB01
BS01
HAB05
HAB07
HAB04
BS04
HAB02
BS02
HAB03
BS03
Lenore Rd
DATA SOURCES
SOURCE DATA: FAUNA DATA (ECOSCAPE 2024); ROADS (MRWA 2024)
BASEMAP: ESRI WORLD IMAGERY
SERVICE LAYERS: TOPOGRAPHIC: ESRI, HERE, GARMIN, USGS, NGA
WORLD IMAGERY: MAXAR
ecoscape
FAUNA HABITAT
PRECINCT 3 LSP EAST WANNEROO
BIOLOGICAL ASSESSMENT
COTERRA ENVIRONMENT
COORDINATE SYSTEM: GDA2020 MGA ZONE 50
PROJECTION: TRANSVERSE MERCATOR
DATUM: GDA2020
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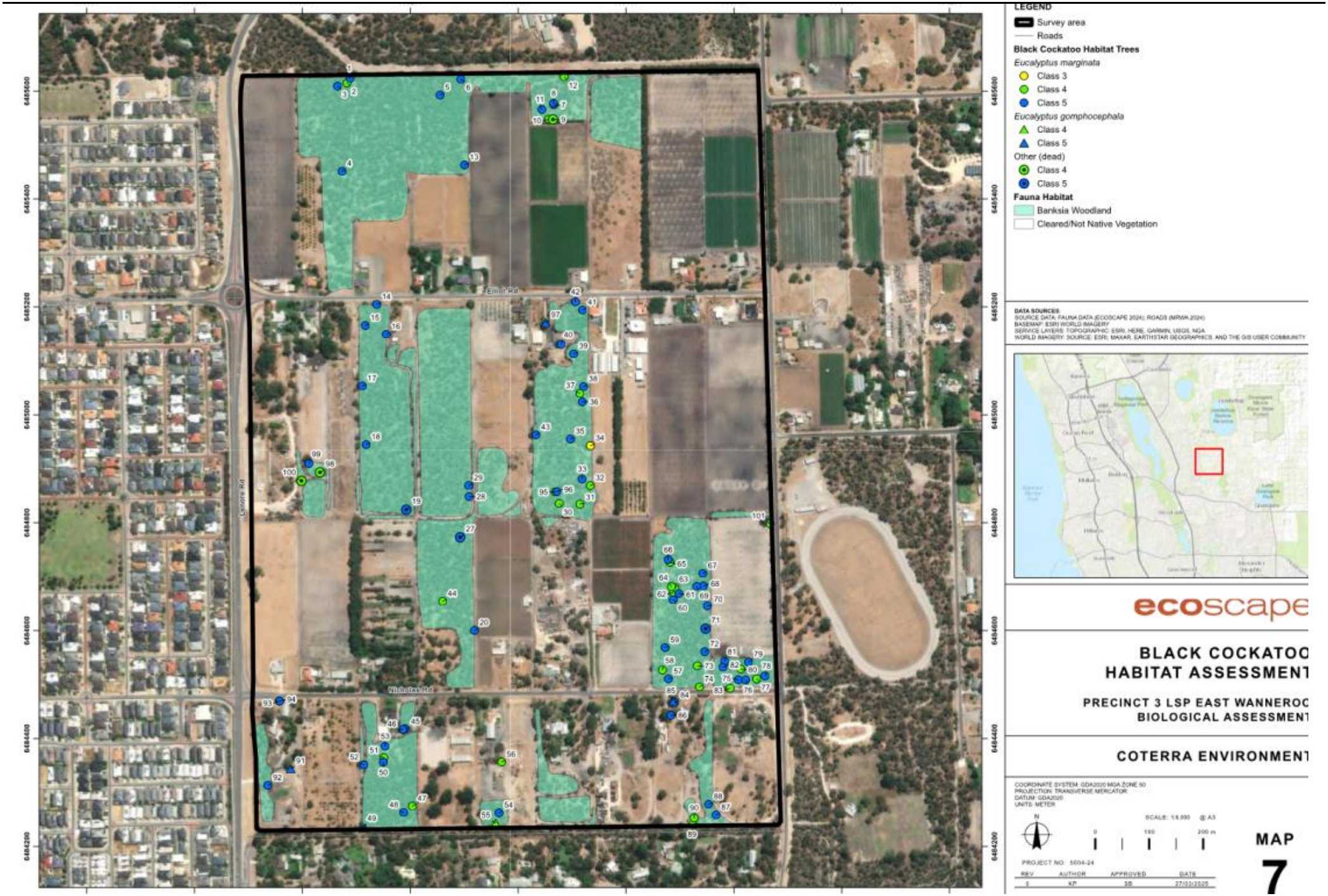
LEGEND
Survey area
Roads
Black Cockatoo Habitat Trees
Eucalyptus marginata
Class 3
Class 4
Class 5
Eucalyptus gomphocephala
Class 4
Class 5
Other (dead)
Class 4
Class 5
Fauna Habitat
Banksia Woodland
Cleared/Not Native Vegetation
DATA SOURCES
SOURCE DATA: FAUNA DATA (ECOSCAPE 2024); ROADS (MRWA 2024)
BASEMAP: ESRI WORLD IMAGERY
SERVICE LAYERS: TOPOGRAPHIC: ESRI, HERE, GARMIN, USGS, NGA
WORLD IMAGERY: SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS, AND THE GIS USER COMMUNITY
ecoscape
BLACK COCKATOO
HABITAT ASSESSMENT
PRECINCT 3 LSP EAST WANNEROO
BIOLOGICAL ASSESSMENT
COTERRA ENVIRONMENT
COORDINATE SYSTEM: GDA2020 MGA ZONE 50
PROJECTION: TRANSVERSE MERCATOR
DATUM: GDA2020
UNITS: METER
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SCALE: 1:6,000 @ A3
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PROJECT NO: 5004-24
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7
Emlin Rd
Lenore Rd
Nicholas Rd

APPENDIX ONE LEGISLATIVE CONTEXT, DEFINITIONS AND CRITERIA

COMMONWEALTH ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The EPBC Act is a legal framework to protect and manage matters of national environmental significance (MNES) including important flora, fauna, ecological communities and heritage areas listed under the Act.

Threatened taxa (flora and fauna) are protected under the EPBC Act, which lists species and ecological communities that have been assessed as meeting the criteria to be listed as Critically Endangered, Endangered, Vulnerable, Conservation Dependant, Extinct, or Extinct in the Wild, as detailed in **Table 15**.

Threatened Ecological Communities protected under the EPBC Act are categorised as Critically Endangered, Endangered or Vulnerable, also detailed in this table.

Migratory species subject to international agreements are also protected under the EPBC Act. The definition of a migratory species under the Act follows that prescribed by the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) (DCCEEW 2023). The list of migratory species established under section 209 of the EPBC Act comprises:

- migratory species which are native to Australia and are included in the appendices to the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals Appendices I and II);
- migratory species included in annexes established under the Japan-Australia Migratory Bird Agreement (JAMBA) and the China-Australia Migratory Bird Agreement (CAMBA)
- native, migratory species identified in a list established under, or an instrument made under, an international agreement approved by the Minister, such as the Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA).

Table 15: EPBC Act categories for flora, fauna and ecological communities

Category	Threatened species	Threatened Ecological Communities
Extinct	A native species is eligible to be included in the extinct category at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.	n/a
Extinct in the wild	A native species is eligible to be included in the extinct in the wild category at a particular time if, at that time: (a) it is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or (b) it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.	n/a
Critically Endangered (CR)	A native species is eligible to be included in the *critically endangered* category at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.	An ecological community is eligible to be included in the *critically endangered* category at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria
Endangered (EN)	A native species is eligible to be included in the *endangered* category at a particular time if, at that time: (a) it is not critically endangered; and (b) it is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.	An ecological community is eligible to be included in the *endangered* category at a particular time if, at that time: (a) it is not critically endangered; and (b) it is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.

Category	Threatened species	Threatened Ecological Communities
Vulnerable (VU)	A native species is eligible to be included in the *vulnerable* category at a particular time if, at that time: (a) it is not critically endangered or endangered; and (b) it is facing a high risk of extinction in the wild in the medium term future, as determined in accordance with the prescribed criteria.	An ecological community is eligible to be included in the *vulnerable* category at a particular time if, at that time: (a) it is not critically endangered or endangered; and (b) it is facing a high risk of extinction in the wild in the medium term future, as determined in accordance with the prescribed criteria.
Conservation Dependent	A native species is eligible to be included in the conservation dependent category at a particular time if, at that time: (a) the species is the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or (b) the following subparagraphs are satisfied: (i) the species is a species of fish; (ii) the species is the focus of a plan of management that provides for management actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long-term survival in nature are maximised; (iii) the plan of management is in force under a law of the Commonwealth or of a State or Territory; (iv) cessation of the plan of management would adversely affect the conservation status of the species.	n/a

WESTERN AUSTRALIAN ENVIRONMENTAL PROTECTION ACT 1986

The Western Australian EP Act was created to provide for an Environmental Protection Authority (the EPA) that has the responsibility for:

- prevention, control and abatement of pollution and environmental harm
- conservation, preservation, protection, enhancement and management of the environment
- matters incidental to or connected with the above.

The EPA is responsible for providing the guidance and policy under which environmental assessments are conducted. It conducts environmental impact assessments (based on the information provided by the proponent), initiates measures to protect the environment and provides advice to the Minister responsible for environmental matters.

WESTERN AUSTRALIAN BIODIVERSITY CONSERVATION ACT 2016

The Western Australian BC Act provides for the conservation, protection and ecologically sustainable use of biodiversity and biodiversity components in Western Australia.

Threatened Species

Threatened species (both flora and fauna) and ecological communities (see below) that meet the categories listed within the BC Act are protected under this legislation and require authorisation by the Minister to take or disturb. These are known as Threatened Flora, Threatened Fauna and Threatened Ecological Communities. The conservation categories of Critically Endangered, Endangered and Vulnerable are detailed in **Table 16**; these categories align with those of the EPBC Act. Some State-listed threatened species and ecological communities are provided with additional protection as they are also listed under the Commonwealth EPBC Act (see **Table 15** for conservation status category descriptions).

The most recent Western Australian flora and fauna listings were published in the Government Gazette on 6 October 2023 (Western Australian Government 2023a) and ecological communities listings on 26 May 2023 (Western Australian Government 2023b).

Priority-Listed Species

Flora are listed as PF where populations are geographically restricted or threatened by local processes, or where there is insufficient information to formally assign them to TF categories. Whilst PF are not specifically listed in the BC Act, some may qualify as being of special conservation interest and thereby have a greater level of protection than unlisted species.

There are three categories covering Western Australian-listed TF and four categories covering PF species which are outlined in **Table 16**. PF for Western Australia are regularly reviewed by the DBCA whenever new information becomes available, with species status altered or removed from the list when data indicates that they no longer meet these requirements.

Conservation significant fauna species are listed by the DBCA as Priority Fauna where populations are geographically restricted or threatened by local processes, or where there is insufficient information to formally assign them to threatened fauna categories. Whilst Priority Fauna are not specifically listed in the BC Act, these have a greater level of significance than other native species. The categories covering Priority Fauna species are outlined in **Table 16**.

Flora and fauna species may be listed as being of special conservation interest if they have a naturally low population, have a restricted natural range, are subject to or recovering from a significant population decline or reduction of range or are of special interest, and the Minister considers that taking may result in depletion of the species. Migratory species and those subject to international agreement are also listed under the Act. These are known as 'specially protected species' in the BC Act.

Table 16: Conservation category definitions for Western Australian flora and fauna (DBCA 2023a)

Conservation Category Definitions for Western Australian Fauna and Flora	
Threatened, Extinct and Specially Protected fauna or flora[1] are species[2] which have been adequately searched for and are deemed to be, in the wild, threatened, extinct or in need of special protection, and have been gazetted as such. **Categories of Threatened, Extinct and Specially Protected fauna and flora are:**	
T	**Threatened species** Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act). **Threatened fauna** is the species of fauna that are listed as critically endangered, endangered or vulnerable threatened species. **Threatened flora** is the species of flora that are listed as critically endangered, endangered or vulnerable threatened species. The assessment of the conservation status of threatened species is in accordance with the BC Act listing criteria and the requirements of Ministerial Guideline Number 1 and Ministerial Guideline Number 2 that adopts the use of the International Union for Conservation of Nature (IUCN) Red List of Threatened Species Categories and Criteria[3], and is based on the national distribution of the species.

Conservation Category Definitions for Western Australian Fauna and Flora	
CR	*Critically endangered species* Threatened species considered to be "*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*". Listed as critically endangered undersection 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines.
EN	*Endangered species* Threatened species considered to be "*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*". Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines.
VU	*Vulnerable species* Threatened species considered to be "*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*". Listed as vulnerable undersection 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines.
Extinct species **Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.**	
EX	*Extinct species* Species where "*there is no reasonable doubt that the last member of the species has died*", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).
EW	*Extinct in the wild species* Species that "*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*", and listing is otherwise in accordance with the ministerial guidelines (section 25of the BC Act). Currently there are no fauna or flora species listed as extinct in the wild.
Specially protected species Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection. Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as specially Protected species.	
MI	*Migratory species* Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act). Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA)[4], China (CAMBA)[5] and The Republic of Korea (ROKAMBA)[6], and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention)[7], an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.
CD	*Species of special conservation interest (conservation dependent)* Species of special conservation need that are dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act). Currently only fauna are listed as species of special conservation interest.
OS	*Other specially protected species* Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act). Currently only fauna are listed as species otherwise in need of special protection.

Conservation Category Definitions for Western Australian Fauna and Flora	
P	**Priority species** Priority is not a listing category under the BC Act. All fauna and flora are protected in WA following the provisions in Part 10 of the BC Act. The protection applies even when a species is not listed as threatened or specially protected, and regardless of land tenure (State managed land (Crown land), private land, or Commonwealth land). Species that may possibly be threatened species that do not meet the criteria for listing under the BC Act because of insufficient survey or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of prioritisation for survey and evaluation of conservation status so that consideration can be given to potential listing as threatened. Species that are adequately known, meet criteria for near threatened, or are rare but not threatened, or that have been recently removed from the threatened species list or conservation dependent or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring. Assessment of priority status is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.
1	*Priority 1: Poorly-known species – known from few locations, none on conservation lands* Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, for example, agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.
2	*Priority 2: Poorly-known species – known from few locations, some on conservation lands* Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, for example, national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.
3	*Priority 3: Poorly-known species – known from several locations* Species that are known from several locations and the species does not appear to be under imminent threat or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. These species need further survey.
4	*Priority 4: Rare, Near Threatened and other species in need of monitoring* (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands. (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent. (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy. (d) Other species in need of monitoring.

[1] The definition of flora includes algae, fungi and lichens.

[2] Species includes all taxa (plural of taxon - a classificatory group of any taxonomic rank, e.g. a family, genus, species or any infraspecific category i.e. subspecies or variety, or a distinct population).

[3] Western Australia has assigned species to threat categories using the *IUCN Red List of Threatened Species Categories and Criteria* since 1996 (referencing all criteria).

[4] **JAMBA - first included in the WA migratory species list in 1980.**

[5] **CAMBA - first included in the WA migratory species list in 2010.**

[6] **ROKAMBA - first included in the WA migratory species list in 2010.**

[7] Bonn Convention (Birds) - first included in the WA migratory species list in 2015.

Threatened and Priority Ecological Communities

Western Australian TECs are protected under the BC Act and are categorised much like those of the EPBC Act. Western Australian definitions and criteria for TECs are shown in **Table 17**.

Currently described TECs are listed on the DBCA website, with the most recent list endorsed by the Minister for Environment published in the Government Gazette on 26 May 2023 (Western Australian Government 2023c) and updated by DBCA on 28 November 2023 (DBCA 2023b).

DBCA also maintains a list of Priority Ecological Communities (PECs). PECs include potential TECs that do not meet survey criteria, or that are not adequately defined. They are not protected under legislation but are taken into consideration as part of the environmental approvals process. Currently described PECs are listed on the DBCA website, with the most recent list dated 19 June 2023 (DBCA 2023c). Currently described PECs are listed on the DBCA website, with the most recent list dated 21 December 2022 (Species and Communities Program, DBCA 2022).

Definitions and criteria for PECs are shown in **Table 17**.

Table 17: DBCA definitions and criteria for TECs and PECs (DBCA 2023d)

Criteria	Definition
Listed Ecological Communities	
Collapsed ecological communities (CO)	An ecological community listed by order of the Minister as collapsed under section 31(1) of the BC Act. As determined by criteria set out in section 32 of the BC Act, an ecological community is eligible for listing as a collapsed ecological community at a particular time if, at that time — (a) there is no reasonable doubt that the last occurrence of the ecological community has collapsed; or (b) the ecological community has been so extensively modified throughout its range that no occurrence of it is likely to recover — (i) its species composition or structure; or (ii) its species composition and structure.
Critically endangered ecological communities (CR)	A threatened ecological community listed in the category of critically endangered under section 27(1)(a) of the BC Act, as determined by criteria set out in section 28 of the BC Act and the ministerial guidelines. A critically endangered ecological community faces an extremely high risk of becoming eligible for listing as a collapsed ecological community in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines.
Endangered ecological communities (EN)	A threatened ecological community listed in the category of endangered ecological community under section 27(1)(b) of the BC Act, as determined by criteria set out in section 29 of the BC Act and the ministerial guidelines. A threatened ecological community faces a very high risk of becoming eligible for listing as a collapsed ecological community in the near future, as determined in accordance with criteria set out in the ministerial guidelines.
Vulnerable ecological communities (VU)	A threatened ecological community listed in the category of vulnerable ecological community under section 27(1)(c) of the BC Act, as determined by criteria set out in section 30 of the BC Act and the ministerial guidelines. A vulnerable ecological community faces a high risk of becoming eligible for listing as a collapsed ecological community in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines.
Priority ecological communities	
Priority One (P1)	*Poorly known ecological communities – very few occurrences, very restricted distribution* Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤100ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g., within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.
Priority Two (P2)	*Poorly known ecological communities – few occurrences, restricted distribution* Communities that are known from few occurrences with a restricted distribution (generally ≤10 occurrences or a total area of ≤200ha). At least some occurrences are not believed to be under immediate threat (within approximately 10 years) of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.

Criteria	Definition
Priority Three (P3)	*Poorly known ecological communities inadequately surveyed or not well defined* Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them. This category includes three sub-categories: i. Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation. ii. Communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat (within approximately 10 years). iii. Communities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, inappropriate fire regimes, clearing, hydrological change, etc.
Priority Four (P4)	*Adequately known ecological communities – rare, near threatened, or recently removed from the threatened list* Ecological communities that are adequately known and are rare but not threatened near threatened, or have been recently removed from the threatened list. These communities require regular monitoring. i. Rare: ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands. ii. Near Threatened: ecological communities that are considered to have been adequately surveyed and that do not qualify as conservation dependent, but that are close to qualifying for a higher threat category. iii. Ecological communities that have been removed from the list of threatened communities during the past five years.
Priority Five (P5)	*Conservation Dependent Ecological Communities* Ecological Communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

FLORA CRITERIA

Other Significant Flora

According to the Flora and Vegetation Technical Guidance (EPA 2016a) other than being listed as Threatened or Priority Flora, a species can be considered as significant if it is considered to be:

- locally endemic or association with a restricted habitat type (e.g. Groundwater Dependent Ecosystems, Sheet Flow Dependent Vegetation)
- a new species or has anomalous features that indicate a potential new species
- at the extremes of range, recently discovered range extensions (generally considered greater than 100 km or in a different bioregion), or isolated outliers of the main range
- unusual species, including restricted subspecies, varieties or naturally occurring hybrids
- relictual status, being representative of taxonomic groups that no longer occur widely in the broader landscape.

Introduced Flora

Introduced plant species, known as weeds, are plants that are not indigenous to an area and have been introduced either directly or indirectly (unintentionally) through human activity. Species are regarded as introduced if they are listed as 'alien' on *FloraBase* (Western Australian Herbarium [WAH] 1998a-2024) and are designated with an asterisk (*) in this document.

Weeds of National Significance

At a national level there are 32 weed species listed as Weeds of National Significance (WoNS) (Weeds Australia & Centre for Invasive Species Solutions 2021). The Commonwealth *Australian Weeds Strategy 2017-2027* (Invasive Plants and Animals Committee 2016) describes broad goals and objectives to manage these species.

Declared Pest Plants

The Western Australian Organism List (WAOL) details organisms listed as Declared Pests under the *Biosecurity and Agriculture Management Act 2007* (BAM Act). Under the BAM Act, Declared Pests are listed as one of the three categories, or exempt:

- C1 (exclusion), that applies to pests not established in Western Australia; control measures are to be taken to prevent their entry and establishment
- C2 (eradication), that applies to pests that are present in Western Australia but in low numbers or in limited areas where eradication is still a possibility
- C3 (management), that applies to established pests where it is not feasible or desirable to manage them in order to limit their damage
- exempt (no category).

VEGETATION CRITERIA

Other Significant Vegetation

According to the Flora and Vegetation Technical Guidance (EPA 2016a) other than being listed as a TEC or PEC, vegetation can be considered as significant if it is considered to have:

- restricted distribution
- a degree of historical impact from threatening processes
- a role as a refuge
- provides an important function required to maintain ecological integrity of a significant ecosystem.

[delete below if not relevant]

Groundwater Dependent and Sheet Flow Dependent Mulga vegetation may be considered as significant and are described below.

Groundwater Dependent Vegetation

Groundwater Definition

Groundwater is water that is found in the saturated zone of the soil, where all soil pores are filled with water. The water table is the upper surface of the saturated zone in an unconfined aquifer. Groundwater may also occur as a perched aquifer located above unsaturated rock formations as a result of a discontinuous permeable layer or held under pressure in a confined aquifer (Goulburn-Murray Water 2010).

Groundwater Dependent Ecosystems Definition

Groundwater Dependent Ecosystems (GDEs) have been defined as ecosystems that are dependent on groundwater for their survival at some stage or stages of their lifecycle, however groundwater use cannot be equated with groundwater dependence (Eamus 2009). In some contexts (including that of a flora and vegetation assessment), GDEs are also known as Groundwater Dependent Vegetation (GDV).

Hatton and Evans (1998) identified four types of GDEs based on their geographic setting: terrestrial vegetation (vegetation communities and dependent fauna that have seasonal or episodic dependence on groundwater), river base flow systems (aquatic and riparian ecosystems that exist in or adjacent to streams that are fed by groundwater base flow), aquifer and cave ecosystems, and wetlands.

Eamus *et al.* (2006) identified three primary classes based on type of groundwater reliance:

1. Aquifer and cave ecosystems.
2. All ecosystems dependent on the surface expression of groundwater:
    a) river base flows
    b) wetlands, swamplands
    c) seagrass beds in estuaries
    d) floodplains
    e) mound springs

f) riparian vegetation
g) saline discharge to lakes
h) low lying forests.

3. All ecosystems dependent on the subsurface presence of groundwater, often accessed via the capillary fringe (non-saturated zone above the water table) when roots penetrate this zone:
   a) River Red Gum (*Eucalyptus camaldulensis*) forests
   b) Banksia woodlands
   c) Riparian vegetation in the wet/dry tropics.

Atlas of Groundwater Dependent Ecosystems

The Groundwater Dependent Ecosystems Atlas (BoM 2024b) indicates the presence of known GDEs and Inflow Dependent Ecosystems (IDEs) in Australia.

An Inflow Dependent Ecosystem is one in which the vegetation within the landscape is likely to be accessing water in addition to rainfall, from soil or surface water or groundwater, assessed using remotely sensed data. The likelihood of a landscape using additional water is rated from one to 10 (low to high), with a rating above six indicating that a landscape is likely to be inflow dependent (BoM 2024b).

ENVIRONMENTALLY SENSITIVE AREAS

There are a number of areas within Western Australia identified as being of environmental significance within which the exemptions to the Native Vegetation Clearing Regulations do not apply. These are referred to as Environmentally Sensitive Areas (ESAs), and are declared under section 51B of the EP Act and described in the *Environmental Protection (Environmentally Sensitive Areas) Notice*.

CONSERVATION ESTATE

The National Reserve System is a network of protected areas managed for conservation under international guidelines. The objective of placing areas of bushland into the Conservation Estate is to achieve and maintain a comprehensive, adequate and representative reserve system for Western Australia. The Conservation and Parks Commission is the vesting body for conservation lands, forest and marine reserves that are managed by DBCA (Government of Western Australia 2018).

APPENDIX TWO FIELD SURVEY CRITERIA

Table 18: NVIS structural formation terminology, terrestrial vegetation (NVIS Technical Working Group & DotEE 2017)

	Cover characteristics							
	Foliage cover *	70-100	30-70	10-30	<10	» 0 (scattered)	0-5 (clumped)	unknown
	Cover code	d	c	i	r	bi	bc	unknown
Growth Form	**Height Ranges (m)**	**Structural Formation Classes**						
tree, palm	<10,10-30, >30	closed forest	open forest	woodland	open woodland	isolated trees	isolated clumps of trees	tree, palm
tree mallee	<3, <10, 10-30	closed mallee forest	open mallee forest	mallee woodland	open mallee woodland	isolated mallee trees	isolated clumps of mallee trees	tree mallee
shrub, cycad, grass-tree, tree-fern	<1,1-2,>2	closed shrubland	shrubland	open shrubland	sparse shrubland	isolated shrubs	isolated clumps of shrubs	shrub, cycad, grass-tree, tree-fern
mallee shrub	<3, <10, 10-30	closed mallee shrubland	mallee shrubland	open mallee shrubland	sparse mallee shrubland	isolated mallee shrubs	isolated clumps of mallee shrubs	mallee shrub
heath shrub	<1,1-2,>2	closed heathland	heathland	open heathland	sparse heathland	isolated heath shrubs	isolated clumps of heath shrubs	heath shrub
chenopod shrub	<1,1-2,>2	closed chenopod shrubland	chenopod shrubland	open chenopod shrubland	sparse chenopod shrubland	isolated chenopod shrubs	isolated clumps of chenopod shrubs	chenopod shrub
samphire shrub	<0.5,>0.5	closed samphire shrubland	samphire shrubland	open samphire shrubland	sparse samphire shrubland	isolated samphire shrubs	isolated clumps of samphire shrubs	samphire shrub
hummock grass	<2,>2	closed hummock grassland	hummock grassland	open hummock grassland	sparse hummock grassland	isolated hummock grasses	isolated clumps of hummock grasses	hummock grass
tussock grass	<0.5,>0.5	closed tussock grassland	tussock grassland	open tussock grassland	sparse tussock grassland	isolated tussock grasses	isolated clumps of tussock grasses	tussock grass
other grass	<0.5,>0.5	closed grassland	grassland	open grassland	sparse grassland	isolated grasses	isolated clumps of grasses	other grass
sedge	<0.5,>0.5	closed sedgeland	sedgeland	open sedgeland	sparse sedgeland	isolated sedges	isolated clumps of sedges	sedge
rush	<0.5,>0.5	closed rushland	rushland	open rushland	sparse rushland	isolated rushes	isolated clumps of rushes	rush
forb	<0.5,>0.5	closed forbland	forbland	open forbland	sparse forbland	isolated forbs	isolated clumps of forbs	forb
fern	<1,1-2,>2	closed fernland	fernland	open fernland	sparse fernland	isolated ferns	isolated clumps of ferns	fern
bryophyte	<0.5	closed bryophyte-land	bryophyte-land	open bryophyteland	sparse bryophyteland	isolated bryophytes	isolated clumps of bryophytes	bryophyte
lichen	<0.5	closed lichenland	lichenland	open lichenland	sparse lichenland	isolated lichens	isolated clumps of lichens	lichen
vine	<10,10-30, >30	closed vineland	vineland	open vineland	sparse vineland	isolated vines	isolated clumps of vines	vine

Table 19: NVIS height classes (NVIS Technical Working Group & DotEE 2017)

Height		Growth form				
Height Class	Height Range (m)	Tree, vine (M & U), palm (single-stemmed)	Shrub, heath shrub, chenopod shrub, ferns, samphire shrub, cycad, tree-fern, grass-tree, palm (multi-stemmed)	Tree mallee, mallee shrub	Tussock grass, hummock grass, other grass, sedge, rush, forbs, vine (G)	Bryophyte, lichen, seagrass, aquatic
8	>30	tall	NA	NA	NA	NA
7	10-30	mid	NA	tall	NA	NA
6	<10	low	NA	mid	NA	NA
5	<3	NA	NA	low	NA	NA
4	>2	NA	tall	NA	tall	NA
3	1-2	NA	mid	NA	tall	NA
2	0.5-1	NA	low	NA	mid	tall
1	<0.5	NA	low	NA	low	low
Source: (based on Walker & Hopkins 1990)						

Table 20: Vegetation condition scale for the South West and Interzone Botanical Provinces (EPA 2016a)

Condition rating	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance or damage caused by human activities since European settlement.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks.
Very Good	Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees and shrubs.

Table 21: Grading system for the assessment of potential nest trees for Black Cockatoos (Bamford 2024)

Class	Description of tree and hollows/activity
1	Activity at hollow observed; adult (or immature) bird seen entering or emerging from hollow. Can also be used for a known nest tree active in the previous 12 months (although this should be noted in the description). Note that activity at a hollow does not absolutely mean that breeding is occurring unless a young bird in hollow is observed.
2	Hollow of suitable size visible with chew marks around entrance. Record if chew-marks are recent or old.
3	Potentially suitable hollow visible but no chew marks present at entrance; or potentially suitable hollow suspected to be present - as suggested by structure of tree, such as large, vertical trunk broken off at a height of >8m; but note that hollow height is contextual. Carnaby's Black-Cockatoo will nest in hollows <5m so in a Wheatbelt breeding site a lower criterion may be more appropriate.
4	Tree with large hollows or broken branches that might contain large hollows, but hollows or potential hollows are not vertical or near-vertical; thus a tree with or likely to have hollows of sufficient size but not to have hollows of the angle preferred by Black-Cockatoos. Also, a tree with hollows that might be large enough for a Black-Cockatoo, but in a trunk or branch of insufficient diameter to contain a hollow of preferred size. Trees with low but otherwise suitable hollows can also be assigned a rank or 4, depending on the context (eg south-west forest or Wheatbelt).
5	Tree lacking large hollows or broken branches that might have large hollows; a tree with more or less intact branches and a spreading crown.
Significance	**Significance rank for Class 3 and above trees**
1 (Very High Value)	Very high value: large tree with obvious large vertical hollow above 5 m (height above ground) with future potential to create more hollows, ideal for Black Cockatoos
2 (High Value)	High value: large/medium (often healthy) tree with suitable vertical or near vertical hollow with potential to create future hollows
3 (Moderate-Low Value)	Moderate/low value: outer diameter of hollow at least 10 cm, height from ground at least 3 m, often in smaller trees or stags with limited potential for future hollows

Table 22: Black Cockatoo foraging quality scoring tool (DAWE 2022a)

Foraging quality scoring tool template				
Starting Score		**Carnaby's Cockatoo**	**Baudin's Cockatoo**	**Forest Red-tailed Black Cockatoo**
10		**Start at a score of 10** if your site is native shrubland, kwongan heathland or woodland, dominated by proteaceous plant species such as Banksia spp. (including Dryandra spp.), Hakea spp. and Grevillea spp., as well as native eucalypt woodland and forest that contains foraging species, within the range of the species, including along roadsides and parkland cleared areas. Also includes planted native vegetation. **This tool only applies to sites equal to or larger than 1 hectare in size.**	**Start at a score of 10** if your site is native eucalypt woodlands and forest, and proteaceous woodland and heath, particularly Marri, within the range of the species, including along roadsides and parkland cleared areas. Can include planted vegetation. **This tool only applies to sites equal to or larger than 1 hectare in size**	**Start at a score of 10** if your site is Jarrah or Marri woodland and/or forest, or if it is on the edge of Karri forest, or if Wandoo and Blackbutt occur on the site, within the range of the subspecies, including along roadsides and parkland cleared areas. **This tool only applies to sites equal to or larger than 1 hectare in size.**
Attribute	**Sub-tractions**	**Context adjustor (attributes reducing functionality of foraging habitat)**		

Foraging quality scoring tool template				
Starting Score		**Carnaby's Cockatoo**	**Baudin's Cockatoo**	**Forest Red-tailed Black Cockatoo**
Foraging Potential	**-2**	**Subtract 2** from your score if there is no evidence of feeding debris on your site.	**Subtract 2** from your score if there is no evidence of feeding debris on your site.	**Subtract 2** from your score if there is no evidence of feeding debris on your site.
Connectivity	**-2**	**Subtract 2** from your score if you have evidence to conclude that there is no other foraging habitat within 12 km of your site.	**Subtract 2** from your score if you have evidence to conclude that there is no other foraging habitat within 12 km of your site.	**Subtract 2** from your score if you have evidence to conclude that there is no other foraging habitat within 12 km of your site.
Proximity to breeding	**-2**	**Subtract 2** if you have evidence to conclude that your site is more than 12 km from breeding habitat.	**Subtract 2** if you have evidence to conclude that your site is more than 12 km from breeding habitat.	**Subtract 2** if you have evidence to conclude that your site is more than 12 km from breeding habitat.
Proximity to roosting	**-1**	**Subtract 1** if you have evidence to conclude that your site is more than 20 km from a known night roosting habitat.	**Subtract 1** if you have evidence to conclude that your site is more than 20 km from a known night roosting habitat.	**Subtract 1** if you have evidence to conclude that your site is more than 20 km from a known night roosting habitat.
Impact from significant plant disease	**-1**	**Subtract 1** if your site has disease present (e.g. Phytophthora spp. or Marri canker) and the disease is affecting more than 50% of the preferred food plants present.	**Subtract 1** if your site has disease present (e.g. Phytophthora spp. or Marri canker) and the disease is affecting more than 50% of the preferred food plants present.	**Subtract 1** if your site has disease present (e.g. Phytophthora spp. or Marri canker) and the disease is affecting more than 50% of the preferred food plants present.
Total Score		*Enter score*	*Enter score*	*Enter score*
Appraisal		To support your habitat score, you should provide an overall appraisal of the habitat on the impact site and within 20km of the impact area to clearly explain and justify the score. It should include discussion on the foraging habitat's proximity to other resources (e.g. exact distance to proximate resources), frequency of use of proximate sites, the degree of evidence and description of vegetation type and condition.		

Table 23: Black Cockatoo foraging value scoring system (Bamford 2020)

Site condition: vegetation composition, condition and structure scoring			
Site Score	**Carnaby's Cockatoo**	**Baudin's Cockatoo**	**Forest Red-tailed Black Cockatoo**
0	No foraging value: no Proteaceae, Eucalypts or other potential sources of food. Examples: • Water bodies (e.g. salt lakes, dams, rivers) • Bare ground • Developed sites devoid of vegetation (e.g. infrastructure, roads, gravel pits) or with vegetation of no food value (e.g. some suburban landscapes) • Mown grass.	No foraging value: no Eucalypts or other potential sources of food. Examples: • Water bodies (e.g. dams, rivers) • Bare ground • Developed sites devoid of vegetation (e.g. infrastructure, roads, gravel pits).	No foraging value: no Eucalypts or other potential sources of food. Examples: • Water bodies (e.g. dams, rivers) • Bare ground • Developed sites devoid of vegetation (e.g. infrastructure, roads, gravel pits).
1	Negligible to low foraging value. Examples: • Scattered specimens of known food plants but projected foliage cover of these is < 2%. This could include urban areas with scattered foraging trees. • Paddocks that are lightly vegetated with melons or other known food-source (weeds e.g. *Erodium* spp.) that represent a short-term and/or seasonal food source • Blue Gum plantations (foraging by Carnaby's Cockatoos has been reported but appears to be unusual).	Negligible to low foraging value. Scattered specimens of known food plants but projected foliage cover of these < 1%. This could include urban areas with scattered foraging trees.	Negligible to low foraging value. Scattered specimens of known food plants but projected foliage cover of these < 1%. Could include urban areas with scattered foraging trees.
2	Low foraging value. Examples: • Shrubland in which species of foraging value, such as shrubby banksias, have < 10% projected foliage cover • Woodland with tree banksias 2-5% projected foliage cover • Open eucalypt woodland/mallee of small-fruited species • Paddocks that are densely vegetated with melons or other known food-source (weeds e.g. *Erodium* spp.) that represent a short-term and/or seasonal food source.	Low foraging value. Examples: ▪ Woodland with scattered specimens of known food plants (e.g. Marri and Jarrah) 1-5% projected foliage cover • Urban areas with scattered foraging trees.	Low foraging value. Examples: ▪ Woodland with scattered specimens of known food plants (e.g. Marri, Jarrah or Sheoak) 1-5% projected foliage cover • Urban areas with scattered food plants such as Cape Lilac, *Eucalyptus caesia* and *E. erythrocorys*.

Site condition: vegetation composition, condition and structure scoring			
Site Score	**Carnaby's Cockatoo**	**Baudin's Cockatoo**	**Forest Red-tailed Black Cockatoo**
3	Low to Moderate foraging value. Examples: ▪ Shrubland in which species of foraging value, such as shrubby banksias, have 10-20% projected foliage cover ▪ Woodland with tree banksias 5-20% projected foliage cover ▪ Eucalypt Woodland/Mallee of small-fruited species • Eucalypt Woodland with Marri < 10% projected foliage cover.	Low to Moderate foraging value. Examples: ▪ Eucalypt Woodland with known food plants (especially Marri) 5-20% projected foliage cover ▪ Parkland-cleared Eucalypt Woodland/Forest with known food plants 10-40% projected foliage cover (poor long-term viability without management) • Younger areas of (managed) revegetation with known food plants 10-40% projected foliage cover (establishing food sources with good long-term viability).	Low to Moderate foraging value. Examples: ▪ Eucalypt Woodland with known food plants (especially Marri and Jarrah) 5-20% projected foliage cover ▪ Parkland-cleared Eucalypt Woodland/Forest with known food plants 10-40% projected foliage cover (poor long-term viability without management) • Younger areas of (managed) revegetation with known food plants 10-40% projected foliage cover (establishing food sources with good long-term viability).
4	Moderate foraging value. Examples: ▪ Woodland/low forest with tree banksias (of key species *B. attenuata* and *B. menziesii*) 20-40% projected foliage cover ▪ Kwongan/Shrubland in which species of foraging value, such as shrubby banksias, have 20-40% projected foliage cover • Eucalypt Woodland/Forest with Marri 20-40% projected foliage cover.	Moderate foraging value. Examples: ▪ Marri-Jarrah Woodland/Forest with 20-40% projected foliage cover ▪ Marri-Jarrah Forest with 40-60% projected foliage cover but vegetation condition reduced due to weed invasion and/or some tree deaths ▪ Eucalypt Woodland/Forest with diverse, healthy understorey and known food trees (especially Marri) 10-20% projected foliage cover • Orchards with highly desirable food sources (e.g. apples, pears, some stone fruits)	Moderate foraging value. Examples: ▪ Marri-Jarrah Woodland/Forest with 20-40% projected foliage cover ▪ Marri-Jarrah Forest with 40-60% projected foliage cover but vegetation condition reduced due to weed invasion and/or some tree deaths • Sheoak Forest with 40-60% projected foliage cover.

Site condition: vegetation composition, condition and structure scoring			
Site Score	**Carnaby's Cockatoo**	**Baudin's Cockatoo**	**Forest Red-tailed Black Cockatoo**
5	Moderate to High foraging value. Examples: ▪ Banksia Low Forest (of key species *B. attenuata* and *B. menziesii*) with 40-60% projected foliage cover ▪ Banksia Low Forest (of key species *B. attenuata* and *B. menziesii*) with > 60% projected foliage cover but vegetation condition reduced due to weed invasion and/or some tree deaths • Pine plantations with trees more than 10 years old (but see pine modifier score if relevant).	Moderate to High foraging value. Examples: ▪ Marri-Jarrah Forest with 40-60% projected foliage cover • Marri-Jarrah Forest with > 60% projected foliage cover but vegetation condition reduced due to weed invasion and/or some tree deaths.	Moderate to High foraging value. Examples: ▪ Marri-Jarrah Forest with 40-60% projected foliage cover ▪ Marri-Jarrah Forest with > 60% projected foliage cover but vegetation condition reduced due to weed invasion and/or some tree deaths • Sheoak Forest with > 60% projected foliage cover.
6	High foraging value. Example: • Banksia Low Forest (of key species *B. attenuata* and *B. menziesii*) with > 60% projected foliage cover and vegetation condition good with low weed invasion and/or low tree deaths (indicating it is robust and unlikely to decline in the medium term).	High foraging value. Example: • Marri-Jarrah Forest with > 60% projected foliage cover and vegetation condition good with low weed invasion and/or low tree deaths (indicating it is robust and unlikely to decline in the medium term).	High foraging value. Example: • Marri-Jarrah Forest with > 60% projected foliage cover and vegetation condition good with low weed invasion and/or low tree deaths (indicating it is robust and unlikely to decline in the medium term).
Site context	Percentage of the 'local' (i.e. within 15 km) area native vegetation that the survey area represents		
Score	**'Local' breeding known/likely**	**'Local' breeding unlikely**	
3	>5%	>10%	
2	1-5%	5-10%	
1	0.1-1%	1-5%	
0	<0.1%	<1%	
Species density/stocking rate			
1	Species is regularly reported/recorded and/or abundant foraging evidence or Direct evidence lacking but at least moderate condition score and site is part of connected habitat where Black Cockatoos are known to occur.		
0	Species is irregularly or very infrequently reported and little or no foraging evidence is present.		

APPENDIX THREE TEC ASSESSMENT CRITERIA

BANKSIA WOODLANDS TEC

The criteria outlined in the *Approved Conservation Advice for the Banksia Woodlands of the Swan Coastal Plain* TEC (TSSC 2016) was used to determine if the TEC occurs, as below.

The key characteristics for vegetation to be included in this TEC are that:

- it occurs on the Swan Coastal Plain IBRA region, including the Dandaragan Plateau and adjacent to the Jarrah Forest IBRA region on the lower parts of the Darling and Whicher escarpments
- it generally occurs on low-nutrient sandy substrates, including sandy colluvium and aeolean sands although may occur occasionally on other substrates (usually on the Bassendean and Spearwood sands)
- the structure is typically low woodland or forest with a distinct upper stratum of low trees dominated or co-dominated by one or more of four characteristic Banksia species (*Banksia attenuata*, *B. menziesii*, *B. prionotes*, *B. ilicifolia*) although emergent trees are sometimes present but cannot be the dominant stratum
- the understorey is typically a highly diverse shrub and herb layer
- it meets the thresholds in the table that follows (with vegetation type mapping extrapolated outside the survey area to be included in the extent calculations).

Table 24: Condition categories and thresholds for inclusion in the Banksia Woodlands TEC (TSSC 2016)

Condition threshold	Indicative condition measures (typical)		Minimum patch size
	Native vegetation composition[1]	Weed cover	
Pristine	Native plant species diversity	Native plant species diversity	No minimum
Excellent	High native plant species	High native plant species	0.5 ha / 5,000 m^2
Very Good	Moderate native plant species	Moderate native plant species	1 ha / 10,000 m^2
Good	Low native plant species	Low native plant species	2 ha / 20,000 m^2
Degraded	Very low native plant species	Very low native plant species	Not representative
Completely Degraded	Very low to no native species	Very low to no native species	Not representative

[1] Relative to expected natural range of diversity for that vegetation (e.g. Floristic Community Type; FCT), where comparative data exists.

Whilst FCTs, as defined in Gibson *et al.* (1994) can be used as a guide they do not necessarily define all vegetation that may be included in the TEC. Vegetation defined by Gibson *et al.* FCTs may be listed as TECs in Western Australia or as Priority Ecological Communities (PECs) by DBCA (combined into the EPBC-listed Banksia Woodlands of the Swan Coastal Plain TEC). Some Banksia woodlands on the eastern side of the Swan Coastal Plain (FCT 20 group) are not included in this TEC and have different conservation listings; these Banksia woodland types are not subject to the same thresholds as above to be considered representative of the relevant TEC or PEC.

TUART WOODLANDS TEC

The EPBC-listed critically endangered *Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain ecological community* ('Tuart Woodlands') TEC was declared in 2019.

The criteria for inclusion in the TEC, as outlined in the Approved Conservation Advice (DotEE 2019), includes:

- confirming that the vegetation meets the diagnostic criteria (primarily being located within the Swan Coastal Plain and having at least two mature, living Tuart trees in the upper stratum with a gap of less than 60 m between outer edges of the canopies)
- the mapped extent of Tuart-dominated vegetation (woodlands, forests or mallee) meets various mapping criteria, and takes into consideration the entire extent of Tuart woodland regardless of changes in condition, structure or complexity, and extends to 30 m beyond the outer canopy of mature and dead Tuart trees (DBH greater than 15 cm). The Approved Conservation Advice includes additional information regarding

mapping and condition assessment, noting that the condition assessment scale is not the equivalent of other scales generally used in Western Australia.

- patches occupying less than 0.5 ha are not included in the TEC; patches of 0.5-5 ha may be representative depending on vegetation condition; patches of 5 ha or greater that meet the diagnostic criteria are included in the TEC
- Tuart woodlands over 5 ha in extent do not require additional surveys to demonstrate inclusion in the TEC; smaller extents (0.5-5 ha) require ground surveys to determine inclusion, as per the following table.

Table 25: Condition categories and thresholds for inclusion in the Tuart Woodlands TEC (DotEE 2019)

Patch size Biotic threshold	≥2 ha - <5 ha	≥0.5 ha - <2 ha
Very high condition **≥80% of all understorey vegetation cover is native** **Or** **At least 12 native understorey species per 0.01 ha (10 m x 10 m plot or equivalent sample unit)**	Medium sized patches with very high condition understorey. PART OF THE PROTECTED ECOLOGICAL COMMUNITY	Smaller patches with very high condition understorey. PART OF THE PROTECTED ECOLOGICAL COMMUNITY
High condition **≥60% of all understorey vegetation cover is native** **Or** **At least 8 native understorey species per 0.01 ha (10 m x 10 m plot or equivalent sample unit)**	Medium sized patches with high condition understorey. PART OF THE PROTECTED ECOLOGICAL COMMUNITY	Smaller patches with high condition understorey. AND That either: have an important landscape role (≤100 m to native vegetation)* OR have a habitat role (≥2 very large trees per 0.5 ha)* OR show regeneration (≥15 seedlings and/or saplings per 0.5 ha)* PART OF THE PROTECTED ECOLOGICAL COMMUNITY
Moderate condition **≥50% of all understorey vegetation cover is native** **Or** **At least 4 native understorey species per 0.01 ha (10 m x 10 m plot or equivalent sample unit)**	Medium sized patches with moderate condition understorey. AND That either: have an important landscape role (≤100 m to native vegetation)* OR have a habitat role (≥2 very large trees per 0.5 ha)* OR show regeneration (≥15 seedlings and/or saplings per 0.5 ha)* PART OF THE PROTECTED ECOLOGICAL COMMUNITY	NOT PART OF THE PROTECTED ECOLOGICAL COMMUNITY (but may be a focus for local protection or restoration)
Poor **Has minimal or no native cover and species richness. That is:** **<50% of all understorey vegetation cover is native** **And** **Less than 4 native understorey species per 0.01 ha (10 m x 10 m plot or equivalent sample unit)**	NOT PART OF THE PROTECTED ECOLOGICAL COMMUNITY (but may be a focus for local protection or restoration)	NOT PART OF THE PROTECTED ECOLOGICAL COMMUNITY (but may be a focus for local protection or restoration)

Note:

- understorey is considered as being <3 m in height (i.e. ground or mid stratum)
- *'important landscape role' or 'habitat role' takes into consideration:
  - proximity to other native vegetation that has ≥50% of vegetation cover being native

- the patch contains ≥2 very large trees (≥50 cm DBH) of any native species per 0.5 ha
- the patch shows evidence of natural regeneration of any native Eucalypt species (<15 cm DBH) of at least 15 individuals per 0.5 ha.

APPENDIX FOUR LIKELIHOOD ASSESSMENTS

Table 26: Flora database results and likelihood assessment

Blue shading indicates high likelihood; dark blue indicates species is known (recorded) from the survey area

DBCA*	PMST**	Species name	Habitat from *FloraBase*	Flowering	Likelihood of occurrence	
					Desktop	Post-survey
		Threatened Flora* **				
	Likely	*Andersonia gracilis*	White/grey sand, sandy clay, gravelly loam. Winter-wet areas, near swamps.	Sep-Nov	Unlikely	Very Unlikely
	Likely	*Anigozanthos viridis* subsp. *terraspectans*	Grey sand, clay loam. Winter-wet depressions.	Aug-Sep	Very Unlikely	Very Unlikely
	May	*Banksia mimica*	White or grey sand over laterite, sandy loam.	Dec or Jan-Feb	Unlikely	Very Unlikely
WAH, TP	Likely	*Caladenia huegelii*	Grey-brown sand, clay loam.	Sep-Oct	Unlikely	Very Unlikely
	May	*Paracaleana dixonii*	Grey sand over granite.	Oct-Jan	Unlikely	Very Unlikely
WAH, TP		*Calectasia elegans*	Clayey loam. Winter-wet clay flats.	Jul-Aug	Unlikely	Very Unlikely
WAH		*Darwinia carnea*	Lateritic loam & gravel.	Oct-Dec	Unlikely	Very Unlikely
	May	*Darwinia foetida*	Low plain with dry grey sand. Plain. Winter wet depression, grey/brown soil. Seasonally wet area.	Oct-Nov	Very Unlikely	Very Unlikely
WAH		*Darwinia meeboldii*	Peaty soils over quartzite. Hill slopes.	Aug-Nov	Unlikely	Very Unlikely
WAH		*Darwinia oxylepis*	Stony, peaty sand. Rocky gullies.	Aug-Nov	Unlikely	Very Unlikely
	Likely	*Diuris micrantha*	Brown loamy clay. Winter-wet swamps in shallow water.	Sep-Oct	Very Unlikely	Very Unlikely
	Likely	*Diuris purdiei*	Grey-black sand, moist. Winter-wet swamps.	Sep-Oct	Very Unlikely	Very Unlikely
	Likely	*Drakaea elastica*	White or grey sand. Low-lying situations adjoining winter-wet swamps.	Oct-Nov	Very Unlikely	Very Unlikely
	Likely	*Drakaea micrantha*	White-grey sand.	Sep-Oct	Unlikely	Very Unlikely
	May	*Eleocharis keigheryi*	Clay, sandy loam. Emergent in freshwater, creeks, claypans.	Aug-Nov	Very Unlikely	Very Unlikely
	Known	*Eucalyptus argutifolia*	Shallow soils over limestone. Slopes or gullies of limestone ridges, outcrops.	Mar-Apr	Unlikely	Very Unlikely
	Likely	*Grevillea christineae*	Clay loam, sandy clay, often moist.	Aug-Sep	Very Unlikely	Very Unlikely
WAH	Known	*Grevillea curviloba*	Grey sand, sandy loam. Winter-wet heath.	Aug-Oct	Unlikely	Very Unlikely
	May	*Macarthuria keigheryi*	White or grey sand.	Sep-Dec or Feb-Mar	Unlikely	Very Unlikely
WAH	Known	*Marianthus paralius*	White sand over limestone. Low coastal cliffs.	Sep-Nov	Unlikely	Very Unlikely
	Likely	*Synaphea* sp. Fairbridge Farm (D.Papenfus 696)	Sandy with lateritic pebbles. Near winter-wet flats, in low woodland with weedy grasses.	Oct	Very Unlikely	Very Unlikely

DBCA*	PMST**	Species name	Habitat from *FloraBase*	Flowering	Likelihood of occurrence	
					Desktop	Post-survey
	May	*Thelymitra dedmaniarum*	Eucalyptus wandoo (wandoo) and *Eucalyptus accedens* (powderbark wandoo) woodlands on red-brown sandy-loam soil associated with dolerite and granite outcrops.	Nov-Dec or Jan	Very Unlikely	Very Unlikely
WAH		*Thelymitra variegata*	Sandy clay, sand, laterite.	Jun-Sep	Unlikely	Very Unlikely
	Likely	*Trithuria occidentalis*	Shallows, winter-wet claypans in open *Melaleuca* shrubland. Known from one population in the Ellenbrook area.		Very Unlikely	Very Unlikely
		DBCA Priority 1				
WAH, TP		*Baeckea* sp. Limestone (N. Gibson & M.N. Lyons 1425)	Brown, sandy loam.	Sep-Feb	May	Very Unlikely
WAH		*Drosera patens*	Sandy soils. Margins of winter-wet depressions, swamps and lakes.	Dec, Feb	May	Very Unlikely
WAH		*Drosera* x *sidjamesii*	Peaty sand. Along lake margins, close to winter high-water line.	Nov-Dec, Jan-Mar	Unlikely	Very Unlikely
WAH		*Grevillea* sp. Ocean Reef (D. Pike Joon 4)	Light yellow-brown sand dune.	Oct-Nov	Unlikely	Very Unlikely
WAH		*Leucopogon maritimus*	White-yellow sand, Quindalup dunes.	Apr-Aug	Very Unlikely	Very Unlikely
WAH		*Stachystemon exilis*	Low lying coastal plains, flats, grey sand.	Oct-Nov	Unlikely	Very Unlikely
		DBCA Priority 2				
WAH, TP		*Acacia benthamii*	Sandy plains over limestone.	Aug-Sep	Likely	Unlikely
WAH		*Drosera x badgerupii*	Black sandy soil, lakeside.	Dec	Unlikely	Very Unlikely
WAH		*Millotia tenuifolia* var. *laevis*	Low dunes, hill crests, slopes. Grey or yellow sand, or red-brown lateritic soil.	Sep-Oct	Unlikely	Very Unlikely
WAH		*Poranthera moorokatta*	Yellow or white sand, loam.	Aug-Nov	Unlikely	Unlikely
WAH		*Thryptomene velutina*	Loamy sand.	Jun-Oct	Unlikely	Very Unlikely
		DBCA Priority 3				
WAH		*Austrostipa mundula*	Grey sand over limestone.	Oct	Unlikely	Very Unlikely
WAH, TP		*Conostylis bracteate*	Sand, limestone. Consolidated sand dunes.	Aug-Sep	Unlikely	Very Unlikely
WAH, TP		*Cyathochaeta teretifolia*	Sand, sandy loam.	Aug-Sep	May	Very Unlikely
WAH		*Dampiera triloba*	Loamy sand near permanent water	Aug-Dec	May	Very Unlikely
WAH		*Pimelea calcicole*	Sand. Coastal limestone ridges.	Sep-Nov	Unlikely	Very Unlikely
WAH		*Sarcozona bicarinate*	White sand.	Aug	Unlikely	Very Unlikely
WAH		*Stylidium paludicola*	Peaty sand over clay. Winter wet habitats. Marri and Melaleuca woodland, Melaleuca shrubland.	Oct-Dec	Unlikely	Very Unlikely
WAH		*Styphelia filifolia*	Sand.	Jan-Jun	Unlikely	Very Unlikely

DBCA*	PMST**	Species name	Habitat from *FloraBase*	Flowering	Likelihood of occurrence	
					Desktop	Post-survey
WAH		*Utricularia oppositiflora*	Sand and loamy clay wet depressions.	Aug-Dec	Very Unlikely	Very Unlikely
		DBCA Priority 4				
WAH		*Anigozanthos humilis* subsp. *chrysanthus*	Grey or yellow sand.	Jul-Oct	May	Unlikely
WAH		*Darwinia macrostegia*	Stony soils, peaty sand. Rocky hillsides, gullies.	May-Jun, Aug-Nov	Very Unlikely	Very Unlikely
WAH		*Eucalyptus foecunda* subsp. *foecunda*	Yellow-white sand, limestone outcropping.	Feb-Mar	Unlikely	Very Unlikely
WAH, TP		*Jacksonia sericea*	Calcareous and sandy soils.	Dec-Feb	Likely	Unlikely
WAH		*Schoenus griffinianus*	White sand.	Sep-Oct	Unlikely	Very Unlikely
WAH		*Stylidium striatum*	Brown clay loam over laterite. Hillslopes. Jarrah/Marri forest, Wandoo woodland.	Oct-Nov	Very Unlikely	Very Unlikely

* WAH = herbarium record (vouchered specimen)

TP = Threatened and Priority Flora Report Form record; may be unconfirmed i.e. without vouchered specimen

** PMST likelihood of occurrence or likelihood of habitat occurring

*** Commonwealth EPBC Act and Western Australian BC Act conservation status

Table 27: Fauna database results and likelihood assessment

Blue shading indicates high likelihood; darker blue indicates species is known (recorded) from the survey area. Species identified by database searches but not included in this assessment are listed in **Table 28**, along with the reason for their exclusion.

Scientific Name	Common name	Conservation status		Database		DBCA records			Likelihood	
		EPBC	WA	PMST likelihood	DBCA	# Records	Proximity (km)	Date (recent)	Desktop	Post-survey
Mammals										
Bettongia penicillata ogilbyi	Woylie	EN	CR	Known (buffer area)					Very Unlikely	Very Unlikely
Dasyurus geoffroii	Chuditch, western quoll	VU	VU	Known	X	3	7	2010	Very Unlikely	Very Unlikely
Hydromys chrysogaster	Water-rat, rakali		P4		X	20	4	2015	Very Unlikely	Very Unlikely
Isoodon fusciventer	Quenda, southwestern brown bandicoot		P4		X	251	0	2024	Known	Known
Macroderma gigas	Ghost bat	VU	VU	May					Very Unlikely	Very Unlikely
Myrmecobius fasciatus	Numbat, walpurti	EN	EN		X	1	7	1974	Very Unlikely	Very Unlikely
Notamacropus irma	Western brush wallaby		P4		X	15	8	2023	May	Unlikely
Phascogale tapoatafa wambenger	South-western brush-tailed phascogale, wambenger		CD		X	1	7	1974	Very Unlikely	Very Unlikely
Pseudocheirus occidentalis	Western ringtail possum, ngwayir	CR	CR	Likely (buffer area)	X	2	6	2023	Unlikely	Unlikely
Birds										
Apus pacificus	Fork-tailed swift	MI	MI		X	6	5	2009	Unlikely	Unlikely
Anous tenuirostris melanops	Australian Lesser Noddy	VU	EN	May (buffer area)					Very Unlikely	Very Unlikely
Ardenna grisea	Sooty Shearwater	VU	MI	May (buffer area)					Very Unlikely	Very Unlikely
Botaurus poiciloptilus	Australasian bittern	EN	EN	Known	X	6	2	1983	Very Unlikely	Very Unlikely
Calidris acuminata	Sharp-tailed Sandpiper	VU	MI	Known					Very Unlikely	Very Unlikely
Calidris canutus	Red Knot	VU	EN	Likely					Very Unlikely	Very Unlikely
Calidris ferruginea	Curlew sandpiper	CR & MI	CR	Known	X	3	5	2003	Very Unlikely	Very Unlikely
Calidris ruficollis	Red-necked stint	MI	MI		X	10	3	2011	Very Unlikely	Very Unlikely
Calonectris leucomelas	Streaked shearwater	MI	MI		X	1	8	2010	Very Unlikely	Very Unlikely
Calyptorhynchus banksii naso	Forest red-tailed black cockatoo	VU	VU	Known	X	34	1	2023	Likely	Known
Charadrius leschenaultii	Greater sand plover, large sand plover	VU & MI	VU	Likely	X	1	5	2011	Very Unlikely	Very Unlikely
Diomedea amsterdamensis	Amsterdam Albatross	EN	CR	May (buffer area)					Very Unlikely	Very Unlikely
Diomedea epomophora	Southern Royal Albatross	VU	VU	May (buffer area)					Very Unlikely	Very Unlikely
Diomedea exulans	Wandering Albatross	VU	VU	Likely (buffer area)					Very Unlikely	Very Unlikely
Falco peregrinus	Peregrine falcon		OS		X	13	2	2013	May	May
Glareola maldivarum	Oriental pratincole	MI	MI		X	1	8	1981	Very Unlikely	Very Unlikely
Leipoa ocellata	Malleefowl	VU	VU	Likely					Very Unlikely	Very Unlikely

Scientific Name	Common name	Conservation status		Database		DBCA records			Likelihood	
		EPBC	WA	PMST likelihood	DBCA	# Records	Proximity (km)	Date (recent)	Desktop	Post-survey
Limosa lapponica menzbieri	Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit	EN	CR	Known (in buffer)					Very Unlikely	Very Unlikely
Ixobrychus dubius	Australian little bittern		P4		X	4	1	2001	Unlikely	Very Unlikely
Ixobrychus flavicollis australis (southwest subpopulation)	Black bittern (southwest subpopulation)		P2		X	1	5	1987	Very Unlikely	Very Unlikely
Limosa lapponica	Bar-tailed godwit	MI	MI		X	2	8	1980	Very Unlikely	Very Unlikely
Limosa limosa	Black-tailed godwit	MI	MI		X	1	5	2011	Very Unlikely	Very Unlikely
Macronectes giganteus	Southern giant petrel	EN & MI	MI	May (buffer area)	X	2	3	1940	Very Unlikely	Very Unlikely
Macronectes halli	Northern Giant Petrel	VU	MI	Likely (buffer area)					Very Unlikely	Highly Unlikely
Numenius madagascariensis	Eastern Curlew, Far Eastern Curlew	CR	CR	May					Very Unlikely	Very Unlikely
Onychoprion anaethetus	Bridled tern	MI	MI		X	1	10	1989	Very Unlikely	Very Unlikely
Oxyura australis	Blue-billed duck		P4		X	89	2	2013	Unlikely	Unlikely
Pachyptila turtur subantarctica	Fairy Prion	VU		Likely (buffer area)					Very Unlikely	Very Unlikely
Pandion haliaetus	Osprey	MI	MI		X	1	10	2015	Very Unlikely	Very Unlikely
Phaethon rubricauda westralis	Red-tailed Tropicbird (Indian Ocean)	EN	MI & P4	May (buffer area)					Very Unlikely	Very Unlikely
Phoebetria fusca	Sooty Albatross	VU	EN	May (buffer area)					Very Unlikely	Very Unlikely
Plegadis falcinellus	Glossy ibis	MI	MI		X	35	2	2013	May	Unlikely
Pluvialis squatarola	Grey plover	MI	MI		X	1	8	1978	Very Unlikely	Very Unlikely
Procellaria aequinoctialis	White-chinned petrel	MI	VU		X	1	9	2000	Very Unlikely	Very Unlikely
Rostratula australis	Australian Painted Snipe	EN	EN	Likely					Very Unlikely	Very Unlikely
Sternula nereis nereis	Fairy tern	VU	VU	Known	X	1	3	1902	Unlikely	Very Unlikely
Thalassarche carteri	Indian Yellow-nosed Albatross	VU	EN	Likely (buffer area)					Very Unlikely	Very Unlikely
Thalassarche cauta	Shy Albatross	EN	VU	May (buffer area)					Very Unlikely	Very Unlikely
Thalassarche chrysostoma	Grey-headed albatross	EN & MI	VU		X	1	9	1966	Very Unlikely	Very Unlikely
Thalassarche impavida	Campbell Albatross	VU	VU	May (buffer area)					Very Unlikely	Very Unlikely
Thalassarche melanophris	Black-browed Albatross	VU	EN	Likely (buffer area)					Very Unlikely	Very Unlikely
Thalassarche steadi	White-capped Albatross	VU	VU	May (buffer area)					Very Unlikely	Very Unlikely
Thalasseus bergii	Crested tern	MI	MI		X	17	7	2016	Unlikely	Unlikely
Tringa glareola	Wood sandpiper	MI	MI		X	10	2	2002	Unlikely	Unlikely
Tringa nebularia	Common greenshank	MI	MI	Known	X	49	2	2013	Unlikely	Unlikely
Tringa stagnatilis	Marsh sandpiper	MI	MI		X	2	2	2011	Very Unlikely	Very Unlikely
Tyto novaehollandiae novaehollandiae	Masked owl (southwest)		P3		X	1	4	1978	Very Unlikely	Very Unlikely
Zanda baudinii	Baudin's cockatoo	EN	EN		X	8	2	2012	Unlikely	Unlikely
Zanda latirostris	Carnaby's cockatoo	EN	EN	Known	X	1015	1	2023	Likely	Known

Scientific Name	Common name	Conservation status		Database		DBCA records			Likelihood	
		EPBC	WA	PMST likelihood	DBCA	# Records	Proximity (km)	Date (recent)	Desktop	Post-survey
Reptiles										
Neelaps calonotos	Black-striped snake		P3		X	27	2	2022	May	May

Table 28: Excluded species and reason for exclusion

Species	Common name	Conservation status		Reason excluded from assessment
		EPBC Act	WA	
Arctocephalus tropicalis	Subantarctic fur seal	EN	VU	Marine; not within the scope of the project
Caretta caretta	Loggerhead turtle	EN & MI	EN	Marine; not within the scope of this project
Chelonia mydas	Green turtle	VU & MI	VU	Marine; not within the scope of this project
Dermochelys coriacea	Leatherback Turtle	EN	VU	Marine; not within the scope of this project
Hylaeus globuliferus	Woolybush bee		P3	Invertebrate; not within the scope of the project
Idiosoma sigillatum	Swan Coastal Plain shield-backed trapdoor spider		P3	Invertebrate; not within the scope of the project
Leioproctus contrarius	A short-tongued bee		P3	Invertebrate; not within the scope of the project
Natator depressus	Flatback turtle	VU & MI	VU	Marine; not within the scope of this project
Neophoca cinerea	*Australian sea lion*	EN	EN	Marine; not within the scope of the project
Synemon gratiosa	Graceful sunmoth		P4	Invertebrate; not within the scope of the project

APPENDIX FIVE PMST AND DANDJOO DATABASE SEARCH RESULTS

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 09-Sep-2024

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat
Acknowledgements

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or ma relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	5
Listed Threatened Species:	66
Listed Migratory Species:	50

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	72
Commonwealth Heritage Places:	None
Listed Marine Species:	74
Whales and Other Cetaceans:	12
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	11
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	69
Key Ecological Features (Marine):	None
Biologically Important Areas:	9
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coastal Plain	Endangered	Community known to occur within area	In buffer area only
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area	In feature area
Empodisma peatlands of southwestern Australia	Endangered	Community may occur within area	In feature area
Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion	Critically Endangered	Community likely to occur within area	In buffer area only
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species [Resource Information

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area

Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only

Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Phaethon rubricauda westralis Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824]	Endangered	Species or species habitat may occur within area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
Zanda latirostris listed as Calyptorhynchus latirostris Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Breeding known to occur within area	In feature area
FISH			
Galaxiella nigrostriata Blackstriped Dwarf Galaxias, Black-stripe Minnow [88677]	Endangered	Species or species habitat may occur within area	In buffer area only
INSECT			
Hesperocolletes douglasi Douglas' Broad-headed Bee, Rottnest Bee [66734]	Critically Endangered	Species or species habitat may occur within area	In feature area
MAMMAL			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat known to occur within area	In buffer area only
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
PLANT			
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat likely to occur within area	In feature area
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw [3435]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Banksia mimica Summer Honeypot [82765]	Endangered	Species or species habitat may occur within area	In feature area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat likely to occur within area	In feature area
Caleana dixonii listed as Paracaleana dixonii Sandplain Duck Orchid [87944]	Endangered	Species or species habitat may occur within area	In buffer area only
Darwinia foetida Muchea Bell [83190]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat likely to occur within area	In feature area
Drakaea elastica Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area	In feature area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat may occur within area	In feature area
Eucalyptus argutifolia Yanchep Mallee, Wabling Hill Mallee [24263]	Vulnerable	Species or species habitat known to occur within area	In feature area
Grevillea christineae Christine's Grevillea [64520]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Grevillea curviloba subsp. curviloba Curved-leaf Grevillea [64908]	Endangered	Species or species habitat known to occur within area	In buffer area only
Grevillea curviloba subsp. incurva Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Macarthuria keigheryi Keighery's Macarthuria [64930]	Endangered	Species or species habitat may occur within area	In feature area
Marianthus paralius [83925]	Endangered	Species or species habitat known to occur within area	In buffer area only
Synaphea sp. Fairbridge Farm (D.Papenfus 696) Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
Thelymitra dedmaniarum Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat may occur within area	In buffer area only
Trithuria occidentalis Swan Hydatella [42224]	Endangered	Species or species habitat likely to occur within area	In buffer area only
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only

Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
SHARK			
Carcharias taurus (west coast population) Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only

Listed Migratory Species		[Resource Information	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In buffer area only
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area

Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Hydroprogne caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Onychoprion anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Marine Species			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only

Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only

Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area	In feature area
Calidris subminuta Long-toed Stint [861]		Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Tringa glareola Wood Sandpiper [829]		Species or species habitat known to occur within area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due t the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Unknown		
Commonwealth Land - [50705]	WA	In buffer area only
Commonwealth Land - [50696]	WA	In buffer area only
Commonwealth Land - [50694]	WA	In buffer area only
Commonwealth Land - [50561]	WA	In buffer area only
Commonwealth Land - [50560]	WA	In buffer area only
Commonwealth Land - [50563]	WA	In buffer area only
Commonwealth Land - [50692]	WA	In buffer area only
Commonwealth Land - [50562]	WA	In buffer area only
Commonwealth Land - [50691]	WA	In buffer area only
Commonwealth Land - [50682]	WA	In buffer area only

Commonwealth Land - [50553]	WA	In buffer area only
Commonwealth Land - [51491]	WA	In buffer area only
Commonwealth Land - [50508]	WA	In buffer area only
Commonwealth Land - [51120]	WA	In buffer area only
Commonwealth Land - [50675]	WA	In buffer area only
Commonwealth Land - [50704]	WA	In buffer area only
Commonwealth Land - [50502]	WA	In buffer area only
Commonwealth Land - [50699]	WA	In buffer area only
Commonwealth Land - [50714]	WA	In buffer area only
Commonwealth Land - [50720]	WA	In buffer area only
Commonwealth Land - [50674]	WA	In buffer area only
Commonwealth Land - [50698]	WA	In buffer area only
Commonwealth Land - [50584]	WA	In buffer area only
Commonwealth Land - [50583]	WA	In buffer area only
Commonwealth Land - [50582]	WA	In buffer area only
Commonwealth Land - [50489]	WA	In buffer area only
Commonwealth Land - [50271]	WA	In buffer area only
Commonwealth Land - [51129]	WA	In buffer area only
Commonwealth Land - [50701]	WA	In buffer area only
Commonwealth Land - [50588]	WA	In buffer area only
Commonwealth Land - [50697]	WA	In buffer area only
Commonwealth Land - [50630]	WA	In buffer area only
Commonwealth Land - [50715]	WA	In buffer area only
Commonwealth Land - [50719]	WA	In buffer area only
Commonwealth Land - [51154]	WA	In buffer area only
Commonwealth Land - [50585]	WA	In buffer area only
Commonwealth Land - [50586]	WA	In buffer area only

Commonwealth Land - [50587]	WA	In buffer area only
Commonwealth Land - [50713]	WA	In buffer area only
Commonwealth Land - [50717]	WA	In buffer area only
Commonwealth Land - [50706]	WA	In buffer area only
Commonwealth Land - [50680]	WA	In buffer area only
Commonwealth Land - [50747]	WA	In buffer area only
Commonwealth Land - [51111]	WA	In buffer area only
Commonwealth Land - [50312]	WA	In buffer area only
Commonwealth Land - [51891]	WA	In buffer area only
Commonwealth Land - [50606]	WA	In buffer area only
Commonwealth Land - [51130]	WA	In buffer area only
Commonwealth Land - [51978]	WA	In buffer area only
Commonwealth Land - [51132]	WA	In buffer area only
Commonwealth Land - [51118]	WA	In buffer area only
Commonwealth Land - [50805]	WA	In buffer area only
Commonwealth Land - [50593]	WA	In buffer area only
Commonwealth Land - [50801]	WA	In buffer area only
Commonwealth Land - [50494]	WA	In buffer area only
Commonwealth Land - [50594]	WA	In buffer area only
Commonwealth Land - [50702]	WA	In buffer area only
Commonwealth Land - [50703]	WA	In buffer area only
Commonwealth Land - [50689]	WA	In buffer area only
Commonwealth Land - [50700]	WA	In buffer area only
Commonwealth Land - [50592]	WA	In buffer area only
Commonwealth Land - [50598]	WA	In buffer area only
Commonwealth Land - [50668]	WA	In buffer area only
Commonwealth Land - [50711]	WA	In buffer area only

Commonwealth Land - [50716]	WA	In buffer area only
Commonwealth Land - [50559]	WA	In buffer area only
Commonwealth Land - [50574]	WA	In buffer area only
Commonwealth Land - [50575]	WA	In buffer area only
Commonwealth Land - [50576]	WA	In buffer area only
Commonwealth Land - [50625]	WA	In buffer area only
Commonwealth Land - [50667]	WA	In buffer area only
Commonwealth Land - [50626]	WA	In buffer area only

Listed Marine Species			[Resource Information
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In buffer area only
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area overfly marine area	In feature area
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area overfly marine area	In feature area
Calidris subminuta Long-toed Stint [861]		Species or species habitat known to occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius ruficapillus Red-capped Plover [881]		Species or species habitat known to occur within area overfly marine area	In feature area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only

Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Species or species habitat known to occur within area overfly marine area	In feature area
Hydroprogne caspia as Sterna caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Larus pacificus Pacific Gull [811]		Foraging, feeding or related behaviour may occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area

Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Onychoprion anaethetus as Sterna anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Puffinus assimilis Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Recurvirostra novaehollandiae Red-necked Avocet [871]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Sterna dougallii Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Sternula albifrons as Sterna albifrons Little Tern [82849]		Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat may occur within area overfly marine area	In feature area
Tringa glareola Wood Sandpiper [829]		Species or species habitat known to occur within area overfly marine area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Fish			
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only

Campichthys galei Gale's Pipefish [66191]	Species or species habitat may occur within area	In buffer area only
Choeroichthys suillus Pig-snouted Pipefish [66198]	Species or species habitat may occur within area	In buffer area only
Halicampus brocki Brock's Pipefish [66219]	Species or species habitat may occur within area	In buffer area only
Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse [66234]	Species or species habitat may occur within area	In buffer area only
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]	Species or species habitat may occur within area	In buffer area only
Hippocampus subelongatus West Australian Seahorse [66722]	Species or species habitat may occur within area	In buffer area only
Lissocampus fatiloquus Prophet's Pipefish [66250]	Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]	Species or species habitat may occur within area	In buffer area only
Mitotichthys meraculus Western Crested Pipefish [66259]	Species or species habitat may occur within area	In buffer area only
Nannocampus subosseus Bonyhead Pipefish, Bony-headed Pipefish [66264]	Species or species habitat may occur within area	In buffer area only
Phycodurus eques Leafy Seadragon [66267]	Species or species habitat may occur within area	In buffer area only

Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Syngnathoides biaculeatus Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Reptile			
Aipysurus pooleorum Shark Bay Sea Snake [66061]		Species or species habitat may occur within area	In buffer area only

Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Hydrophis kingii as Disteira kingii Spectacled Sea Snake [93511]		Species or species habitat may occur within area	In buffer area only
Hydrophis platura as Pelamis platurus Yellow-bellied Sea Snake [93746]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Whales and Other Cetaceans		[Resource Information	
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In buffer area only
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only

Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves			[Resource Information
Protected Area Name	Reserve Type	State	Buffer Status
Errina Road	Nature Reserve	WA	In buffer area only
Jandabup	Nature Reserve	WA	In feature area
Lake Joondalup	Nature Reserve	WA	In buffer area only
Marmion	Marine Park	WA	In buffer area only
Neerabup	National Park	WA	In buffer area only
Unnamed WA21176	5(1)(h) Reserve	WA	In buffer area only

Unnamed WA43290	Conservation Park	WA	In buffer area only
Unnamed WA46756	Conservation Park	WA	In buffer area only
Unnamed WA46926	5(1)(h) Reserve	WA	In buffer area only
Unnamed WA50514	5(1)(h) Reserve	WA	In buffer area only
Woodvale	5(1)(h) Reserve	WA	In buffer area only

Nationally Important Wetlands		[Resource Information
Wetland Name	State	Buffer Status
Joondalup Lake	WA	In buffer area only

EPBC Act Referrals				[Resource Information
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Alkimos Seawater Desalination	2019/8453		Completed	In feature area
Land clearing for timber storage	2022/09367		Completed	In buffer area only
Land Development, James Street and Well Street, East Wanneroo, Elberton Property	2021/9106		Assessment	In buffer area only
Mariginiup Residential Development	2023/09675		Assessment	In buffer area only
Northern Terminal to Neerabup Terminal 330kV Transmission Line	2024/09799		Assessment	In buffer area only
Residential Subdivision development	2011/6040		Post-Approval	In buffer area only
Wattle Avenue East Quarry	2022/09326		Referral Decision	In buffer area only
Controlled action				
Catalina Residential Development	2010/5785	Controlled Action	Post-Approval	In buffer area only
East Landsdale Residential Development	2008/4676	Controlled Action	Post-Approval	In buffer area only
East Wanneroo Cell 9 residential subdivision - Lots 50,51,52,154 & 404	2010/5772	Controlled Action	Completed	In buffer area only
Erindale Road Development, Hamersley, WA	2018/8324	Controlled Action	Further Information Request	In buffer area only

Controlled action				
Excavate sand and limestone resources	2010/5621	Controlled Action	Completed	In buffer area only
Lot 1665 Wanneroo Road, Sinagra.	2017/7921	Controlled Action	Post-Approval	In buffer area only
Lot 9000 Wanneroo Road Sinagra Mixed Use Development, Western Australia	2020/8798	Controlled Action	Proposed Decision	In buffer area only
Meridian Business Park Industrial Development	2007/3479	Controlled Action	Post-Approval	In buffer area only
Mitchell Freeway Extension between Burns Beach Rd and Hester Av, Neerabup, WA	2013/7091	Controlled Action	Post-Approval	In buffer area only
Mitchell Freeway Principal Shared Path Gaps Project Ocean Reef Road to Hepburn Avenue	2020/8833	Controlled Action	Post-Approval	In buffer area only
National Lifestyle Villages Development	2011/6020	Controlled Action	Post-Approval	In buffer area only
Nava-1 Cable System	2001/510	Controlled Action	Completed	In buffer area only
Neerabup Industrial Area, WA	2021/8917	Controlled Action	Assessment Approach	In buffer area only
Neerabup Industrial Estate, Lot 701 Flynn Drive Neerabup WA	2012/6424	Controlled Action	Post-Approval	In buffer area only
Ocean Reef Marina Development	2009/4937	Controlled Action	Completed	In buffer area only
Perth-Darwin National Highway alignment (Swan Valley Section), WA	2013/7042	Controlled Action	Post-Approval	In buffer area only
Shark Hazard Mitigation Drum Line Program, WA	2014/7174	Controlled Action	Completed	In buffer area only
Shenton Park Subdivision	2004/1479	Controlled Action	Completed	In buffer area only
Subdivision of Lot 902 Flynn Drive Neerabup for Industrial Development	2021/8977	Controlled Action	Assessment Approach	In buffer area only
Not controlled action				
Commercial development of Lot 9004 Hodges Drive, Joondalup, WA	2016/7844	Not Controlled Action	Completed	In buffer area only
Connect Joondalup - Lot 9000 McLarty Ave and Lot 999 Piccadilly Circus, Joondalup, WA	2016/7758	Not Controlled Action	Completed	In buffer area only

Not controlled action				
Development Application 20 Kenhelm St Balcatta WA	2021/9037	Not Controlled Action	Completed	In buffer area only
Development of 39 (Lot 3000) Hardcastle Avenue, Landsdale, WA	2017/8100	Not Controlled Action	Completed	In buffer area only
Development of ECU Engineering Annex, Joondalup Campus, WA	2017/7995	Not Controlled Action	Completed	In buffer area only
Eradication of the European House Borer, Perth metropolitan area, WA	2009/5027	Not Controlled Action	Completed	In feature area
Flynn Drive / Pinjar Road Intersection Works, Lot 9000 Flynn Drive, Neerabup, WA	2017/7983	Not Controlled Action	Completed	In buffer area only
Gnangara Road upgrade project, city of Swan, WA	2013/6966	Not Controlled Action	Completed	In buffer area only
Groundwater Replenishment Scheme (GWRS) Stage 2	2016/7786	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO West Submarine Telecommunications Cable, WA	2017/8126	Not Controlled Action	Completed	In buffer area only
Landsdale Primary School Development, WA	2015/7597	Not Controlled Action	Completed	In buffer area only
Landsdale Residential Subdivision Development	2011/6027	Not Controlled Action	Completed	In buffer area only
Lot 158 Landsdale Rd, Landsdale, WA	2012/6403	Not Controlled Action	Completed	In buffer area only
Lot 594 Wanneroo Road development, Hocking	2020/8621	Not Controlled Action	Completed	In buffer area only
Lots 71 & 72 Queensway Rd, East Landsdale	2012/6541	Not Controlled Action	Completed	In buffer area only
Ocean Reef Marina Development, City of Joondalup, WA	2014/7237	Not Controlled Action	Completed	In buffer area only
Pearsall Primary School, Lots 62, 269, 1008, 1009 & Part Lot 23, Pearsall, WA	2012/6405	Not Controlled Action	Completed	In buffer area only
Pinjar Motorcycle Park Raceway Development	2012/6419	Not Controlled Action	Completed	In buffer area only
Realignment of Flynn Drive	2011/6170	Not Controlled Action	Completed	In buffer area only

Not controlled action				
Reid Highway duplication project(Erindale Rd - Duffy Rd)WA	2013/7073	Not Controlled Action	Completed	In buffer area only
Residential and commercial development, Lot 1981 Alexander Drive & Lot 152 Gnangara Road, Landsdale,	2013/6982	Not Controlled Action	Completed	In buffer area only
Residential Development, 50 Lot 2 Driver Road, Darch, Western Australia	2020/8677	Not Controlled Action	Completed	In buffer area only
Residential development, Landsdale, WA	2013/6964	Not Controlled Action	Completed	In buffer area only
Residential development, Lot 14143 (16) Harford Way, Girrawheen, WA	2016/7819	Not Controlled Action	Completed	In buffer area only
Residential Development, Lot 4 Coogee Road, Mariginiup, WA	2019/8452	Not Controlled Action	Completed	In buffer area only
Residential development, Lot 55 Alexander Drive, Landsdale, WA	2013/6971	Not Controlled Action	Completed	In buffer area only
Residential Development, Lots 10 Dundebar Road and 28 and 29 Belgrade Road, East Wanneroo, WA	2019/8521	Not Controlled Action	Completed	In buffer area only
Residential development of 118 Coogee Road, Mariginiup, WA	2017/8011	Not Controlled Action	Completed	In buffer area only
Residential Subdivision	2012/6410	Not Controlled Action	Completed	In buffer area only
Residential subdivision - lot 169 Kingsway Road, Landsdale WA	2012/6412	Not Controlled Action	Completed	In buffer area only
Residential Subdivision - Lots 12, 36 & 38 Capron St, Wanneroo	2012/6409	Not Controlled Action	Completed	In buffer area only
Residential subdivision - Lots 156 and 157 Landsdale Road Landsdale WA	2012/6407	Not Controlled Action	Completed	In buffer area only
Seismic Survey, Bremer Basin, Mentelle Basin and Zeewyck Sub-basin	2004/1700	Not Controlled Action	Completed	In buffer area only
Telstra PITC O3B Clearing Application	2011/6147	Not Controlled Action	Completed	In buffer area only
Wangara Industrial Extension Area, WA	2012/6501	Not Controlled Action	Completed	In buffer area only
Wanneroo Road/Ocean Reef Road Grade Separation, Pearsall, WA	2017/8110	Not Controlled Action	Completed	In buffer area only

Not controlled action				
Wanneroo Road Duplication, WA	2015/7632	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
Ocean Reef Road Extension Works in Wangara	2010/5388	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Road realignment and widening	2009/4926	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
South West Metropolitan Railway Project	2003/1175	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Subdivision Lot 4 Flynn Drive and earthworks for industrial development, 240 Fl	2009/5028	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				
Boundary Road Sand Quarry	2019/8560	Referral Decision	Completed	In buffer area only

Biologically Important Areas			[Resource Information
Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Ardenna pacifica Wedge-tailed Shearwater [84292]	Foraging (in high numbers)	Known to occur	In buffer area only
Hydroprogne caspia Caspian Tern [808]	Foraging (provisioning young)	Known to occur	In buffer area only
Larus pacificus Pacific Gull [811]	Foraging (in high numbers)	Former Range	In buffer area only
Onychoprion anaethetus Bridled Tern [82845]	Foraging (in high numbers)	Known to occur	In buffer area only
Puffinus assimilis tunneyi Little Shearwater [59363]	Foraging (in high numbers)	Known to occur	In buffer area only

Sterna dougallii			
Roseate Tern [817]	Foraging	Known to occur	In buffer area only
Sternula nereis			
Fairy Tern [82949]	Foraging (in high numbers)	Known to occur	In buffer area only
Seals			
Neophoca cinerea			
Australian Sea Lion [22]	Foraging (male)	Likely to occur	In buffer area only
Whales			
Megaptera novaeangliae			
Humpback Whale [38]	Migration (north and south)	Known to occur	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referra of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine tl existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the repor or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known an if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together wi point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets t rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact us page.

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VERNMENT OF
TERN AUSTRALIA

Dandjoo Species List Export

Created by Guest User on 31 Jan 2025

Source	Dandjoo – Department of Biodiversity, Conservation and Attractions
Method	User defined circle: [[115.83195, -31.76521]] 9.0 km.
Date time	2025-01-31T16:13:48.818107+08:00

onservation status summary	Count
R	5
N	3
one	733
1	11
2	9
3	20
4	12
arent of conservation listed taxa	1
U	1
otal	**795**

ingdoms	Count
lantae	795
otal unique species	**795**

	Class	Family	Name	Establishment	Conservatio
lantae					
	Bryopsida	Bryaceae Schwagr.	Bryum lanatum (P.Beauv.) Brid.	native	
	Bryopsida	Bryaceae Schwagr.	Gemmabryum pachytheca (MÃ¼ll.Hal.) J.R.Spence & H.P.Ramsay	native	
	Bryopsida	Bryaceae Schwagr.	Gemmabryum preissianum (Hampe) J.R.Spence & H.P.Ramsay	native	
	Bryopsida	Bryaceae Schwagr.	Rosulabryum billarderii (SchwÃ¤gr.) J.R.Spence	native	
	Bryopsida	Dicranaceae Schimp.	Campylopus introflexus (Hedw.) Brid.	alien	
	Bryopsida	Ditrichaceae Limpr.	Ceratodon purpureus (Hedw.) Brid.	native	
	Bryopsida	Ditrichaceae Limpr.	Eccremidium pulchellum (Hook.f. & Wilson) MÃ¼ll.Hal.	native	
	Bryopsida	Fabroniaceae Schimp.	Fabronia hampeana Sond.	native	P2
	Bryopsida	Fissidentaceae	Fissidens tenellus Hook.f. & Wilson	native	
0	Bryopsida	Orthotrichaceae Arn.	Zygodon menziesii (Schwagr.) Arn.	native	
1	Bryopsida	Pottiaceae Schimp.	Barbula calycina SchwÃ¤gr.	native	
2	Bryopsida	Pottiaceae Schimp.	Syntrichia antarctica (Hampe) R.H.Zander	native	
3	Bryopsida	Pottiaceae Schimp.	Syntrichia laevipila Brid.	native	
4	Bryopsida	Pottiaceae Schimp.	Trichostomum eckelianum R.H.Zander	native	
5	Bryopsida	Racopilaceae	Racopilum cuspidigerum var. convolutaceum (MÃ¼ll.Hal.) Zanten & Ã…ngstr.	native	
6	Charophyceae	Characeae Gray	Chara L.		
7	Charophyceae	Characeae Gray	Chara corallina Willdenow		
8	Charophyceae	Characeae Gray	Chara fibrosa Bruzelius		
9	Charophyceae	Characeae Gray	Chara globularis Thuill.		

1	Charophyceae	Characeae Gray	Nitella tasmanica A.Braun	native	
2	Cycadopsida	Zamiaceae Horan.	Macrozamia Miq.		
3	Cycadopsida	Zamiaceae Horan.	Macrozamia riedlei (Gaudich.) C.A.Gardner	native	
4	Florideophyceae	Rhodomelaceae Horan.	Vertebrata australis (C.Agardh) Kuntze	native	
5	Liliopsida	Anarthriaceae D.F.Cutler & Airy Shaw	Lyginia barbata R.Br.	native	
6	Liliopsida	Anarthriaceae D.F.Cutler & Airy Shaw	Lyginia imberbis R.Br.	native	
7	Liliopsida	Araceae Juss.	Lemna L.		
8	Liliopsida	Araceae Juss.	Zantedeschia aethiopica (L.) Spreng. *(Arum Lily)*	alien	
9	Liliopsida	Arecaceae Bercht. & J.Presl	Washingtonia filifera H.Wendl.	alien	
0	Liliopsida	Asparagaceae Juss.	Acanthocarpus preissii Lehm.	native	
1	Liliopsida	Asparagaceae Juss.	Arthropodium R.Br.		
2	Liliopsida	Asparagaceae Juss.	Lachenalia reflexa Thunb.	alien	
3	Liliopsida	Asparagaceae Juss.	Laxmannia minor R.Br.	native	
4	Liliopsida	Asparagaceae Juss.	Laxmannia ramosa Lindl. *(Branching Lily)*	native	
5	Liliopsida	Asparagaceae Juss.	Laxmannia ramosa Lindl. subsp. ramosa *(Branching Lily)*	native	
6	Liliopsida	Asparagaceae Juss.	Laxmannia sessiliflora subsp. australis Keighery	native	
7	Liliopsida	Asparagaceae Juss.	Laxmannia squarrosa Lindl. *(Paper Lily)*	native	
8	Liliopsida	Asparagaceae Juss.	Lomandra Labill.		
9	Liliopsida	Asparagaceae Juss.	Lomandra caespitosa (Benth.) Ewart	native	
0	Liliopsida	Asparagaceae Juss.	Lomandra hermaphrodita (C.R.P.Andrews) C.A.Gardner	native	
1	Liliopsida	Asparagaceae Juss.	Lomandra maritima T.S.Choo	native	
2	Liliopsida	Asparagaceae Juss.	Lomandra micrantha (Endl.) Ewart	native	
3	Liliopsida	Asparagaceae Juss.	Lomandra nigricans T.Macfarlane	native	
4	Liliopsida	Asparagaceae Juss.	Lomandra odora (Endl.) Ewart *(Tiered Matrush)*	native	
5	Liliopsida	Asparagaceae Juss.	Lomandra preissii (Endl.) Ewart *(Preiss' Mat Rush)*	native	
6	Liliopsida	Asparagaceae Juss.	Lomandra suaveolens (Endl.) Ewart	native	
7	Liliopsida	Asparagaceae Juss.	Sowerbaea laxiflora Lindl. *(Purple Tassels)*	native	
8	Liliopsida	Asparagaceae Juss.	Thysanotus R.Br.		
9	Liliopsida	Asparagaceae Juss.	Thysanotus arbuscula Baker	native	
0	Liliopsida	Asparagaceae Juss.	Thysanotus arenarius Brittan *(Sand-dune Fringed Lily)*	native	
1	Liliopsida	Asparagaceae Juss.	Thysanotus patersonii R.Br.	native	
2	Liliopsida	Asparagaceae Juss.	Thysanotus sparteus R.Br. *(Leafless Fringed Lily)*	native	
3	Liliopsida	Asparagaceae Juss.	Thysanotus thyrsoideus Baker	native	
4	Liliopsida	Asparagaceae Juss.	Thysanotus triandrus (Labill.) R.Br.	native	
5	Liliopsida	Centrolepidaceae Endl.	Aphelia sp. Albany (B.G. Briggs 596)	native	
6	Liliopsida	Centrolepidaceae Endl.	Centrolepis drummondiana (Nees) Walp. *(Drummond's Centrolepis)*	native	
7	Liliopsida	Colchicaceae DC.	Burchardia congesta Lindl. *(Milkmaids)*	native	
8	Liliopsida	Colchicaceae DC.	Burchardia multiflora Lindl. *(Dwarf Burchardia)*	native	
9	Liliopsida	Colchicaceae DC.	Wurmbea pygmaea (Endl.) Benth.	native	
0	Liliopsida	Commelinaceae Mirb.	Cartonema philydroides F.Muell.	native	
1	Liliopsida	Cyperaceae Juss.	Ammothryon grandiflorum (Lehm.) R.L.Barrett, K.L.Wilson & J.J.Bruhl	native	
2	Liliopsida	Cyperaceae Juss.	Bolboschoenus fluviatilis (Torr.) Sojak	native	P1
3	Liliopsida	Cyperaceae Juss.	Carex fascicularis Boott *(Tassel Sedge)*	native	
4	Liliopsida	Cyperaceae Juss.	Carex tereticaulis F.Muell.	native	P3
5	Liliopsida	Cyperaceae Juss.	Carex thecata Boott	native	
6	Liliopsida	Cyperaceae Juss.	Chaetospora curvifolia R.Br.	native	
7	Liliopsida	Cyperaceae Juss.	Cyathochaeta clandestina (R.Br.) Benth.	native	
8	Liliopsida	Cyperaceae Juss.	Cyathochaeta teretifolia W.Fitzg.	native	P3
9	Liliopsida	Cyperaceae Juss.	Cyperus involucratus Poir.	alien	

2	Liliopsida	Cyperaceae Juss.	Ficinia marginata (Thunb.) Fourc.		
3	Liliopsida	Cyperaceae Juss.	Ficinia nodosa (Rottb.) Goetgh., Muasya & D.A.Simpson *(Knotted Club Rush)*	native	
4	Liliopsida	Cyperaceae Juss.	Isolepis cernua (Vahl) Roem. & Schult. *(Nodding Club-rush)*	native	
5	Liliopsida	Cyperaceae Juss.	Isolepis cernua var. setiformis (Benth.) Muasya *(Nodding Club Rush)*	native	
6	Liliopsida	Cyperaceae Juss.	Isolepis oldfieldiana (S.T.Blake) K.L.Wilson	native	
7	Liliopsida	Cyperaceae Juss.	Isolepis producta (C.B.Clarke) K.L.Wilson	native	
8	Liliopsida	Cyperaceae Juss.	Lepidosperma Labill.		
9	Liliopsida	Cyperaceae Juss.	Lepidosperma angustatum R.Br.	native	
0	Liliopsida	Cyperaceae Juss.	Lepidosperma apricola R.L.Barrett	native	
1	Liliopsida	Cyperaceae Juss.	Lepidosperma calcicola R.L.Barrett & K.L.Wilson	native	
2	Liliopsida	Cyperaceae Juss.	Lepidosperma longitudinale Labill. *(Pithy Sword-sedge)*	native	
3	Liliopsida	Cyperaceae Juss.	Lepidosperma persecans S.T.Blake	native	
4	Liliopsida	Cyperaceae Juss.	Lepidosperma pubisquameum Steud.	native	
5	Liliopsida	Cyperaceae Juss.	Lepidosperma scabrum Nees *(Scabrid Sword-sedge)*	native	
6	Liliopsida	Cyperaceae Juss.	Lepidosperma squamatum Labill.	native	
7	Liliopsida	Cyperaceae Juss.	Lepidosperma striatum R.Br.	native	
8	Liliopsida	Cyperaceae Juss.	Machaerina articulata (R.Br.) T.Koyama *(Jointed Rush)*	native	
9	Liliopsida	Cyperaceae Juss.	Machaerina laxa (Nees) T.Koyama	native	
0	Liliopsida	Cyperaceae Juss.	Machaerina preissii (Nees) L.A.S.Johnson & T.Koyama	native	
1	Liliopsida	Cyperaceae Juss.	Mesomelaena graciliceps (C.B.Clarke) K.L.Wilson	native	
2	Liliopsida	Cyperaceae Juss.	Mesomelaena pseudostygia (KÃ¼k.) K.L.Wilson *(Semaphore Sedge)*	native	
3	Liliopsida	Cyperaceae Juss.	Morelotia octandra (Nees) R.L.Barrett & J.J.Bruhl	native	
4	Liliopsida	Cyperaceae Juss.	Netrostylis sp. Chandala (G.J. Keighery 17055)	native	P2
5	Liliopsida	Cyperaceae Juss.	Schoenoplectus tabernaemontani (C.C.Gmel.) Palla *(Lake Club-rush)*	native	
6	Liliopsida	Cyperaceae Juss.	Schoenus brevisetis (R.Br.) Poir.	native	
7	Liliopsida	Cyperaceae Juss.	Schoenus pedicellatus (R.Br.) Benth.	native	
8	Liliopsida	Cyperaceae Juss.	Schoenus plumosus Rye	native	
9	Liliopsida	Cyperaceae Juss.	Schoenus subbarbatus KÃ¼k. *(Bearded Bog-rush)*	native	
00	Liliopsida	Cyperaceae Juss.	Schoenus subfascicularis KÃ¼k.	native	
01	Liliopsida	Dasypogonaceae Dumort.	Calectasia cyanea R.Br. *(Blue Tinsel Lily)*	native	CR
02	Liliopsida	Dasypogonaceae Dumort.	Calectasia elegans R.L.Barrett *(Elegant Tinsel Lily)*	native	CR
03	Liliopsida	Dasypogonaceae Dumort.	Calectasia narragara R.L.Barrett & K.W.Dixon	native	
04	Liliopsida	Dasypogonaceae Dumort.	Dasypogon bromeliifolius R.Br. *(Pineapple Bush)*	native	
05	Liliopsida	Haemodoraceae R.Br.	Anigozanthos humilis Lindl. *(Catspaw)*	native	
06	Liliopsida	Haemodoraceae R.Br.	Anigozanthos humilis Lindl. subsp. humilis	native	
07	Liliopsida	Haemodoraceae R.Br.	Anigozanthos humilis subsp. chrysanthus Hopper *(Golden Catspaw)*	native	P4
08	Liliopsida	Haemodoraceae R.Br.	Anigozanthos manglesii D.Don	native	
09	Liliopsida	Haemodoraceae R.Br.	Anigozanthos manglesii D.Don subsp. manglesii *(Mangles' Kangaroo Paw)*	native	
10	Liliopsida	Haemodoraceae R.Br.	Conostylis R.Br.		
11	Liliopsida	Haemodoraceae R.Br.	Conostylis aculeata R.Br.	native	
12	Liliopsida	Haemodoraceae R.Br.	Conostylis aculeata subsp. bromelioides (Endl.) J.W.Green	native	
13	Liliopsida	Haemodoraceae R.Br.	Conostylis aculeata subsp. cygnorum Hopper	native	
14	Liliopsida	Haemodoraceae R.Br.	Conostylis aculeata subsp. preissii (Endl.) J.W.Green	native	
15	Liliopsida	Haemodoraceae R.Br.	Conostylis aurea Lindl. *(Golden Conostylis)*	native	
16	Liliopsida	Haemodoraceae R.Br.	Conostylis bracteata Lindl.	native	P3
17	Liliopsida	Haemodoraceae R.Br.	Conostylis candicans Endl. *(Grey Cottonhead)*	native	

19	Liliopsida	Haemodoraceae R.Br.	Conostylis juncea Endl.	native	
20	Liliopsida	Haemodoraceae R.Br.	Conostylis pauciflora Hopper *(Dawesville Conostylis)*	native	Parent of conservation listed taxa
21	Liliopsida	Haemodoraceae R.Br.	Conostylis setigera R.Br. *(Bristly Cottonhead)*	native	
22	Liliopsida	Haemodoraceae R.Br.	Conostylis setigera R.Br. subsp. setigera *(Bristly Cottonhead)*	native	
23	Liliopsida	Haemodoraceae R.Br.	Conostylis teretifolia J.W.Green subsp. teretifolia	native	
24	Liliopsida	Haemodoraceae R.Br.	Haemodorum laxum R.Br. *(Bloodroot)*	native	
25	Liliopsida	Haemodoraceae R.Br.	Haemodorum paniculatum Lindl. *(Mardja)*	native	
26	Liliopsida	Haemodoraceae R.Br.	Haemodorum spicatum R.Br. *(Bohn)*	native	
27	Liliopsida	Haemodoraceae R.Br.	Phlebocarya ciliata R.Br.	native	
28	Liliopsida	Haemodoraceae R.Br.	Phlebocarya pilosissima (F.Muell.) Benth. subsp. pilosissima	native	P3
29	Liliopsida	Haemodoraceae R.Br.	Tribonanthes australis Endl. *(Southern Tiurndin)*	native	
30	Liliopsida	Hemerocallidaceae R.Br.	Arnocrinum preissii Endl.	native	
31	Liliopsida	Hemerocallidaceae R.Br.	Caesia micrantha Lindl.	native	
32	Liliopsida	Hemerocallidaceae R.Br.	Caesia occidentalis R.Br.	native	
33	Liliopsida	Hemerocallidaceae R.Br.	Chamaescilla corymbosa (R.Br.) Benth. *(Blue Squill)*	native	
34	Liliopsida	Hemerocallidaceae R.Br.	Corynotheca micrantha (Lindl.) Druce *(Hexagon Zigzag Lily)*	native	
35	Liliopsida	Hemerocallidaceae R.Br.	Dianella revoluta R.Br. *(Blueberry Lily)*	native	
36	Liliopsida	Hemerocallidaceae R.Br.	Dianella revoluta var. divaricata (R.Br.) R.J.F.Hend. *(Flax Lily)*	native	
37	Liliopsida	Hemerocallidaceae R.Br.	Hensmania turbinata (Endl.) W.Fitzg.	native	
38	Liliopsida	Hemerocallidaceae R.Br.	Johnsonia acaulis Endl.	native	
39	Liliopsida	Hemerocallidaceae R.Br.	Tricoryne elatior R.Br. *(Yellow Autumn Lily)*	native	
40	Liliopsida	Hemerocallidaceae R.Br.	Tricoryne tenella R.Br.	native	
41	Liliopsida	Hydrocharitaceae Juss.	Hydrocharis laevigata (Willd.) Byng & Christenh.	alien	
42	Liliopsida	Hydrocharitaceae Juss.	Najas marina L. *(Prickly Water Nymph)*	native	
43	Liliopsida	Iridaceae Juss.	Babiana angustifolia Sweet	alien	
44	Liliopsida	Iridaceae Juss.	Chasmanthe floribunda (Salisb.) N.E.Br. *(African Cornflag)*	alien	
45	Liliopsida	Iridaceae Juss.	Freesia leichtlinii subsp. alba x leichtlinii subsp. leichtlinii		
46	Liliopsida	Iridaceae Juss.	Gladiolus L.		
47	Liliopsida	Iridaceae Juss.	Gladiolus caryophyllaceus (Burm.f.) Poir. *(Wild Gladiolus)*	alien	
48	Liliopsida	Iridaceae Juss.	Hesperantha falcata (L.f.) Ker Gawl.	alien	
49	Liliopsida	Iridaceae Juss.	Moraea flaccida (Sweet) Steud. *(One-leaf Cape Tulip)*	alien	
50	Liliopsida	Iridaceae Juss.	Orthrosanthus laxus (Endl.) Benth.	native	
51	Liliopsida	Iridaceae Juss.	Orthrosanthus laxus (Endl.) Benth. var. laxus *(Morning Iris)*	native	
52	Liliopsida	Iridaceae Juss.	Patersonia juncea Lindl. *(Rush Leaved Patersonia)*	native	
53	Liliopsida	Iridaceae Juss.	Patersonia occidentalis R.Br. *(Purple Flag)*	native	
54	Liliopsida	Iridaceae Juss.	Patersonia occidentalis R.Br. var. occidentalis *(Purple Flag)*	native	
55	Liliopsida	Iridaceae Juss.	Romulea flava var. minor (Beg.) M.P.deVos	alien	
56	Liliopsida	Iridaceae Juss.	Romulea rosea (L.) Eckl.	alien	
57	Liliopsida	Iridaceae Juss.	Sparaxis pillansii L.Bolus *(Harlequin Flower)*	alien	
58	Liliopsida	Juncaceae Juss.	Juncus amabilis Edgar	native	
59	Liliopsida	Juncaceae Juss.	Juncus pallidus R.Br. *(Pale Rush)*	native	
60	Liliopsida	Juncaceae Juss.	Luzula DC.		
61	Liliopsida	Juncaginaceae Rich.	Triglochin L.		
62	Liliopsida	Orchidaceae Juss.	Caladenia R.Br.		

65	Liliopsida	Orchidaceae Juss.	Caladenia flava R.Br. *(Cowslip Orchid)*	native	
66	Liliopsida	Orchidaceae Juss.	Caladenia flava R.Br. subsp. flava *(Cowslip Orchid)*	native	
67	Liliopsida	Orchidaceae Juss.	Caladenia huegelii Rchb.f. *(Grand Spider Orchid)*	native	CR
68	Liliopsida	Orchidaceae Juss.	Caladenia latifolia R.Br. *(Pink Fairies, Pink Fairy Orchid)*	native	
69	Liliopsida	Orchidaceae Juss.	Caladenia longicauda Lindl. *(Common White Spider Orchid)*	native	
70	Liliopsida	Orchidaceae Juss.	Caladenia longicauda Lindl. subsp. longicauda *(White Spider Orchid)*	native	
71	Liliopsida	Orchidaceae Juss.	Caladenia longicauda subsp. calcigena Hopper & A.P.Br. *(Coastal White Spider Orchid)*	native	
72	Liliopsida	Orchidaceae Juss.	Caladenia reptans Lindl. subsp. reptans *(Little Pink Fariry)*	native	
73	Liliopsida	Orchidaceae Juss.	Cyanicula gemmata (Lindl.) Hopper & A.P.Br. *(Blue China Orchid)*	native	
74	Liliopsida	Orchidaceae Juss.	Cyanicula sericea (Lindl.) Hopper & A.P.Br.	native	
75	Liliopsida	Orchidaceae Juss.	Cyrtostylis huegelii Endl.	native	
76	Liliopsida	Orchidaceae Juss.	Disa bracteata Sw.	alien	
77	Liliopsida	Orchidaceae Juss.	Diuris corymbosa Lindl. *(Common Donkey Orchid)*	native	
78	Liliopsida	Orchidaceae Juss.	Diuris longifolia R.Br. *(Purple Pansy Orchid)*	native	
79	Liliopsida	Orchidaceae Juss.	Diuris magnifica D.L.Jones	native	
80	Liliopsida	Orchidaceae Juss.	Drakaea glyptodon Fitzg. *(King-in-his-carriage)*	native	
81	Liliopsida	Orchidaceae Juss.	Elythranthera brunonis (Endl.) A.S.George *(Purple Enamel Orchid)*	native	
82	Liliopsida	Orchidaceae Juss.	Epiblema grandiflorum R.Br. *(Babe-in-a-cradle)*	native	
83	Liliopsida	Orchidaceae Juss.	Eriochilus dilatatus Lindl. *(White Bunny Orchid)*	native	
84	Liliopsida	Orchidaceae Juss.	Eriochilus dilatatus Lindl. subsp. dilatatus *(White Bunny Orchid)*	native	
85	Liliopsida	Orchidaceae Juss.	Leporella fimbriata (Lindl.) A.S.George *(Fringed Hare Orchid, Hare Orchid)*	native	
86	Liliopsida	Orchidaceae Juss.	Leptoceras menziesii (R.Br.) Lindl. *(Rabbit Orchid)*	native	
87	Liliopsida	Orchidaceae Juss.	Microtis media R.Br. subsp. media *(Common Mignonette Orchid)*	native	
88	Liliopsida	Orchidaceae Juss.	Prasophyllum R.Br.		
89	Liliopsida	Orchidaceae Juss.	Prasophyllum fimbria Rchb.f. *(Fringed Leek Orchid)*	native	
90	Liliopsida	Orchidaceae Juss.	Prasophyllum hians Rchb.f. *(Yawning Leek Orchid)*	native	
91	Liliopsida	Orchidaceae Juss.	Prasophyllum parvifolium Lindl.	native	
92	Liliopsida	Orchidaceae Juss.	Pterostylis R.Br.		
93	Liliopsida	Orchidaceae Juss.	Pterostylis aspera D.L.Jones & M.A.Clem. *(Brown-veined Shell Orchid)*	native	
94	Liliopsida	Orchidaceae Juss.	Pterostylis brevisepala (D.L.Jones & C.J.French) D.L.Jones & C.J.French	native	
95	Liliopsida	Orchidaceae Juss.	Pterostylis crispula (D.L.Jones & C.J.French) D.L.Jones & C.J.French *(Slender Snail Orchid)*	native	
96	Liliopsida	Orchidaceae Juss.	Pterostylis dilatata A.S.George *(Robust Snail Orchid)*	native	
97	Liliopsida	Orchidaceae Juss.	Pterostylis orbiculata (D.L.Jones & C.J.French) D.L.Jones & C.J.French *(Coastal Banded Greenhood)*	native	
98	Liliopsida	Orchidaceae Juss.	Pterostylis pyramidalis Lindl. *(Tall Snail Orchid)*	native	
99	Liliopsida	Orchidaceae Juss.	Pterostylis sp. limestone (B.J. Keighery & G.J. Keighery 65)	native	
00	Liliopsida	Orchidaceae Juss.	Pterostylis vittata Lindl. *(Banded Greenhood)*	native	
01	Liliopsida	Orchidaceae Juss.	Pyrorchis nigricans (R.Br.) D.L.Jones & M.A.Clem. *(Red beaks)*	native	
02	Liliopsida	Orchidaceae Juss.	Thelymitra benthamiana Rchb.f. *(Leopard Orchid)*	native	
03	Liliopsida	Orchidaceae Juss.	Thelymitra campanulata Lindl. *(Bell Sun Orchid, Shirt Orchid)*	native	
04	Liliopsida	Orchidaceae Juss.	Thelymitra fuscolutea R.Br. *(Chestnut Sun Orchid)*	native	
05	Liliopsida	Orchidaceae Juss.	Thelymitra variegata (Lindl.) F.Muell. *(Queen of Sheba)*	native	CR
06	Liliopsida	Poaceae Barnhart	Aira caryophyllea L.	alien	
07	Liliopsida	Poaceae Barnhart	Aira praecox L.	alien	
08	Liliopsida	Poaceae Barnhart	Amphipogon strictus R.Br.	native	
09	Liliopsida	Poaceae Barnhart	Amphipogon turbinatus R.Br.	native	

11	Liliopsida	Poaceae Barnhart	Austrostipa eremophila (Reader) S.W.L.Jacobs & J.Everett	native	
12	Liliopsida	Poaceae Barnhart	Austrostipa flavescens (Labill.) S.W.L.Jacobs & J.Everett	native	
13	Liliopsida	Poaceae Barnhart	Austrostipa nitida (Summerh. & C.E.Hubb.) S.W.L.Jacobs & J.Everett	native	
14	Liliopsida	Poaceae Barnhart	Austrostipa tenuifolia (Steud.) S.W.L.Jacobs & J.Everett	mixed	
15	Liliopsida	Poaceae Barnhart	Avena fatua L.	alien	
16	Liliopsida	Poaceae Barnhart	Briza maxima L. *(Blowfly Grass)*	alien	
17	Liliopsida	Poaceae Barnhart	Briza minor L.	alien	
18	Liliopsida	Poaceae Barnhart	Bromus L.		
19	Liliopsida	Poaceae Barnhart	Bromus diandrus Roth *(Great Brome)*	alien	
20	Liliopsida	Poaceae Barnhart	Catapodium rigidum (L.) C.E.Hubb. *(Rigid Fescue)*	alien	
21	Liliopsida	Poaceae Barnhart	Cenchrus ciliaris L. *(Buffel Grass)*	alien	
22	Liliopsida	Poaceae Barnhart	Cortaderia selloana (Schult. & Schult.f.) Asch. & Graebn. subsp. selloana	alien	
23	Liliopsida	Poaceae Barnhart	Cynodon dactylon (L.) Pers. *(Couch)*	alien	
24	Liliopsida	Poaceae Barnhart	Digitaria sanguinalis (L.) Scop. *(Crab Grass)*	alien	
25	Liliopsida	Poaceae Barnhart	Ehrharta brevifolia var. cuspidata Nees	alien	
26	Liliopsida	Poaceae Barnhart	Ehrharta calycina Sm. *(Perennial Veldt Grass)*	alien	
27	Liliopsida	Poaceae Barnhart	Ehrharta longiflora Sm. *(Annual Veldt Grass)*	alien	
28	Liliopsida	Poaceae Barnhart	Eragrostis curvula (Schrad.) Nees *(African Lovegrass)*	alien	
29	Liliopsida	Poaceae Barnhart	Hemarthria uncinata R.Br. *(Matgrass)*	native	
30	Liliopsida	Poaceae Barnhart	Heteropogon contortus (L.) Roem. & Schult. *(Bunch Speargrass)*	native	
31	Liliopsida	Poaceae Barnhart	Holcus lanatus L. *(Yorkshire Fog)*	alien	
32	Liliopsida	Poaceae Barnhart	Hordeum leporinum Link *(Barley Grass)*	alien	
33	Liliopsida	Poaceae Barnhart	Hyparrhenia hirta (L.) Stapf *(Tambookie Grass)*	alien	
34	Liliopsida	Poaceae Barnhart	Lagurus ovatus L. *(Hare's Tail Grass)*	alien	
35	Liliopsida	Poaceae Barnhart	Lolium multiflorum Lam. *(Italian Ryegrass)*	alien	
36	Liliopsida	Poaceae Barnhart	Lolium x hybridum Hausskn.	alien	
37	Liliopsida	Poaceae Barnhart	Microlaena stipoides (Labill.) R.Br.	native	
38	Liliopsida	Poaceae Barnhart	Neurachne alopecuroidea R.Br. *(Foxtail Mulga Grass)*	native	
39	Liliopsida	Poaceae Barnhart	Pentameris airoides Nees *(False Hairgrass)*	alien	
40	Liliopsida	Poaceae Barnhart	Pentameris airoides Nees subsp. airoides	alien	
41	Liliopsida	Poaceae Barnhart	Pentameris pallida (Thunb.) Galley & H.P.Linder	alien	
42	Liliopsida	Poaceae Barnhart	Pentameris patula (Nees) Steud.	alien	
43	Liliopsida	Poaceae Barnhart	Phyllostachys aurea Riviere & C.Riviere	alien	
44	Liliopsida	Poaceae Barnhart	Poa annua L. *(Winter Grass)*	alien	
45	Liliopsida	Poaceae Barnhart	Polypogon monspeliensis (L.) Desf. *(Annual Beardgrass)*	alien	
46	Liliopsida	Poaceae Barnhart	Rytidosperma occidentale (Vickery) Connor & Edgar	native	
47	Liliopsida	Poaceae Barnhart	Spinifex hirsutus Labill. *(Hairy Spinifex)*	native	
48	Liliopsida	Poaceae Barnhart	Stipa L.		
49	Liliopsida	Poaceae Barnhart	Thinopyrum distichum (Thunb.) Ã.LÃ¶ve	alien	
50	Liliopsida	Poaceae Barnhart	Vulpia C.C.Gmel.		
51	Liliopsida	Poaceae Barnhart	Vulpia bromoides (L.) Gray	alien	
52	Liliopsida	Poaceae Barnhart	Vulpia fasciculata (Forssk.) Fritsch	alien	
53	Liliopsida	Poaceae Barnhart	Vulpia myuros (L.) C.C.Gmel.	alien	
54	Liliopsida	Posidoniaceae Vines	Posidonia angustifolia Cambridge & J.Kuo	native	
55	Liliopsida	Potamogetonaceae Bercht. & J. Presl	Potamogeton crispus L. *(Curly Pondweed)*	native	
56	Liliopsida	Restionaceae R.Br.	Alexgeorgea nitens (Nees) L.A.S.Johnson & B.G.Briggs	native	
57	Liliopsida	Restionaceae R.Br.	Chaetanthus aristatus (R.Br.) B.G.Briggs & L.A.S.Johnson	native	
58	Liliopsida	Restionaceae R.Br.	Chordifex microcodon B.G.Briggs & L.A.S.Johnson	native	
59	Liliopsida	Restionaceae R.Br.	Chordifex sinuosus B.G.Briggs & L.A.S.Johnson	native	
60	Liliopsida	Restionaceae R.Br.	Desmocladus asper (Nees) B.G.Briggs & L.A.S.Johnson	native	
61	Liliopsida	Restionaceae R.Br.	Desmocladus fasciculatus (R.Br.) B.G.Briggs & L.A.S.Johnson	native	

63	Liliopsida	Restionaceae R.Br.	Dielsia stenostachya (W.Fitzg.) B.G.Briggs & L.A.S.Johnson	native	
64	Liliopsida	Restionaceae R.Br.	Hypolaena exsulca R.Br.	native	
65	Liliopsida	Restionaceae R.Br.	Hypolaena robusta Meney & Pate	native	P4
66	Liliopsida	Restionaceae R.Br.	Lepidobolus preissianus Nees subsp. preissianus	native	
67	Liliopsida	Restionaceae R.Br.	Leptocarpus scariosus R.Br.	native	
68	Liliopsida	Restionaceae R.Br.	Leptocarpus tenax (Labill.) R.Br. *(Slender Twine Rush)*	native	
69	Liliopsida	Restionaceae R.Br.	Lepyrodia macra Nees *(Large Scale Rush)*	native	
70	Liliopsida	Restionaceae R.Br.	Lepyrodia muirii F.Muell.	native	
71	Liliopsida	Typhaceae Juss.	Typha domingensis Pers. *(Bulrush)*	native	
72	Liliopsida	Typhaceae Juss.	Typha orientalis C.Presl *(Bulrush)*	native	
73	Liliopsida	Xanthorrhoeaceae Dumort.	Xanthorrhoea brunonis Endl. subsp. brunonis	native	
74	Liliopsida	Xanthorrhoeaceae Dumort.	Xanthorrhoea preissii Endl.	native	
75	Magnoliopsida	Aizoaceae Martinov	Aizoon pubescens Eckl. & Zeyh. *(Coastal Galenia)*	alien	
76	Magnoliopsida	Aizoaceae Martinov	Carpobrotus N.E.Br.		
77	Magnoliopsida	Aizoaceae Martinov	Lampranthus coccineus (Haw.) N.E.Br.		
78	Magnoliopsida	Aizoaceae Martinov	Sarcozona bicarinata S.T.Blake	native	P3
79	Magnoliopsida	Aizoaceae Martinov	Tetragonia decumbens Mill. *(Sea Spinach)*	alien	
80	Magnoliopsida	Aizoaceae Martinov	Tetragonia tetragonoides (Pall.) Kuntze *(New Zealand Spinach)*	native	
81	Magnoliopsida	Amaranthaceae Juss.	Alternanthera Forssk.		
82	Magnoliopsida	Amaranthaceae Juss.	Alternanthera pungens Kunth *(Khaki Weed)*	alien	
83	Magnoliopsida	Amaranthaceae Juss.	Amaranthus L.		
84	Magnoliopsida	Amaranthaceae Juss.	Amaranthus blitum L.	alien	
85	Magnoliopsida	Amaranthaceae Juss.	Ptilotus drummondii (Moq.) F.Muell.	native	
86	Magnoliopsida	Amaranthaceae Juss.	Ptilotus drummondii (Moq.) F.Muell. var. drummondii *(Pussytail)*	native	
87	Magnoliopsida	Amaranthaceae Juss.	Ptilotus manglesii (Lindl.) F.Muell.	native	
88	Magnoliopsida	Amaranthaceae Juss.	Ptilotus sericostachyus (Nees) F.Muell. subsp. sericostachyus	native	
89	Magnoliopsida	Anacardiaceae R.Br.	Schinus terebinthifolia Raddi	alien	
90	Magnoliopsida	Apiaceae Lindl.	Apium graveolens L.	alien	
91	Magnoliopsida	Apiaceae Lindl.	Daucus glochidiatus (Labill.) Fisch., C.A.Mey. & Ave-Lall. *(Australian Carrot)*	native	
92	Magnoliopsida	Apiaceae Lindl.	Eryngium pinnatifidum Bunge subsp. pinnatifidum	native	
93	Magnoliopsida	Apiaceae Lindl.	Eryngium pinnatifidum subsp. Palustre (G.J. Keighery 13459)	native	P3
94	Magnoliopsida	Apiaceae Lindl.	Eryngium sp. Subdecumbens (G.J. Keighery 5390)	native	P3
95	Magnoliopsida	Apiaceae Lindl.	Homalosciadium homalocarpum (F.Muell.) H.Eichler	native	
96	Magnoliopsida	Apiaceae Lindl.	Xanthosia huegelii (Benth.) Steud.	native	
97	Magnoliopsida	Apocynaceae Juss.	Alyxia buxifolia R.Br. *(Dysentery Bush)*	native	
98	Magnoliopsida	Apocynaceae Juss.	Gomphocarpus physocarpus E.Mey.	alien	
99	Magnoliopsida	Araliaceae Juss.	Hydrocotyle lemnoides Benth. *(Aquatic Pennywort)*	native	P4
00	Magnoliopsida	Araliaceae Juss.	Hydrocotyle striata Benth.	native	P1
01	Magnoliopsida	Araliaceae Juss.	Tetrapanax papyrifer (Hook.) K.Koch	alien	
02	Magnoliopsida	Araliaceae Juss.	Trachymene pilosa Sm.	native	
03	Magnoliopsida	Asteraceae Bercht. & J.Presl	Arctotheca calendula (L.) K.Lewin *(Cape Weed)*	alien	
04	Magnoliopsida	Asteraceae Bercht. & J.Presl	Asteridea pulverulenta Lindl.	native	
05	Magnoliopsida	Asteraceae Bercht. & J.Presl	Brachyscome iberidifolia Benth. *(Swan River Daisy)*	native	
06	Magnoliopsida	Asteraceae Bercht. & J.Presl	Chondrilla juncea L. *(Skeleton Weed)*	alien	
07	Magnoliopsida	Asteraceae Bercht. & J.Presl	Cotula coronopifolia L. *(Waterbuttons)*	alien	
08	Magnoliopsida	Asteraceae Bercht. & J.Presl	Cotula turbinata L. *(Funnel Weed)*	alien	

		J.Presl			
10	Magnoliopsida	Asteraceae Bercht. & J.Presl	Eclipta prostrata (L.) L.	alien	
11	Magnoliopsida	Asteraceae Bercht. & J.Presl	Erigeron bonariensis L.	alien	
12	Magnoliopsida	Asteraceae Bercht. & J.Presl	Erigeron canadensis L.	alien	
13	Magnoliopsida	Asteraceae Bercht. & J.Presl	Erigeron sumatrensis Retz.	alien	
14	Magnoliopsida	Asteraceae Bercht. & J.Presl	Galinsoga parviflora Cav. *(Potato Weed)*	alien	
15	Magnoliopsida	Asteraceae Bercht. & J.Presl	Gamochaeta americana (Mill.) Wedd.	alien	
16	Magnoliopsida	Asteraceae Bercht. & J.Presl	Gazania linearis (Thunb.) Druce	alien	
17	Magnoliopsida	Asteraceae Bercht. & J.Presl	Helminthotheca echioides (L.) Holub *(Ox-tongue)*	alien	
18	Magnoliopsida	Asteraceae Bercht. & J.Presl	Hypochaeris glabra L. *(Smooth Cats-ear)*	alien	
19	Magnoliopsida	Asteraceae Bercht. & J.Presl	Lactuca serriola L. *(Prickly Lettuce)*	alien	
20	Magnoliopsida	Asteraceae Bercht. & J.Presl	Lagenophora huegelii Benth.	native	
21	Magnoliopsida	Asteraceae Bercht. & J.Presl	Lagenophora platysperma Jian Wang ter & A.R.Bean	native	
22	Magnoliopsida	Asteraceae Bercht. & J.Presl	Millotia myosotidifolia (Benth.) Steetz	native	
23	Magnoliopsida	Asteraceae Bercht. & J.Presl	Millotia tenuifolia Cass.	native	
24	Magnoliopsida	Asteraceae Bercht. & J.Presl	Millotia tenuifolia var. laevis P.S.Short	native	P2
25	Magnoliopsida	Asteraceae Bercht. & J.Presl	Monoculus monstrosus (Burm.f.) B.Nord.	alien	
26	Magnoliopsida	Asteraceae Bercht. & J.Presl	Olearia axillaris (DC.) Benth. *(Coastal Daisybush)*	native	
27	Magnoliopsida	Asteraceae Bercht. & J.Presl	Olearia lehmanniana (Steetz) Lander	native	
28	Magnoliopsida	Asteraceae Bercht. & J.Presl	Olearia rudis (Benth.) Benth. *(Rough Daisybush)*	native	
29	Magnoliopsida	Asteraceae Bercht. & J.Presl	Osteospermum ecklonis (DC.) Norl.	alien	
30	Magnoliopsida	Asteraceae Bercht. & J.Presl	Pithocarpa corymbulosa Lindl. *(Corymbose Pithocarpa)*	native	P3
31	Magnoliopsida	Asteraceae Bercht. & J.Presl	Pithocarpa pulchella Lindl.	native	
32	Magnoliopsida	Asteraceae Bercht. & J.Presl	Pithocarpa pulchella Lindl. var. pulchella	native	
33	Magnoliopsida	Asteraceae Bercht. & J.Presl	Pithocarpa pulchella var. melanostigma (P.Lewis & Summerh.) Lepschi	native	
34	Magnoliopsida	Asteraceae Bercht. & J.Presl	Podolepis gracilis (Lehm.) Graham *(Slender Podolepis)*	native	
35	Magnoliopsida	Asteraceae Bercht. & J.Presl	Podolepis nutans Steetz *(Nodding Podolepis)*	native	
36	Magnoliopsida	Asteraceae Bercht. & J.Presl	Podotheca angustifolia (Labill.) Less. *(Sticky Longheads)*	native	
37	Magnoliopsida	Asteraceae Bercht. & J.Presl	Podotheca chrysantha (Steetz) Benth. *(Yellow Podotheca)*	native	
38	Magnoliopsida	Asteraceae Bercht. & J.Presl	Podotheca gnaphalioides Graham *(Golden Long-heads)*	native	
39	Magnoliopsida	Asteraceae Bercht. & J.Presl	Pseudognaphalium luteoalbum (L.) Hilliard & B.L.Burtt *(Jersey Cudweed)*	mixed	
40	Magnoliopsida	Asteraceae Bercht. & J.Presl	Quinetia urvillei Cass.	native	

42	Magnoliopsida	Asteraceae Bercht. & J.Presl	Senecio multicaulis A.Rich. subsp. multicaulis	native	
43	Magnoliopsida	Asteraceae Bercht. & J.Presl	Senecio pinnatifolius var. latilobus (Steetz) I.Thomps. *(Variable Groundsel)*	native	
44	Magnoliopsida	Asteraceae Bercht. & J.Presl	Senecio vulgaris L. *(Common Groundsel)*	alien	
45	Magnoliopsida	Asteraceae Bercht. & J.Presl	Siloxerus humifusus Labill.	native	
46	Magnoliopsida	Asteraceae Bercht. & J.Presl	Sonchus oleraceus L.	alien	
47	Magnoliopsida	Asteraceae Bercht. & J.Presl	Taraxacum khatoonae Abedin *(Dandelion)*	alien	
48	Magnoliopsida	Asteraceae Bercht. & J.Presl	Ursinia anthemoides (L.) Poir.	alien	
49	Magnoliopsida	Asteraceae Bercht. & J.Presl	Ursinia anthemoides (L.) Poir. subsp. anthemoides	alien	
50	Magnoliopsida	Asteraceae Bercht. & J.Presl	Vellereophyton dealbatum (Thunb.) Hilliard & B.L.Burtt *(White Cudweed)*	alien	
51	Magnoliopsida	Asteraceae Bercht. & J.Presl	Verbesina encelioides (Cav.) A.Gray var. encelioides *(Crownbeard)*	alien	
52	Magnoliopsida	Asteraceae Bercht. & J.Presl	Waitzia suaveolens (Benth.) Druce *(Fragrant Waitzia)*	native	
53	Magnoliopsida	Asteraceae Bercht. & J.Presl	Waitzia suaveolens (Benth.) Druce var. suaveolens	native	
54	Magnoliopsida	Asteraceae Bercht. & J.Presl	Xanthium occidentale Bertol. *(Noogoora Burr)*	alien	
55	Magnoliopsida	Asteraceae Bercht. & J.Presl	Xerochrysum Tzvelev		
56	Magnoliopsida	Brassicaceae Burnett	Brassica barrelieri subsp. oxyrrhina (Coss.) P.W.Ball & Heywood *(Smooth-stem Turnip)*	alien	
57	Magnoliopsida	Brassicaceae Burnett	Brassica fruticulosa Cirillo *(Twiggy Turnip)*	alien	
58	Magnoliopsida	Brassicaceae Burnett	Brassica tournefortii Gouan *(Mediterranean Turnip)*	alien	
59	Magnoliopsida	Brassicaceae Burnett	Cakile maritima Scop. *(Sea Rocket)*	alien	
60	Magnoliopsida	Brassicaceae Burnett	Cardamine hirsuta L. *(Common Bittercress)*	alien	
61	Magnoliopsida	Brassicaceae Burnett	Cardamine occulta Hornem.	alien	
62	Magnoliopsida	Brassicaceae Burnett	Heliophila pusilla L.f.	alien	
63	Magnoliopsida	Brassicaceae Burnett	Lobularia maritima (L.) Desv. *(Sweet Alyssum)*	alien	
64	Magnoliopsida	Brassicaceae Burnett	Raphanus raphanistrum L. *(Wild Radish)*	alien	
65	Magnoliopsida	Brassicaceae Burnett	Stenopetalum gracile Bunge	native	
66	Magnoliopsida	Byblidaceae Domin	Byblis gigantea Lindl. *(Rainbow Plant)*	native	P3
67	Magnoliopsida	Campanulaceae Juss.	Isotoma hypocrateriformis (R.Br.) Druce *(Woodbridge Poison)*	native	
68	Magnoliopsida	Campanulaceae Juss.	Lobelia gibbosa Labill. *(Tall Lobelia)*	native	
69	Magnoliopsida	Campanulaceae Juss.	Lobelia tenuior R.Br.	native	
70	Magnoliopsida	Campanulaceae Juss.	Wahlenbergia capensis (L.) A.DC. *(Cape Bluebell)*	alien	
71	Magnoliopsida	Campanulaceae Juss.	Wahlenbergia gracilenta Lothian *(Annual Bluebell)*	native	
72	Magnoliopsida	Campanulaceae Juss.	Wahlenbergia multicaulis Benth.	native	
73	Magnoliopsida	Campanulaceae Juss.	Wahlenbergia preissii de Vriese	native	
74	Magnoliopsida	Caprifoliaceae Juss.	Sixalix atropurpurea (L.) Greuter & Burdet	alien	
75	Magnoliopsida	Caryophyllaceae Juss.	Cerastium glomeratum Thuill.	alien	
76	Magnoliopsida	Caryophyllaceae Juss.	Petrorhagia dubia (Raf.) G.Lopez & Romo	alien	
77	Magnoliopsida	Caryophyllaceae Juss.	Sagina apetala Ard. *(Annual Pearlwort)*	alien	
78	Magnoliopsida	Caryophyllaceae Juss.	Silene gallica L. *(French Catchfly)*	alien	
79	Magnoliopsida	Caryophyllaceae Juss.	Silene gallica L. var. gallica	alien	
80	Magnoliopsida	Caryophyllaceae Juss.	Silene nocturna L. *(Mediterranean Catchfly)*	alien	
81	Magnoliopsida	Caryophyllaceae Juss.	Stellaria media (L.) Vill.	alien	
82	Magnoliopsida	Casuarinaceae R.Br.	Allocasuarina fraseriana (Miq.) L.A.S.Johnson *(Kondil, Sheoak)*	native	
			Allocasuarina humilis (Otto & A.Dietr.) L.A.S.Johnson *(Dwarf*		

84	Magnoliopsida	Casuarinaceae R.Br.	Casuarina cunninghamiana Miq. subsp. cunninghamiana	alien	
85	Magnoliopsida	Celastraceae R.Br.	Stackhousia huegelii Endl.	native	
86	Magnoliopsida	Celastraceae R.Br.	Tripterococcus sp. Brachylobus (A.S. George 14234)	native	P4
87	Magnoliopsida	Chenopodiaceae Vent.	Chenopodium glaucum L. *(Glaucous Goosefoot)*	alien	
88	Magnoliopsida	Chenopodiaceae Vent.	Chenopodium macrospermum Hook.f.	alien	
89	Magnoliopsida	Chenopodiaceae Vent.	Rhagodia baccata (Labill.) Moq. *(Berry Saltbush)*	native	
90	Magnoliopsida	Convolvulaceae Juss.	Cuscuta planiflora Ten.	alien	
91	Magnoliopsida	Convolvulaceae Juss.	Dichondra micrantha Urb.	alien	
92	Magnoliopsida	Convolvulaceae Juss.	Ipomoea cairica (L.) Sweet *(Coast Morning Glory)*	alien	
93	Magnoliopsida	Crassulaceae J.St.-Hil.	Crassula L.		
94	Magnoliopsida	Crassulaceae J.St.-Hil.	Crassula alata (Viv.) A.Berger	alien	
95	Magnoliopsida	Crassulaceae J.St.-Hil.	Crassula colorata (Nees) Ostenf.	native	
96	Magnoliopsida	Crassulaceae J.St.-Hil.	Crassula colorata (Nees) Ostenf. var. colorata *(Dense Stonecrop)*	native	
97	Magnoliopsida	Crassulaceae J.St.-Hil.	Crassula glomerata P.J.Bergius	alien	
98	Magnoliopsida	Crassulaceae J.St.-Hil.	Crassula natans var. minor (Eckl. & Zeyh.) G.D.Rowley	alien	
99	Magnoliopsida	Crassulaceae J.St.-Hil.	Crassula thunbergiana Schult.	alien	
00	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia Andrews		
01	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia aurea Steud.	native	
02	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia crassifolia (Turcz.) Benth.	native	
03	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia cuneiformis (Labill.) Sm. *(Cutleaf Hibbertia)*	mixed	
04	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia helianthemoides (Turcz.) F.Muell.	native	P4
05	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia huegelii (Endl.) F.Muell.	native	
06	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia hypericoides (DC.) Benth.	native	
07	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia hypericoides (DC.) Benth. subsp. hypericoides *(Yellow Buttercups)*	native	
08	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia leptotheca (J.R.Wheeler) K.R.Thiele	native	P3
09	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia perfoliata Endl.	native	
10	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia racemosa (Endl.) Gilg *(Stalked Guinea Flower)*	native	
11	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia sericosepala K.R.Thiele	native	
12	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia striata (Steud.) K.R.Thiele	native	
13	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia subvaginata (Steud.) F.Muell.	native	
14	Magnoliopsida	Droseraceae Salisb.	Drosera drummondii Planch.	native	
15	Magnoliopsida	Droseraceae Salisb.	Drosera erythrorhiza Lindl. *(Red Ink Sundew)*	native	
16	Magnoliopsida	Droseraceae Salisb.	Drosera macrantha Endl. *(Bridal Rainbow)*	native	
17	Magnoliopsida	Droseraceae Salisb.	Drosera menziesii DC. *(Pink Rainbow)*	native	
18	Magnoliopsida	Droseraceae Salisb.	Drosera micra Lowrie & Conran	native	P1
19	Magnoliopsida	Droseraceae Salisb.	Drosera micrantha Lehm.	native	
20	Magnoliopsida	Droseraceae Salisb.	Drosera minutiflora Planch.	native	
21	Magnoliopsida	Droseraceae Salisb.	Drosera occidentalis Morrison *(Western Sundew)*	native	P4
22	Magnoliopsida	Droseraceae Salisb.	Drosera omissa Diels *(Bright Sundew)*	native	
23	Magnoliopsida	Droseraceae Salisb.	Drosera paleacea DC. *(Dwarf Sundew)*	native	P1
24	Magnoliopsida	Droseraceae Salisb.	Drosera pallida Lindl. *(Pale Rainbow)*	native	
25	Magnoliopsida	Droseraceae Salisb.	Drosera patens Lowrie & Conran	native	P1
26	Magnoliopsida	Droseraceae Salisb.	Drosera pulchella Lehm. *(Pretty Sundew)*	native	
27	Magnoliopsida	Droseraceae Salisb.	Drosera sp. Branched styles (S.C. Coffey 193)	native	
28	Magnoliopsida	Droseraceae Salisb.	Drosera subhirtella Planch. *(Sunny Rainbow)*	native	
29	Magnoliopsida	Droseraceae Salisb.	Drosera x badgerupii Cheek	native	P2
30	Magnoliopsida	Droseraceae Salisb.	Drosera x sidjamesii Lowrie & Conran	native	P1
31	Magnoliopsida	Elaeocarpaceae Juss.	Platytheca galioides Steetz	native	
32	Magnoliopsida	Elaeocarpaceae Juss.	Tetratheca hirsuta Lindl. *(Black Eyed Susan)*	native	
33	Magnoliopsida	Elaeocarpaceae Juss.	Tetratheca hirsuta subsp. viminea (Lindl.) Joyce *(Slender Tetratheca)*	native	
34	Magnoliopsida	Elaeocarpaceae Juss.	Tetratheca pilifera Lindl.	native	P3

37	Magnoliopsida	Ericaceae Juss.	Andersonia lehmanniana Sond. subsp. lehmanniana	native	
38	Magnoliopsida	Ericaceae Juss.	Conostephium minus Lindl.	native	
39	Magnoliopsida	Ericaceae Juss.	Conostephium pendulum Benth.	native	
40	Magnoliopsida	Ericaceae Juss.	Conostephium preissii Sond.	native	
41	Magnoliopsida	Ericaceae Juss.	Leucopogon australis R.Br. *(Spiked Beard-heath)*	native	
42	Magnoliopsida	Ericaceae Juss.	Leucopogon capitellatus DC.	native	
43	Magnoliopsida	Ericaceae Juss.	Leucopogon maritimus Hislop	native	P1
44	Magnoliopsida	Ericaceae Juss.	Leucopogon parviflorus (Andrews) Lindl. *(Coast Beard-heath)*	native	
45	Magnoliopsida	Ericaceae Juss.	Leucopogon polymorphus Sond.	native	
46	Magnoliopsida	Ericaceae Juss.	Leucopogon sprengelioides Sond.	native	
47	Magnoliopsida	Ericaceae Juss.	Leucopogon squarrosus Benth. subsp. squarrosus	native	
48	Magnoliopsida	Ericaceae Juss.	Lysinema ciliatum R.Br. *(Curry Flower)*	native	
49	Magnoliopsida	Ericaceae Juss.	Lysinema pentapetalum R.Br. *(Curry Flower)*	native	
50	Magnoliopsida	Ericaceae Juss.	Styphelia conostephioides (DC.) F.Muell.	native	
51	Magnoliopsida	Ericaceae Juss.	Styphelia discolor (Sond.) Hislop, Crayn & Puente-Lel.	native	
52	Magnoliopsida	Ericaceae Juss.	Styphelia erubescens F.Muell.	native	
53	Magnoliopsida	Ericaceae Juss.	Styphelia filifolia Hislop & Puente-Lel.	native	P3
54	Magnoliopsida	Ericaceae Juss.	Styphelia insularis (DC.) Hislop, Crayn & Puente-Lel.	native	
55	Magnoliopsida	Ericaceae Juss.	Styphelia kingiana F.Muell.	native	
56	Magnoliopsida	Ericaceae Juss.	Styphelia pallida (R.Br.) Spreng. *(Kick Bush)*	native	
57	Magnoliopsida	Ericaceae Juss.	Styphelia porcata Hislop	native	P3
58	Magnoliopsida	Ericaceae Juss.	Styphelia propinqua (R.Br.) Spreng.	native	
59	Magnoliopsida	Ericaceae Juss.	Styphelia serratifolia (DC.) Hislop, Crayn & Puente-Lel.	native	
60	Magnoliopsida	Ericaceae Juss.	Styphelia xerophylla (DC.) F.Muell.	native	
61	Magnoliopsida	Euphorbiaceae Juss.	Euphorbia peplus L. *(Petty Spurge)*	alien	
62	Magnoliopsida	Euphorbiaceae Juss.	Euphorbia terracina L. *(Geraldton Carnation Weed)*	alien	
63	Magnoliopsida	Euphorbiaceae Juss.	Monotaxis Brongn.		
64	Magnoliopsida	Euphorbiaceae Juss.	Monotaxis grandiflora Endl. *(Diamond of the Desert)*	native	
65	Magnoliopsida	Euphorbiaceae Juss.	Monotaxis grandiflora Endl. var. grandiflora *(Diamond of the Desert)*	native	
66	Magnoliopsida	Euphorbiaceae Juss.	Ricinocarpos glaucus Endl.	native	
67	Magnoliopsida	Euphorbiaceae Juss.	Ricinocarpos tuberculatus MÃ¼ll.Arg.	native	P2
68	Magnoliopsida	Euphorbiaceae Juss.	Ricinocarpos undulatus Lehm. *(Wedding Bush)*	native	
69	Magnoliopsida	Euphorbiaceae Juss.	Stachystemon exilis Hislop & R.W.Davis *(Slender Stachystemon)*	native	P1
70	Magnoliopsida	Fabaceae Lindl.	Acacia applanata Maslin	native	
71	Magnoliopsida	Fabaceae Lindl.	Acacia barbinervis subsp. borealis Maslin	native	
72	Magnoliopsida	Fabaceae Lindl.	Acacia benthamii Meisn. *(Bentham's Wattle)*	native	P2
73	Magnoliopsida	Fabaceae Lindl.	Acacia cochlearis (Labill.) H.L.Wendl. *(Rigid Wattle)*	native	
74	Magnoliopsida	Fabaceae Lindl.	Acacia cyclops G.Don *(Coastal Wattle)*	native	
75	Magnoliopsida	Fabaceae Lindl.	Acacia huegelii Benth. *(Huegel's Wattle)*	native	
76	Magnoliopsida	Fabaceae Lindl.	Acacia lasiocarpa Benth. var. lasiocarpa *(Panjang)*	mixed	
77	Magnoliopsida	Fabaceae Lindl.	Acacia lasiocarpa var. lasiocarpa Cockleshell Gully variant (E.A. Griffin 2039)	native	P2
78	Magnoliopsida	Fabaceae Lindl.	Acacia lasiocarpa var. sedifolia (Meisn.) Maslin	native	
79	Magnoliopsida	Fabaceae Lindl.	Acacia longifolia (Andrews) Willd.	alien	
80	Magnoliopsida	Fabaceae Lindl.	Acacia longifolia (Andrews) Willd. subsp. longifolia	alien	
81	Magnoliopsida	Fabaceae Lindl.	Acacia pulchella R.Br.	mixed	
82	Magnoliopsida	Fabaceae Lindl.	Acacia pulchella var. glaberrima Meisn. *(Prickly Moses)*	native	
83	Magnoliopsida	Fabaceae Lindl.	Acacia rostellifera Benth. *(Summer-scented Wattle)*	native	
84	Magnoliopsida	Fabaceae Lindl.	Acacia saligna (Labill.) H.L.Wendl.	native	
85	Magnoliopsida	Fabaceae Lindl.	Acacia sessilis Benth.	native	
86	Magnoliopsida	Fabaceae Lindl.	Acacia stenoptera Benth. *(Narrow Winged Wattle)*	native	
87	Magnoliopsida	Fabaceae Lindl.	Acacia trigonophylla Meisn.	mixed	

89	Magnoliopsida	Fabaceae Lindl.	Acacia willdenowiana H.L.Wendl. *(Grass Wattle, Two-winged Acacia)*	native	
90	Magnoliopsida	Fabaceae Lindl.	Acacia xanthina Benth. *(White-stemmed Wattle)*	native	
91	Magnoliopsida	Fabaceae Lindl.	Aotus ericoides (Vent.) G.Don	native	
92	Magnoliopsida	Fabaceae Lindl.	Aotus gracillima Meisn.	native	
93	Magnoliopsida	Fabaceae Lindl.	Bossiaea eriocarpa Benth. *(Common Brown Pea)*	native	
94	Magnoliopsida	Fabaceae Lindl.	Callistachys lanceolata Vent. *(Wonnich)*	native	
95	Magnoliopsida	Fabaceae Lindl.	Chamaecytisus palmensis (Christ) F.A.Bisby & K.W.Nicholls *(Tagasaste)*	alien	
96	Magnoliopsida	Fabaceae Lindl.	Daviesia Sm.		
97	Magnoliopsida	Fabaceae Lindl.	Daviesia decurrens Meisn.	native	
98	Magnoliopsida	Fabaceae Lindl.	Daviesia decurrens Meisn. subsp. decurrens	native	
99	Magnoliopsida	Fabaceae Lindl.	Daviesia divaricata Benth. *(Marno)*	native	
00	Magnoliopsida	Fabaceae Lindl.	Daviesia divaricata Benth. subsp. divaricata *(Marno)*	native	
01	Magnoliopsida	Fabaceae Lindl.	Daviesia hakeoides Meisn.	native	
02	Magnoliopsida	Fabaceae Lindl.	Daviesia hakeoides Meisn. subsp. hakeoides	native	
03	Magnoliopsida	Fabaceae Lindl.	Daviesia incrassata Sm.	native	
04	Magnoliopsida	Fabaceae Lindl.	Daviesia nudiflora Meisn.	native	
05	Magnoliopsida	Fabaceae Lindl.	Daviesia nudiflora Meisn. subsp. nudiflora	native	
06	Magnoliopsida	Fabaceae Lindl.	Daviesia pedunculata Lindl.	native	
07	Magnoliopsida	Fabaceae Lindl.	Daviesia physodes G.Don	native	
08	Magnoliopsida	Fabaceae Lindl.	Daviesia triflora Crisp	native	
09	Magnoliopsida	Fabaceae Lindl.	Euchilopsis linearis (Benth.) F.Muell.	native	
10	Magnoliopsida	Fabaceae Lindl.	Eutaxia virgata Benth.	native	
11	Magnoliopsida	Fabaceae Lindl.	Gastrolobium capitatum (Benth.) G.Chandler & Crisp *(Bacon and Eggs)*	native	
12	Magnoliopsida	Fabaceae Lindl.	Gastrolobium ebracteolatum G.Chandler & Crisp	native	
13	Magnoliopsida	Fabaceae Lindl.	Gastrolobium linearifolium G.Chandler & Crisp	native	
14	Magnoliopsida	Fabaceae Lindl.	Gastrolobium nervosum G.Chandler & Crisp	native	
15	Magnoliopsida	Fabaceae Lindl.	Gompholobium confertum (DC.) Crisp	native	
16	Magnoliopsida	Fabaceae Lindl.	Gompholobium knightianum Lindl.	native	
17	Magnoliopsida	Fabaceae Lindl.	Gompholobium scabrum Sm.	native	
18	Magnoliopsida	Fabaceae Lindl.	Gompholobium tomentosum Labill.	native	
19	Magnoliopsida	Fabaceae Lindl.	Hardenbergia comptoniana (Andrews) Benth. *(Native Wisteria)*	native	
20	Magnoliopsida	Fabaceae Lindl.	Hovea pungens Benth.	native	
21	Magnoliopsida	Fabaceae Lindl.	Hovea trisperma Benth. *(Common Hovea)*	native	
22	Magnoliopsida	Fabaceae Lindl.	Hovea trisperma Benth. var. trisperma *(Common Hovea)*	native	
23	Magnoliopsida	Fabaceae Lindl.	Isotropis cuneifolia (Sm.) Heynh. *(Granny Bonnets)*	native	
24	Magnoliopsida	Fabaceae Lindl.	Isotropis cuneifolia (Sm.) Heynh. subsp. cuneifolia *(Granny Bonnets)*	native	
25	Magnoliopsida	Fabaceae Lindl.	Isotropis juncea Turcz.	native	
26	Magnoliopsida	Fabaceae Lindl.	Jacksonia calcicola Chappill	native	
27	Magnoliopsida	Fabaceae Lindl.	Jacksonia floribunda Endl. *(Holly Pea)*	native	
28	Magnoliopsida	Fabaceae Lindl.	Jacksonia sericea Benth. *(Waldjumi)*	native	P4
29	Magnoliopsida	Fabaceae Lindl.	Jacksonia sternbergiana Huegel *(Stinkwood)*	native	
30	Magnoliopsida	Fabaceae Lindl.	Kennedia coccinea (Curtis) Vent.		
31	Magnoliopsida	Fabaceae Lindl.	Kennedia prostrata R.Br. *(Scarlet Runner)*	native	
32	Magnoliopsida	Fabaceae Lindl.	Latrobea tenella (Meisn.) Benth.	native	
33	Magnoliopsida	Fabaceae Lindl.	Lessertia frutescens (L.) Goldblatt & J.C.Manning	alien	
34	Magnoliopsida	Fabaceae Lindl.	Loricobbia reticulata (Sm.) R.L.Barrett & T.Macfarlane	native	
35	Magnoliopsida	Fabaceae Lindl.	Lotus angustissimus L. *(Narrowleaf Trefoil)*	alien	
36	Magnoliopsida	Fabaceae Lindl.	Lotus subbiflorus Lag.	alien	
37	Magnoliopsida	Fabaceae Lindl.	Medicago polymorpha L. *(Burr Medic)*	alien	
38	Magnoliopsida	Fabaceae Lindl.	Melilotus indicus (L.) All.	alien	

40	Magnoliopsida	Fabaceae Lindl.	Ornithopus pinnatus (Mill.) Druce *(Slender Serradella)*	alien	
41	Magnoliopsida	Fabaceae Lindl.	Templetonia retusa (Vent.) R.Br. *(Cockies Tongues)*	native	
42	Magnoliopsida	Fabaceae Lindl.	Trifolium L.		
43	Magnoliopsida	Fabaceae Lindl.	Trifolium arvense L.	alien	
44	Magnoliopsida	Fabaceae Lindl.	Trifolium campestre Schreb.	alien	
45	Magnoliopsida	Fabaceae Lindl.	Trifolium hirtum All. *(Rose Clover)*	alien	
46	Magnoliopsida	Fabaceae Lindl.	Vicia sativa L.	alien	
47	Magnoliopsida	Fabaceae Lindl.	Vicia sativa subsp. nigra (L.) Ehrh.	alien	
48	Magnoliopsida	Fabaceae Lindl.	Viminaria juncea (Schrad. & J.C.Wendl.) Hoffmanns. *(Swishbush)*	native	
49	Magnoliopsida	Geraniaceae Juss.	Erodium cicutarium (L.) L'Her. *(Common Storksbill)*	alien	
50	Magnoliopsida	Geraniaceae Juss.	Geranium solanderi Carolin *(Native Geranium)*	native	
51	Magnoliopsida	Geraniaceae Juss.	Pelargonium capitatum (L.) Aiton *(Rose Pelargonium)*	alien	
52	Magnoliopsida	Goodeniaceae R.Br.	Dampiera linearis R.Br. *(Common Dampiera, Wedge-leaved Dampiera)*	native	
53	Magnoliopsida	Goodeniaceae R.Br.	Dampiera triloba Lindl.	native	P3
54	Magnoliopsida	Goodeniaceae R.Br.	Goodenia pulchella Benth.	native	
55	Magnoliopsida	Goodeniaceae R.Br.	Goodenia reinwardtii (de Vriese) K.A.Sheph.	native	
56	Magnoliopsida	Goodeniaceae R.Br.	Lechenaultia biloba Lindl. *(Blue Leschenaultia)*	mixed	
57	Magnoliopsida	Goodeniaceae R.Br.	Lechenaultia floribunda Benth. *(Free-flowering Leschenaultia)*	native	
58	Magnoliopsida	Goodeniaceae R.Br.	Lechenaultia linarioides DC. *(Yellow Leschenaultia)*	native	
59	Magnoliopsida	Goodeniaceae R.Br.	Scaevola L.		
60	Magnoliopsida	Goodeniaceae R.Br.	Scaevola canescens Benth.	native	
61	Magnoliopsida	Goodeniaceae R.Br.	Scaevola globulifera Labill.	native	
62	Magnoliopsida	Goodeniaceae R.Br.	Scaevola repens de Vriese	native	
63	Magnoliopsida	Goodeniaceae R.Br.	Scaevola repens de Vriese var. repens	native	
64	Magnoliopsida	Goodeniaceae R.Br.	Scaevola repens var. angustifolia de Vriese	native	
65	Magnoliopsida	Goodeniaceae R.Br.	Scaevola thesioides Benth. subsp. thesioides	native	
66	Magnoliopsida	Gyrostemonaceae A.Juss.	Tersonia cyathiflora (Fenzl) J.W.Green *(Button Creeper)*	native	
67	Magnoliopsida	Haloragaceae R.Br.	Glischrocaryon angustifolium (Nees) M.L.Moody & Les	native	
68	Magnoliopsida	Haloragaceae R.Br.	Gonocarpus pithyoides Nees	native	
69	Magnoliopsida	Haloragaceae R.Br.	Meionectes brownii Hook.f. *(Swamp Raspwort)*	native	
70	Magnoliopsida	Haloragaceae R.Br.	Meionectes tenuifolia (Benth.) M.L.Moody & Les	native	P3
71	Magnoliopsida	Haloragaceae R.Br.	Myriophyllum tillaeoides Diels	native	
72	Magnoliopsida	Lamiaceae Martinov	Hemiandra glabra Benth.	native	
73	Magnoliopsida	Lamiaceae Martinov	Hemiandra incana Bartl.	native	
74	Magnoliopsida	Lamiaceae Martinov	Hemiandra linearis Benth. *(Speckled Snakebush)*	native	
75	Magnoliopsida	Lamiaceae Martinov	Hemiandra pungens R.Br. *(Snakebush)*	native	
76	Magnoliopsida	Lamiaceae Martinov	Hemiphora bartlingii (Lehm.) B.J.Conn & Henwood *(Woolly Dragon)*	native	
77	Magnoliopsida	Lamiaceae Martinov	Leonotis leonurus (L.) R.Br. *(Lion's Ear)*	alien	
78	Magnoliopsida	Lamiaceae Martinov	Salvia verbenaca L. *(Wild Sage)*	alien	
79	Magnoliopsida	Lauraceae Juss.	Cassytha Osbeck		
80	Magnoliopsida	Lauraceae Juss.	Cassytha flava Nees *(Dodder Laurel)*	native	
81	Magnoliopsida	Lentibulariaceae Rich.	Utricularia australis R.Br.	native	
82	Magnoliopsida	Lentibulariaceae Rich.	Utricularia gibba L.	mixed	
83	Magnoliopsida	Lentibulariaceae Rich.	Utricularia volubilis R.Br. *(Twining Bladderwort)*	native	
84	Magnoliopsida	Linaceae Perleb	Linum usitatissimum L. *(Flax)*	alien	
85	Magnoliopsida	Loganiaceae Mart.	Phyllangium divergens (Hook.f.) Dunlop	native	
86	Magnoliopsida	Loganiaceae Mart.	Phyllangium paradoxum (R.Br.) Dunlop	native	
87	Magnoliopsida	Loranthaceae Juss.	Nuytsia floribunda (Labill.) G.Don *(Christmas Tree)*	native	
88	Magnoliopsida	Lythraceae J.St.-Hil.	Lythrum hyssopifolia L. *(Lesser Loosestrife)*	alien	
		Macarthuriaceae			

90	Magnoliopsida	Christenh.	Macarthuria apetala Harv.	native	
91	Magnoliopsida	Macarthuriaceae Christenh.	Macarthuria australis Endl.	native	
92	Magnoliopsida	Malvaceae Juss.	Guichenotia ledifolia Gay	native	
93	Magnoliopsida	Malvaceae Juss.	Thomasia triphylla (Labill.) J.Gay	native	
94	Magnoliopsida	Meliaceae Juss.	Melia azedarach L. *(White Cedar)*	mixed	
95	Magnoliopsida	Menyanthaceae Dumort.	Liparophyllum capitatum (Lehm.) Tippery & Les	native	
96	Magnoliopsida	Menyanthaceae Dumort.	Ornduffia albiflora (F.Muell.) Tippery & Les	native	
97	Magnoliopsida	Montiaceae Raf.	Calandrinia corrigioloides Benth. *(Strap Purslane)*	native	
98	Magnoliopsida	Montiaceae Raf.	Calandrinia granulifera Benth. *(Pygmy Purslane)*	native	
99	Magnoliopsida	Montiaceae Raf.	Calandrinia liniflora Fenzl *(Parakeelya)*	native	
00	Magnoliopsida	Moraceae Gaudich.	Ficus carica L. *(Common Fig)*	alien	
01	Magnoliopsida	Myrtaceae Juss.	Apectospermum spinescens (Endl.) Peter G.Wilson	native	
02	Magnoliopsida	Myrtaceae Juss.	Astartea scoparia Schauer *(Common Astartea)*	native	
03	Magnoliopsida	Myrtaceae Juss.	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	native	P1
04	Magnoliopsida	Myrtaceae Juss.	Beaufortia elegans Schauer *(Elegant Beaufortia)*	native	
05	Magnoliopsida	Myrtaceae Juss.	Calothamnus lateralis Lindl.	native	
06	Magnoliopsida	Myrtaceae Juss.	Calothamnus quadrifidus R.Br. subsp. quadrifidus *(One-sided Bottlebrush)*	mixed	
07	Magnoliopsida	Myrtaceae Juss.	Calothamnus sanguineus Labill.	native	
08	Magnoliopsida	Myrtaceae Juss.	Calytrix acutifolia (Lindl.) Craven	native	
09	Magnoliopsida	Myrtaceae Juss.	Calytrix angulata Lindl. *(Yellow Starflower)*	native	
10	Magnoliopsida	Myrtaceae Juss.	Calytrix flavescens A.Cunn. *(Summer Starflower)*	native	
11	Magnoliopsida	Myrtaceae Juss.	Calytrix fraseri A.Cunn. *(Pink Summer Calytrix)*	native	
12	Magnoliopsida	Myrtaceae Juss.	Calytrix sapphirina Lindl.	native	
13	Magnoliopsida	Myrtaceae Juss.	Calytrix strigosa A.Cunn.	native	
14	Magnoliopsida	Myrtaceae Juss.	Chamelaucium uncinatum Schauer *(Geraldton Wax, Wembley Wax)*	mixed	
15	Magnoliopsida	Myrtaceae Juss.	Corymbia calophylla (Lindl.) K.D.Hill & L.A.S.Johnson *(Marri)*	native	
16	Magnoliopsida	Myrtaceae Juss.	Darwinia pimelioides Cayzer & F.W.Wakef.	native	P4
17	Magnoliopsida	Myrtaceae Juss.	Eremaea pauciflora (Endl.) Druce	native	
18	Magnoliopsida	Myrtaceae Juss.	Eremaea pauciflora (Endl.) Druce var. pauciflora	native	
19	Magnoliopsida	Myrtaceae Juss.	Eremaea purpurea C.A.Gardner	native	
20	Magnoliopsida	Myrtaceae Juss.	Eucalyptus L'Her.		
21	Magnoliopsida	Myrtaceae Juss.	Eucalyptus argutifolia Grayling & Brooker *(Wabling Hill Mallee)*	native	VU
22	Magnoliopsida	Myrtaceae Juss.	Eucalyptus decipiens Endl. *(Redheart)*	native	
23	Magnoliopsida	Myrtaceae Juss.	Eucalyptus decurva F.Muell. *(Slender Mallee)*	native	
24	Magnoliopsida	Myrtaceae Juss.	Eucalyptus foecunda Schauer subsp. foecunda *(Fremantle Mallee)*	native	P4
25	Magnoliopsida	Myrtaceae Juss.	Eucalyptus gomphocephala DC. *(Tuart)*	mixed	
26	Magnoliopsida	Myrtaceae Juss.	Eucalyptus marginata Sm. *(Jarrah)*	native	
27	Magnoliopsida	Myrtaceae Juss.	Eucalyptus marginata Sm. subsp. marginata	native	
28	Magnoliopsida	Myrtaceae Juss.	Eucalyptus rudis Endl. *(Flooded Gum)*	native	
29	Magnoliopsida	Myrtaceae Juss.	Eucalyptus todtiana F.Muell. *(Pricklybark)*	native	
30	Magnoliopsida	Myrtaceae Juss.	Hypocalymma angustifolium (Endl.) Schauer *(White Myrtle)*	native	
31	Magnoliopsida	Myrtaceae Juss.	Hypocalymma robustum (Endl.) Lindl. *(Swan River Myrtle)*	native	
32	Magnoliopsida	Myrtaceae Juss.	Kunzea Rchb.		
33	Magnoliopsida	Myrtaceae Juss.	Kunzea glabrescens Toelken *(Spearwood)*	native	
34	Magnoliopsida	Myrtaceae Juss.	Melaleuca L.		
35	Magnoliopsida	Myrtaceae Juss.	Melaleuca huegelii Endl.	native	
36	Magnoliopsida	Myrtaceae Juss.	Melaleuca huegelii Endl. subsp. huegelii *(Chenille Honeymyrtle)*	native	
37	Magnoliopsida	Myrtaceae Juss.	Melaleuca incana R.Br.	native	

39	Magnoliopsida	Myrtaceae Juss.	Melaleuca rhaphiophylla Schauer *(Swamp Paperbark)*	native	
40	Magnoliopsida	Myrtaceae Juss.	Melaleuca seriata Lindl.	native	
41	Magnoliopsida	Myrtaceae Juss.	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	native	EN
42	Magnoliopsida	Myrtaceae Juss.	Melaleuca systena Craven *(Coastal Honeymyrtle)*	native	
43	Magnoliopsida	Myrtaceae Juss.	Melaleuca teretifolia Endl.	native	
44	Magnoliopsida	Myrtaceae Juss.	Melaleuca trichophylla Lindl.	native	
45	Magnoliopsida	Myrtaceae Juss.	Pericalymma ellipticum (Endl.) Schauer var. ellipticum	native	
46	Magnoliopsida	Myrtaceae Juss.	Regelia ciliata Schauer	native	
47	Magnoliopsida	Myrtaceae Juss.	Regelia inops (Schauer) Schauer	native	
48	Magnoliopsida	Myrtaceae Juss.	Scholtzia involucrata (Endl.) Druce *(Spiked Scholtzia)*	native	
49	Magnoliopsida	Myrtaceae Juss.	Verticordia densiflora Lindl. var. densiflora *(Compacted Featherflower)*	native	
50	Magnoliopsida	Myrtaceae Juss.	Verticordia drummondii Schauer *(Drummond's Featherflower)*	native	
51	Magnoliopsida	Myrtaceae Juss.	Verticordia lindleyi Schauer subsp. lindleyi	native	P4
52	Magnoliopsida	Myrtaceae Juss.	Verticordia nitens (Lindl.) Endl. *(Morrison Featherflower)*	native	
53	Magnoliopsida	Myrtaceae Juss.	Verticordia ovalifolia Meisn.	native	
54	Magnoliopsida	Oleaceae Hoffmanns. & Link	Olea europaea L. *(Olive)*	alien	
55	Magnoliopsida	Onagraceae Juss.	Epilobium ciliatum Raf.	alien	
56	Magnoliopsida	Onagraceae Juss.	Epilobium hirtigerum A.Cunn. *(Hairy Willow Herb)*	native	
57	Magnoliopsida	Onagraceae Juss.	Epilobium tetragonum L. subsp. tetragonum	alien	
58	Magnoliopsida	Onagraceae Juss.	Oenothera drummondii Hook. *(Beach Evening Primrose)*	alien	
59	Magnoliopsida	Onagraceae Juss.	Oenothera drummondii Hook. subsp. drummondii	alien	
60	Magnoliopsida	Onagraceae Juss.	Oenothera stricta Link *(Common Evening Primrose)*	alien	
61	Magnoliopsida	Orobanchaceae Vent.	Orobanche cernua var. australiana (F.Muell.) Beck *(Australian Broomrape)*	native	P3
62	Magnoliopsida	Orobanchaceae Vent.	Orobanche minor Sm. *(Lesser Broomrape)*	alien	
63	Magnoliopsida	Oxalidaceae R.Br.	Oxalis purpurea L. *(Largeflower Wood Sorrel)*	alien	
64	Magnoliopsida	Phyllanthaceae Martinov	Lysiandra calycina (Labill.) R.W.Bouman *(False Boronia)*	native	
65	Magnoliopsida	Phyllanthaceae Martinov	Moeroris tenella (Roxb.) R.W.Bouman	alien	
66	Magnoliopsida	Phyllanthaceae Martinov	Poranthera ericoides Klotzsch *(Heath Poranthera)*	native	
67	Magnoliopsida	Phyllanthaceae Martinov	Poranthera microphylla Brongn. *(Small Poranthera)*	native	
68	Magnoliopsida	Phyllanthaceae Martinov	Poranthera moorokatta R.L.Barrett	native	P2
69	Magnoliopsida	Phytolaccaceae R.Br.	Phytolacca octandra L. *(Red Ink Plant)*	alien	
70	Magnoliopsida	Pittosporaceae R.Br.	Billardiera fraseri (Hook.) L.Cayzer, Crisp & I.Telford *(Elegant Pronaya)*	native	
71	Magnoliopsida	Pittosporaceae R.Br.	Marianthus paralius L.Cayzer & Crisp	native	EN
72	Magnoliopsida	Pittosporaceae R.Br.	Pittosporum ligustrifolium Putt.	native	
73	Magnoliopsida	Pittosporaceae R.Br.	Pittosporum multiflorum (A.Cunn.) L.W.Cayzer, Crisp & I.Telford	mixed	
74	Magnoliopsida	Plantaginaceae Juss.	Bacopa monnieri (L.) Pennell	alien	
75	Magnoliopsida	Plantaginaceae Juss.	Gratiola pubescens R.Br.	native	
76	Magnoliopsida	Plantaginaceae Juss.	Plantago debilis R.Br.	native	
77	Magnoliopsida	Plantaginaceae Juss.	Plantago major L. *(Greater Plantain)*	alien	
78	Magnoliopsida	Plumbaginaceae Juss.	Limonium sinuatum (L.) Mill. *(Perennial Sea Lavender)*	alien	
79	Magnoliopsida	Polygalaceae Hoffmanns. & Link	Comesperma calymega Labill. *(Blue-spike Milkwort)*	native	
80	Magnoliopsida	Polygonaceae Juss.	Muehlenbeckia polybotrya Meisn.	native	
81	Magnoliopsida	Polygonaceae Juss.	Persicaria decipiens (R.Br.) K.L.Wilson	native	
82	Magnoliopsida	Polygonaceae Juss.	Persicaria lapathifolia (L.) Delarbre	alien	
83	Magnoliopsida	Polygonaceae Juss.	Rumex acetosella L. *(Sorrel)*	alien	

85	Magnoliopsida	Proteaceae Juss.	Adenanthos cygnorum Diels subsp. cygnorum *(Common Woollybush)*	native	
86	Magnoliopsida	Proteaceae Juss.	Adenanthos meisneri Lehm.	native	
87	Magnoliopsida	Proteaceae Juss.	Adenanthos obovatus Labill. *(Basket Flower)*	native	
88	Magnoliopsida	Proteaceae Juss.	Banksia L.f.		
89	Magnoliopsida	Proteaceae Juss.	Banksia armata (R.Br.) A.R.Mast & K.R.Thiele var. armata	native	
90	Magnoliopsida	Proteaceae Juss.	Banksia attenuata R.Br. *(Slender Banksia)*	native	
91	Magnoliopsida	Proteaceae Juss.	Banksia grandis Willd. *(Bull Banksia)*	native	
92	Magnoliopsida	Proteaceae Juss.	Banksia ilicifolia R.Br. *(Holly-leaved Banksia)*	native	
93	Magnoliopsida	Proteaceae Juss.	Banksia littoralis R.Br. *(Swamp Banksia)*	native	
94	Magnoliopsida	Proteaceae Juss.	Banksia menziesii R.Br. *(Firewood Banksia)*	native	
95	Magnoliopsida	Proteaceae Juss.	Banksia nivea Labill. *(Honeypot Dryandra)*	native	
96	Magnoliopsida	Proteaceae Juss.	Banksia prionotes Lindl. *(Acorn Banksia)*	native	
97	Magnoliopsida	Proteaceae Juss.	Banksia sessilis var. cygnorum (Gand.) A.R.Mast & K.R.Thiele *(Parrot Bush)*	native	
98	Magnoliopsida	Proteaceae Juss.	Conospermum acerosum Lindl. *(Needle-leaved Smokebush)*	native	
99	Magnoliopsida	Proteaceae Juss.	Conospermum acerosum Lindl. subsp. acerosum	native	
00	Magnoliopsida	Proteaceae Juss.	Conospermum canaliculatum Meisn. subsp. canaliculatum	native	
01	Magnoliopsida	Proteaceae Juss.	Conospermum incurvum Lindl. *(Plume Smokebush)*	native	
02	Magnoliopsida	Proteaceae Juss.	Conospermum stoechadis Endl. *(Common Smokebush)*	native	
03	Magnoliopsida	Proteaceae Juss.	Conospermum stoechadis Endl. subsp. stoechadis *(Common Smokebush)*	native	
04	Magnoliopsida	Proteaceae Juss.	Grevillea Knight		
05	Magnoliopsida	Proteaceae Juss.	Grevillea crithmifolia R.Br.	native	
06	Magnoliopsida	Proteaceae Juss.	Grevillea curviloba McGill.	mixed	EN
07	Magnoliopsida	Proteaceae Juss.	Grevillea maccutcheonii Keighery & Cranfield	native	CR
08	Magnoliopsida	Proteaceae Juss.	Grevillea preissii Meisn.	native	
09	Magnoliopsida	Proteaceae Juss.	Grevillea sp. Ocean Reef (D. Pike Joon 4)	native	P1
10	Magnoliopsida	Proteaceae Juss.	Grevillea vestita (Endl.) Meisn.	native	
11	Magnoliopsida	Proteaceae Juss.	Grevillea vestita (Endl.) Meisn. subsp. vestita	native	
12	Magnoliopsida	Proteaceae Juss.	Hakea costata Meisn. *(Ribbed Hakea)*	mixed	
13	Magnoliopsida	Proteaceae Juss.	Hakea lissocarpha R.Br. *(Honey Bush)*	native	
14	Magnoliopsida	Proteaceae Juss.	Hakea prostrata R.Br.	native	
15	Magnoliopsida	Proteaceae Juss.	Hakea ruscifolia Labill. *(Candle Hakea)*	native	
16	Magnoliopsida	Proteaceae Juss.	Hakea trifurcata (Sm.) R.Br. *(Two-leaf Hakea)*	native	
17	Magnoliopsida	Proteaceae Juss.	Isopogon sphaerocephalus Lindl.	native	
18	Magnoliopsida	Proteaceae Juss.	Persoonia comata Meisn.	native	
19	Magnoliopsida	Proteaceae Juss.	Persoonia saccata R.Br. *(Snottygobble)*	native	
20	Magnoliopsida	Proteaceae Juss.	Petrophile axillaris Meisn.	native	
21	Magnoliopsida	Proteaceae Juss.	Petrophile brevifolia Lindl.	native	
22	Magnoliopsida	Proteaceae Juss.	Petrophile brevifolia Lindl. subsp. brevifolia	native	
23	Magnoliopsida	Proteaceae Juss.	Petrophile linearis R.Br. *(Pixie Mops)*	native	
24	Magnoliopsida	Proteaceae Juss.	Petrophile macrostachya R.Br.	native	
25	Magnoliopsida	Proteaceae Juss.	Petrophile serruriae R.Br.	native	
26	Magnoliopsida	Proteaceae Juss.	Stirlingia latifolia (R.Br.) Steud. *(Blueboy)*	native	
27	Magnoliopsida	Proteaceae Juss.	Synaphea polymorpha R.Br. *(Albany Synaphea, Pinda)*	native	
28	Magnoliopsida	Proteaceae Juss.	Synaphea spinulosa (Burm.f.) Merr.	native	
29	Magnoliopsida	Proteaceae Juss.	Synaphea spinulosa (Burm.f.) Merr. subsp. spinulosa	native	
30	Magnoliopsida	Proteaceae Juss.	Xylomelum occidentale R.Br. *(Woody Pear)*	native	
31	Magnoliopsida	Ranunculaceae Juss.	Clematis pubescens Endl. *(Common Clematis)*	native	
32	Magnoliopsida	Ranunculaceae Juss.	Ranunculus sceleratus L.	alien	
33	Magnoliopsida	Rhamnaceae Juss.	Cryptandra pungens Steud.	native	
34	Magnoliopsida	Rhamnaceae Juss.	Spyridium globulosum (Labill.) Benth. *(Basket Bush)*	native	
35	Magnoliopsida	Rhamnaceae Juss.	Stenanthemum notiale subsp. chamelum Rye	native	

37	Magnoliopsida	Rhamnaceae Juss.	Trymalium ledifolium Fenzl var. ledifolium	native	
38	Magnoliopsida	Rubiaceae Juss.	Coprosma repens A.Rich.	alien	
39	Magnoliopsida	Rubiaceae Juss.	Opercularia vaginata Juss. *(Dog Weed)*	native	
40	Magnoliopsida	Rutaceae Juss.	Boronia purdieana Diels	native	
41	Magnoliopsida	Rutaceae Juss.	Boronia purdieana Diels subsp. purdieana	native	
42	Magnoliopsida	Rutaceae Juss.	Chorilaena anceps (DC.) Duretto & Heslewood	native	
43	Magnoliopsida	Rutaceae Juss.	Cyanothamnus ramosus Lindl.	native	
44	Magnoliopsida	Rutaceae Juss.	Cyanothamnus ramosus subsp. anethifolius (Bartl.) Duretto & Heslewood	native	
45	Magnoliopsida	Rutaceae Juss.	Diplolaena angustifolia Hook. *(Yanchep Rose)*	native	
46	Magnoliopsida	Rutaceae Juss.	Diplolaena dampieri Desf. *(Southern Diplolaena)*	mixed	
47	Magnoliopsida	Rutaceae Juss.	Philotheca spicata (A.Rich.) Paul G.Wilson	native	
48	Magnoliopsida	Salicaceae Mirb.	Salix L.		
49	Magnoliopsida	Santalaceae R.Br.	Exocarpos sparteus R.Br. *(Broom Ballart)*	native	
50	Magnoliopsida	Santalaceae R.Br.	Leptomeria empetriformis Miq.	native	
51	Magnoliopsida	Santalaceae R.Br.	Leptomeria pauciflora R.Br. *(Sparse-flowered Currant Bush)*	native	
52	Magnoliopsida	Santalaceae R.Br.	Santalum acuminatum (R.Br.) A.DC. *(Quandong)*	native	
53	Magnoliopsida	Scrophulariaceae Juss.	Dischisma arenarium E.Mey.	alien	
54	Magnoliopsida	Scrophulariaceae Juss.	Myoporum caprarioides Benth. *(Slender Myoporum)*	native	
55	Magnoliopsida	Scrophulariaceae Juss.	Myoporum insulare R.Br. *(Blueberry Tree)*	native	
56	Magnoliopsida	Scrophulariaceae Juss.	Nemesia strumosa Benth.	alien	
57	Magnoliopsida	Solanaceae Juss.	Solanum lycopersicum L.	alien	
58	Magnoliopsida	Solanaceae Juss.	Solanum nigrum L. *(Black Berry Nightshade)*	alien	
59	Magnoliopsida	Solanaceae Juss.	Solanum styleanum Dunal	alien	
60	Magnoliopsida	Solanaceae Juss.	Solanum symonii H.Eichler	native	
61	Magnoliopsida	Stylidiaceae R.Br.	Levenhookia preissii (Sond.) F.Muell. *(Preiss's Stylewort)*	native	P1
62	Magnoliopsida	Stylidiaceae R.Br.	Levenhookia pusilla R.Br.	native	
63	Magnoliopsida	Stylidiaceae R.Br.	Levenhookia stipitata (Benth.) Benth.	native	
64	Magnoliopsida	Stylidiaceae R.Br.	Stylidium adpressum Benth. *(Trigger-on-stilts)*	native	
65	Magnoliopsida	Stylidiaceae R.Br.	Stylidium androsaceum Lindl. *(Book Triggerplant)*	native	
66	Magnoliopsida	Stylidiaceae R.Br.	Stylidium araeophyllum Wege *(Stilt Walker)*	native	
67	Magnoliopsida	Stylidiaceae R.Br.	Stylidium brunonianum Benth. *(Pink Fountain Triggerplant)*	native	
68	Magnoliopsida	Stylidiaceae R.Br.	Stylidium bulbiferum Benth.	native	
69	Magnoliopsida	Stylidiaceae R.Br.	Stylidium calcaratum R.Br.	native	
70	Magnoliopsida	Stylidiaceae R.Br.	Stylidium crossocephalum F.Muell. *(Posy Triggerplant)*	native	
71	Magnoliopsida	Stylidiaceae R.Br.	Stylidium cygnorum W.Fitzg.	native	
72	Magnoliopsida	Stylidiaceae R.Br.	Stylidium diuroides Lindl. subsp. diuroides	native	
73	Magnoliopsida	Stylidiaceae R.Br.	Stylidium divaricatum Sond. *(Daddy-long-legs)*	native	
74	Magnoliopsida	Stylidiaceae R.Br.	Stylidium junceum R.Br.	native	
75	Magnoliopsida	Stylidiaceae R.Br.	Stylidium longitubum Benth. *(Jumping Jacks)*	native	P4
76	Magnoliopsida	Stylidiaceae R.Br.	Stylidium maritimum Lowrie, Coates & Kenneally *(Coastal Triggerplant)*	native	P3
77	Magnoliopsida	Stylidiaceae R.Br.	Stylidium neurophyllum Wege *(Coastal Plain Triggerplant)*	native	
78	Magnoliopsida	Stylidiaceae R.Br.	Stylidium paludicola Wege	native	P3
79	Magnoliopsida	Stylidiaceae R.Br.	Stylidium piliferum R.Br. *(Common Butterfly Triggerplant)*	native	
80	Magnoliopsida	Stylidiaceae R.Br.	Stylidium repens R.Br. *(Matted Triggerplant)*	native	
81	Magnoliopsida	Stylidiaceae R.Br.	Stylidium rigidulum Sond.	native	
82	Magnoliopsida	Stylidiaceae R.Br.	Stylidium schoenoides DC.	native	
83	Magnoliopsida	Stylidiaceae R.Br.	Stylidium striatum Lindl. *(Fan-leaved Triggerplant)*	native	P4
84	Magnoliopsida	Stylidiaceae R.Br.	Stylidium trudgenii Lowrie & Kenneally	native	P3
85	Magnoliopsida	Thymelaeaceae Juss.	Pimelea argentea R.Br. *(Silvery Leaved Pimelea)*	native	
86	Magnoliopsida	Thymelaeaceae Juss.	Pimelea calcicola Rye *(Coastal Banjine)*	native	P3
87	Magnoliopsida	Thymelaeaceae Juss.	Pimelea floribunda Meisn.	native	
88	Magnoliopsida	Thymelaeaceae Juss.	Pimelea leucantha Diels	native	

90	Magnoliopsida	Verbenaceae J.St.-Hil.	Phyla nodiflora (L.) Greene var. nodiflora	alien	
91	Magnoliopsida	Violaceae Batsch	Pigea calycina DC.	native	
92	Pinopsida	Cupressaceae Gray	Callitris preissii Miq. *(Rottnest Island Pine)*	mixed	
93	Pteridopsida	Dennstaedtiaceae Lotsy	Pteridium esculentum (G.Forst.) Cockayne subsp. esculentum	native	
94	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae KÃ¼tz.	Caulerpa flexilis J.V.Lamour.	native	
95	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae KÃ¼tz.	Caulerpa obscura Sond.	native	

hreatened species

- CR – Critically Endangered
- EN – Endangered
- VU – Vulnerable
- EX – Extinct
- EW – Extinct in the Wild
- CD – Species of special conservation interest (conservation dependent)
- OS – Species otherwise in need of special protection (other specially protected)
- MI – Migratory
- SP – Specially protected species

riority species

- P1 – Priority 1: Poorly-known species – known from few locations, none on conservation lands
- P2 – Priority 2: Poorly-known species – known from few locations, some on conservation lands
- P3 – Priority 3: Poorly-known species – known from several locations
- P4 – Priority 4: Rare, Near Threatened and other species in need of monitoring

andjoo specific codes

- Parent of conservation listed taxa
- Cons code inherited from parent, X

ead full definitions at https://bio.wa.gov.au/guide/conservation-status-definitions

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ırther note, precise locations of conservation listed species are considered sensitive. To protect this information, ɔfuscation has been applied to conservation-listed species records. For these species, the true location is Â±10km fron ıe search area used to generate this species list.

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Dandjoo Species List Export

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Source	Dandjoo – Department of Biodiversity, Conservation and Attractions
Method	User defined circle: [[115.83195, -31.76521]] 9.0 km.
Date time	2025-01-31T16:14:44.635105+08:00

onservation status summary	Count
D	1
D, MI	1
R	4
ons code inherited from parent; MI	2
ons code inherited from parent; OS	1
N	10
II	18
one	586
S	1
2	3
3	7
4	8
arent of conservation listed taxa	5
U	20
otal	**667**

ingdoms	Count
nimalia	667
otal unique species	**667**

	Class	Family	Name	Establishment	Conservatio
nimalia					
	None	None	Arthropoda		
	None	Entomobryidae	Australotomurus morbidus Greenslade & Jordana, 2014 *(cemetery springtail)*	native	P3
	Amphibia	Limnodynastidae	Heleioporus albopunctatus Gray, 1841 *(Western Spotted Frog)*	native	
	Amphibia	Limnodynastidae	Heleioporus eyrei (Gray, 1845)	native	
	Amphibia	Limnodynastidae	Limnodynastes dorsalis (Gray, 1841)	native	
	Amphibia	Myobatrachidae	Crinia georgiana Tschudi, 1838	native	
	Amphibia	Myobatrachidae	Crinia glauerti (Loveridge, 1933)	native	
	Amphibia	Myobatrachidae	Crinia insignifera (Moore, 1954)	native	
	Amphibia	Myobatrachidae	Geocrinia leai (Fletcher, 1898)	native	
0	Amphibia	Myobatrachidae	Myobatrachus gouldii (Gray, 1841)	native	
1	Amphibia	Myobatrachidae	Pseudophryne guentheri Boulenger, 1882	native	
2	Amphibia	Pelodryadidae GÃ¼nther, 1858	Litoria adelaidensis (Gray, 1841)	native	
3	Amphibia	Pelodryadidae GÃ¼nther, 1858	Litoria moorei (Copland, 1957)	native	
4	Arachnida	None	Araneae Clerck, 1757		

	Arachnida	1892	Missulena Walckenaer, 1805		
7	Arachnida	Actinopodidae Simon, 1892	Missulena granulosa (O. P.-Cambridge, 1869)		
8	Arachnida	Actinopodidae Simon, 1892	Missulena occatoria Walckenaer, 1805		
9	Arachnida	Anamidae Simon, 1889	Aname L. Koch, 1873		
0	Arachnida	Anamidae Simon, 1889	Anaminae		
1	Arachnida	Anamidae Simon, 1889	Chenistonia Hogg, 1901		
2	Arachnida	Anamidae Simon, 1889	Kwonkan Main, 1983		
3	Arachnida	Anamidae Simon, 1889	Proshermacha Simon, 1908		
4	Arachnida	Anapidae Simon, 1895	Micropholcommatinae		
5	Arachnida	Anapidae Simon, 1895	Raveniella cirrata Rix & Harvey, 2010		
6	Arachnida	Anapidae Simon, 1895	Raveniella peckorum Rix & Harvey, 2010		
7	Arachnida	Araneidae Clerck, 1757	Austracantha minax (Thorell, 1859)		
8	Arachnida	Araneidae Clerck, 1757	Hortophora biapicata (L. Koch, 1871)		
9	Arachnida	Araneidae Clerck, 1757	Poltys C. L. Koch, 1843		
0	Arachnida	Barychelidae Simon, 1892	Barychelinae		
1	Arachnida	Barychelidae Simon, 1892	Idiommata Ausserer, 1871		
2	Arachnida	Barychelidae Simon, 1892	Idiommata blackwalli (O. Pickard-Cambridge, 1870)		
3	Arachnida	Barychelidae Simon, 1892	Synothele Simon, 1908		
4	Arachnida	Barychelidae Simon, 1892	Synothele durokoppin Raven, 1994	mixed	
5	Arachnida	Barychelidae Simon, 1892	Synothele michaelseni Simon, 1908		
6	Arachnida	Bothriuridae	Cercophonius Peters, 1861		
7	Arachnida	Bothriuridae	Cercophonius granulosus Kraepelin, 1908		
8	Arachnida	Bothriuridae	Cercophonius sulcatus Kraepelin, 1908		
9	Arachnida	Buthidae C.L. Koch, 1837	Buthidae C.L. Koch, 1837		
0	Arachnida	Buthidae C.L. Koch, 1837	Isometroides Keyserling, 1885		
1	Arachnida	Buthidae C.L. Koch, 1837	Lychas C.L. Koch, 1845		
2	Arachnida	Chthoniidae Daday, 1888	Austrochthonius J.C. Chamberlin, 1929		
3	Arachnida	Corinnidae	Iridonyssus formicans Raven, 2015		
4	Arachnida	Corinnidae	Nyssus albopunctatus (Hogg, 1896)		
5	Arachnida	Corinnidae	Nyssus coloripes Walckenaer, 1805		
6	Arachnida	Desidae Pocock, 1895	Badumna insignis (L. Koch, 1872)		
7	Arachnida	Desidae Pocock, 1895	Corasoides occidentalis Humphrey, 2017		
8	Arachnida	Euagridae Raven, 1979	Cethegus Thorell, 1881		
9	Arachnida	Gnaphosidae Banks, 1892	Austrammo harveyi Platnick, 2002		
0	Arachnida	Gnaphosidae Banks, 1892	Ceryerda Simon, 1909		
1	Arachnida	Gnaphosidae Banks, 1892	Cryptoerithus quobba Platnick & Baehr, 2006		
	Arachnida	Gnaphosidae Banks,	Gnaphosidae Banks, 1892		

3	Arachnida	Gnaphosidae Banks, 1892	Molycria vokes Platnick & Baehr, 2006		
4	Arachnida	Gnaphosidae Banks, 1892	Molycriinae		
5	Arachnida	Gnaphosidae Banks, 1892	Myandra bicincta Simon, 1908		
6	Arachnida	Gnaphosidae Banks, 1892	Myandra cambridgei Simon, 1887		
7	Arachnida	Idiopidae Simon, 1889	Idiosoma Ausserer, 1871		Parent of conservation listed taxa
8	Arachnida	Idiopidae Simon, 1889	Idiosoma nigrum Main, 1952	native	EN
9	Arachnida	Idiopidae Simon, 1889	Idiosoma sigillatum O. P.-Cambridge, 1870 *(Swan Coastal Plain shield-backed trapdoor spider)*	native	P3
0	Arachnida	Ixodidae	Amblyomma Koch, 1844		
1	Arachnida	Ixodidae	Amblyomma triguttatum triguttatum Koch, 1844	uncertain	
2	Arachnida	Lamponidae Simon, 1893	Lampona cylindrata (L. Koch, 1866)		
3	Arachnida	Lamponidae Simon, 1893	Lampona whaleback Platnick, 2000		
4	Arachnida	Lamponidae Simon, 1893	Lamponella kimba Platnick, 2000		
5	Arachnida	Lamponidae Simon, 1893	Lamponina elongata Platnick, 2000		
6	Arachnida	Lamponidae Simon, 1893	Longepi woodman Platnick, 2000	mixed	
7	Arachnida	Lamponidae Simon, 1893	Paralampona marangaroo Platnick, 2000		
8	Arachnida	Lamponidae Simon, 1893	Prionosternum nitidiceps (Simon, 1909)		
9	Arachnida	Lamponidae Simon, 1893	Prionosternum scutatum Dunn, 1951		
0	Arachnida	Lamponidae Simon, 1893	Pseudolampona woodman Platnick, 2000		
1	Arachnida	Linyphiidae Blackwall, 1859	Erigone Audouin, 1826		
2	Arachnida	Linyphiidae Blackwall, 1859	Laetesia Simon, 1908		
3	Arachnida	Linyphiidae Blackwall, 1859	Linyphiidae Blackwall, 1859		
4	Arachnida	Lycosidae	Artoria Thorell, 1877		
5	Arachnida	Lycosidae	Artoria linnaei Framenau, 2008		
6	Arachnida	Lycosidae	Dingosa serrata (L. Koch, 1877)		
7	Arachnida	Lycosidae	Hogna crispipes (L. Koch, 1877)		
8	Arachnida	Lycosidae	Lycosa Latreille, 1804		
9	Arachnida	Lycosidae	Lycosa australicola (Strand, 1913)		
0	Arachnida	Lycosidae	Tasmanicosa gilberta (Hogg, 1905)		
1	Arachnida	Lycosidae	Tasmanicosa godeffroyi (L. Koch, 1865)		
2	Arachnida	Lycosidae	Venator Hogg, 1833		
3	Arachnida	Lycosidae	Venator immansuetus (Simon, 1909)		
4	Arachnida	Lycosidae	Venatrix pullastra (Simon, 1909)		
5	Arachnida	Malkaridae Davies, 1980	Pararchaeinae		
6	Arachnida	Malkaridae Davies, 1980	Westrarchaea pusilla Rix, 2006		
7	Arachnida	Mimetidae Simon, 1881	Australomimetus auriocularus (Hickman, 1929)		
8	Arachnida	Mimetidae Simon, 1881	Australomimetus spinosus Heimer, 1986		
9	Arachnida	Miturgidae Simon, 1889	Elassoctenus Simon, 1909		

		1889			
1	Arachnida	Miturgidae Simon, 1889	Miturgidae Simon, 1889		
2	Arachnida	Miturgidae Simon, 1889	Mitzoruga Raven, 2009		
3	Arachnida	Miturgidae Simon, 1889	Simonus lineatus (Simon, 1880)	native	
4	Arachnida	Neopilionidae Lawrence, 1931	Ballarra longipalpus Hunt & Cokendolpher, 1991		
5	Arachnida	Neopilionidae Lawrence, 1931	Megalopsalis Roewer, 1923		
6	Arachnida	Nephilidae Simon, 1894	Trichonephila edulis (LabillardiÃ¨re, 1799)		
7	Arachnida	Oecobiidae Blackwall, 1862	Oecobius navus Blackwall, 1859		
8	Arachnida	Olpiidae Banks, 1895	Beierolpium Heurtault, 1976		
9	Arachnida	Oonopidae Simon, 1890	Grymeus Harvey, 1987		
00	Arachnida	Oonopidae Simon, 1890	Opopaea Simon, 1892		
01	Arachnida	Oonopidae Simon, 1890	Opopaea framenaui Baehr & Harvey, 2013		
02	Arachnida	Oonopidae Simon, 1890	Opopaea gracillima Baehr & Harvey, 2013		
03	Arachnida	Oonopidae Simon, 1890	Opopaea marangaroo Baehr & Harvey, 2013		
04	Arachnida	Oonopidae Simon, 1890	Opopaea rixi Baehr & Harvey, 2013		
05	Arachnida	Oonopidae Simon, 1890	Orchestina Simon, 1882		
06	Arachnida	Oonopidae Simon, 1890	Pelicinus Simon, 1892		
07	Arachnida	Oonopidae Simon, 1890	Xestaspis Simon, 1884		
08	Arachnida	Oxyopidae	Oxyopes Latreille, 1804		
09	Arachnida	Pholcidae C.L. Koch, 1851	Pholcus phalangioides (Fuesslin, 1775)		
10	Arachnida	Phonognathidae Simon, 1894	Phonognatha Simon, 1894		
11	Arachnida	Pseudocheylidae Oudemans, 1909	Anoplocheylus clavatus Baker & Atyeo, 1964		
12	Arachnida	Salticidae Blackwall, 1841	Cytaea Keyserling, 1882		
13	Arachnida	Salticidae Blackwall, 1841	Euophryini		
14	Arachnida	Salticidae Blackwall, 1841	Maratus Karsch, 1878		
15	Arachnida	Salticidae Blackwall, 1841	Maratus chrysomelas (Simon, 1909)		
16	Arachnida	Salticidae Blackwall, 1841	Maratus clupeatus Otto & Hill, 2014		
17	Arachnida	Salticidae Blackwall, 1841	Maratus pavonis (Dunn, 1947)		
18	Arachnida	Salticidae Blackwall, 1841	Maratus spicatus Otto & Hill, 2012		
19	Arachnida	Salticidae Blackwall, 1841	Neon Simon, 1876		
20	Arachnida	Salticidae Blackwall, 1841	Ocrisiona leucocomis (L. Koch, 1879)		
21	Arachnida	Salticidae Blackwall, 1841	Salticidae Blackwall, 1841		
22	Arachnida	Salticidae Blackwall, 1841	Servaea melaina Richardson & Gunter, 2012		

23	Arachnida	1841	Sondra Wahless, 1988		
24	Arachnida	Salticidae Blackwall, 1841	Thyene concinna (Keyserling, 1881)		
25	Arachnida	Segestriidae Simon, 1893	Segestriidae Simon, 1893		
26	Arachnida	Selenopidae Simon, 1897	Karaops jarrit Crews & Harvey, 2011		
27	Arachnida	Sparassidae Bertkau, 1872	Delena convexa (Hirst, 1991)		
28	Arachnida	Sparassidae Bertkau, 1872	Isopeda leishmanni Hogg, 1903		
29	Arachnida	Sparassidae Bertkau, 1872	Neosparassus Hogg, 1903		
30	Arachnida	Sparassidae Bertkau, 1872	Sparassidae Bertkau, 1872		
31	Arachnida	Theridiidae Sundevall, 1833	Argyrodes Simon, 1864		
32	Arachnida	Theridiidae Sundevall, 1833	Crustulina bicruciata Simon, 1908		
33	Arachnida	Theridiidae Sundevall, 1833	Enoplognatha Pavesi, 1880		
34	Arachnida	Theridiidae Sundevall, 1833	Euryopis Menge, 1868		
35	Arachnida	Theridiidae Sundevall, 1833	Gmogala Keyserling, 1890		
36	Arachnida	Theridiidae Sundevall, 1833	Hadrotarsinae		
37	Arachnida	Theridiidae Sundevall, 1833	Hadrotarsus Thorell, 1881		
38	Arachnida	Theridiidae Sundevall, 1833	Latrodectus Sundevall, 1805		
39	Arachnida	Theridiidae Sundevall, 1833	Latrodectus hasselti Thorell, 1870		
40	Arachnida	Theridiidae Sundevall, 1833	Phycosoma O. Pickard-Cambridge, 1880		
41	Arachnida	Theridiidae Sundevall, 1833	Steatoda Sundevall, 1833		
42	Arachnida	Theridiidae Sundevall, 1833	Steatoda capensis Hann, 1990		
43	Arachnida	Theridiidae Sundevall, 1833	Theridiidae Sundevall, 1833		
44	Arachnida	Thomisidae Sundevall, 1833	Australomisidia Szymkowiak, 2014		
45	Arachnida	Thomisidae Sundevall, 1833	Australomisidia cruentata (L. Koch, 1874)		
46	Arachnida	Thomisidae Sundevall, 1833	Sidymella Strand, 1942		
47	Arachnida	Thomisidae Sundevall, 1833	Stephanopis O. Pickard-Cambridge, 1869		
48	Arachnida	Thomisidae Sundevall, 1833	Thomisidae Sundevall, 1833		
49	Arachnida	Trachycosmidae Platnick, 2002	Longrita insidiosa (Simon, 1908)		
50	Arachnida	Triaenonychidae	Nunciella Roewer, 1929		
51	Arachnida	Uloboridae	Uloborus Latreille, 1806		
52	Arachnida	Urodacidae	Urodacus Peters, 1861		
53	Arachnida	Urodacidae	Urodacus novaehollandiae Peters, 1861		
54	Arachnida	Zodariidae Thorell, 1881	Australutica JocquÃ©, 1995		
55	Arachnida	Zodariidae Thorell, 1881	Habronestes australiensis (O. Pickard-Cambridge, 1869)	native	
56	Arachnida	Zodariidae Thorell,	Masasteron tuart Baehr, 2004		

57	Arachnida	1881	Neostorena Rainbow, 1914		
58	Arachnida	Zodariidae Thorell, 1881	Zillimata JocquÃ©, 1995		
59	Aves	Acanthizidae	Acanthiza apicalis Gould, 1847	native	
60	Aves	Acanthizidae	Acanthiza apicalis apicalis Gould, 1847 *(Broad-tailed Thornbill)*	native	
61	Aves	Acanthizidae	Acanthiza chrysorrhoa (Quoy & Gaimard, 1830)	native	
62	Aves	Acanthizidae	Acanthiza inornata Gould, 1841	native	
63	Aves	Acanthizidae	Gerygone fusca (Gould, 1838)	native	
64	Aves	Acanthizidae	Smicrornis brevirostris (Gould, 1838)	native	
65	Aves	Accipitridae	Elanus axillaris (Latham, 1802)		
66	Aves	Accipitridae	Elanus caeruleus (Desfontaines, 1789)	native	
67	Aves	Accipitridae	Haliaeetus leucogaster (Gmelin, 1788)	native	
68	Aves	Accipitridae	Haliastur sphenurus (Vieillot, 1818)	native	
69	Aves	Accipitridae	Hieraaetus morphnoides (Gould, 1841)	native	
70	Aves	Accipitridae	Pandion haliaetus (Linnaeus, 1758)	native	MI
71	Aves	Accipitridae	Tachyspiza cirrocephala (Vieillot, 1817)	native	
72	Aves	Accipitridae	Tachyspiza cirrocephala cirrocephala (Vieillot, 1817)	native	
73	Aves	Accipitridae	Tachyspiza fasciata Vigors & Horsfield, 1827	native	
74	Aves	Aegothelidae	Aegotheles cristatus (Shaw, 1790)	native	
75	Aves	Alcedinidae	Dacelo novaeguineae (Hermann, 1783)	alien	
76	Aves	Alcedinidae	Todiramphus sanctus (Vigors & Horsfield, 1827)	native	
77	Aves	Alcedinidae	Todiramphus sanctus sanctus (Vigors & Horsfield, 1837)	native	
78	Aves	Anatidae	Anas gracilis Buller, 1869	native	
79	Aves	Anatidae	Anas platyrhynchos Linnaeus, 1758	native	
80	Aves	Anatidae	Anas superciliosa Gmelin, 1789	native	
81	Aves	Anatidae	Aythya australis (Eyton, 1838)	native	
82	Aves	Anatidae	Biziura lobata (Shaw, 1796)	native	
83	Aves	Anatidae	Chenonetta jubata (Latham, 1802) *(Australian Wood Duck)*	native	
84	Aves	Anatidae	Cygnus atratus (Latham, 1790) *(Black Swan)*	native	
85	Aves	Anatidae	Malacorhynchus membranaceus (Latham, 1802)	native	
86	Aves	Anatidae	Oxyura australis Gould, 1836	native	P4
87	Aves	Anatidae	Spatula rhynchotis (Latham, 1802)		
88	Aves	Anatidae	Stictonetta naevosa (Gould, 1841)	native	
89	Aves	Anatidae	Tadorna tadornoides (Jardine & Selby, 1828)	native	
90	Aves	Anhingidae	Anhinga melanogaster Pennant, 1769	native	
91	Aves	Apodidae	Apus pacificus (Latham, 1801)	native	MI
92	Aves	Ardeidae	Ardea alba modesta JE Gray, 1831	native	
93	Aves	Ardeidae	Ardea coromanda (Boddaert, 1783)		
94	Aves	Ardeidae	Ardea pacifica Latham, 1802	native	
95	Aves	Ardeidae	Botaurus dubius Mathews, 1912	native	P4
96	Aves	Ardeidae	Botaurus flavicollis australis (Lesson, 1831)	native	P2
97	Aves	Ardeidae	Botaurus poiciloptilus (Wagler, 1827) *(Australasian Bittern)*	native	EN
98	Aves	Ardeidae	Egretta novaehollandiae (Latham, 1790)		
99	Aves	Ardeidae	Nycticorax caledonicus (Gmelin, 1789)	native	
00	Aves	Artamidae	Artamus cyanopterus (Latham, 1802)	native	
01	Aves	Artamidae	Cracticus torquatus (Latham, 1802)	native	
02	Aves	Artamidae	Gymnorhina tibicen (Latham, 1802)		
03	Aves	Cacatuidae	Cacatua Vieillot, 1817		
04	Aves	Cacatuidae	Cacatua galerita galerita (Latham, 1790)	alien	
05	Aves	Cacatuidae	Cacatua sanguinea Gould, 1843	native	
06	Aves	Cacatuidae	Cacatua tenuirostris (Kuhl, 1820)	alien	
07	Aves	Cacatuidae	Calyptorhynchus Desmarest, 1826		Parent of conservation listed taxa

09	Aves	Cacatuidae	Calyptorhynchus banksii naso Gould, 1837	native	VU
10	Aves	Cacatuidae	Eolophus roseicapilla (Vieillot, 1817)	native	
11	Aves	Cacatuidae	Zanda Mathews, 1913		Parent of conservation listed taxa
12	Aves	Cacatuidae	Zanda baudinii Lear, 1832 *(Baudin's Cockatoo)*	native	EN
13	Aves	Cacatuidae	Zanda latirostris Carnaby, 1948	native	EN
14	Aves	Campephagidae	Coracina novaehollandiae (Gmelin, 1789)	native	
15	Aves	Charadriidae	Charadrius melanops Vieillot, 1818	native	
16	Aves	Climacteridae	Climacteris rufus Gould, 1841	native	
17	Aves	Columbidae	Columba livia Gmelin, 1789	alien	
18	Aves	Columbidae	Ocyphaps lophotes (Temminck, 1822)	native	
19	Aves	Columbidae	Spilopelia chinensis (Scopoli, 1786)		
20	Aves	Columbidae	Spilopelia senegalensis (Linnaeus, 1766)		
21	Aves	Corvidae	Corvus coronoides Vigors & Horsfield, 1827	native	
22	Aves	Corvidae	Corvus coronoides coronoides Vigors & Horsfield, 1827	mixed	
23	Aves	Cracticidae	Strepera versicolor (Latham, 1802)	native	
24	Aves	Cuculidae	Cacomantis flabelliformis flabelliformis (Latham, 1802)	native	
25	Aves	Cuculidae	Chalcites lucidus (Gmelin & JF, 1788)	native	
26	Aves	Cuculidae	Chalcites lucidus plagosus (Latham, 1802)		
27	Aves	Cuculidae	Heteroscenes pallidus (Latham, 1802)		
28	Aves	Dicaeidae	Dicaeum hirundinaceum (Shaw, 1792)	native	
29	Aves	Diomedeidae	Diomedea antipodensis gibsoni Robertson & Warham, 1992	native	EN
30	Aves	Diomedeidae	Thalassarche carteri (Rothschild, 1903)	native	EN
31	Aves	Diomedeidae	Thalassarche cauta cauta (Gould, 1841) *(Shy Albatross)*	native	VU
32	Aves	Diomedeidae	Thalassarche chlororhynchos (Gmelin, 1789)	native	VU
33	Aves	Diomedeidae	Thalassarche chrysostoma (J.R. Forster, 1785)	native	VU
34	Aves	Falconidae	Falco berigora Vigors & Horsfield, 1827	native	
35	Aves	Falconidae	Falco cenchroides Vigors & Horsfield, 1827	native	
36	Aves	Falconidae	Falco cenchroides cenchroides Vigors & Horsfield, 1827	native	
37	Aves	Falconidae	Falco longipennis Swainson, 1837	native	
38	Aves	Falconidae	Falco peregrinus Tunstall, 1771 *(Peregrine Falcon)*	native	OS
39	Aves	Falconidae	Falco peregrinus macropus Swainson, 1837	native	Cons code inherited fror parent; OS
40	Aves	Falcunculidae	Falcunculus leucogaster Gould, 1838	native	
41	Aves	Hirundinidae	Cheramoeca leucosterna (Gould, 1841)	native	
42	Aves	Hirundinidae	Hirundo neoxena Gould, 1842	native	
43	Aves	Hirundinidae	Petrochelidon nigricans (Vieillot, 1817)	native	
44	Aves	Hydrobatidae	Oceanites oceanicus (Kuhl, 1820)	native	MI
45	Aves	Laridae	Anous tenuirostris melanops Gould, 1846	native	EN
46	Aves	Laridae	Chlidonias leucopterus (Temminck, 1815)	native	MI
47	Aves	Laridae	Chroicocephalus novaehollandiae Stephens, 1826		
48	Aves	Laridae	Hydroprogne caspia (Pallas, 1770)	native	MI
49	Aves	Laridae	Onychoprion anaethetus (Scopoli, 1786) *(Bridled Tern)*	native	MI
50	Aves	Laridae	Onychoprion anaethetus anaethetus (Scopoli, 1786)		Cons code inherited fror parent; MI
51	Aves	Laridae	Sterna dougallii gracilis Gould, 1845	native	Cons code inherited fror parent; MI
52	Aves	Laridae	Sterna paradisaea Pontoppidan, 1763	native	MI
53	Aves	Laridae	Sternula nereis nereis Gould, 1843	native	VU
54	Aves	Locustellidae Bonaparte, 1854	Cincloramphus mathewsi Iredale, 1911	native	
					Parent of

56	Aves	Maluridae	Malurus leucopterus Dumont, 1824	native	
57	Aves	Maluridae	Malurus splendens (Quoy & Gaimard, 1830)	native	
58	Aves	Meliphagidae	Acanthorhynchus superciliosus Gould, 1837	native	
59	Aves	Meliphagidae	Anthochaera carunculata (Shaw, 1790)	native	
60	Aves	Meliphagidae	Anthochaera lunulata Gould, 1838	native	
61	Aves	Meliphagidae	Gavicalis virescens (Vieillot, 1817)	native	
62	Aves	Meliphagidae	Gliciphila melanops (Latham, 1802)	native	
63	Aves	Meliphagidae	Lichmera indistincta (Vigors & Horsfield, 1827)	native	
64	Aves	Meliphagidae	Manorina flavigula (Gould, 1840)	native	
65	Aves	Meliphagidae	Phylidonyris niger (Bechstein, 1811)	native	
66	Aves	Meliphagidae	Phylidonyris novaehollandiae (Latham, 1790)	native	
67	Aves	Meliphagidae	Ptilotula ornata (Gould, 1838)	native	
68	Aves	Meropidae	Merops ornatus Latham, 1802	native	
69	Aves	Monarchidae Bonaparte, 1854	Grallina cyanoleuca (Latham, 1802)	native	
70	Aves	Neosittidae	Daphoenositta chrysoptera (Latham, 1802)	native	
71	Aves	Pachycephalidae	Colluricincla harmonica (Latham, 1802)	native	
72	Aves	Pachycephalidae	Colluricincla harmonica rufiventris Gould, 1841	native	
73	Aves	Pachycephalidae	Pachycephala fuliginosa occidentalis Ramsay, 1878		
74	Aves	Pachycephalidae	Pachycephala rufiventris (Latham, 1802)	native	
75	Aves	Pachycephalidae	Pachycephala rufiventris rufiventris (Latham, 1802)	native	
76	Aves	Pardalotidae	Pardalotus striatus (Gmelin, 1789)	native	
77	Aves	Passeridae	Passer domesticus (Linnaeus, 1758)	alien	
78	Aves	Passeridae	Passer domesticus domesticus (Linnaeus, 1758)	alien	
79	Aves	Pelecanidae	Pelecanus conspicillatus Temminck, 1824	native	
80	Aves	Petroicidae Mathews, 1920	Melanodryas cucullata (Latham, 1802)	native	
81	Aves	Petroicidae Mathews, 1920	Petroica boodang campbelli Sharpe, 1898	native	
82	Aves	Phalacrocoracidae	Microcarbo melanoleucos (Vieillot, 1817)		
83	Aves	Phalacrocoracidae	Phalacrocorax sulcirostris (von Brandt, 1837)	native	
84	Aves	Podargidae	Podargus strigoides (Latham, 1802)	native	
85	Aves	Podargidae	Podargus strigoides brachypterus Gould, 1841	native	
86	Aves	Podicipedidae	Podiceps cristatus australis Gould, 1844	native	
87	Aves	Podicipedidae	Poliocephalus poliocephalus (Jardine & Selby, 1827)	native	
88	Aves	Podicipedidae	Tachybaptus novaehollandiae novaehollandiae (Stephens, 1826)	native	
89	Aves	Procellariidae	Ardenna carneipes (Gould, 1844)	native	VU
90	Aves	Procellariidae	Ardenna pacifica (Gmelin, 1789)	native	MI
91	Aves	Procellariidae	Calonectris leucomelas (Temminck, 1835) *(Streaked Shearwater)*	native	MI
92	Aves	Procellariidae	Halobaena caerulea (Gmelin, 1789)	native	VU
93	Aves	Procellariidae	Macronectes giganteus (Gmelin, 1789)	native	MI
94	Aves	Procellariidae	Procellaria aequinoctialis Linnaeus, 1758 *(White-chinned Petrel)*	native	VU
95	Aves	Procellariidae	Pterodroma mollis (Gould, 1844)	native	VU
96	Aves	Psittacidae	Neophema elegans (Gould, 1837)	native	
97	Aves	Psittaculidae	Barnardius zonarius (Shaw, 1805)		
98	Aves	Psittaculidae	Psittacula krameri Scopoli, 1769	alien	
99	Aves	Psittaculidae	Purpureicephalus spurius (Kuhl, 1820)	native	
00	Aves	Psittaculidae	Trichoglossus haematodus (Linnaeus, 1771)	native	
01	Aves	Psittaculidae	Trichoglossus haematodus moluccanus (Gmelin, 1788)	alien	
02	Aves	Rallidae	Fulica atra Linnaeus, 1758	native	
03	Aves	Rallidae	Fulica atra australis Gould, 1845	native	
04	Aves	Rallidae	Gallinula tenebrosa tenebrosa Gould, 1846	native	
05	Aves	Rallidae	Hypotaenidia philippensis (Linnaeus, 1766)		

07	Aves	Rallidae	Porphyrio porphyrio (Linnaeus, 1758)	native	
08	Aves	Rallidae	Porphyrio porphyrio bellus Gould, 1841	native	
09	Aves	Rallidae	Tribonyx ventralis (Gould, 1837)	native	
10	Aves	Recurvirostridae	Himantopus himantopus (Linnaeus, 1758)	native	
11	Aves	Rhipiduridae	Rhipidura albiscapa Gould, 1840	native	
12	Aves	Rhipiduridae	Rhipidura leucophrys (Latham, 1802)	native	
13	Aves	Rhipiduridae	Rhipidura leucophrys leucophrys (Latham, 1802)	native	
14	Aves	Scolopacidae	Actitis hypoleucos (Linnaeus, 1758)	native	MI
15	Aves	Scolopacidae	Calidris acuminata (Horsfield, 1821)	native	MI
16	Aves	Scolopacidae	Calidris ferruginea (Pontoppidan, 1763)	native	CR
17	Aves	Scolopacidae	Calidris subminuta (Middendorff, 1853)	native	MI
18	Aves	Scolopacidae	Limosa limosa (Linnaeus, 1758)	native	MI
19	Aves	Scolopacidae	Tringa glareola Linnaeus, 1758	native	MI
20	Aves	Scolopacidae	Tringa nebularia (Gunnerus, 1767)	native	MI
21	Aves	Scolopacidae	Tringa stagnatilis (Bechstein, 1803)	native	MI
22	Aves	Stercorariidae	Stercorarius antarcticus lonnbergi (Matthews, 1912)	native	P4
23	Aves	Strigidae	Ninox boobook (Latham, 1801)	native	
24	Aves	Sylviidae	Megalurus gramineus (Gould, 1845)	native	
25	Aves	Threskiornithidae	Platalea flavipes Gould, 1838	native	
26	Aves	Threskiornithidae	Plegadis falcinellus (Linnaeus, 1766) *(Glossy Ibis)*	native	MI
27	Aves	Threskiornithidae	Threskiornis moluccus (Cuvier, 1829)	native	
28	Aves	Threskiornithidae	Threskiornis spinicollis (Jameson, 1835)	native	
29	Aves	Turnicidae	Turnix		
30	Aves	Turnicidae	Turnix velox (Gould, 1841)	native	
31	Aves	Tytonidae	Tyto javanica delicatula (Gould, 1837)		
32	Aves	Tytonidae	Tyto novaehollandiae novaehollandiae (Stephens, 1826)	native	P3
33	Aves	Zosteropidae	Zosterops lateralis (Latham, 1802)	native	
34	Aves	Zosteropidae	Zosterops lateralis chloronotus Gould, 1841	native	
35	Bivalvia	Hyriidae	Westralunio carteri Iredale, 1934	native	VU
36	Chilopoda Latreille, 1817	None	Geophilida	native	
37	Chilopoda Latreille, 1817	Chilenophilidae	Chilenophilidae		
38	Chilopoda Latreille, 1817	Henicopidae	Henicopidae		
39	Chilopoda Latreille, 1817	Henicopidae	Henicops dentatus Pocock, 1901		
40	Chilopoda Latreille, 1817	Scolopendridae	Cormocephalus aurantiipes (Newport, 1844)		
41	Chilopoda Latreille, 1817	Scolopendridae	Cormocephalus novaehollandiae (Kraepelin, 1908)		
42	Chilopoda Latreille, 1817	Scolopendridae	Cormocephalus strigosus Kraepelin, 1908		
43	Chilopoda Latreille, 1817	Scolopendridae	Cormocephalus turneri Pocock, 1901		
44	Chilopoda Latreille, 1817	Scolopendridae	Ethmostigmus rubripes (Brandt, 1840)		
45	Chilopoda Latreille, 1817	Scolopendridae	Notiasemus glauerti L. E. Koch, 1985		
46	Chilopoda Latreille, 1817	Scolopendridae	Scolopendra laeta Haase, 1887		
47	Chondrichthyes Huxley, 1880	Odontaspididae	Carcharias taurus Rafinesque, 1810	native	VU
48	Clitellata	None	Oligochaeta Grube, 1850		
49	Collembola Lubbock, 1870	None	Collembola Lubbock, 1870		
50	Cubozoa Werner, 1973	Carybdeidae Gegenbaur, 1857	Carybdea xaymacana Conant, 1897		

52	Desmospongiae	Spongillidae	Spongillidae		
53	Diplopoda de Blainville, 1844	None	Diplopoda de Blainville, 1844		
54	Diplopoda de Blainville, 1844	None	Polyzoniida Cook, 1895		
55	Diplopoda de Blainville, 1844	Iulomorphidae Verhoeff, 1924	Iulomorphidae Verhoeff, 1924		
56	Diplopoda de Blainville, 1844	Julidae Leach, 1814	Ommatoiulus moreleti (Lucas, 1860)		
57	Diplopoda de Blainville, 1844	Paradoxosomatidae	Antichiropus Attems, 1911		
58	Diplopoda de Blainville, 1844	Paradoxosomatidae	Antichiropus variabilis Attems, 1911		
59	Diplopoda de Blainville, 1844	Paradoxosomatidae	Antichiropus whistleri Attems, 1911		
60	Diplopoda de Blainville, 1844	Paradoxosomatidae	Solaenodolichopus Verhoeff, 1924		
61	Diplopoda de Blainville, 1844	Paradoxosomatidae	Solaenodolichopus pruvoti (Brolemann, 1931)		
62	Diplopoda de Blainville, 1844	Synxenidae Silvestri, 1923	Synxenidae Silvestri, 1923		
63	Gastropoda	Bothriembryontidae Iredale, 1937	Bothriembryon Pilsbry, 1894		
64	Gastropoda	Bothriembryontidae Iredale, 1937	Bothriembryon bulla	native	
65	Gastropoda	Columbellidae Swainson, 1840	Mitrella Risso, 1826		
66	Gastropoda	Glaucidae Gray, 1827	Glaucus atlanticus Forster, 1777		
67	Gastropoda	Lymnaeidae	Pseudosuccinea columella (Say, 1817)		
68	Gastropoda	Physidae	Physidae		
69	Gastropoda	Planorbidae Rafinesque, 1815	Planorbella duryi (Wetherby, 1879)		
70	Gastropoda	Polyceridae Hancock & Alder, 1845	Gymnodoris ceylonica (Kelaart, 1858)		
71	Gastropoda	Succineidae Beck, 1837	Succinea Draparnaud, 1801		
72	Hexacorallia	None	Plesiastrea versipora (Lamarck, 1816)		
73	Hexacorallia	Lobophylliidae	Lobophyllia de Blainville, 1830		
74	Hexacorallia	Merulinidae Milne Edwards & Haime, 1857	Cyphastrea serailia (ForskÃ¥l, 1775)		
75	Insecta	None	Coleoptera		
76	Insecta	None	Diptera		
77	Insecta	None	Fulgoroidea		
78	Insecta	None	Hemiptera		
79	Insecta	None	Hymenoptera		
80	Insecta	None	Lepidoptera		
81	Insecta	None	Staphylinoidea		
82	Insecta	None	Thysanoptera		
83	Insecta	Aeshnidae	Adversaeschna brevistyla (Rambur, 1842)		
84	Insecta	Alydidae	Alydidae		
85	Insecta	Alydidae	Melanacanthus StÃ¥l, 1873		
86	Insecta	Anthicidae Latreille, 1819	Anthicidae Latreille, 1819		
87	Insecta	Aphelinidae	Encarsia formosa Gahan, 1924		
88	Insecta	Aphelinidae	Encarsia sophia (Girault & Dodd, 1915)		
89	Insecta	Aphelinidae	Eretmocerus warrae Naumann & Schmidt, 2000		
90	Insecta	Aphididae	Aphididae		
91	Insecta	Apidae	Amegilla (Notomegilla) chlorocyanea (Cockerell, 1914)		

93	Insecta	Ascalaphidae	Stilbopteryx napoleo (LefÃ¯bvre, 1842)		
94	Insecta	Asilidae Latreille, 1802	Blepharotes Duncan, 1840		
95	Insecta	Asilidae Latreille, 1802	Mauropteron pelago (Walker, 1849)		
96	Insecta	Blattidae	Euzosteria femoralis (Walker, 1868)		
97	Insecta	Blattidae	Zonioploca StÃ¥l, 1874		
98	Insecta	Blattidae	Zonioploca pallida Shelford, 1909		
99	Insecta	Bolboceratidae	Blackbolbus frontalis (GuÃ©rin-MÃ©neville, 1838)		
00	Insecta	Bothrideridae Erichson, 1845	Deretaphrus Newman, 1842		
01	Insecta	Bothrideridae Erichson, 1845	Deretaphrus xanthorrhoeae Lea, 1899		
02	Insecta	Buprestidae Leach, 1815	Astraeus (Depollus) aberrans van de Poll, 1886		
03	Insecta	Buprestidae Leach, 1815	Buprestidae Leach, 1815		
04	Insecta	Buprestidae Leach, 1815	Calotemognatha varicollis (Carter, 1913)		
05	Insecta	Buprestidae Leach, 1815	Castiarina anchoralis (Gory & Laporte, 1838)		
06	Insecta	Buprestidae Leach, 1815	Castiarina aureola (Carter, 1913)		
07	Insecta	Buprestidae Leach, 1815	Castiarina cupreoflava (Saunders, 1869)		
08	Insecta	Buprestidae Leach, 1815	Castiarina decemguttata (Gory, 1841)		
09	Insecta	Buprestidae Leach, 1815	Castiarina flaviceps (Carter, 1913)		
10	Insecta	Buprestidae Leach, 1815	Castiarina mansueta (Kerremans, 1898)		
11	Insecta	Buprestidae Leach, 1815	Castiarina mimesis Barker, 1993		
12	Insecta	Buprestidae Leach, 1815	Castiarina pallidiventris (Gory & Laporte, 1838)		
13	Insecta	Buprestidae Leach, 1815	Castiarina simulata (Gory & Laporte, 1838)		
14	Insecta	Buprestidae Leach, 1815	Castiarina subcincta Barker, 1996		
15	Insecta	Buprestidae Leach, 1815	Castiarina versicolor Gory & Laporte, 1838		
16	Insecta	Buprestidae Leach, 1815	Diphucrania Dejean, 1833		
17	Insecta	Buprestidae Leach, 1815	Diphucrania duodecimmaculata (Fabricius, 1801)		
18	Insecta	Buprestidae Leach, 1815	Diphucrania leucosticta (Kirby, 1818)		
19	Insecta	Buprestidae Leach, 1815	Diphucrania macmillani (Barker, 2001)		
20	Insecta	Buprestidae Leach, 1815	Diphucrania parva (Blackburn, 1887)		
21	Insecta	Buprestidae Leach, 1815	Diphucrania roseocuprea (Hope, 1846)		
22	Insecta	Buprestidae Leach, 1815	Diphucrania tyrrhena (Carter, 1923)		
23	Insecta	Buprestidae Leach, 1815	Diphucrania viridipurpurea (Carter, 1924)		
24	Insecta	Buprestidae Leach, 1815	Ethonion roei (Saunders, 1868)		
25	Insecta	Buprestidae Leach, 1815	Melobasis Laporte & Gory, 1837		
26	Insecta	Buprestidae Leach,	Melobasis costifera Thomson, 1879		

27	Insecta	Buprestidae Leach, 1815	Melobasis glorlosa Laporte & Gory, 1837		
28	Insecta	Buprestidae Leach, 1815	Melobasis superba (Laporte & Gory, 1837)		
29	Insecta	Buprestidae Leach, 1815	Selagis Dejean, 1836		
30	Insecta	Buprestidae Leach, 1815	Stigmodera roei Saunders, 1868		
31	Insecta	Buprestidae Leach, 1815	Synechocera elongata Thomson, 1879		
32	Insecta	Buprestidae Leach, 1815	Temognatha mitchellii (Hope, 1846)		
33	Insecta	Buprestidae Leach, 1815	Temognatha reichei (Gory & Laporte, 1838)		
34	Insecta	Buprestidae Leach, 1815	Xyroscelis crocata (Gory & Laporte, 1839)		
35	Insecta	Callipappidae	Callipappus GuÃ©rin MÃ©neville, 1841		
36	Insecta	Castniidae	Synemon gratiosa Westwood, 1877	native	P4
37	Insecta	Cerambycidae	Phoracantha semipunctata (Fabricius, 1775)		
38	Insecta	Ceratocombidae	Ceratocombidae		
39	Insecta	Chrysopidae	Plesiochrysa ramburi (Schneider, 1851)		
40	Insecta	Cicadellidae Latreille, 1825	Bakeriana procurrens (Jacobi, 1909)		
41	Insecta	Cicadellidae Latreille, 1825	Cicadellidae Latreille, 1825		
42	Insecta	Coenagrionidae	Austroagrion cyane (Selys, 1876)		
43	Insecta	Coenagrionidae	Ischnura aurora (Brauer, 1865)		
44	Insecta	Coenagrionidae	Xanthagrion erythroneurum (Selys, 1876)		
45	Insecta	Colletidae	Callomelitta antipodes (Smith, 1853)		
46	Insecta	Colletidae	Euhesma (Euhesma) Michener, 1965		
47	Insecta	Colletidae	Hylaeus		
48	Insecta	Colletidae	Hylaeus (Euprosopis) violaceus (Smith, 1853)		
49	Insecta	Colletidae	Hylaeus (Euprosopoides) ruficeps kalamundae (Cockerell, 1915)		
50	Insecta	Colletidae	Hylaeus (Rhodohylaeus) rufipes (Smith, 1853)		
51	Insecta	Colletidae	Hylaeus (Sphaerhylaeus) globuliferus (Cockerell, 1929) *(woolybush bee)*	native	P3
52	Insecta	Colletidae	Leioproctus (Colletopsis) contrarius Michener, 1965 *(a short-tongued bee)*	native	P3
53	Insecta	Colletidae	Leioproctus (Leioproctus) macmillani Houston, 1991		
54	Insecta	Corduliidae	Hemicordulia tau (Selys, 1871)		
55	Insecta	Corduliidae	Procordulia affinis (Selys, 1871)		
56	Insecta	Coreidae	Coreidae		
57	Insecta	Corixidae	Agraptocorixa eurynome (Kirkaldy, 1897)		
58	Insecta	Cydnidae	Cydnidae		
59	Insecta	Cylindrachetidae	Cylindraustralia GÃ¼nther, 1992		
60	Insecta	Cylindrachetidae	Cylindraustralia kochii de Saussure, 1877		
61	Insecta	Formicidae Latreille, 1809	Formicidae Latreille, 1809		
62	Insecta	Formicidae Latreille, 1809	Iridomyrmex suchieri Forel, 1907		
63	Insecta	Gelastocoridae	Gelastocoridae		
64	Insecta	Gomphidae	Austrogomphus (Austrogomphus) collaris Hagen, 1854		
65	Insecta	Gryllotalpidae Leach, 1815	Gryllotalpa Latreille, 1802		
66	Insecta	Gryllotalpidae Leach, 1815	Gryllotalpa pluvialis (MjÃ¶berg, 1913)		
67	Insecta	Hemerobiidae	Micromus tasmaniae (Walker, 1860)		
68	Insecta	Hesperiidae Latreille, 1809	Hesperilla dirphia Hewitson, 1868		

70	Insecta	Hesperiidae Latreille, 1809	Taractrocera papyria agraulia (Hewitson, 1868)		
71	Insecta	Hesperiidae Latreille, 1809	Trapezites sciron Waterhouse & Lyell, 1914		
72	Insecta	Heteroceridae	Heterocerus simillimus Charpentier, 1968		
73	Insecta	Hyocephalidae	Hyocephalidae		
74	Insecta	Kalotermitidae	Kalotermes aemulus Sewell & Gay, 1978		
75	Insecta	Lestidae	Austrolestes aleison Watson & Moulds, 1979 *(Western Ringtail)*		
76	Insecta	Lestidae	Austrolestes analis (Rambur, 1842)		
77	Insecta	Lestidae	Austrolestes psyche (Hagen, 1862)		
78	Insecta	Libellulidae	Austrothemis nigrescens (Martin, 1901)		
79	Insecta	Libellulidae	Diplacodes bipunctata (Brauer, 1865)		
80	Insecta	Libellulidae	Diplacodes haematodes (Burmeister, 1839)		
81	Insecta	Libellulidae	Nannophya occidentalis (Tillyard, 1908)		
82	Insecta	Libellulidae	Orthetrum caledonicum (Brauer, 1865)		
83	Insecta	Libellulidae	Tramea stenoloba (Watson, 1962)		
84	Insecta	Lycaenidae	Candalides heathi heathi (Cox, 1873)		
85	Insecta	Lycaenidae	Cyprotides cyprotus cyprotus (Olliff, 1886)		
86	Insecta	Lycaenidae	Erina acasta (Cox, 1873)		
87	Insecta	Lycaenidae	Hypochrysops halyaetus Hewitson, 1874		
88	Insecta	Lycaenidae	Jalmenus inous inous Hewitson, 1865		
89	Insecta	Lycaenidae	Lampides boeticus (Linnaeus, 1767)		
90	Insecta	Lycaenidae	Nacaduba biocellata biocellata (C. & R. Felder, 1865)		
91	Insecta	Lycaenidae	Neolucia agricola occidens Waterhouse & Lyell, 1914		
92	Insecta	Lycaenidae	Ogyris idmo Hewitson, 1862		
93	Insecta	Lycaenidae	Theclinesthes miskini (T.P. Lucas, 1889)		
94	Insecta	Lycaenidae	Zizina otis labradus (Godart, 1824) *(Common Grass-blue)*		
95	Insecta	Lygaeidae	Lygaeidae		
96	Insecta	Megachilidae	Megachile (Austrochile) subferox Meade-Waldo, 1915		
97	Insecta	Megachilidae	Megachile (Eutricharaea) chrysopyga Smith, 1853		
98	Insecta	Megachilidae	Megachile (Hackeriapis) tosticauda Cockerell, 1912		
99	Insecta	Megachilidae	Megachile speluncarum Meade-Waldo, 1915		
00	Insecta	Miridae	Miridae		
01	Insecta	Myrmeleontidae	Distoleon bistrigatus (Rambur, 1842)		
02	Insecta	Nemopteridae	Chasmoptera huttii (Westwood, 1848)		
03	Insecta	Nepidae	Ranatra dispar Montandon, 1903		
04	Insecta	Noctuidae Latreille, 1809	Helicoverpa armigera (HÃ¼bner, 1808)		
05	Insecta	Notonectidae	Anisops thienemanni Lundblad, 1933		
06	Insecta	Notonectidae	Paranisops endymion (Kirkaldy, 1904)		
07	Insecta	Nymphalidae Rafinesque, 1815	Geitoneura klugii (GuÃ©rin-MÃ©neville, 1830)		
08	Insecta	Nymphalidae Rafinesque, 1815	Geitoneura minyas (Waterhouse & Lyell, 1914)		
09	Insecta	Pentatomidae	Oechalia schellenbergii (GuÃ©rin, 1831)		
10	Insecta	Pentatomidae	Pentatomidae		
11	Insecta	Pentatomidae	Poecilometis Dallas, 1851		
12	Insecta	Pentatomidae	Poecilometis apicalis apicalis (Westwood, 1837)		
13	Insecta	Pentatomidae	Poecilotoma		
14	Insecta	Pentatomidae	Poecilotoma grandicornis (Erichson, 1842)		
15	Insecta	Pentatomidae	Pseudapines geminata (Van Duzee, 1905)		
16	Insecta	Pergidae	Lophyrotoma Ashmead, 1898		
17	Insecta	Phoridae Curtis, 1833	Phoridae Curtis, 1833		
18	Insecta	Reduviidae	Harpactorinae		

21	Insecta	Reduviidae	Peiratinae		
22	Insecta	Reduviidae	Piestolestes Bergroth, 1912		
23	Insecta	Reduviidae	Reduviidae		
24	Insecta	Reduviidae	Trachylestes		
25	Insecta	Rhinotermitidae	Coptotermes acinaciformis raffrayi Wasmann, 1900		
26	Insecta	Rhinotermitidae	Coptotermes michaelseni Silvestri, 1909		
27	Insecta	Rhinotermitidae	Heterotermes occiduus (Hill, 1927)		
28	Insecta	Rhinotermitidae	Heterotermes platycephalus Froggatt, 1897		
29	Insecta	Rhinotermitidae	Schedorhinotermes reticulatus (Froggatt, 1897)		
30	Insecta	Scarabaeidae	Onthophagus flavoapicalis Lea, 1923		
31	Insecta	Scarabaeidae	Onthophagus haagi Harold, 1867		
32	Insecta	Tenebrionidae	Sympetes orbicularis (BrÃªme, 1842)		
33	Insecta	Termitidae	Amitermes conformis Gay, 1968		
34	Insecta	Termitidae	Amitermes heterognathus (Silvestri, 1909)		
35	Insecta	Termitidae	Amitermes modicus (Hill, 1942)		
36	Insecta	Termitidae	Hesperotermes infrequens (Hill, 1927)		
37	Insecta	Termitidae	Nasutitermes exitiosus (Hill, 1925)		
38	Insecta	Termitidae	Occasitermes occasus (Silvestri, 1909)		
39	Insecta	Termitidae	Paracapritermes kraepelinii (Silvestri, 1909)		
40	Insecta	Termitidae	Tumulitermes apiocephalus (Silvestri, 1909)		
41	Insecta	Termitidae	Tumulitermes westraliensis (Hill, 1921)		
42	Insecta	Termitidae	Xylochomitermes tomentosus (Gay, 1971)		
43	Insecta	Tettigoniidae	Austrosaga spinifer Rentz, 1993 *(bush cricket (Swan Coastal Plain), spiny katydid (Swan Coastal Plain))*	native	P2
44	Insecta	Therevidae	Therevidae		
45	Insecta	Tingidae	Tingidae		
46	Insecta	Tiphiidae	Austromyzinum nubilipennis (Turner, 1910)		
47	Insecta	Tiphiidae	Psammothynnus depressus (Westwood, 1844)		
48	Insecta	Tiphiidae	Zaspilothynnus Ashmead, 1903		
49	Insecta	Vespidae	Paragia oligomera Snelling, 1986		
50	Mammalia	Balaenidae	Eubalaena australis (Desmoulins, 1822) *(Southern Right Whale)*	native	VU
51	Mammalia	Balaenopteridae	Megaptera novaeangliae Borowski, 1781 *(Humpback Whale)*	native	CD, MI
52	Mammalia	Burramyidae	Cercartetus concinnus (Gould, 1845) *(Western Pygmy-possum)*	native	
53	Mammalia	Canidae	Canis familiaris L., 1758 *(Dog)*	alien	
54	Mammalia	Dasyuridae	Dasyurus geoffroii Gould, 1841	native	VU
55	Mammalia	Dasyuridae	Ningaui timealeyi Archer, 1975	native	
56	Mammalia	Dasyuridae	Phascogale tapoatafa wambenger Aplin, Rhind, Ten Have & Chesser, 2015 *(South-western Brush-tailed Phascogale)*	native	CD
57	Mammalia	Dasyuridae	Planigale ingrami (Thomas, 1906)	native	
58	Mammalia	Dasyuridae	Planigale maculata (Gould, 1851)	native	
59	Mammalia	Dasyuridae	Sminthopsis macroura (Gould, 1845)	native	
60	Mammalia	Felidae	Felis catus Linnaeus, 1758	alien	
61	Mammalia	Leporidae	Oryctolagus cuniculus (Linnaeus, 1758)	alien	
62	Mammalia	Macropodidae	Macropus fuliginosus (Desmarest, 1817)	native	
63	Mammalia	Macropodidae	Macropus fuliginosus melanops Gould, 1842 *(Western Grey Kangaroo)*	native	
64	Mammalia	Macropodidae	Notamacropus eugenii derbianus J.E. Gray, 1837	native	P4
65	Mammalia	Macropodidae	Notamacropus irma (Jourdan, 1837)	native	P4
66	Mammalia	Muridae	Hydromys chrysogaster Geoffroy, 1804 *(Water-rat)*	native	P4
67	Mammalia	Muridae	Mus musculus	alien	
68	Mammalia	Muridae	Pseudomys delicatulus	native	
69	Mammalia	Muridae	Pseudomys desertor Troughton, 1932	native	
70	Mammalia	Muridae	Pseudomys shortridgei (Thomas, 1907) *(Heath Mouse)*	native	VU
71	Mammalia	Muridae	Rattus fuscipes (Waterhouse, 1839) *(Western Bush Rat)*	native	

74	Mammalia	Otariidae	Arctocephalus tropicalis (Gray, 1872)	native	VU
75	Mammalia	Otariidae	Neophoca cinerea (Peron, 1816)	native	EN
76	Mammalia	Peramelidae	Isoodon fusciventer (Gray, 1841)	native	P4
77	Mammalia	Peramelidae	Isoodon obesulus (Shaw, 1797)	native	
78	Mammalia	Phalangeridae	Trichosurus vulpecula (Kerr, 1793)	native	
79	Mammalia	Phalangeridae	Trichosurus vulpecula hypoleucus (Wagner, 1855)	native	
80	Mammalia	Phocidae	Mirounga leonina (Linnaeus, 1758)	native	VU
81	Mammalia	Physeteridae	Physeter macrocephalus Linnaeus, 1758 *(Sperm Whale)*	native	VU
82	Mammalia	Potoroidae	Bettongia penicillata ogilbyi (Waterhouse, 1841)	native	CR
83	Mammalia	Pseudocheiridae	Pseudocheirus occidentalis (Thomas, 1888) *(ngwayir, Western Ringtail Possum)*	native	CR
84	Mammalia	Tachyglossidae	Tachyglossus aculeatus (Shaw, 1792)	native	
85	Mammalia	Tarsipedidae	Tarsipes rostratus Gervais & Verraux, 1842	native	
86	Mammalia	Vespertilionidae	Chalinolobus gouldii (Gray, 1841) *(Gould's Wattled Bat)*	native	
87	Reptilia	Agamidae	Ctenophorus adelaidensis (Gray, 1841) *(Southern Heath Dragon)*	native	
88	Reptilia	Agamidae	Ctenophorus caudicinctus (GÃ¼nther, 1875)	native	
89	Reptilia	Agamidae	Diporiphora valens Storr, 1979	native	
90	Reptilia	Agamidae	Moloch horridus Gray, 1841 *(Thorny Devil)*	native	
91	Reptilia	Agamidae	Pogona minor (Sternfeld, 1919)	native	
92	Reptilia	Agamidae	Pogona minor minor (Sternfeld, 1919) *(Western Bearded Dragon)*	native	
93	Reptilia	Chelidae	Chelodina oblonga Gray, 1841	native	
94	Reptilia	Chelidae	Pseudemydura umbrina Siebenrock, 1901 *(Western Swamp Tortoise)*	native	CR
95	Reptilia	Cheloniidae	Caretta caretta Linnaeus, 1758 *(Loggerhead Turtle)*	native	EN
96	Reptilia	Cheloniidae	Chelonia mydas (Linnaeus, 1758) *(Green Turtle)*	native	VU
97	Reptilia	Cheloniidae	Natator depressus (Garman, 1880) *(Flatback Turtle)*	native	VU
98	Reptilia	Dermochelyidae	Dermochelys coriacea (Vandelli, 1761) *(Leatherback Turtle)*	native	VU
99	Reptilia	Diplodactylidae	Crenadactylus ocellatus (Gray, 1845) *(South-western clawless gecko)*	native	
00	Reptilia	Diplodactylidae	Diplodactylus granariensis granariensis Storr, 1979 *(Western stone gecko)*	native	
01	Reptilia	Diplodactylidae	Diplodactylus polyophthalmus GÃ¼nther, 1867 *(Spotted Sandplain Gecko)*	native	
02	Reptilia	Diplodactylidae	Diplodactylus savagei Kluge, 1963	native	
03	Reptilia	Diplodactylidae	Lucasium stenodactylus (Boulenger, 1896)	native	
04	Reptilia	Diplodactylidae	Lucasium wombeyi (Storr, 1978)	native	
05	Reptilia	Diplodactylidae	Rhynchoedura ornata GÃ¼nther, 1867	native	
06	Reptilia	Diplodactylidae	Strophurus michaelseni (Werner, 1910) *(Robust striped gecko)*	native	
07	Reptilia	Diplodactylidae	Strophurus spinigerus (Gray, 1842)	native	
08	Reptilia	Diplodactylidae	Strophurus spinigerus spinigerus (Gray, 1842) *(Soft spiny-tailed gecko)*	native	
09	Reptilia	Elapidae	Brachyurophis fasciolatus fasciolatus (GÃ¼nther, 1872) *(Narrow-banded Shovel-nosed Snake)*	native	
10	Reptilia	Elapidae	Brachyurophis semifasciatus (GÃ¼nther, 1863) *(Southern Shovel-nosed Snake)*	native	
11	Reptilia	Elapidae	Demansia reticulata (Gray, 1842) *(Reticulated Whipsnake)*		
12	Reptilia	Elapidae	Echiopsis curta (Schlegel, 1837) *(Bardick)*	native	
13	Reptilia	Elapidae	Hydrophis platurus platurus (Linnaeus, 1766) *(Yellow-bellied Seasnake)*	native	
14	Reptilia	Elapidae	Narophis bimaculatus (A.M.C. DumÃ©ril, Bibron & A. DumÃ©ril, 1854) *(Black-naped Burrowing Snake)*		
15	Reptilia	Elapidae	Neelaps calonotos (A.M.C. DumÃ©ril, Bibron & A. DumÃ©ril, 1854)	native	P3
16	Reptilia	Elapidae	Notechis scutatus (Peters, 1861)	native	
17	Reptilia	Elapidae	Pseudonaja affinis Gunther, 1872	native	
18	Reptilia	Elapidae	Pseudonaja affinis affinis GÃ¼nther, 1872	native	
19	Reptilia	Elapidae	Simoselaps bertholdi (Jan, 1859)	native	
20	Reptilia	Elapidae	Suta gouldii (Gray, 1841) *(Gould's Hooded Snake)*		

23	Reptilia	Gekkonidae	Gehyra variegata (DumÃ©ril & Bibron, 1836)	native	
24	Reptilia	Gekkonidae	Heteronotia binoei	native	
25	Reptilia	Gekkonidae	Underwoodisaurus milii Bory de Saint-Vincent, 1825 *(Southern Barking Gecko)*	native	
26	Reptilia	Pygopodidae	Aprasia repens (Fry, 1914)	native	
27	Reptilia	Pygopodidae	Delma fraseri Gray, 1831 *(Fraser's Delma, Fraser's Legless Lizard)*	native	
28	Reptilia	Pygopodidae	Delma grayii Smith, 1849 *(Side-barred Delma)*	native	
29	Reptilia	Pygopodidae	Delma pax Kluge, 1974	native	
30	Reptilia	Pygopodidae	Lialis burtonis Gray, 1835	native	
31	Reptilia	Pygopodidae	Pletholax gracilis Cope, 1864 *(West Coast Keeled Legless Gecko)*	native	
32	Reptilia	Pygopodidae	Pygopus lepidopodus (LacÃ©pÃ¨de, 1804) *(Common Scaly Foot)*	native	
33	Reptilia	Pythonidae	Morelia spilota imbricata (Smith, 1981) *(Carpet Python, Western Australian Carpet Python)*	native	
34	Reptilia	Scincidae	Acritoscincus trilineatus (Gray, 1839)	native	
35	Reptilia	Scincidae	Carlia munda	native	
36	Reptilia	Scincidae	Cryptoblepharus buchananii (Gray, 1838)	native	
37	Reptilia	Scincidae	Cryptoblepharus plagiocephalus	native	
38	Reptilia	Scincidae	Ctenotus australis (Gray, 1838)	native	
39	Reptilia	Scincidae	Ctenotus fallens Storr, 1974	native	
40	Reptilia	Scincidae	Ctenotus gemmula (Swan Coastal Plain subpopulation) Storr, 1974 *(Jewelled South-west Ctenotus (Swan Coastal Plain pop P3), skink)*	native	P3
41	Reptilia	Scincidae	Ctenotus gemmula Storr, 1974 *(Jewelled South-west Ctenotus (Swan Coastal Plain subpop P3))*	native	Parent of conservation listed taxa
42	Reptilia	Scincidae	Ctenotus impar Storr, 1969 *(South-western Odd-striped Ctenotus)*	native	
43	Reptilia	Scincidae	Ctenotus saxatilis Storr, 1970	native	
44	Reptilia	Scincidae	Cyclodomorphus celatus Shea & Miller, 1995	native	
45	Reptilia	Scincidae	Egernia napoleonis (Gray, 1838) *(South-western Crevice-skink)*	native	
46	Reptilia	Scincidae	Hemiergis peronii (Fitzinger, 1826)	native	
47	Reptilia	Scincidae	Hemiergis quadrilineata (Dumeril & Bibron, 1839)	native	
48	Reptilia	Scincidae	Hemiergis quadrilineatus (Dumeril, Shaw & Bibron, 1839)	native	
49	Reptilia	Scincidae	Lerista elegans (Gray, 1845)	native	
50	Reptilia	Scincidae	Lerista jacksoni Smith & Adams, 2007	native	
51	Reptilia	Scincidae	Lerista lineopunctulata (Dumeril & Bibron, 1839) *(Line-spotted Robust Slider)*	native	
52	Reptilia	Scincidae	Lerista praepedita (Boulenger, 1987)	native	
53	Reptilia	Scincidae	Menetia greyii Gray, 1845	native	
54	Reptilia	Scincidae	Morethia lineoocellata (Dumeril & Bibron, 1839) *(West Coast Morethia Skink)*	native	
55	Reptilia	Scincidae	Morethia obscura (Storr, 1973)	native	
56	Reptilia	Scincidae	Morethia ruficauda	native	
57	Reptilia	Scincidae	Notoscincus ornatus	native	
58	Reptilia	Scincidae	Tiliqua occipitalis (Peters, 1863) *(Western Blue-tongue Skink)*	native	
59	Reptilia	Scincidae	Tiliqua rugosa (Gray, 1825)	native	
60	Reptilia	Scincidae	Tiliqua rugosa rugosa (Gray, 1825)	native	
61	Reptilia	Typhlopidae Merrem, 1820	Anilios australis Gray, 1845	native	
62	Reptilia	Typhlopidae Merrem, 1820	Anilios hamatus (Storr, 1981)	native	
63	Reptilia	Typhlopidae Merrem, 1820	Anilios pinguis (Waite, 1897) *(Rotund Blind Snake)*	native	P2
64	Reptilia	Typhlopidae Merrem, 1820	Anilios waitii (Boulenger, 1895) *(Beaked Blind Snake)*	native	
65	Reptilia	Varanidae	Varanus gouldii (Gray, 1838)	native	
66	Reptilia	Varanidae	Varanus rosenbergi Mertens, 1957 *(Heath Goanna, Heath Monitor)*	native	
67	Reptilia	Varanidae	Varanus tristis (Schlegel, 1839) *(Black-headed Monitor)*	native	

hreatened species

- CR – Critically Endangered
- EN – Endangered
- VU – Vulnerable
- EX – Extinct
- EW – Extinct in the Wild
- CD – Species of special conservation interest (conservation dependent)
- OS – Species otherwise in need of special protection (other specially protected)
- MI – Migratory
- SP – Specially protected species

riority species

- P1 – Priority 1: Poorly-known species – known from few locations, none on conservation lands
- P2 – Priority 2: Poorly-known species – known from few locations, some on conservation lands
- P3 – Priority 3: Poorly-known species – known from several locations
- P4 – Priority 4: Rare, Near Threatened and other species in need of monitoring

andjoo specific codes

- Parent of conservation listed taxa
- Cons code inherited from parent, X

ead full definitions at https://bio.wa.gov.au/guide/conservation-status-definitions

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ırther note, precise locations of conservation listed species are considered sensitive. To protect this information, ɔfuscation has been applied to conservation-listed species records. For these species, the true location is Â±10km fron ıe search area used to generate this species list.

APPENDIX SIX FIELD SURVEY RESULTS

Family	Species	Naturalised	Cons. code	WT2401	WT2402	WT2403	WT2404	WT2405	WT2406	WT2407	WT2408	WT2409	WT2410	WT2411	WT2412	Op
Agapanthaceae	*Agapanthus praecox*	*														X
Aizoaceae	*Carpobrotus edulis*	*														X
	Carpobrotus sp.									X	X	X				
Amaranthaceae	*Ptilotus polystachyus*															X
Anacardiaceae	*Schinus terebinthifolius*	*														X
Anarthriaceae	*Lyginia barbata*											X				
	Lyginia imberbis							X			X					
Apiaceae	*Xanthosia huegelii*						X									X
Araliaceae	*Trachymene pilosa*			X	X	X	X	X	X	X	X	X		X	X	X
Asparagaceae	*Agave americana*	*														X
	Asparagus asparagoides	*														X
	Laxmannia squarrosa										X					
	Lomandra sericea			X										X		X
	Lomandra suaveolens									X	X		X	X		
	Sowerbaea laxiflora					X		X	X							X
	Thysanotus manglesianus				X			X					X	X	X	X
	Thysanotus sp.													X		
	Thysanotus sp. Coastal plain (N.H. Brittan 66/63)			X								X				X
	Thysanotus thyrsoideus						X									
Asphodelaceae	*Trachyandra divaricata*	*			X	X	X				X		X		X	
Asteraceae	*Arctotheca calendula*	*			X	X	X		X	X	X	X				X
	Cotula turbinata	*														X
	Hyalosperma cotula						X	X	X	X	X	X	X		X	
	Hypochaeris glabra	*			X	X	X	X		X	X	X	X	X	X	
	Leontodon rhagadioloides	*														X
	Millotia myosotidifolia			X												
	Millotia tenuifolia						X									
	Monoculus monstrosus	*														X
	Osteospermum ecklonis	*														X
	Podotheca angustifolia			X												X
	Podotheca gnaphalioides													X		X
	Quinetia urvillei						X									
	Rhodanthe citrina			X							X					X
	Senecio pinnatifolius															X

Family	Species	Naturalised	Cons. code	WT2401	WT2402	WT2403	WT2404	WT2405	WT2406	WT2407	WT2408	WT2409	WT2410	WT2411	WT2412	Op
	Sonchus oleraceus	*		X	X	X	X		X			X	X	X		
	Ursinia anthemoides subsp. *anthemoides*	*		X	X	X	X	X	X	X	X	X	X	X	X	X
	Vellereophyton dealbatum	*														X
Brassicaceae	*Brassica tournefortii*	*								X						X
	Heliophila pusilla	*														X
	Raphanus raphanistrum	*														X
Cactaceae	*Opuntia stricta*	*														X
Campanulaceae	*Wahlenbergia capensis*	*														X
	Wahlenbergia multicaulis						X				X					
Caryophyllaceae	*Petrorhagia dubia*	*														X
	Spergula arvensis	*														X
Casuarinaceae	*Allocasuarina fraseriana*			X	X	X	X	X	X	X	X	X	X	X		X
	Allocasuarina humilis															X
	Casuarina cunninghamiana	*														X
Centrolepidaceae	*Centrolepis drummondiana*												X		X	
Colchicaceae	*Burchardia congesta*			X	X	X		X	X	X		X		X		X
Crassulaceae	*Crassula colorata*				X	X		X					X		X	
	Crassula ovata	*														X
Cupressaceae	*Callitris preissii*															X
Cyperaceae	*Ammothryon grandiflorum*															X
	Chaetospora curvifolia						X									
	Ficinia marginata	*					X		X	X			X		X	
	Lepidosperma leptostachyum						X									
	Lepidosperma sp.					X		X	X							
	Mesomelaena pseudostygia			X	X	X		X	X	X	X	X	X	X	X	X
	Morelotia octandra			X			X								X	X
Dasypogonaceae	*Calectasia narragara*						X									X
	Dasypogon bromeliifolius													X		X
Dilleniaceae	*Hibbertia huegelii*										X		X			X
	Hibbertia hypericoides subsp. *hypericoides*			X	X	X	X	X	X	X	X	X	X	X		X
	Hibbertia striata			X												X
	Hibbertia subvaginata															X
Droseraceae	*Drosera erythrorhiza*			X		X	X	X	X					X	X	X
	Drosera menziesii				X	X	X			X				X		
Ericaceae	*Conostephium pendulum*															X

Family	Species	Naturalised	Cons. code	WT2401	WT2402	WT2403	WT2404	WT2405	WT2406	WT2407	WT2408	WT2409	WT2410	WT2411	WT2412	Op
	Conostephium preissii															X
	Styphelia propinqua															X
Euphorbiaceae	*Euphorbia peplus*	*														X
	Euphorbia terracina	*														X
	Ricinocarpos undulatus							X								
	Ricinus communis	*														X
Fabaceae	*Acacia applanata*						X					X		X	X	X
	Acacia huegelii														X	X
	Acacia iteaphylla	*														X
	Acacia lasiocarpa															X
	Acacia longifolia	*								X				X		X
	Acacia podalyriifolia	*														X
	Acacia pulchella											X				X
	Acacia saligna															X
	Bossiaea eriocarpa					X		X	X					X		
	Chamaecytisus palmensis	*														X
	Daviesia divaricata													X	X	
	Daviesia divaricata subsp. *divaricata*				X		X	X	X	X	X		X			X
	Daviesia nudiflora subsp. *nudiflora*			X		X	X	X	X			X	X	X	X	X
	Daviesia triflora															X
	Gastrolobium capitatum						X							X		X
	Genista sp.	*									X					
	Gompholobium tomentosum					X	X			X	X		X	X		X
	Hardenbergia comptoniana				X									X		X
	Isotropis cuneifolia subsp. *cuneifolia*															X
	Jacksonia floribunda															X
	Jacksonia sternbergiana				X		X	X								X
	Kennedia prostrata					X										X
	Lupinus cosentinii	*														X
	Medicago polymorpha	*														X
	Trifolium campestre	*														X
	Vicia sativa	*														X
Geraniaceae	*Erodium moschatum*	*														X
	Pelargonium capitatum	*								X						X
Goodeniaceae	*Dampiera linearis*															X

Family	Species	Naturalised	Cons. code	WT2401	WT2402	WT2403	WT2404	WT2405	WT2406	WT2407	WT2408	WT2409	WT2410	WT2411	WT2412	Op
	Scaevola repens var. repens							X	X	X	X	X		X	X	X
Haemodoraceae	*Anigozanthos humilis* subsp. *humilis*			X							X					X
	Anigozanthos manglesii															X
	Conostylis aculeata				X	X		X		X	X		X	X	X	
	Conostylis candicans															X
	Conostylis juncea						X									
	Conostylis setigera				X		X					X		X		X
	Conostylis setigera subsp. *setigera*			X												
	Haemodorum laxum			X				X	X			X				
Hemerocallidaceae	*Caesia micrantha*			X												
	Chamaescilla corymbosa															X
	Dianella revoluta			X	X	X										X
	Tricoryne tenella								X							X
Iridaceae	*Freesia leichtlinii* subsp. *alba* x *leichtlinii* subsp. *leichtlinii*	*														X
	Gladiolus caryophyllaceus	*		X	X	X	X	X	X	X		X	X		X	X
	Orthrosanthus laxus														X	X
	Patersonia occidentalis										X	X		X		X
	Romulea rosea	*													X	X
	Watsonia meriana var. *bulbillifera*	*														X
Loganiaceae	*Phyllangium divergens*			X												X
	Phyllangium paradoxum						X	X				X	X		X	
Loranthaceae	*Amyema preissii*															X
	Nuytsia floribunda															X
Malvaceae	*Malva parviflora*	*														X
Meliaceae	*Melia azedarach*															X
Montiaceae	*Calandrinia corrigioloides*									X						X
Myrtaceae	*Agonis flexuosa*															X
	Calothamnus sanguineus															X
	Calytrix angulata			X												
	Calytrix fraseri			X			X				X	X	X		X	X
	Chamelaucium uncinatum															X
	Eremaea pauciflora							X		X			X			
	Eucalyptus gomphocephala															X
	Eucalyptus marginata subsp. *marginata*			X	X		X		X					X	X	X
	Gaudium laevigatum	*					X									X

Family	Species	Naturalised	Cons. code	WT2401	WT2402	WT2403	WT2404	WT2405	WT2406	WT2407	WT2408	WT2409	WT2410	WT2411	WT2412	Op
	Hypocalymma angustifolium					X		X								
	Hypocalymma robustum				X	X			X	X		X				X
	Kunzea glabrescens															X
	Verticordia densiflora						X									
	Verticordia nitens						X									
Oleaceae	*Olea europaea*	*														X
Orchidaceae	*Caladenia arenicola*															X
	Caladenia discoidea															X
	Caladenia flava subsp. *flava*			X			X	X	X	X	X	X			X	X
	Diuris corymbosa							X		X						X
	Elythranthera brunonis							X			X	X				X
	Orchidaceae sp.								X							
	Pterostylis recurva															X
	Pterostylis sp. limestone (B.J. Keighery & G.J. Keighery 65)						X									X
	Pterostylis vittata				X									X	X	X
	Pyrorchis nigricans			X					X							X
	Thelymitra crinita															X
	Thelymitra sp.								X							
Oxalidaceae	*Oxalis pes-caprae*	*														X
Papaveraceae	*Fumaria capreolata*	*				X										X
	Fumaria muralis	*														X
Phyllanthaceae	*Poranthera microphylla*			X	X			X		X	X		X			
	Poranthera moorokatta		2								X					
Pittosporaceae	*Billardiera fraseri*			X												X
Poaceae	*Aira cupaniana*	*					X									X
	Amphipogon turbinatus												X			
	Avena barbata	*														X
	Briza maxima	*		X	X	X	X	X	X	X	X	X		X	X	X
	Bromus diandrus	*														X
	Ehrharta calycina	*			X	X	X	X	X	X			X	X	X	X
	Ehrharta longiflora	*			X	X								X		X
	Eragrostis curvula	*														X
	Lagurus ovatus	*														X
	Lolium perenne	*														X
	Poa annua	*					X									

Family	Species	Naturalised	Cons. code	WT2401	WT2402	WT2403	WT2404	WT2405	WT2406	WT2407	WT2408	WT2409	WT2410	WT2411	WT2412	Op
	Vulpia myuros	*														X
Primulaceae	*Lysimachia arvensis*	*								X		X				X
Proteaceae	*Adenanthos cygnorum*												X			X
	Banksia attenuata			X	X	X		X	X	X	X	X		X		
	Banksia dallanneyi subsp. *dallanneyi*					X										
	Banksia grandis															X
	Banksia ilicifolia															X
	Banksia menziesii							X			X	X	X	X		X
	Banksia prionotes						X		X	X			X		X	
	Grevillea vestita															X
	Hakea prostrata						X									X
	Hakea ruscifolia									X						
	Petrophile linearis										X	X				X
	Petrophile macrostachya															X
	Stirlingia latifolia					X	X	X	X		X	X	X	X	X	X
Restionaceae	*Alexgeorgea nitens*				X		X	X	X	X	X	X	X	X		
	Desmocladus asper				X											
	Desmocladus flexuosus								X			X		X		
	Hypolaena exsulca														X	X
Rubiaceae	*Opercularia vaginata*															X
Rutaceae	*Philotheca spicata*					X	X	X	X							X
Scrophulariaceae	*Dischisma capitatum*	*														X
	Scrophulariaceae sp.						X									
Solanaceae	*Solanum nigrum*	*														X
Stylidiaceae	*Stylidium androsaceum*			X			X	X	X			X	X		X	X
	Stylidium neurophyllum								X		X					
	Stylidium piliferum						X	X	X				X			
Thymelaeaceae	*Pimelea leucantha*											X				
	Pimelea sulphurea															X
Tropaeolaceae	*Tropaeolum majus*	*														X
Violaceae	*Pigea calycina*					X		X			X	X	X			X
Xanthorrhoeaceae	*Xanthorrhoea brunonis*			X		X	X	X	X	X	X	X	X	X	X	X
	Xanthorrhoea preissii				X											X
Zamiaceae	*Macrozamia riedlei*															X

Table 29: Fauna inventory

Species	Common name	EPBC Act status	Western Australian status
Mammals			
Isoodon fusciventer	Southern Brown Bandicoot (Quenda)		Priority 4
Macropus fuliginosus	Western Grey Kangaroo		
*Oryctolagus cuniculus**	Rabbit		
Rodentia sp.	Rodent		
*Vulpes vulpes**	Red Fox		
Birds			
Anthochaera carunculata	Red Wattlebird		
Anthochaera lunulata	Western Little Wattlebird		
Barnardius zonarius	Australian Ringneck		
Cacatua sanguinea	Little Corella		
Calyptorhynchus banksii subsp. naso	Forest Red-tailed Black-Cockatoo	Vulnerable	Vulnerable
Colluricincla harmonica	Grey Shrike-thrush		
Coracina novaehollandiae	Black-faced Cuckoo-shrike		
Corvus coronoides	Australian Raven		
Cracticus tibicen	Australian Magpie		
*Dacelo novaeguineae**	Laughing Kookaburra		
Gerygone fusca	Western Gerygone		
Lichmera indistincta	Brown Honeyeater		
Merops ornatus	Rainbow Bee-eater	MA	
Ocyphaps lophotes	Crested Pigeon		
Petrochelidon nigricans	Tree Martin		
Phaps chalcoptera	Common Bronzewing		
Phylidonyris nigra	White-cheeked Honeyeater		
Phylidonyris novaehollandiae	New Holland Honeyeater		
Podargus strigoides	Tawny Frogmouth		
Purpureicephalus spurius	Red-capped Parrot		
Rhipidura albiscapa	Grey Fantail		
Rhipidura leucophrys	Willie Wagtail		
Smicrornis brevirostris	Weebill		
*Spilopelia chinensis**	Spotted Turtle-Dove		
*Spilopelia senegalensis **	Laughing Turtle-Dove		
Threskiornis spinicollis	Straw-necked Ibis		
*Trichoglossus moluccanus**	Rainbow Lorikeet		
Zanda latirostris	Carnaby's Cockatoo	Endangered	Endangered
Zosterops lateralis	Grey-breasted White-eye		
Reptiles			
Cryptoblepharus buchananii	Buchanan's snake-eyed skink		
Varanus sp.	Monitor lizard		

Table 30: Fauna sites (GDA94, Zone 50)

Site Name	Site Type	Easting	Northing
HAB01	Habitat Assessment	389078.34	6485382.16
HAB02	Habitat Assessment	389704.79	6484578.49
HAB03	Habitat Assessment	389143.18	6484338.32
HAB04	Habitat Assessment	389491.12	6484975.71
HAB05	Habitat Assessment	389193.47	6484963.57
HAB06	Habitat Assessment	389148.90	6485576.26
HAB07	Habitat Assessment	389266.34	6484961.07
BS01	Ornithological Survey	389069.44	6485333.07
BS02	Ornithological Survey	389733.34	6484547.64
BS03	Ornithological Survey	389143.02	6484256.50
BS04	Ornithological Survey	389256.81	6484725.80
FO1	Sighting	389078.86	6485386.93
FO2	Sighting	389801.67	6484491.17
FO3	Tracks / Diggings / Scratching	389152.07	6484233.65
FO4	Sighting	389150.30	6484248.49
FO5	Sighting	389126.25	6484265.97
FO6	Physical evidence	389136.26	6484303.88
FO7	Physical evidence	389137.95	6484331.17
FO8	Physical evidence	389139.56	6484331.18
FO9	Burrow / Mound	389189.90	6484282.95
FO10	Burrow / Mound	389185.67	6484271.37
FO11	Burrow / Mound	389190.18	6484274.30
FO12	Physical evidence	389185.80	6484259.07
FO13	Burrow / Mound	389172.39	6484254.93
FO14	Physical evidence	389180.02	6484241.71
FO15	Sighting	389179.42	6484244.48
FO16	Physical evidence	389360.06	6484258.95
FO17	Physical evidence	389365.44	6484261.00
FO18	Unknown Sampling Type	389362.49	6484261.85
FO19	Physical evidence	389354.57	6484258.78
FO20	Burrow / Mound	389364.26	6484247.57
FO21	Physical evidence	389719.95	6484568.67
FO22	Sighting	389730.98	6484609.25
FO23	Tracks / Diggings / Scratching	389729.65	6484725.09
FO24	Burrow / Mound	389716.80	6484739.70
FO25	Tracks / Diggings / Scratching	389721.86	6484736.09
FO26	Tracks / Diggings / Scratching	389721.27	6484737.30
FO27	Tracks / Diggings / Scratching	389721.59	6484743.63
FO28	Burrow / Mound	389716.03	6484740.46
FO29	Tracks / Diggings / Scratching	389733.55	6484750.07
FO30	Burrow / Mound	389715.58	6484782.59
FO31	Tracks / Diggings / Scratching	389695.72	6484771.40
FO32	Sighting	389694.11	6484771.49
FO33	Tracks / Diggings / Scratching	389674.38	6484730.04

Site Name	Site Type	Easting	Northing
FO34	Tracks / Diggings / Scratching	389674.66	6484730.04
FO35	Burrow / Mound	389679.58	6484704.15
FO36	Tracks / Diggings / Scratching	389679.67	6484704.82
FO37	Tracks / Diggings / Scratching	389128.03	6485165.41
FO38	Physical evidence	389136.34	6485071.04
FO39	Sighting	389128.88	6485059.99
FO40	Physical evidence	389148.66	6485035.48
FO41	Burrow / Mound	389177.29	6484997.43
FO42	Sighting	389181.21	6484994.36
FO43	Physical evidence	389255.52	6484874.32
FO44	Burrow / Mound	389263.89	6484835.72
FO45	Tracks / Diggings / Scratching	389320.00	6484832.33
FO46	Physical evidence	389340.55	6484876.57
FO47	Physical evidence	389363.02	6484892.33
FO48	Physical evidence	389479.55	6484924.84
FO49	Sighting	389475.47	6484951.52
FO50	Physical evidence	389477.64	6484996.55
FO51	Tracks / Diggings / Scratching	389474.61	6485022.79
FO52	Sighting	389022.56	6484897.76
FO53	Tracks / Diggings / Scratching	389018.44	6484901.71
FO54	Physical evidence	389032.97	6484854.63
FO55	Physical evidence	389030.23	6484818.24
FO56	Burrow / Mound	389043.75	6484847.32
FO57	Tracks / Diggings / Scratching	389017.19	6484895.04
FO58	Physical evidence	389119.05	6485577.82
FO59	Tracks / Diggings / Scratching	389149.68	6485582.92
FO60	Tracks / Diggings / Scratching	389150.65	6485581.05
FO61	Burrow / Mound	389205.53	6485612.68
FO62	Physical evidence	389425.99	6485634.89
FO63	Physical evidence	389425.53	6485634.00
FO64	Tracks / Diggings / Scratching	389434.09	6485621.78
FO65	Tracks / Diggings / Scratching	389436.20	6485618.92
FO66	Tracks / Diggings / Scratching	389451.24	6485577.18
FO67	Tracks / Diggings / Scratching	389458.60	6485562.07
FO68	Tracks / Diggings / Scratching	389468.89	6485547.88
FO69	Tracks / Diggings / Scratching	389472.54	6485543.26
FO70	Burrow / Mound	389469.25	6485549.33
FO71	Tracks / Diggings / Scratching	389474.70	6485535.64
FO72	Sighting	389571.53	6485563.71
FO73	Sighting	389112.61	6484255.18
FO74	Sighting	389139.47	6485454.12
FO75	Sighting	389236.19	6484745.36
FO76	Physical evidence	389061.81	6485489.20

Table 31: Black Cockatoo habitat tree locations (GDA94, Zone 50)

Tree No	Tree species	DBH (mm)	Number of hollows	Tree class	Bees present	Easting	Northing	Significance *
1	*Eucalyptus marginata*	718	0	5	No	389088.34	6485623.49	NA
2	*Eucalyptus marginata*	853	1	4	No	389082.51	6485614.92	NA
3	*Eucalyptus marginata*	623	0	5	No	389065.09	6485609.30	NA
4	*Eucalyptus marginata*	1042	0	5	No	389073.49	6485451.48	NA
5	*Eucalyptus marginata*	5671	0	5	No	389255.16	6485592.62	NA
6	*Eucalyptus marginata*	513	0	5	No	389293.88	6485621.89	NA
7	*Eucalyptus marginata*	519	5	5	No	389466.26	6485574.94	NA
8	*Eucalyptus marginata*	535	0	5	No	389465.63	6485577.49	NA
9	*Dead*	1073	0	4	No	389464.60	6485547.43	NA
10	*Eucalyptus marginata*	620	1	4	No	389456.41	6485547.88	NA
11	*Eucalyptus marginata*	598	0	5	No	389444.14	6485566.16	NA
12	*Eucalyptus marginata*	608	1	4	No	389485.11	6485626.66	NA
13	*Eucalyptus marginata*	546	0	5	No	389300.60	6485463.18	NA
14	*Eucalyptus marginata*	600	0	5	No	389137.91	6485204.52	NA
15	*Eucalyptus marginata*	617	0	5	No	389116.65	6485165.51	NA
16	*Eucalyptus marginata*	575	0	5	No	389155.50	6485149.38	NA
17	*Eucalyptus marginata*	504	0	5	No	389111.14	6485053.52	NA
18	*Eucalyptus marginata*	582	0	5	No	389118.16	6484944.87	NA
19	*Dead*	898	0	5	No	389192.51	6484824.21	NA
20	*Eucalyptus marginata*	572	0	5	No	389318.85	6484600.43	NA
27	*Dead*	732	0	5	No	389292.42	6484773.03	NA
28	*Eucalyptus marginata*	579	0	5	No	389309.08	6484848.37	NA
29	*Eucalyptus marginata*	574	0	5	No	389308.24	6484868.96	NA
30	*Eucalyptus marginata*	1331	1	4	No	389476.23	6484835.90	NA
31	*Eucalyptus marginata*	1067	1	4	No	389514.54	6484834.55	NA
32	*Eucalyptus marginata*	1006	1	4	No	389533.81	6484868.83	NA
33	*Eucalyptus marginata*	740	0	5	No	389518.68	6484880.97	NA
34	*Eucalyptus marginata*	812	1	3	No	389533.99	6484942.65	3 moderate/low
35	*Eucalyptus marginata*	737	0	5	No	389497.07	6484955.13	NA
36	*Eucalyptus marginata*	844	0	5	No	389519.06	6485024.14	NA
37	*Eucalyptus marginata*	1171	1	4	No	389514.60	6485039.68	NA
38	*Eucalyptus marginata*	646	0	5	No	389521.28	6485052.26	NA
39	*Eucalyptus marginata*	1630	0	5	No	389502.97	6485113.15	NA
40	*Eucalyptus marginata*	767	0	5	No	389479.74	6485130.82	NA
41	*Eucalyptus marginata*	835	0	5	No	389519.45	6485194.20	NA
42	*Eucalyptus marginata*	813	0	5	No	389506.36	6485209.56	NA
43	*Eucalyptus marginata*	641	0	5	No	389432.98	6484962.93	NA
44	*Eucalyptus marginata*	1790	1	4	No	389260.06	6484654.21	NA
45	*Eucalyptus marginata*	846	0	5	No	389190.69	6484418.51	NA
46	*Eucalyptus marginata*	664	0	5	No	389186.66	6484417.07	NA
47	*Eucalyptus marginata*	878	1	4	No	389203.90	6484274.56	NA
48	*Eucalyptus marginata*	558	0	5	No	389187.49	6484262.64	NA
49	*Eucalyptus gomphocephala*	872	0	5	No	389114.97	6484235.22	NA
50	*Eucalyptus marginata*	557	0	5	No	389149.99	6484356.15	NA

Tree No	Tree species	DBH (mm)	Number of hollows	Tree class	Bees present	Easting	Northing	Significance *
51	*Eucalyptus marginata*	557	1	4	No	389151.03	6484364.35	NA
52	*Eucalyptus marginata*	567	0	5	No	389113.86	6484351.07	NA
53	*Eucalyptus marginata*	NM	0	5	No	389153.35	6484385.74	NA
54	*Eucalyptus marginata*	1265	0	5	No	389364.56	6484262.22	NA
55	*Eucalyptus gomphocephala*	1148	1	4	No	389358.35	6484243.96	NA
56	*Eucalyptus marginata*	1273	1	4	No	389369.26	6484356.44	NA
57	*Eucalyptus marginata*	750	0	5	No	389678.57	6484510.38	NA
58	*Eucalyptus marginata*	787	1	4	No	389667.41	6484526.98	NA
59	*Eucalyptus marginata*	539	0	5	No	389672.46	6484568.46	NA
60	*Eucalyptus marginata*	505	0	5	No	389687.33	6484657.07	NA
61	*Eucalyptus marginata*	512	0	5	No	389697.95	6484668.73	NA
62	*Eucalyptus marginata*	955	1	4	No	389687.85	6484670.38	NA
63	*Eucalyptus marginata*	802	2	4	No	389690.48	6484679.66	NA
64	*Eucalyptus marginata*	686	1	4	No	389684.42	6484681.45	NA
65	*Eucalyptus marginata*	823	1	4	No	389681.48	6484726.46	NA
66	*Eucalyptus marginata*	600	0	5	No	389678.23	6484731.57	NA
67	*Eucalyptus marginata*	652	0	5	No	389742.37	6484705.89	NA
68	*Eucalyptus marginata*	621	0	5	No	389743.54	6484682.98	NA
69	*Eucalyptus marginata*	571	0	5	No	389730.87	6484681.92	NA
70	*Eucalyptus marginata*	583	0	5	No	389750.88	6484646.12	NA
71	Dead	529	0	5	No	389747.44	6484603.60	NA
72	*Eucalyptus marginata*	562	0	5	No	389746.04	6484560.77	NA
73	*Eucalyptus marginata*	593	1	4	No	389732.16	6484534.71	NA
74	*Eucalyptus marginata*	1162	1	4	No	389736.11	6484495.67	NA
75	*Eucalyptus marginata*	790	0	5	No	389808.21	6484508.78	NA
76	*Eucalyptus marginata*	708	0	5	No	389821.92	6484508.56	NA
77	*Eucalyptus marginata*	1017	1	4	No	389842.28	6484510.59	NA
78	*Eucalyptus marginata*	759	0	5	No	389857.64	6484515.96	NA
79	*Eucalyptus marginata*	697	0	5	No	389827.21	6484541.90	NA
80	*Eucalyptus marginata*	765	1	4	No	389812.84	6484528.64	NA
81	*Eucalyptus marginata*	550	0	5	No	389783.05	6484543.31	NA
82	*Eucalyptus marginata*	957	0	5	No	389779.60	6484532.33	NA
83	*Eucalyptus marginata*	2983	2	4	No	389793.02	6484493.17	NA
84	*Eucalyptus marginata*	824	0	5	No	389689.88	6484467.14	NA
85	*Eucalyptus gomphocephala*	1430	0	5	No	389687.42	6484470.50	NA
86	*Eucalyptus marginata*	996	0	5	No	389683.07	6484443.00	NA
87	*Eucalyptus marginata*	566	0	5	No	389766.98	6484258.12	NA
88	*Eucalyptus marginata*	540	0	5	No	389753.13	6484278.05	NA
89	*Eucalyptus marginata*	768	1	4	No	389723.77	6484241.24	NA
90	*Eucalyptus marginata*	880	1	4	No	389726.27	6484252.73	NA
91	*Eucalyptus gomphocephala*	819	0	5	No	388978.19	6484344.73	NA
92	*Eucalyptus marginata*	822	0	5	No	388935.89	6484313.19	NA
93	*Eucalyptus marginata*	NM	1	4	No	388957.00	6484469.39	NA
94	*Eucalyptus marginata*	NM	0	5	No	388957.95	6484469.38	NA

Tree No	Tree species	DBH (mm)	Number of hollows	Tree class	Bees present	Easting	Northing	Significance *
95	*Eucalyptus marginata*	936	1	4	No	389468.66	6484856.89	NA
96	*Eucalyptus marginata*	835	0	5	No	389471.73	6484857.61	NA
97	*Eucalyptus gomphocephala*	1034	0	5	No	389451.06	6485171.44	NA
98	Dead	1530	1	4	No	389032.48	6484893.33	NA
99	*Eucalyptus marginata*	764	0	5	No	389012.20	6484909.65	NA
100	Dead	1020	1	4	No	388998.30	6484877.64	NA
101	*Eucalyptus marginata*	1424	1	4	No	389867.29	6484798.06	NA

* Significance:
1 = Very high value: large tree with obvious large vertical hollow above 5 m (height above ground) with future potential to create more hollows, ideal for Black Cockatoos
2 = High value: large/medium (often healthy) tree with suitable vertical or near vertical hollow with potential to create future hollows
3 = Moderate/low value: outer diameter of hollow at least 10 cm, height from ground at least 3 m, often in smaller trees or stags with limited potential for future hollows.

APPENDIX SEVEN FLORISTIC QUADRAT DATA

SITE DETAILS

WT2401

Staff SOK **Date** 11/09/2024 **Season** E

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389728 **mE** 6484545 **mN** **Lat.** -31.7693 **Long.** 115.8355

Habitat

Aspect N/A **Slope** N/A

Soil Type White sand brown loam

Rock Type

Loose Rock 0 % cover **Litter** 50 % cover ; 0-3 cm in depth

Bare ground 1 % cover **Weeds**

Vegetation U+ ^*Allocasuarina fraseriana*,^*Banksia attenuata*\^tree\6\c;M ^*Calytrix fraseri*,^*Daviesia nudiflora* subsp. *nudiflora*\^shrub\3\r;G ^^*Xanthorrhoea brunonis*,*Morelotia octandra*,*Hibbertia hypericoides* subsp. *hypericoides*\^grass tree,sedge,shrub\1\c

Veg. Condition Good

Disturbance Rubbish, weed

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Allocasuarina fraseriana		11	12	
Anigozanthos humilis subsp. *humilis*		.15	<1	
Banksia attenuata		8	10	
Billardiera fraseri		.4	<1	

SITE DETAILS

**Briza maxima*	.3	3
Burchardia congesta	.3	<1
Caesia micrantha	.2	<1
Caladenia flava subsp. *flava*	.2	<1
Calytrix angulata	.3	<1
Calytrix fraseri	1.5	1
Conostylis setigera subsp. *setigera*	.15	<1
Daviesia nudiflora subsp. *nudiflora*	1.5	<1
Dianella revoluta	.3	<1
Drosera erythrorhiza	.1	1
Eucalyptus marginata subsp. *marginata*	1	2
**Gladiolus caryophyllaceus*	.5	<1
Haemodorum laxum	.3	<1
Hibbertia hypericoides subsp. *hypericoides*	.4	4
Hibbertia striata	.2	<1
Lomandra sericea	.3	<1
Mesomelaena pseudostygia	.5	3
Millotia myosotidifolia		<1
Morelotia octandra	.3	6
Phyllangium divergens	.1	<1
Podotheca angustifolia	.1	<1
Poranthera microphylla	.1	<1
Pyrorchis nigricans	.1	<1
Rhodanthe citrina	.1	<1
**Sonchus oleraceus*	.2	<1
Stylidium androsaceum	.3	<1
Thysanotus sp. Coastal plain (N.H. Brittan 66/63)	.4	<1
Trachymene pilosa	.1	<1
**Ursinia anthemoides* subsp. *anthemoides*	.4	3
Xanthorrhoea brunonis	.5	7

SITE DETAILS

WT2402

Staff KCP **Date** 17/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389451 **mE** 6485589 **mN** **Lat.** -31.7599 **Long.** 115.8327

Habitat Low undulating

Aspect SW **Slope** Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 5 % cover ; 1 cm in depth

Bare ground 2 % cover **Weeds** 30 % cover

Vegetation U+ ^^*Allocasuarina fraseriana*,*Banksia attenuata*,*Eucalyptus marginata* subsp. *marginata*\^tree\7\i;M ^*Jacksonia sternbergiana*\^shrub\4\r;G ^^*Xanthorrhoea preissii*, *Mesomelaena pseudostygia*,*Hibbertia hypericoides* subsp. *hypericoides*\^grass tree,sedge, shrub\2\i

Veg. Condition Good

Disturbance Weeds

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Alexgeorgea nitens		.2	2	
Allocasuarina fraseriana		10	10	
**Arctotheca calendula*		.3	<1	1
Banksia attenuata		10	9	

SITE DETAILS

**Briza maxima*	.3	<1	20
Burchardia congesta	1	<1	
Conostylis aculeata	.2	<1	
Conostylis setigera	.2	<1	
Crassula colorata	.04	<1	50
Daviesia divaricata subsp. *divaricata*	1	<1	
Desmocladus asper	.2	<1	
Dianella revoluta	.4	<1	
Drosera menziesii	1	<1	
**Ehrharta calycina*	.4	<1	20
**Ehrharta longiflora*	.35	10	200
Eucalyptus marginata subsp. *marginata*	15	5	
**Gladiolus caryophyllaceus*	.35	<1	3
Hardenbergia comptoniana	1	<1	
Hibbertia hypericoides subsp. *hypericoides*	.5	3	
Hypocalymma robustum	.5	<1	
**Hypochaeris glabra*	.02	5	500
Jacksonia sternbergiana	2	2	
Mesomelaena pseudostygia	1	5	
Poranthera microphylla	.03	<1	
Pterostylis vittata	.2	<1	1
**Sonchus oleraceus*	.2	<1	1
Thysanotus manglesianus	1	<1	
**Trachyandra divaricata*	.4	<1	
Trachymene pilosa	.05	<1	
**Ursinia anthemoides* subsp. *anthemoides*	.3	10	500
Xanthorrhoea preissii	1	8	

SITE DETAILS

WT2403

Staff KCP **Date** 17/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389588 **mE** 6485585 **mN** **Lat.** -31.7599 **Long.** 115.8341

Habitat Low undulating

Aspect W **Slope** Gentle

Soil Type Gre sand

Rock Type

Loose Rock 0 % cover **Litter** 15 % cover ; 1 cm in depth

Bare ground 2 % cover **Weeds** 30 % cover

Vegetation U+ ^*Allocasuarina fraseriana*,^*Banksia attenuata*\^tree\7\c;M ^*Hibbertia hypericoides* subsp. *hypericoides*,^*Stirlingia latifolia*\^shrub\3\r;G ^*Ehrharta longiflora*,^*Mesomelaena pseudostygia*\^tussock grass,sedge\1\c

Veg. Condition Degraded

Disturbance Weeds, rubbish

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Allocasuarina fraseriana		10	20	
**Arctotheca calendula*		.2	<1	1
Banksia attenuata		10	18	
Banksia dallanneyi subsp. *dallanneyi*		.3	<1	

SITE DETAILS

Bossiaea eriocarpa	.3	<1	
**Briza maxima*	.3	<1	30
Burchardia congesta	.4	<1	
Conostylis aculeata	.2	<1	
Crassula colorata	.03	<1	
Daviesia nudiflora subsp. *nudiflora*	1	<1	
Dianella revoluta	.5	<1	
Drosera erythrorhiza	.01	<1	
Drosera menziesii	.4	<1	
**Ehrharta calycina*	.5	<1	10
**Ehrharta longiflora*	.3	20	100
**Fumaria capreolata*	.5	1	20
**Gladiolus caryophyllaceus*	.5	<1	5
Gompholobium tomentosum	.5	<1	
Hibbertia hypericoides subsp. *hypericoides*	1	5	
Hypocalymma angustifolium	1	<1	
Hypocalymma robustum	.4	<1	
**Hypochaeris glabra*	.02	2	50
Kennedia prostrata	.02	<1	
Lepidosperma sp.	.4	<1	
Mesomelaena pseudostygia	.4	10	
Philotheca spicata	.5	<1	
Pigea calycina	.3	<1	
**Sonchus oleraceus*	.3	<1	5
Sowerbaea laxiflora	.7	<1	
Stirlingia latifolia	1	3	
**Trachyandra divaricata*	.4	<1	
Trachymene pilosa	.05	<1	
**Ursinia anthemoides* subsp. *anthemoides*	.35	2	50
Xanthorrhoea brunonis	.8	<1	

SITE DETAILS

WT2404

Staff KCP **Date** 17/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389236 **mE** 6485535 **mN** **Lat.** -31.7603 **Long.** 115.8304

Habitat Low u dulating

Aspect S **Slope** Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 20 % cover ; 1 cm in depth

Bare ground **Weeds** 23 % cover

Vegetation U+ ^^*Eucalyptus marginata* subsp. *marginata*,*Banksia prionotes*,*Allocasuarina fraseriana*\^tree\6\c;M ^*Gaudium laevigatum*,^*Calytrix fraseri*\^shrub\3\i;G ^^*Daviesia divaricata*, *Ehrharta calycina*\^shrub,tussock grass\2\i

Veg. Condition Very Good

Disturbance Weeds

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Acacia applanata		.3	<1	
**Aira cupaniana*		.1	<1	
Alexgeorgea nitens		.2	<1	
Allocasuarina fraseriana		7	3	

SITE DETAILS

**Arctotheca calendula*	.1	<1	
Banksia prionotes	7	5	
**Briza maxima*	.2	<1	
Caladenia flava subsp. *flava*	.1	<1	
Calectasia narragara	.3	<1	
Calytrix fraseri	1.5	8	
Chaetospora curvifolia	.3	<1	
Conostylis juncea	.3	<1	
Conostylis setigera	.2	<1	
Daviesia divaricata subsp. *divaricata*	0.8	1	
Daviesia nudiflora subsp. *nudiflora*	1	<1	
Drosera erythrorhiza	.01	<1	
Drosera menziesii	.4	<1	
**Ehrharta calycina*	1	1	
Eucalyptus marginata subsp. *marginata*	8	20	
**Ficinia marginata*	.1	<1	1
Gastrolobium capitatum	.3	<1	
**Gaudium laevigatum*	2	20	
**Gladiolus caryophyllaceus*	.4	<1	5
Gompholobium tomentosum	1	<1	
Hakea prostrata	.3	<1	
Hibbertia hypericoides subsp. *hypericoides*	.5	<1	
Hyalosperma cotula	.1	<1	
**Hypochaeris glabra*	.02	<1	
Jacksonia sternbergiana	1	<1	
Lepidosperma leptostachyum	.4	<1	
Millotia tenuifolia	.1	<1	
Morelotia octandra	.35	<1	
Philotheca spicata	1	<1	
Phyllangium paradoxum	.1	<1	
**Poa annua*	.3	<1	
Pterostylis sp. limestone (B.J. Keighery & G.J. Keighery 65)	.1	<1	1
Quinetia urvillei	.1	<1	
Scrophulariaceae *sp.*	.04	<1	
**Sonchus oleraceus*	.02	<1	
Stirlingia latifolia	.6	<1	
Stylidium androsaceum	.1	<1	
Stylidium piliferum	.3	<1	

Thysanotus thyrsoideus	1	<1
**Trachyandra divaricata*	.4	<1
Trachymene pilosa	.1	<1
**Ursinia anthemoides* subsp. *anthemoides*	.3	1
Verticordia densiflora	1.5	2
Verticordia nitens	1	<1
Wahlenbergia multicaulis	.3	<1
Xanthorrhoea brunonis	1	8
Xanthorrhoea brunonis	1	10
Xanthosia huegelii	.2	<1

SITE DETAILS

WT2405

Staff KCP **Date** 17/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389032 **mE** 6485575 **mN** **Lat.** -31.7599 **Long.** 115.8283

Habitat Low undulating

Aspect E **Slope** Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 10 % cover ; 1 cm in depth

Bare ground 2 % cover **Weeds** 5 % cover

Vegetation U+ ^^*Allocasuarina fraseriana*,*Banksia menziesii*,*Banksia attenuata*\^tree\6\i;M ^^*Hibbertia hypericoides* subsp. *hypericoides*,*Eremaea pauciflora*,*Xanthorrhoea brunonis*\^shrub,grass tree\3\i;G ^*Mesomelaena pseudostygia*,^*Ursinia anthemoides* subsp. *anthemoides*\^sedge,forb\1\r

Veg. Condition Good

Disturbance Weeds

Fire Age

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Alexgeorgea nitens		.15	<1	
Allocasuarina fraseriana		8	10	
Banksia attenuata		7	3	
Banksia menziesii		8	4	

SITE DETAILS

Bossiaea eriocarpa	.3	<1	
**Briza maxima*	.2	<1	
Burchardia congesta	.7	<1	
Caladenia flava subsp. *flava*	.3	<1	
Conostylis aculeata	.3	<1	
Crassula colorata	.03	<1	
Daviesia divaricata subsp. *divaricata*	.4	<1	
Daviesia nudiflora subsp. *nudiflora*	1	<1	
Diuris corymbosa	.4	<1	
Drosera erythrorhiza	.01	<1	
**Ehrharta calycina*	.3	<1	
Elythranthera brunonis	.3	<1	
Eremaea pauciflora	1	5	
**Gladiolus caryophyllaceus*	.4	<1	5
Haemodorum laxum	.4	<1	
Hibbertia hypericoides subsp. *hypericoides*	1	8	
Hyalosperma cotula	.1	<1	
Hypocalymma angustifolium	1	<1	
**Hypochaeris glabra*	.02	<1	
Jacksonia sternbergiana	1	<1	
Lepidosperma sp.	.5	<1	
Lyginia imberbis	.4	<1	
Mesomelaena pseudostygia	.5	5	
Philotheca spicata	1	<1	
Phyllangium paradoxum	.1	<1	
Pigea calycina	.2	<1	
Poranthera microphylla	.1	<1	
Ricinocarpos undulatus	.4	<1	
Scaevola repens var. *repens*	.3	<1	
Sowerbaea laxiflora	.4	<1	
Stirlingia latifolia	1	<1	
Stylidium androsaceum	.1	<1	
Stylidium piliferum	.3	<1	
Thysanotus manglesianus	1	<1	
Trachymene pilosa	.1	<1	
**Ursinia anthemoides* subsp. *anthemoides*	.3	3	100
Xanthorrhoea brunonis	1	3	

SITE DETAILS

WT2406

Staff KCP **Date** 17/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389124 **mE** 6485568 **mN** **Lat.** -31.7600 **Long.** 115.8292

Habitat Low undulating

Aspect E **Slope** Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 20 % cover ; 2 cm in depth

Bare ground 5 % cover **Weeds** 3 % cover

Vegetation U+ ^^*Eucalyptus marginata* subsp. *marginata*,*Banksia prionotes*,*Allocasuarina fraseriana*\^tree\6\i;M ^*Xanthorrhoea brunonis*,^*Daviesia nudiflora*\^grass tree,shrub\3\r;G ^*Hibbertia hypericoides* subsp. *hypericoides*,^*Mesomelaena pseudostygia*\^shrub,sedge\1\r

Veg. Condition Very Good

Disturbance Weeds

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Alexgeorgea nitens		.1	<1	
Allocasuarina fraseriana		7	3	
**Arctotheca calendula*		.1	<1	
Banksia attenuata		10	1	

SITE DETAILS

Banksia prionotes	10	6	
Bossiaea eriocarpa	.3	<1	
**Briza maxima*	.2	1	
Burchardia congesta	.3	<1	
Caladenia flava subsp. *flava*	.2	<1	
Daviesia divaricata subsp. *divaricata*	1	<1	
Daviesia nudiflora subsp. *nudiflora*	1	3	
Desmocladus flexuosus	.2	<1	
Drosera erythrorhiza	.01	<1	
**Ehrharta calycina*	.4	<1	50
Eucalyptus marginata subsp. *marginata*	6	25	
**Ficinia marginata*	.1	<1	
**Gladiolus caryophyllaceus*	.2	<1	1
Haemodorum laxum	.4	<1	
Hibbertia hypericoides subsp. *hypericoides*	.45	5	
Hyalosperma cotula	.1	<1	
Hypocalymma robustum	.5	<1	
Lepidosperma sp.	.6	<1	
Mesomelaena pseudostygia	.5	4	
Orchidaceae sp.	.3	<1	
Philotheca spicata	.4	<1	
Pyrorchis nigricans	.01	<1	1
Scaevola repens var. *repens*	.2	<1	
**Sonchus oleraceus*	.1	<1	
Sowerbaea laxiflora	.3	<1	
Stirlingia latifolia	1	<1	
Stylidium androsaceum	.1	<1	
Stylidium neurophyllum	.1	<1	
Stylidium piliferum	.2	<1	
Thelymitra sp.	.3	<1	
Trachymene pilosa	.1	<1	
Tricoryne tenella	.3	<1	
**Ursinia anthemoides* subsp. *anthemoides*	.3	2	50
Xanthorrhoea brunonis	1.3	8	

SITE DETAILS

WT2407

Staff KCP **Date** 18/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389256 **mE** 6484962 **mN** **Lat.** -31.7655 **Long.** 115.8306

Habitat Low undulating

Aspect SE **Slope** Very Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 10 % cover ; 1 cm in depth

Bare ground 5 % cover **Weeds** 5 % cover

Vegetation U+ ^^*Banksia attenuata,Allocasuarina fraseriana,Banksia prionotes*\^tree\6\c;M ^^*Eremaea pauciflora,Xanthorrhoea brunonis,Daviesia divaricata*\^shrub,grass tree\3\i;G ^^*Mesomelaena pseudostygia,Hibbertia hypericoides* subsp. *hypericoides,Ursinia anthemoides* subsp. *anthemoides*\^sedge,shrub,forb\1\i

Veg. Condition Very Good

Disturbance Weeds

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
**Acacia longifolia*		.2	<1	
Alexgeorgea nitens		.2	2	
Allocasuarina fraseriana		7	4	
**Arctotheca calendula*		.1	<1	

Banksia attenuata	7	24
Banksia prionotes	7	2
**Brassica tournefortii*	.3	<1
**Briza maxima*	.3	<1
Burchardia congesta	.4	<1
Caladenia flava subsp. *flava*	.2	<1
Calandrinia corrigioloides	.1	<1
Carpobrotus sp.	.05	<1
Conostylis aculeata	.2	<1
Daviesia divaricata subsp. *divaricata*	1	2
Diuris corymbosa	.3	<1
Drosera menziesii	1	<1
**Ehrharta calycina*	.4	1
Eremaea pauciflora	1	6
**Ficinia marginata*	.1	<1
**Gladiolus caryophyllaceus*	.4	<1
Gompholobium tomentosum	.4	<1
Hakea ruscifolia	1	<1
Hibbertia hypericoides subsp. *hypericoides*	.4	3
Hyalosperma cotula	.1	<1
Hypocalymma robustum	1	<1
**Hypochaeris glabra*	.01	<1
Lomandra suaveolens	.3	<1
**Lysimachia arvensis*	.15	<1
Mesomelaena pseudostygia	.5	15
**Pelargonium capitatum*	.2	<1
Poranthera microphylla	.1	<1
Scaevola repens var. *repens*	.1	<1
Trachymene pilosa	.1	<1
**Ursinia anthemoides* subsp. *anthemoides*	.35	3
Xanthorrhoea brunonis	1	3

SITE DETAILS

WT2408

Staff KCP **Date** 18/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389160 **mE** 6484960 **mN** **Lat.** -31.7655 **Long.** 115.8295

Habitat Low undulating

Aspect N **Slope** Very Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 30 % cover ; 2 cm in depth

Bare ground 7 % cover **Weeds** 2 % cover

Vegetation U+ ^^*Banksia attenuata,Allocasuarina fraseriana,Banksia menziesii*\^tree\7\i;M ^*Xanthorrhoea brunonis*,^*Calytrix fraseri*\^grass tree,shrub\3\r;G ^^*Mesomelaena pseudostygia,Hibbertia hypericoides* subsp. *hypericoides,Patersonia occidentalis*\^sedge,shrub,forb\2\i

Veg. Condition Very Good

Disturbance Weeds

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Alexgeorgea nitens		.2	<1	
Allocasuarina fraseriana		10	15	
Anigozanthos humilis subsp. *humilis*		.3	<1	
**Arctotheca calendula*		.1	<1	

SITE DETAILS

Banksia attenuata		10	20
Banksia menziesii		10	5
**Briza maxima*		.3	<1
Caladenia flava subsp. *flava*		.3	<1
Calytrix fraseri		1.2	2
Carpobrotus sp.		.03	<1
Conostylis aculeata		.2	<1
Daviesia divaricata subsp. *divaricata*		.4	<1
Elythranthera brunonis		.3	<1
**Genista* sp.		.2	<1
Gompholobium tomentosum		.3	<1
Hibbertia huegelii		.3	<1
Hibbertia hypericoides subsp. *hypericoides*		.5	5
Hyalosperma cotula		.1	<1
**Hypochaeris glabra*		.01	<1
Laxmannia squarrosa		.1	<1
Lomandra suaveolens		.3	<1
Lyginia imberbis		.4	<1
Mesomelaena pseudostygia		.7	8
Patersonia occidentalis		.5	3
Petrophile linearis		.3	<1
Pigea calycina		.3	<1
Poranthera microphylla		.1	<1
Poranthera moorokatta	P 2	.02	<1
Rhodanthe citrina		.1	<1
Scaevola repens var. *repens*		.1	<1
Stirlingia latifolia		1	<1
Stylidium neurophyllum		.35	<1
**Trachyandra divaricata*		.4	<1
Trachymene pilosa		.1	<1
**Ursinia anthemoides* subsp. *anthemoides*		.35	1
Wahlenbergia multicaulis		.3	<1
Xanthorrhoea brunonis		1.3	7

SITE DETAILS

WT2409

Staff KCP **Date** 18/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389266 **mE** 6484709 **mN** **Lat.** -31.7678 **Long.** 115.8306

Habitat Low undulating

Aspect E **Slope** Very Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 20 % cover ; 2 cm in depth

Bare ground 7 % cover **Weeds** 6 % cover

Vegetation U+ ^*Banksia attenuata*,^*Allocasuarina fraseriana*\^tree\6\i;M ^*Calytrix fraseri*\^shrub\3\r;G ^^*Hibbertia hypericoides* subsp. *hypericoides*,*Xanthorrhoea brunonis*,*Mesomelaena pseudostygia*\^shrub,grass tree,rush\2\i

Veg. Condition Very Good

Disturbance Weeds

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Acacia applanata		.3	<1	
Acacia pulchella		.2	<1	
Alexgeorgea nitens		.2	<1	
Allocasuarina fraseriana			15	

SITE DETAILS

**Arctotheca calendula*	.02	<1
Banksia attenuata	8	20
Banksia menziesii	2	<1
**Briza maxima*	.3	<1
Burchardia congesta	1	<1
Caladenia flava subsp. *flava*	.3	<1
Calytrix fraseri	2	2
Carpobrotus sp.	.03	<1
Conostylis setigera	.2	<1
Daviesia nudiflora subsp. *nudiflora*	1	<1
Desmocladus flexuosus	.3	<1
Elythranthera brunonis	.35	<1
**Gladiolus caryophyllaceus*	.4	<1
Haemodorum laxum	.5	<1
Hibbertia hypericoides subsp. *hypericoides*	.5	10
Hyalosperma cotula	.1	<1
Hypocalymma robustum	.5	<1
**Hypochaeris glabra*	.01	<1
Lyginia barbata	.5	<1
**Lysimachia arvensis*	.1	<1
Mesomelaena pseudostygia	.5	3
Patersonia occidentalis	.5	<1
Petrophile linearis	.3	<1
Phyllangium paradoxum	.1	<1
Pigea calycina	.3	<1
Pimelea leucantha	1	<1
Scaevola repens var. *repens*	.2	<1
**Sonchus oleraceus*	.1	<1
Stirlingia latifolia	1	<1
Stylidium androsaceum	.1	<1
Thysanotus sp. Coastal plain (N.H. Brittan 66/63)	.4	<1
Trachymene pilosa	.1	<1
**Ursinia anthemoides* subsp. *anthemoides*	.3	5
Xanthorrhoea brunonis	1	7

SITE DETAILS

WT2410

Staff KCP **Date** 18/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389166 **mE** 6484294 **mN** **Lat.** -31.7715 **Long.** 115.8295

Habitat Low undulating

Aspect E **Slope** Very Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 20 % cover ; 1 cm in depth

Bare ground 10 % cover **Weeds** <1 % cover

Vegetation U+ ^*Banksia prionotes*,^*Allocasuarina fraseriana*\^tree\7\i;M ^*Calytrix fraseri*,^*Adenanthos cygnorum*\^shrub\4\i;G ^^*Xanthorrhoea brunonis*,*Eremaea pauciflora*,*Hibbertia hypericoides* subsp. *hypericoides*\^grass tree,shrub\2\i

Veg. Condition Very Good

Disturbance Weeds

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Adenanthos cygnorum		3	4	
Alexgeorgea nitens		.2	<1	
Allocasuarina fraseriana		10	4	
Amphipogon turbinatus		.35	<1	

SITE DETAILS

Banksia menziesii	2	<1	
Banksia prionotes	10	5	
Calytrix fraseri	2.2	10	
Centrolepis drummondiana	.07	<1	
Conostylis aculeata	.2	<1	
Crassula colorata	.03	<1	
Daviesia divaricata subsp. *divaricata*	.4	<1	
Daviesia nudiflora subsp. *nudiflora*	1	<1	
**Ehrharta calycina*	1	1	50
Eremaea pauciflora var. pauciflora	1	4	
**Ficinia marginata*	.08	<1	
**Gladiolus caryophyllaceus*	.4	<1	
Gompholobium tomentosum	.w	<1	
Hibbertia huegelii	.4	<1	
Hibbertia hypericoides subsp. *hypericoides*	.8	3	
Hyalosperma cotula	.1	<1	
**Hypochaeris glabra*	.01	<1	
Lomandra suaveolens	.3	<1	
Mesomelaena pseudostygia	.7	3	
Phyllangium paradoxum	.1	<1	
Pigea calycina	.3	<1	
Poranthera microphylla	.05	<1	
**Sonchus oleraceus*	.1	<1	
Stirlingia latifolia	1	<1	
Stylidium androsaceum	.1	<1	
Stylidium piliferum	.1	<1	
Thysanotus manglesianus	.4	<1	
**Trachyandra divaricata*	.4	<1	
**Ursinia anthemoides* subsp. *anthemoides*	.3	<1	
Xanthorrhoea brunonis	1	5	

SITE DETAILS

WT2411

Staff KCP **Date** 19/09/2024 **Season** A

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389802 **mE** 6484535 **mN** **Lat.** -31.7694 **Long.** 115.8363

Habitat Low undulating

Aspect W **Slope** Very Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 80 % cover ; 3 cm in depth

Bare ground 2 % cover **Weeds** 3 % cover

Vegetation U+ ^^*Eucalyptus marginata* subsp. *marginata*,*Banksia menziesii*,*Banksia attenuata*\^tree\7\c;M ^*Xanthorrhoea brunonis*\^grass tree\3\r;G ^^*Hibbertia hypericoides* subsp. *hypericoides*, *Mesomelaena pseudostygia*,*Patersonia occidentalis*\^shrub,sedge,forb\2\i

Veg. Condition Very Good

Disturbance Weeds

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Acacia applanata		.3	<1	
**Acacia longifolia*		2	1	
Alexgeorgea nitens		0.15	<1	
Allocasuarina fraseriana		2	2	

Banksia attenuata	10	2
Banksia menziesii	10	5
Bossiaea eriocarpa	0.3	<1
**Briza maxima*	0.2	<1
Burchardia congesta	0.6	<1
Conostylis aculeata	.2	<1
Conostylis setigera	.2	<1
Dasypogon bromeliifolius	0.3	<1
Daviesia divaricata	0.5	<1
Daviesia nudiflora subsp. *nudiflora*	0.4	<1
Desmocladus flexuosus	0.1	<1
Drosera erythrorhiza	0.01	<1
Drosera menziesii	0.3	<1
**Ehrharta calycina*	0.5	2
**Ehrharta longiflora*	0.3	<1
Eucalyptus marginata subsp. *marginata*	20	63
Gastrolobium capitatum	0.35	<1
Gompholobium tomentosum	0.3	<1
Hardenbergia comptoniana	0.5	<1
Hibbertia hypericoides subsp. *hypericoides*	0.5	4
**Hypochaeris glabra*	0.01	<1
Lomandra sericea	0.4	<1
Lomandra suaveolens	0.2	<1
Mesomelaena pseudostygia	0.7	7
Patersonia occidentalis	0.5	5
Podotheca gnaphalioides	0.3	<1
Pterostylis vittata	.2	<1
Scaevola repens var. *repens*	0.2	<1
**Sonchus oleraceus*	.2	<1
Stirlingia latifolia	0.5	<1
Thysanotus manglesianus	0.5	<1
Thysanotus sp.	0.4	<1
Trachymene pilosa	0.1	<1
**Ursinia anthemoides* subsp. *anthemoides*	0.15	<1
Xanthorrhoea brunonis	1	10

SITE DETAILS

WT2412

Staff KCP **Date** 19/09/2024 **Season** E

Revisit

Type Q 10 m x 10 m

Location Precinct 3

MGA Zone 50 389171 **mE** 6485517 **mN** **Lat.** -31.7605 **Long.** 115.8297

Habitat Low undulating

Aspect SE **Slope** Very Gentle

Soil Type Grey sand

Rock Type

Loose Rock 0 % cover **Litter** 80 % cover ; 2 cm in depth

Bare ground 5 % cover **Weeds** 6 % cover

Vegetation U+ ^*Eucalyptus marginata* subsp. *marginata*,^*Banksia prionotes*\^tree\7\i;M ^*Xanthorrhoea brunonis*,^*Daviesia nudiflora* subsp. *nudiflora*\^grass tree,shrub\3\;G ^*Mesomelaena pseudostygia*,^*Ehrharta calycina*\^sedge,tussock grass\2\r

Veg. Condition Very Good

Disturbance Weeds

Fire Age >10 years

Notes

Species	WA Cons.	Height (m)	Cover (%)	Count
Acacia applanata		.4	<1	
Acacia huegelii		.4	<1	
Banksia prionotes		10	20	
**Briza maxima*		.3	<1	

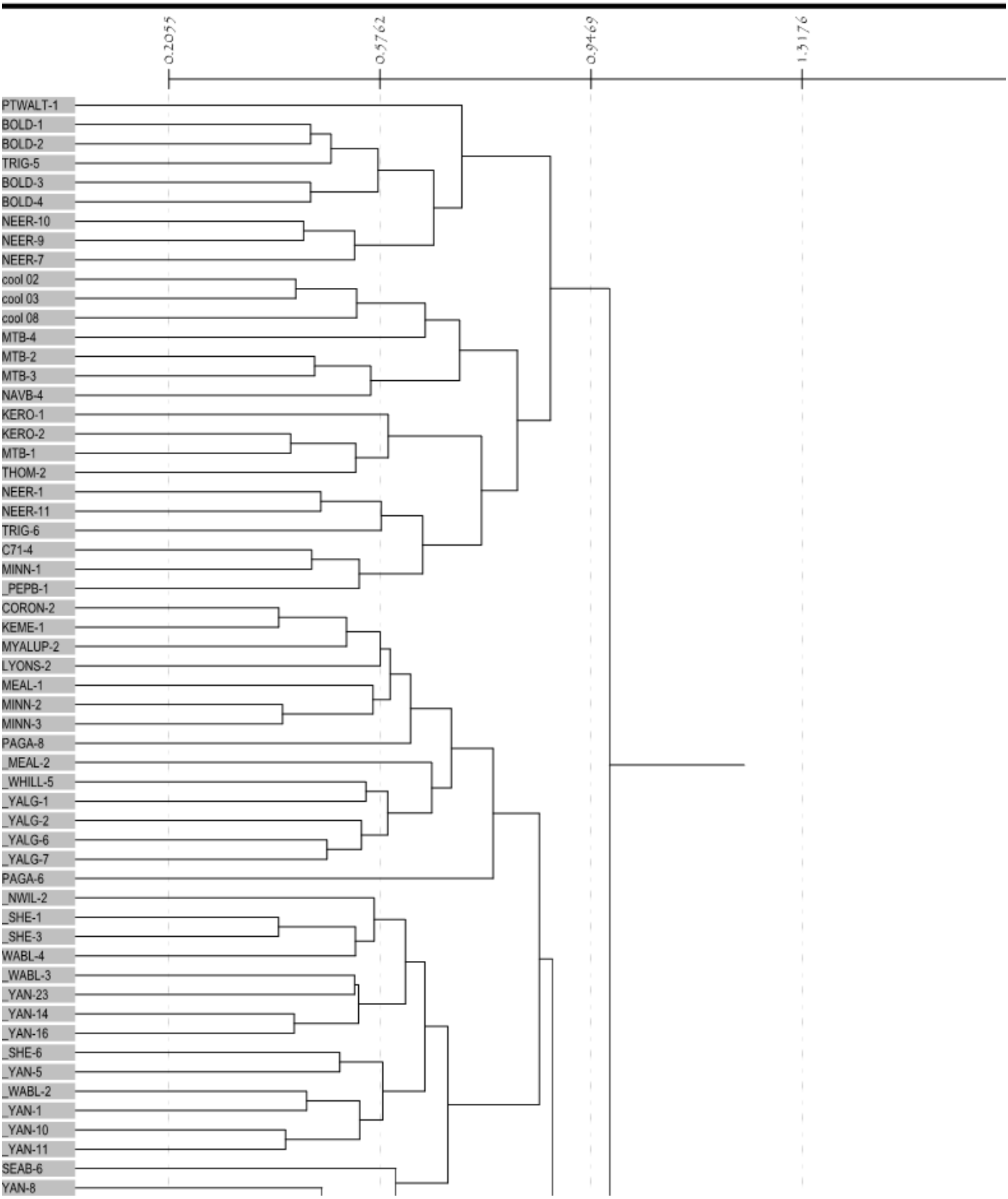
Caladenia flava subsp. *flava*	.2	<1
Calytrix fraseri	.5	<1
Centrolepis drummondiana	.1	<1
Conostylis aculeata	.3	<1
Crassula colorata	.04	<1
Daviesia divaricata	1	<1
Daviesia nudiflora subsp. *nudiflora*	1.2	1
Drosera erythrorhiza	.01	<1
**Ehrharta calycina*	1	3
Eucalyptus marginata subsp. *marginata*	10	8
**Ficinia marginata*	.1	<1
**Gladiolus caryophyllaceus*	.4	<1
Hyalosperma cotula	.1	<1
**Hypochaeris glabra*	.01	<1
Hypolaena exsulca	.5	<1
Mesomelaena pseudostygia	0.8	7
Morelotia octandra	.4	<1
Orthrosanthus laxus	.4	<1
Phyllangium paradoxum	.1	<1
Pterostylis vittata	.2	<1
**Romulea rosea*	1	<1
Scaevola repens var. *repens*	.2	1
Stirlingia latifolia	1	<1
Stylidium androsaceum	.1	<1
Thysanotus manglesianus	.5	<1
**Trachyandra divaricata*	.4	<1
Trachymene pilosa	.1	<1
**Ursinia anthemoides* subsp. *anthemoides*	3	3
Xanthorrhoea brunonis	1	15

APPENDIX EIGHT FCT FLORISTIC ANALYSIS

on Type: Flexible UPGMA Beta = -0.10

Association: Bray & Curtis (Columns) Created on: 10:40:34, January 21, 2025

Column Fusion Dendrogram



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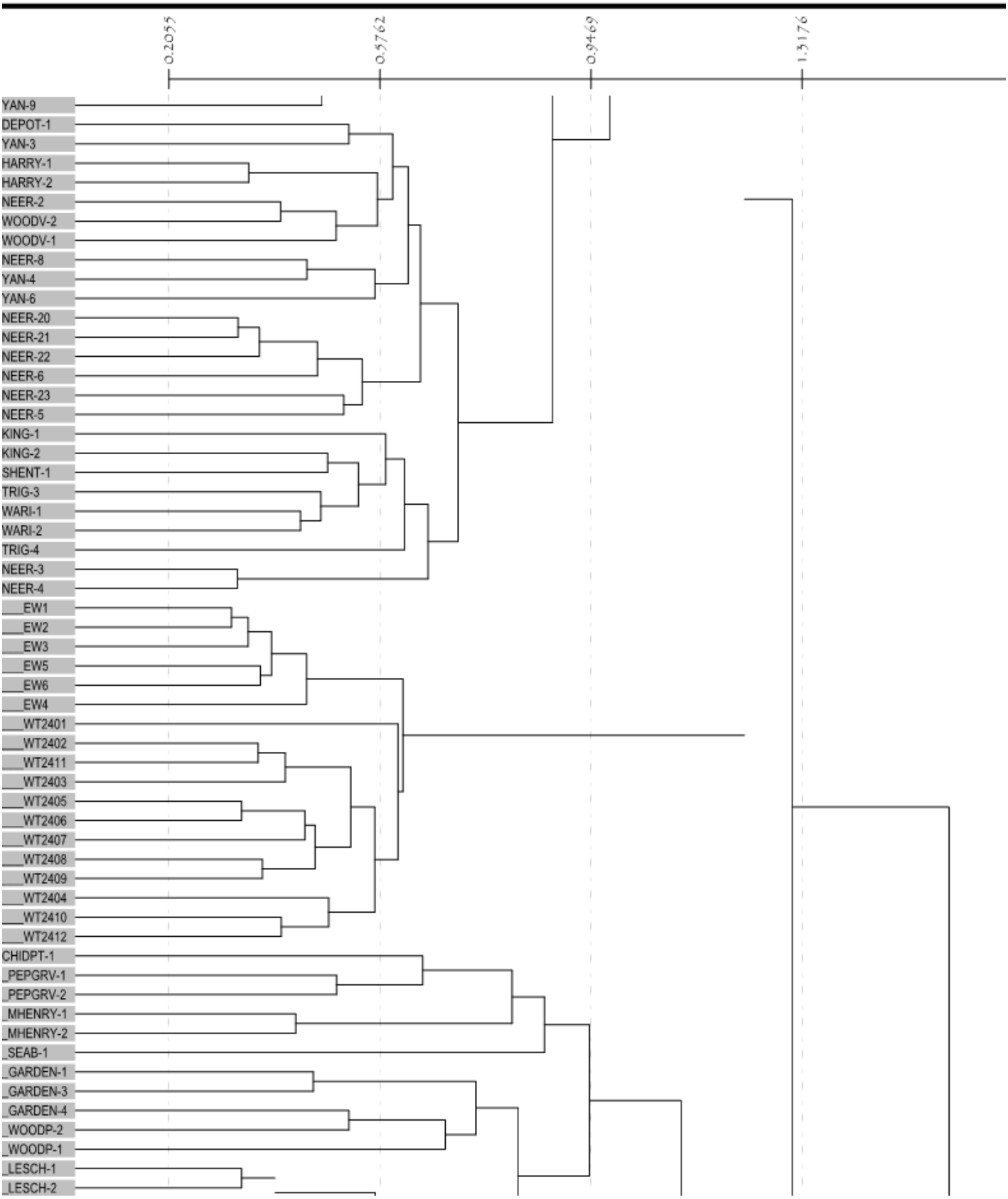

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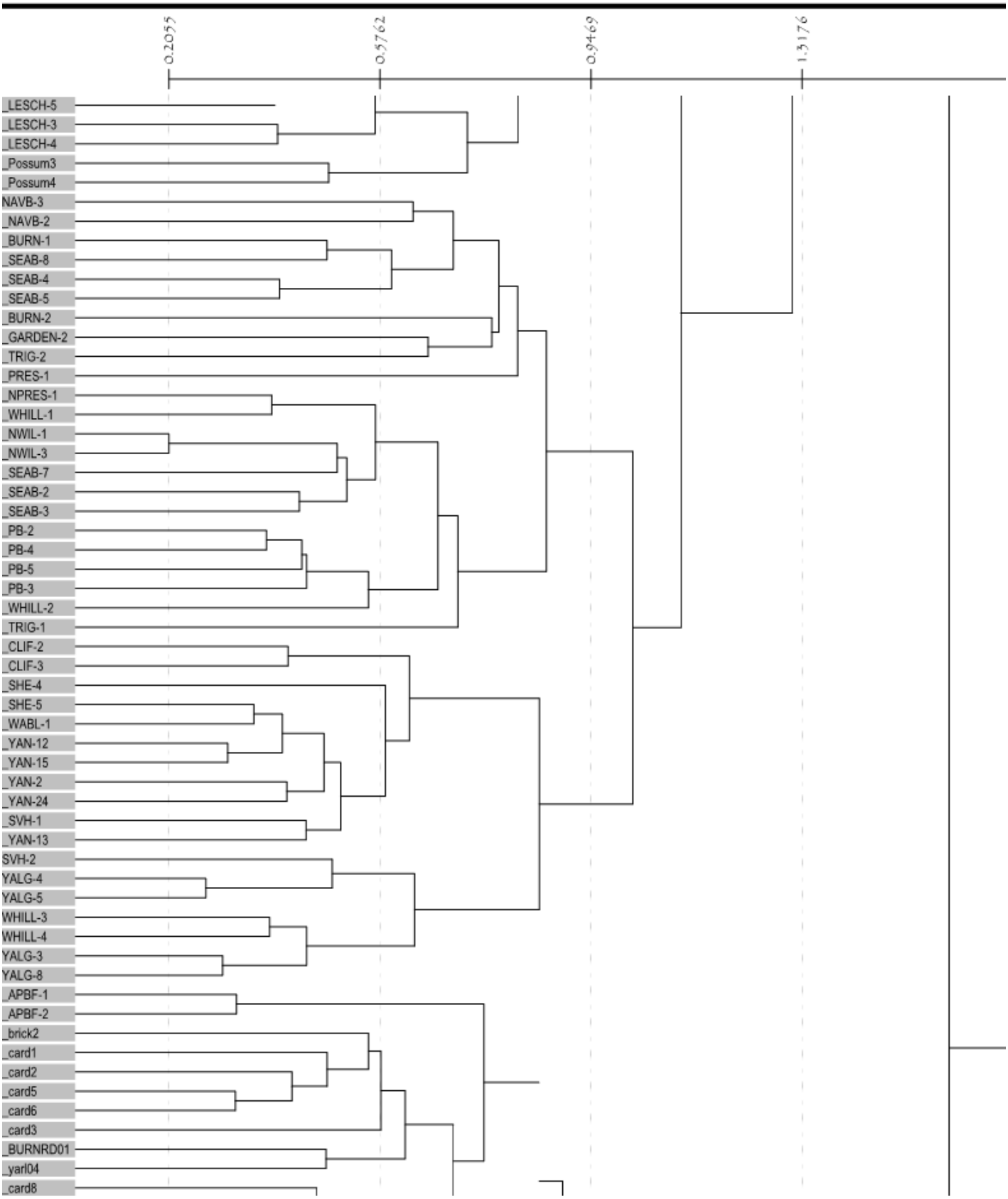

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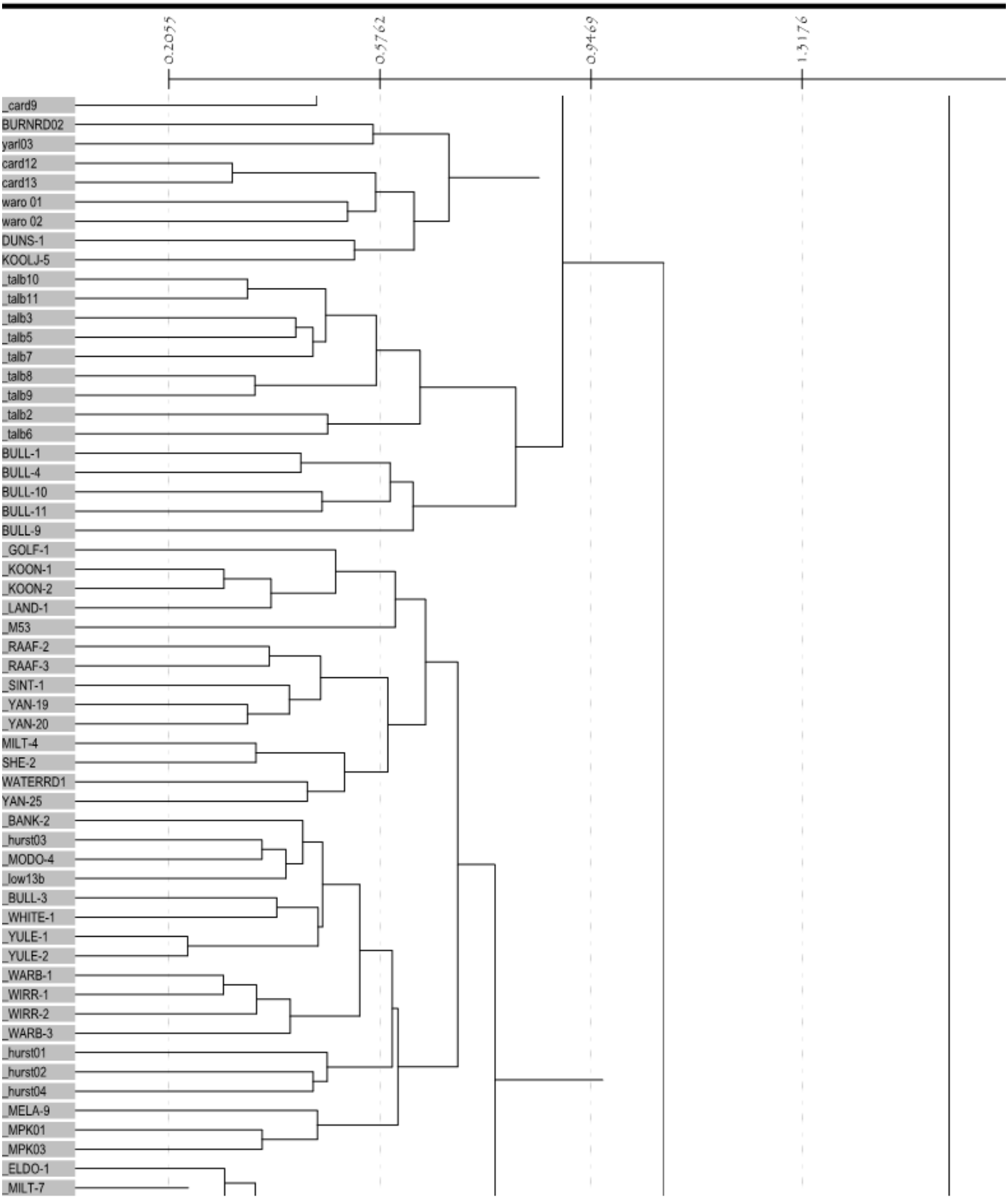

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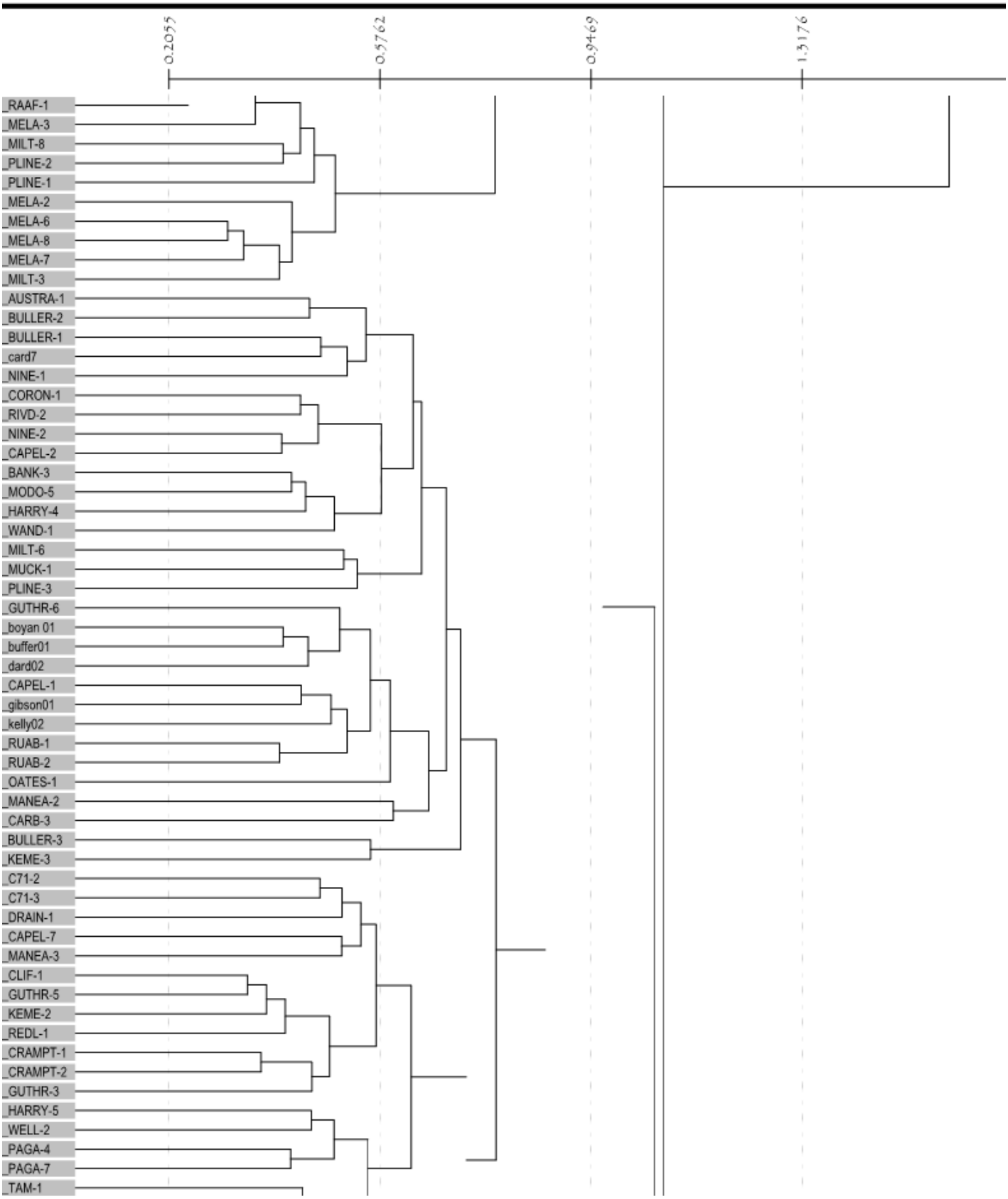

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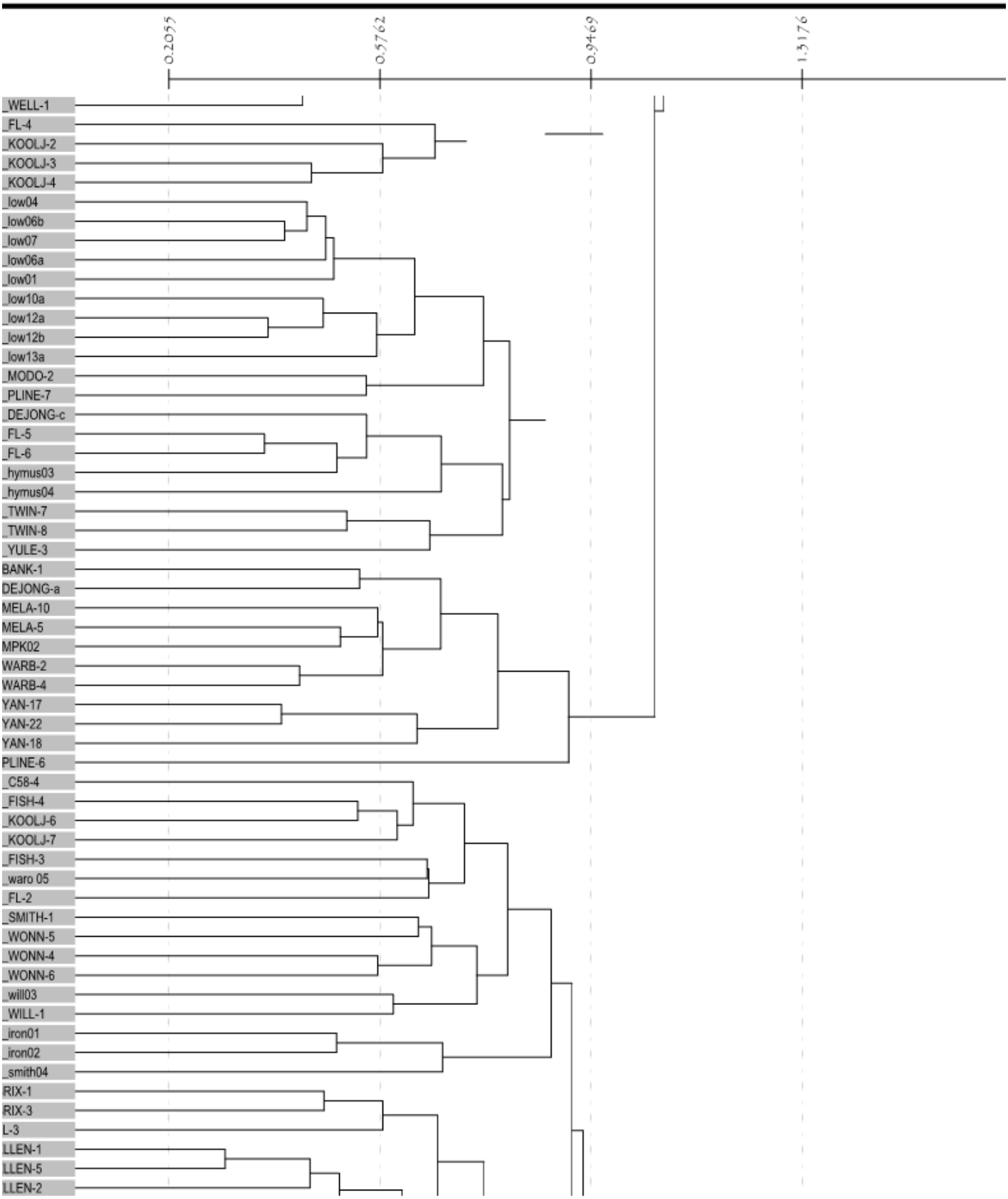
Association: Bray & Curtis (Columns) Created on: 10:40:34, January 21, 2025

Column Fusion Dendrogram



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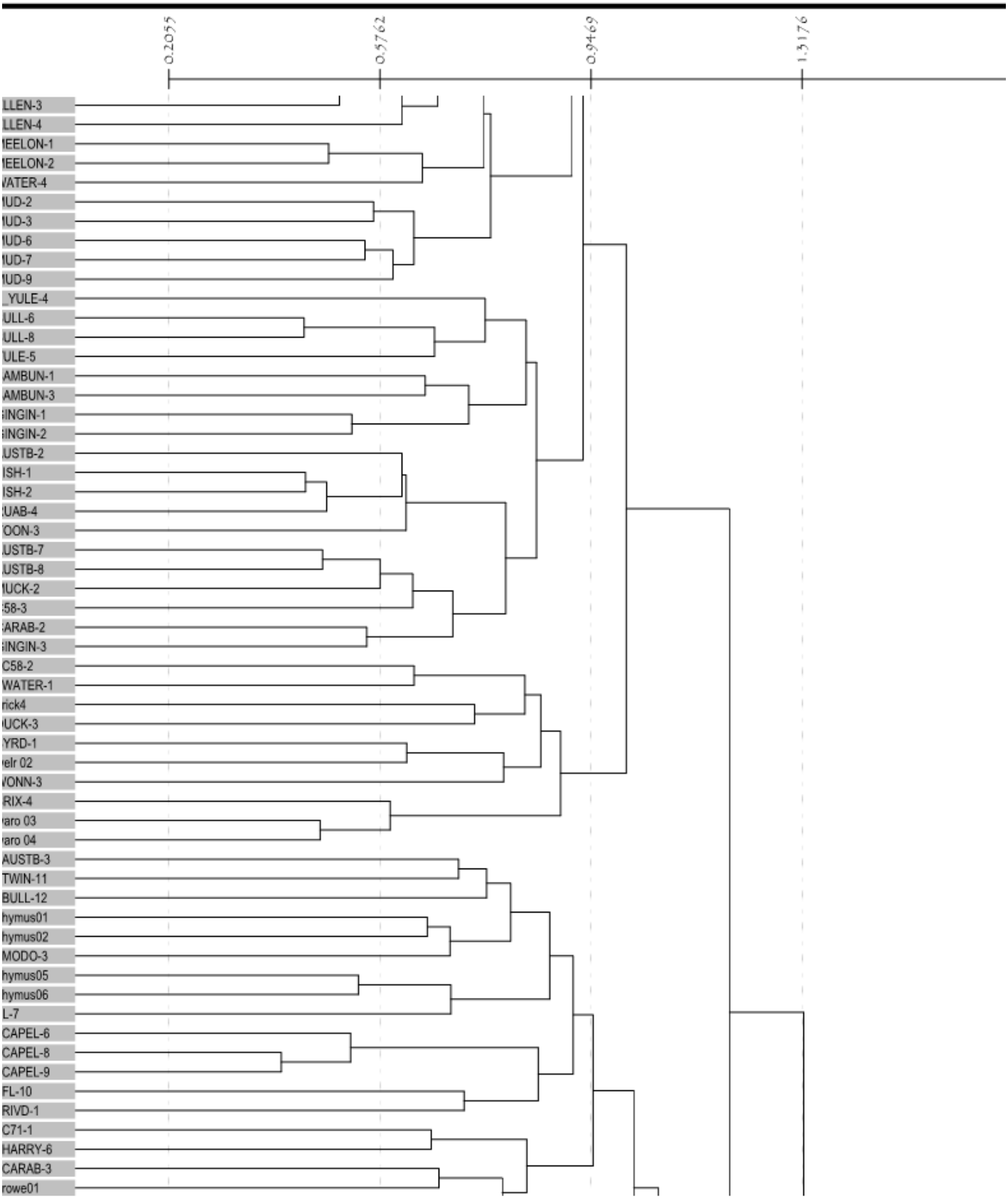

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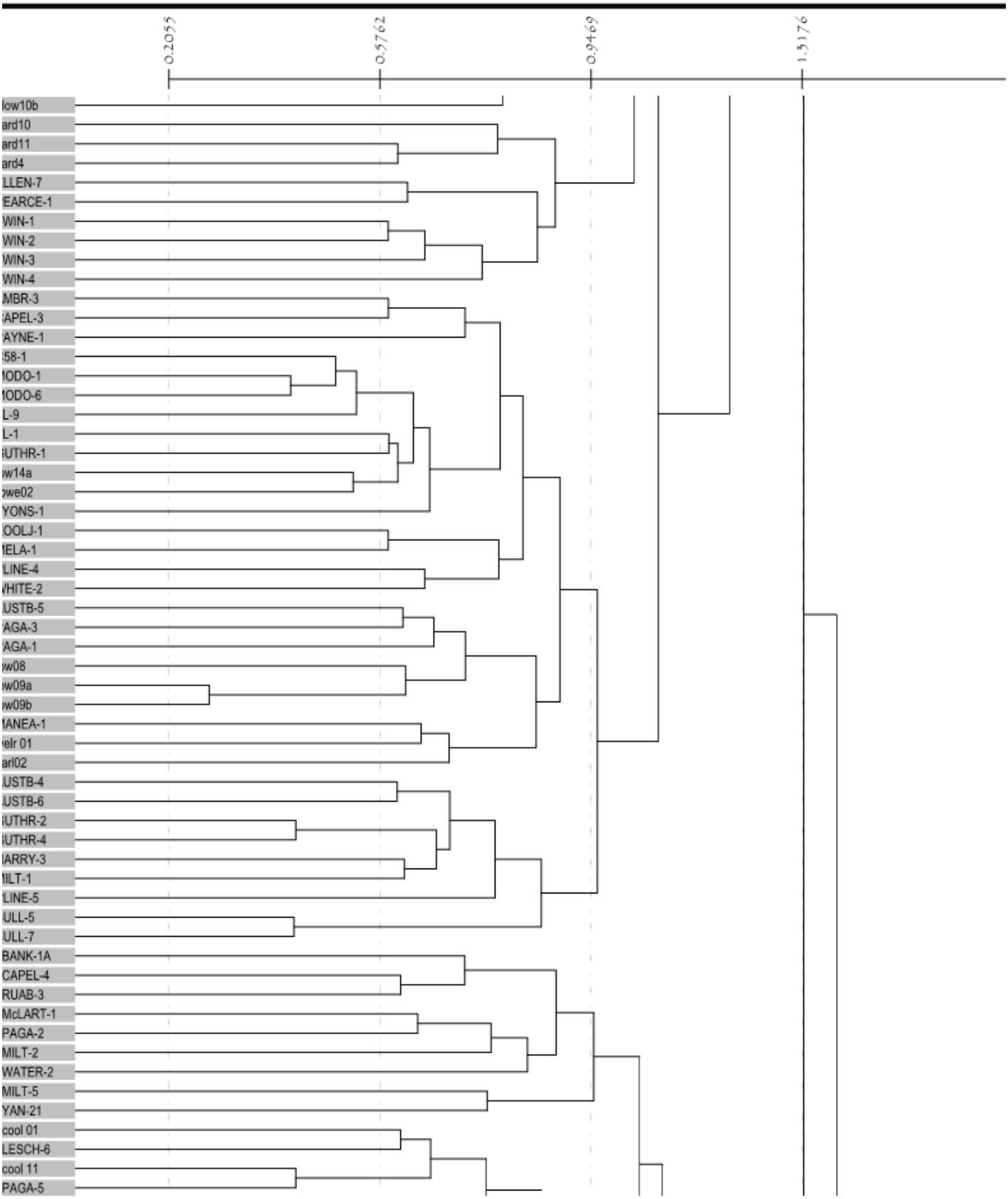
Column Fusion Dendrogram



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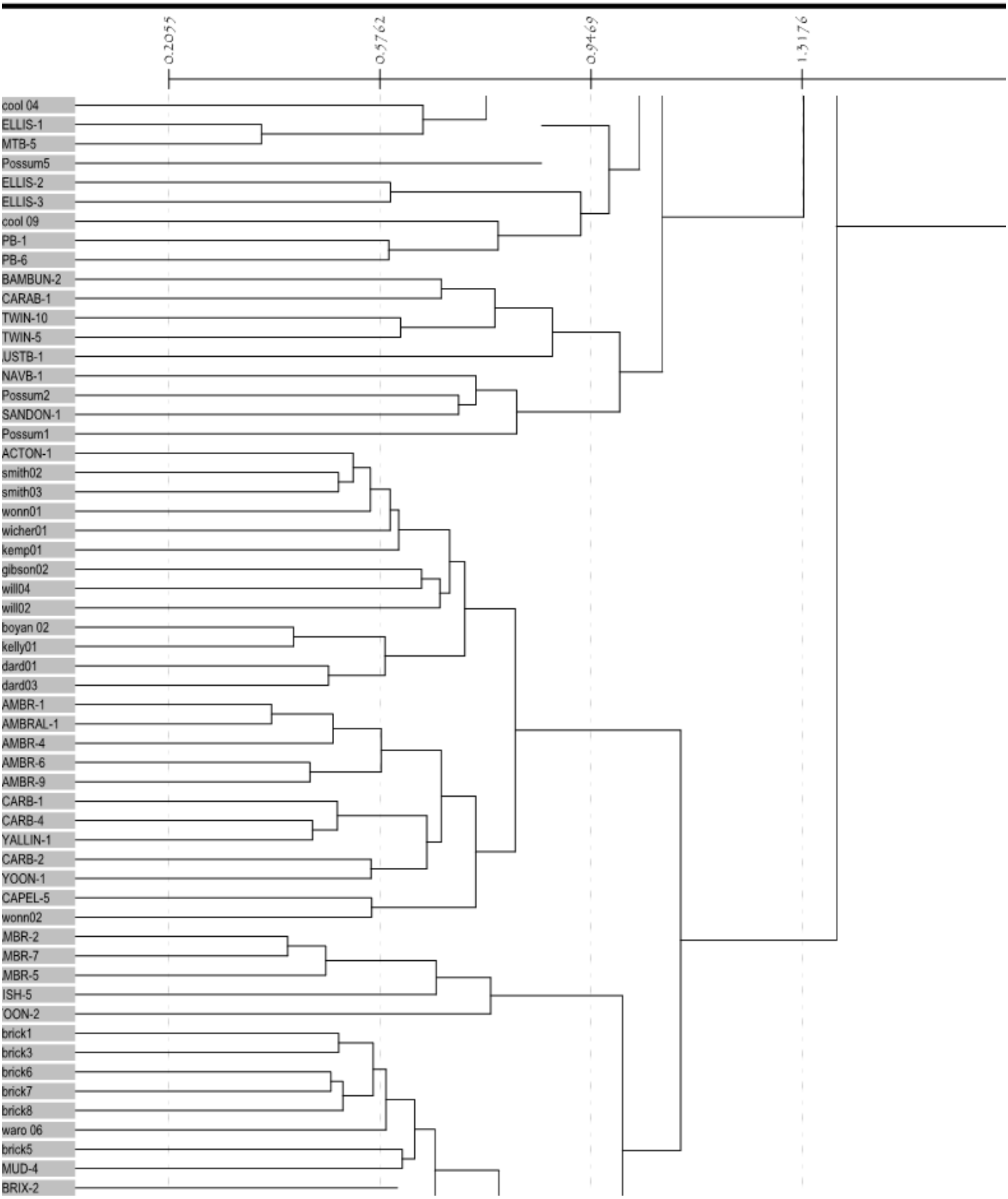
Column Fusion Dendrogram



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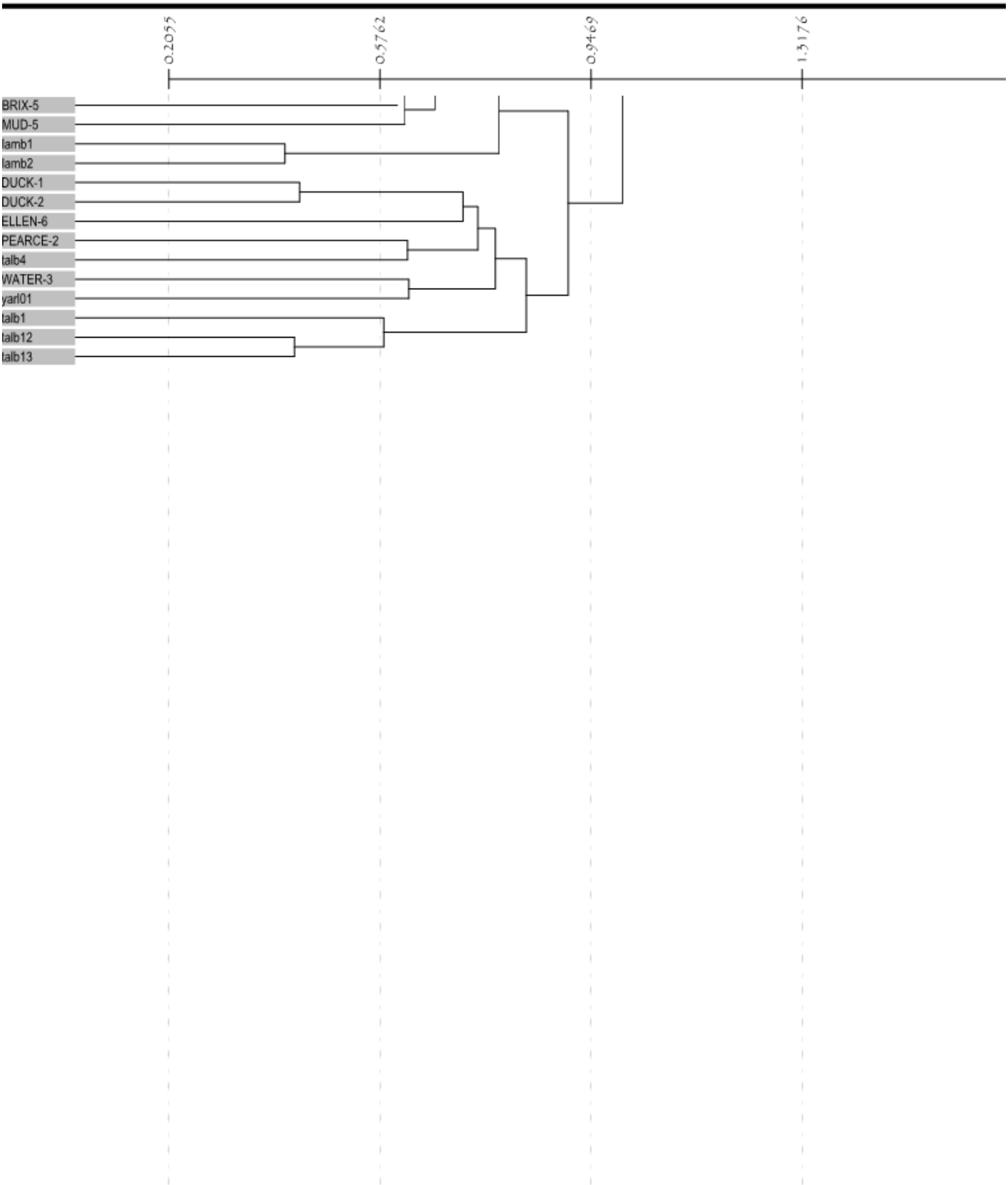

APPENDIX NINE BLACK COCKATOO HABITAT TREES

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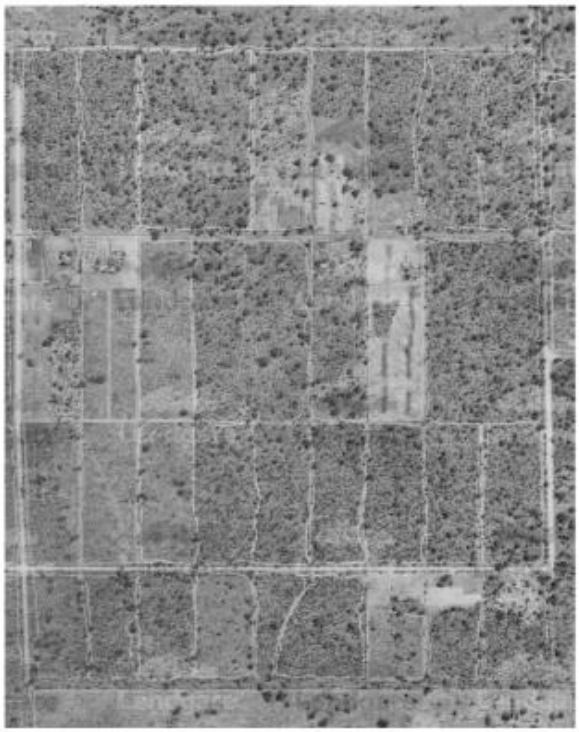
Appendix 5 Historical Aerial Photographs (Landgate, 2024a)



Aerial Photograph from 11 March 1965

Aerial Photograph from 20 July 1970

Aerial Photograph from 30 August 1981

Aerial Photograph from 31 December 1989

Aerial Photograph from 24 February 2000

Aerial Photograph from 26 January 2003

Aerial Photograph from 8 October 2022

Aerial Photograph from 10 February 2024

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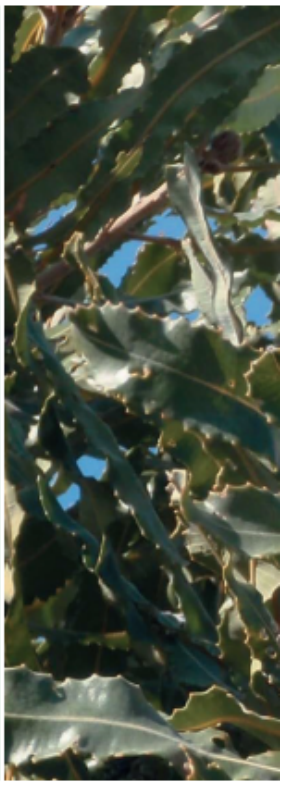

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Integrated Science & Design

Bushfire Management Plan

Local Structure Plan - East Wanneroo

Precinct 3

Project No: EP24-169(01)

Document Control

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				Anthony Rowe	AJR
	Submitted to the client for review				
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	Prepared to address updated LSP. Submitted to the client for review				

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This document has been prepared primarily to consider the layout of development and/or the appropriate building construction standards applicable to development, where relevant. The measures outlined are considered to be prudent minimum standards only based on the standards prescribed by the relevant authorities. The level of bushfire risk mitigation achieved will depend upon the actions of the landowner or occupiers of the land and is not the responsibility of the author. The relevant local government and fire authority (i.e. Department of Fire and Emergency Services or local bushfire brigade) should be approached for guidance on preparing for and responding to a bushfire.

Notwithstanding the precautions recommended in this document, it should always be remembered that bushfires burn under a wide range of conditions which can be unpredictable. An element of risk, no matter how small, will always remain. The objective of the Australian Standard AS 3959:2018 is to "prescribe particular construction details for buildings to reduce the risk of ignition from a bushfire" (Standards Australia 2018). Building to the standards outlined in AS 3959 does not guarantee a building will survive a bushfire or that lives will not be threatened by the effects of bushfire attack.

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Executive Summary

Satterley Property Group (the proponent) is progressing a Local Structure Plan (LSP) over 37 land parcels within the City of Wanneroo, in an area also referred to as Precinct 3 of the *East Wanneroo District Structure Plan* (EWDSP). The collective land parcels (herein referred to as 'the site') extend over a 140-hectare (ha) area situated approximately 20 km north of the Perth Central Business District and immediately to the east of the existing Hocking residential subdivision area.

The proposed Precinct 3 LSP will guide future subdivision of the site for a mix of uses including residential, a local centre, a primary school, public open space (POS) and parkland reserve (for retained native vegetation) areas, and is generally in accordance with the overarching EWDSP.

A significant portion of the site is located within 'Area 2' (designated bushfire prone) on the state-wide *Map of Bush Fire Prone Areas* prepared by the Office of Bushfire Risk Management (OBRM 2024). The identification of the site within 'Area 2' necessitates a further assessment of the determined bushfire risk affecting the site in accordance with *Australian Standard 3959:2018 Construction of buildings in bushfire prone areas* (AS 3959), and the satisfactory compliance of the proposal with the policy measures described in *State Planning Policy 3.7 Bushfire* (SPP 3.7) (WAPC 2024b)and the *Planning for Bushfire Guidelines - For the implementation of State Planning Policy 3.7 Bushfire* (the Guidelines)(WAPC 2024a).

The purpose of this bushfire management plan (BMP) is to assess the bushfire hazards (risk), both within and near the site, and identify the 'management' strategies (risk treatments) required to ensure the future development of the land is consistent with the intent of SPP 3.7, which is:

> *"to implement effective, risk-based land use planning and development which in the first instance avoids the bushfire risk, but where unavoidable, manages and/or mitigates the risk to people, property and infrastructure to an acceptable level. The preservation of life and the management of bushfire impact are paramount."*

The proposed LSP is in accordance with the existing zoning and currently approved EWDSP for the site, with the proposed LSP to be assessed by the outcomes applicable to Bushfire Protection Criteria 5 in the Guidelines.

This BMP has followed the requirements of SPP 3.7 to identify bushfire risks and the bushfire protection measures that will make the land suitable for its intended purpose. A Bushfire Attack Level (BAL) assessment involving the classification of vegetation and the effective slope has been undertaken in accordance with AS 3959, extending 150 m from the site in accordance with the Guidelines.

The following bushfire hazards were identified as applicable to the site following development:

- **Forest (Class A) vegetation** has been identified externally to the site to the north, east, and south within the broader EWDSP area. Forest vegetation is also identified internally to the site in areas proposed for future parkland reserves, where existing remnant native vegetation is proposed for retention.

- **Woodland (Class B) vegetation** is present to the east within Nanovich Park, a horse trotting and training facility external to the site, with the vegetation adjacent to the park's interface with Benmuni Road. This area is also within the broader EWDSP area.
- **Grassland (Class G) vegetation** is identified externally to the east of the site within Nanovich Park as well as an external privately owned landholding to the north of Nanovich Park. These areas are also within the broader EWDSP area.

Existing classified vegetation within future subdivision and development areas within the site will be removed and converted to non-vegetated land and/or low threat vegetation. It is planned that the public open space (POS) in the site will be converted to low threat vegetation in accordance with Section 2.2.3.2 of AS 3959. An exception is the parkland reserve areas remaining in their existing conditions (forest).

All classified vegetation outside the site is assumed to remain in its existing condition and therefore pose a long-term bushfire risk to the site. The Shenton Road reserve to the south of the site has been assumed to be developed as part of this BMP due to likely future staging within the EWDSP. However, if at the time of subdivision, the road has not been constructed, the implementation of greater setbacks and a combination of perimeter roads and/or EAWs will be necessary to address siting and access considerations for the southern portion of the LSP.

Areas of land identified as low threat that are external to the site are assumed to continue to be managed in accordance with existing subdivision approvals and/or land management practices. Narrow nature strips associated with road reserves are considered a low threat without management, based on AS 3959.

Compliance Assessment

The bushfire protection criteria (BPC) provided in the Guidelines represent the risk treatment acceptable solutions applicable to achieving the intent and outcomes listed in SPP 3.7. The BPC are divided into five criteria with each having four elements aligning to an outcome. In this instance, the relevant criteria (category) are *Criteria 5: Structure plans and subdivision applications*. Compliance with each element (as a risk treatment) is required to demonstrate to the decision maker that the risk is within an acceptable level, either by compliance with the acceptable solution or by an outcome (alternate solution).

This BMP demonstrates that compliance with the acceptable solution at each element in BPC 5 can be achieved and is summarised below:

- **Location:** As the site has been identified as being within an 'Area 2' bushfire prone area under the state-wide *Map of Bush Fire Prone Areas* prepared by the Office of Bushfire Risk Management (OBRM 2024), an assessment against Element 1 is necessary. It is noted that while the site sits within the broader EWDSP area which was most recently assessed against bushfire consideration in 2018 and therefore SPP 3.7), this assessment was conducted at a high level and noted that the area subject to this LSP would require further consideration to satisfy Element 1. On this basis, and in accordance with the Guidelines, a Broader Landscape Assessment has been completed, with the site having a point score of 5 meaning it is Broader Landscape Type A and can satisfy the acceptable solution.

- **Element 2 Siting and design:** The BAL assessment conducted as part of the BMP indicates that all future habitable buildings within the proposed development can be sited to achieve BAL-29 or less. A number of the development cells have BAL-40 incursions as result of retained vegetation within the parkland reserves, however, the development cells are sufficiently sized to accommodate appropriately oriented lots at subdivision, allowing for in-lot setbacks to achieve BAL-29. Asset Protection Zones will be established for all lots through the management of residential lots, non-vegetated areas, and low-threat vegetation in the future subdivision design, including roadways and POS areas. It is noted that currently Shenton Road reserve to the south of the site is undeveloped, and until it is constructed will pose a temporary hazard to development within the site. The road reserve does result in BAL-FZ and BAL-40 extending into the site, but impacts can be managed through staging of development until the road is constructed (as proposed is the EWDSP). For the purposes of this BMP BALs have been shown with Shenton Road in a constructed state.
- **Element 3 Vehicular access:** The proposed Precinct 3 LSP offers multiple access and egress points that connect to the existing Benmuni Road to the east and Lenore Road to the west, as well as Nicholas Road and Elliot Road that occur within the site (and connect with Benmuni Road and Lenore Road). Currently, these roads provide access in multiple directions and will be supported by an interconnected road network proposed as part of the LSP. Egress to the south will also be available when Shenton Road is developed. As future development within the site may be staged, it will be essential to ensure that all occupiers and visitors have at least two vehicular access routes at all times during the short, medium, and long-term phases of development. If roads providing through traffic routes are not constructed before any given stage of subdivision within the site, temporary no-through roads with suitable turnaround areas will need to be provided, along with possible temporary emergency access ways.
- **Element 4 Water:** future development will be provided with a permanent and reticulated water supply to support onsite firefighting requirements and hydrants will be installed as per Water Corporation requirements.

The management/mitigation measures to be implemented through the proposed development of the site have been outlined as part of this BMP. If the current development layout changes at the future subdivision process, a revised BMP is likely to be required to support future subdivision applications. It may also be required where BAL-40 extends into lots, to demonstrate how the detailed lot layout has responded to BAL-40 incursion.

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Appendices

Appendix A

Precinct 3 Local Structure Plan

Appendix B

East Wanneroo District Structure Plan

Abbreviation Tables

Table A1: Abbreviations – General terms

General terms	
AS	Australian Standard
APZ	Asset Protection Zone
BAL	Bushfire Attack Level
BMP	Bushfire Management Plan
BPAD	Bushfire Planning and Design
CCW	Conservation category wetland
ESA	Environmentally sensitive area
FDI	Fire Danger Index
UFI	Unique feature identifier
BPC	Busfire Protection Criteria

Table A2: Abbreviations – Organisations

Organisations	
DBCA	Department of Biodiversity, Conservation and Attractions
DFES	Department of Fire and Emergency Services
DWER	Department of Water and Environmental Regulation
DPLH	Department of Planning, Lands and Heritage
OBRM	Office of Bushfire Risk Management
WAPC	Western Australia Planning Commission

Table A3: Abbreviations – Legislation and policies

Legislation	
AS 3959	*Australian Standard 3959:2018 Construction of buildings in bushfire prone areas*
Guidelines	*Planning for Bushfire Guidelines - For the implementation of State Planning Policy 3.7 Bushfire* (WAPC 2024a)
SPP 3.7	*State Planning Policy 3.7 Bushfire* (WAPC 2024b)

Table A4: Abbreviations – Planning and building terms

Planning and building terms	
LSP	Local Structure Plan
DPS	District Planning Scheme
MRS	Metropolitan Region Scheme

Table A4: Abbreviations – units of measurement

Units of measurement	
ha	Hectare
m	Metre
m AHD	m in relation to the Australian height datum

1 Introduction

1.1 Background

Satterley Property Group (the proponent) is progressing a local structure plan (LSP) over 37 land parcels within the City of Wanneroo, in an area also referred to as Precinct 3 under the approved *East Wanneroo District Structure Plan* (EWDSP). The LSP plan is provided in **Appendix A**, while the approved EWDSP is provided in **Appendix B**.

The land parcels, referred to as 'the site,' cover an area of 140 hectares (ha) within the locality of Wanneroo. The site is generally bounded by remnant vegetation, part of Bush Forever site 471, and rural residential development to the north; Benmuni Road, rural development, Nanovich Park, and Bush Forever site 327 to the east; the future Shenton Road alignment and rural residential development to the south; and Lenore Road and existing residential subdivision to the west. It is situated approximately 20 km north of the Perth Central Business District. The location of the site, cadastral boundaries, and lot numbers are shown in **Figure 1**.

The proposed Precinct 3 LSP will guide future subdivision of the site for a mix of uses including residential, a local centre, a primary school, public open space (POS) and parkland reserve (for retained native vegetation) areas, and is generally in accordance with the overarching EWDSP.

The site is largely located within 'Area 2' (designated bushfire prone) on the state-wide *Map of Bush Fire Prone Areas* prepared by the Office of Bushfire Risk Management (OBRM 2024) as shown in **Plate 1**. The identification of the site within 'Area 2' necessitates further assessment of the determined bushfire risk affecting the site in accordance with *Australian Standard 3959:2018 Construction of buildings in bushfire prone areas* (AS 3959) and the satisfactory compliance of the proposal with the policy measures described in *State Planning Policy 3.7 Bushfire* (SPP 3.7) (WAPC 2024b) and the *Planning for Bushfire Guidelines - For the implementation of State Planning Policy 3.7 Bushfire* (the Guidelines) (WAPC 2024a).

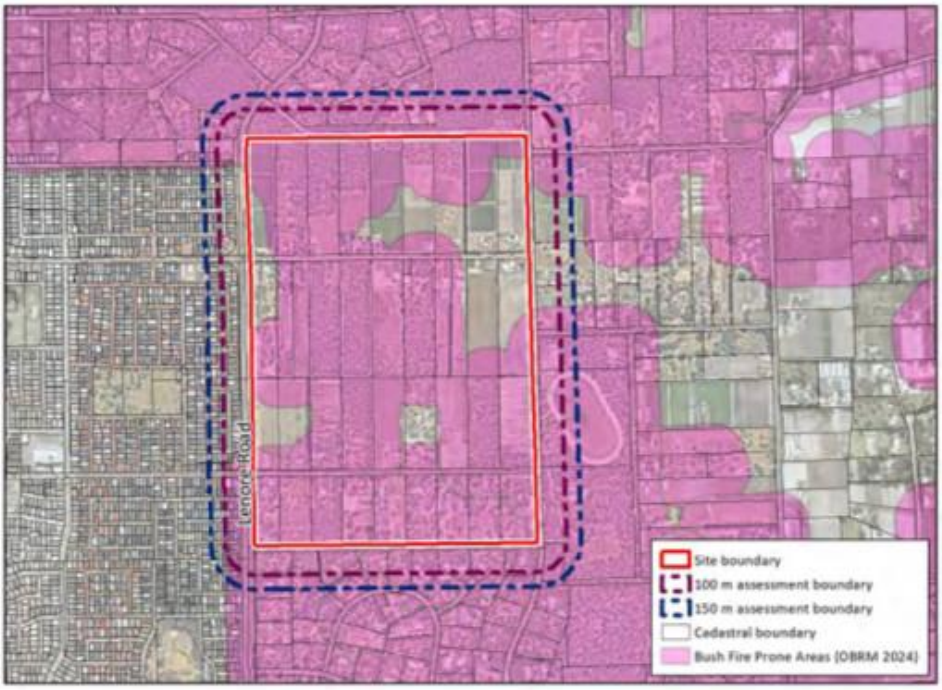

Plate 1: Areas within and surrounding the site, identified as Area 2 'designated bushfire prone' (under the state-wide Map of Bush Fire Prone Areas (OBRM 2024), is indicated in purple

1.2 Aim of this report

The purpose of this Bushfire Management Plan (BMP) is to assess bushfire hazards both within the site, and nearby, and demonstrate that the threat posed by any identified hazards can be appropriately mitigated and managed in future stages of development under the proposed LSP. This BMP has been prepared in accordance with SPP 3.7 (WAPC 2024b), the Guidelines (WAPC 2024a) and AS 3959 (Standards Australia 2018). The document includes:

- An assessment of the existing classified vegetation in the vicinity of the site (within 150 m) and consideration of bushfire hazards that will exist in the post-development scenario (**Section 3**).
- Commentary on how the future development can achieve *Bushfire Protection Criteria (BCP) 5: Structure Plans and subdivision applications* outlined within the Guidelines including an indication of Bushfire Attack Level (BAL) ratings likely to be applicable to development cells and future habitable buildings (**Section 5**).
- An outline of the roles and responsibilities associated with implementing this BMP (see **Section 6**).

1.3 Statutory policy and framework

The following key legislation, policies and guidelines are relevant to the preparation of a bushfire management plan:

- *Bush Fires Act 1954*
- *Fire and Emergency Services Act 1998*
- *Planning and Development Act 2005* and associated regulations
- *Building Act 2011* and associated regulations
- *State Planning Policy 3.7 Bushfire (WAPC 2024b)*
- *Planning for Bushfire Guidelines – For the implementation of State Planning Policy 3.7 Bushfire (WAPC 2024a)*
- *Australian Standard AS 3959 – 2018 Construction of buildings in bushfire prone areas* (Standards Australia 2018)

1.4 Description of the proposed development

The proposed Precinct 3 LSP (**Appendix A**) provides a framework for the provision of future land use, subdivisions and development within the site, consistent with the overarching EWDSP which covers an 8,300 ha area across East Wanneroo, comprising 28 separate structure plan precincts.

The EWDSP outlines the land use rationale for each precinct and specifies the information which is required to inform the preparation of the LSP for each precinct.

With respect to the site, the EWDSP (**Appendix B**) proposes a residential community integrated with natural features for Precinct 3. The proposed LSP (**Appendix A**) identifies the following land uses within the site:

- Approximately 64 ha of mixed density residential development;
- Approximately 12 ha for public open space (POS) and 14.25 ha of parkland reserves (areas of retained native vegetation);
- A primary school in the central portion of the site;
- A 2.1 ha local centre in the north-western portion of the site; and
- A 1.9 ha church site.

The site is predominantly zoned 'Urban Deferred' (including areas proposed for intensification of development), with portions of the proposed parkland reserves being zoned 'Rural' under the Metropolitan Region Scheme (MRS), and zoned 'Rural' under the City of Wanneroo *District Planning Scheme No. 2* (DPS No. 2). The MRS zones and reserves are shown in **Plate 2**.

Plate 2: Metropolitan Region Scheme Zoning and Reserves, in and surrounding the site.

1.5 Description of land characteristics

Based on observed site conditions and a review of publicly available historical aerial photography, it has been determined that large portions of the site have been cleared or disturbed by activities associated with market gardens and rural residential development. It is noted that a number of lots consist of regrowth or remnant native vegetation with Bush Forever site 471 being present in the north and Bush Forever site 327 in the southeast of the site.

The general locality surrounding the site is characterised by urban fringe qualities, with existing land uses including:

- Bush Forever site 471 and rural residential development to the north;
- Market gardens, Nanovich Park (horse trotting and training facility) and Bush Forever site 327 to the east;
- The future Shenton Road reserve and rural residential development to the south; and
- Lenore Road and residential development to the west.

The existing rural residential areas to the north, south and east of the site are part of the EWDSP and proposed for future urban and residential development.

The topography of the site is characterised as generally flat with portions of the site including undulating terrain, resulting from natural sand dunes. The site generally falls from the southwest to the northeast with the highest point within the southwest at 85 m Australian Height Datum (m AHD). From this high point, the land slopes down in all directions, with the lowest point being at 50 m AHD in the northeast, as illustrated in **Figure 1**. As part of development, the topographic contours will be modified, as part of cut and fill requirements across the site.

2 Environmental Considerations

In accordance with the *Bushfire Management Plan (BMP) Manual* (DPLH and WAPC 2024), this BMP has considered whether there are any environmental values that may require specific consideration through either protection, retention, or revegetation. To support this, a review of publicly available databases has been undertaken, with particular reference to the Shared Location Information Platform (SLIP) databases. A summary of the search results has been provided in **Table 1**.

Table 1: Summary of potential environmental considerations that may be associated with the site.

Key environmental feature (information in brackets refers to mapping data source)	Yes / no / potentially occurring within the site	If yes / potentially, describe the value that may be impacted
Conservation category wetlands and buffer (Geomorphic wetlands, Swan Coastal Plain (DBCA-019))	No	No conservation category wetlands (CCWs) or other geomorphic wetlands intersect the site.
RAMSAR wetlands (DBCA-010)	No	No RAMSAR wetlands are mapped as occurring within the site or in close proximity.
Threatened and priority flora (DBCA-036)	Yes	Existing remnant vegetation within the site varies in condition and could contain threatened and priority flora. Separate investigations are being progressed to understand the values associated with these areas and have informed the proposed areas for retention. Native vegetation within parkland reserve areas will be retained and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP. Areas proposed for retention are largely in accordance with the EWDSP.
Threatened and priority fauna (DBCA-037)	Yes	Existing remnant vegetation within the site varies in condition and will provide habitat for threatened and priority fauna species, including the federally and state protected black cockatoo species. Separate investigations are being progressed to understand the values associated with these areas and have informed the proposed areas for retention. Native vegetation within parkland reserve areas will be retained and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP. Areas proposed for retention are largely in accordance with the EWDSP.
Threatened ecological communities (DBCA-038)	Potentially	Investigations undertaken to support the EWDSP and this LSP indicate that areas of remnant native vegetation in the site contain the Banksia Woodlands of the Swan Coastal Plain threatened ecological community (TEC). Native vegetation within parkland reserve areas will be retained and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP. Areas proposed for retention are largely in accordance with the EWDSP.
Bush Forever areas (DPLH-019)	Yes	Two Bush Forever sites are present within the site and have been incorporated into the proposed parkland reserves. In the north of the site, Bush Forever site 471 is present, while site 327 is located in the southeast. Where these areas intersect with the site and remnant vegetation is present, they are proposed to remain vegetated and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP.

Table 1: Summary of potential environmental considerations that may be associated with the site. (continued)

Key environmental feature (information in brackets refers to mapping data source)	Yes / no / potentially occurring within the site	If yes / potentially, describe the value that may be impacted
Clearing regulations – Environmentally sensitive areas (DWER-046)	Yes	Where remnant vegetation is present as part of Bush Forever sites 471 and 327, it has been designated as an environmentally sensitive area (ESA). Where these areas intersect with the site and remnant vegetation is present, they are proposed to remain vegetated and will not be modified to support the requirements of this BMP. Existing firebreaks will be maintained and have been considered as part of the BMP.
Swan Bioplan Regionally Significant Natural Areas 2010 (DWER-070)	No	Not applicable. No Regionally Significant Natural Areas are identified within the site or nearby.

2.1 Native vegetation – modification and clearing

The majority of the site is currently cleared of native vegetation (covered by market gardens and rural residential development); however, several remnant or regrowth patches of native vegetation are present within the site. Portions of the existing remnant or regrowth native vegetation are proposed to be retained in parkland reserve areas in an unmanaged state. These are identified within the LSP (**Appendix A**). it is noted that the clearing proposed as part of this LSP are following the expectations established under the EWDSP

The retention of native vegetation in parkland reserves aligns with considerations detailed in the EWDSP as well as the proponent's aim to maximise vegetation retention within the LSP area due to the environmental and amenity benefits. Opportunities for tree retention outside the proposed parkland reserves exist within POS, road reserves, and future lot areas. However, these opportunities may be limited by requirements associated with implementing residential subdivision, such as cut and fill needs. Ultimately this will be considered during detailed design, with all landscaping (including vegetation retention) outside of the parkland reserves to be maintained (e.g., grass mown/slashed) to a low-threat standard in accordance with Section 2.2.3.2 of AS 3959. On this basis, the exact vegetation and/or trees selected for retention outside the proposed parkland reserves will be confirmed through future detailed landscape design processes.

Where clearing of native vegetation is undertaken in accordance with a subdivision approval under the *Planning and Development Act 2005*, it is exempt from requiring a clearing permit under Schedule 6 of the *Environmental Protection Act 1986* (EP Act). Additionally, a clearing permit will not be required where other exemptions pursuant to the EP Act or Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (where outside an ESA) exist, such as those associated with Section 33 of the *Bush Fires Act 1954* or a building licence, respectively.

Vegetation to the south of the site within the future Shenton Road reserve has been assumed to be cleared and/or managed once future subdivision commences to allow for its construction in line with the expectations of the EWDSP. Although the exact timing has not been confirmed, it is assumed that by the time of subdivision, the road will have been constructed. If this has not occurred by the time of subdivision, a revised BAL assessment should be prepared to identify the bushfire hazard. All other vegetation outside the site has been assessed in its assumed mature state, post-development of the site.

2.2 Revegetation and landscape plans

It is possible that revegetation will occur but will be limited to the parkland reserve areas which are assumed to retain existing vegetation, and revegetation would not change the vegetation classification from a bushfire perspective.

POS areas within the site are intended to be utilised for recreation and drainage purposes. The detailed design of POS areas will be determined in collaboration with the City of Wanneroo as part of the standard development process and based on achieving the requirements of Liveable Neighbourhoods and community expectations for urban areas.

All POS areas will be designed to achieve low threat in accordance with Section 2.2.3.2 of AS 3959. Ongoing management is likely to include:

- Irrigation of grass and garden beds (where required).
- Regular removal of weeds and built-up dead material (such as fallen branches, leaf litter etc.)
- Low pruning of trees (branches below 2 m in height removed where appropriate).
- Application of ground/surface covers such as mulch or non-flammable materials as required.
- Regular mowing/slashing of grass to less than 100 mm in height.

The proponent will be responsible for the initial maintenance of the POS areas within the site and, following handover, the City of Wanneroo will be responsible for the ongoing long-term maintenance.

3 Bushfire Assessment Results

Bushfire risk for the site has been appropriately considered with regard to the potential impact upon the site using AS 3959 and the Guidelines.

The objective of AS 3959 is to reduce the risk of ignition and loss of a building to bushfire. It provides a consistent method for determining a radiant heat level (radiant heat flux) as a primary consideration of bushfire attack. AS 3959 measures the BAL as the radiant heat level (kW/m^2) over a distance of 100 m. AS 3959 also prescribes deemed-to-satisfy construction responses that can resist the determined radiant heat level at a given distance from the fire. It is based on six BAL ratings: BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ.

A BAL contour plan has been prepared in accordance with Appendix A.3 of the Guidelines and Method 1 of AS 3959 to determine the BAL ratings likely to be applicable to future buildings. This has been based on the vegetation classifications and the effective slope under the vegetation (post-development scenario).

3.1 Assessment inputs

Vegetation classifications and effective slope have been detailed in **Table 2** and **Figure 2** (post-development) and a site assessment was completed on 21 January 2025.

3.1.1 Inputs and assumptions

The BAL assessment is based on the following inputs and assumptions:

- **Designated Fire Danger Index (FDI):** 80
- **Flame temperature:** 1090 K
- **Effective slope beneath classified vegetation:** flat/upslope, downslope 0-5 (see **Figure 2**)
- The site will be developed and managed to be largely clear of vegetation and excluded as non-vegetated in accordance with 2.2.3.2 (e) of AS 3959, or where landscaping (road verges, future residential gardens, POS) is present, this will be implemented and managed to achieve low threat in accordance with 2.2.3.2 (f) (unless otherwise stated).
- Areas designated for parkland reserve purposes have been assumed to retain existing native vegetation and remain unmanaged. These areas area assumed to maintain a forest classification.
- Areas of low threat vegetation outside the site will continue to be managed and/or considered to achieve low threat (in accordance with Section 2.2.3.2 of AS 3959) based on the completion of the subdivision process and/or the existing maintenance regimes.
- Classified vegetation in the Shenton Road reserve that directly interfaces with the proposed lots is assumed to be modified to a low threat or non-vegetated state at subdivision to align with the expectations set by the EWDSP
- Classified vegetation that has been identified outside of the proponent's landholdings has been assumed to remain in its current state (unless stated otherwise) and will therefore continue to be a bushfire hazard to development within the site.
- Areas of grassland can include up to 10% foliage cover from shrubs and trees, as per AS 3959.

3.1.2 Vegetation classification

All vegetation within 150 m of the site was classified in accordance with Section 2.2.3 of AS 3959. The assignment of vegetation classifications is based on an assessment of vegetation structure, including consideration of the various fuel layers of different vegetation types, as outlined in **Plate 3.** Each distinguishable vegetation plot is described in **Table 2** and shown in **Figure 2**.

Not all vegetation is classified as a bushfire risk. Vegetation and ground surfaces that are exempt from classification as a potential hazard are identified as a low threat under Section 2.2.3.2 of AS 3959. Low threat vegetation includes the following:

a. *Vegetation of any type that is more than 100 m from the site.*
b. *Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified.*
c. *Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other or of other areas of vegetation being classified.*
d. *Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified.*
e. *Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings, and rocky outcrops.*
f. *Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition, mangroves, and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and wind breaks.*

Plate 3: The five fuel layers in a forest environment that could be associated with fire behaviour (Gould et al. 2007)

*Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)*

Photo ID:	1	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south east of the site, on the eastern side of Benmuni Road associated with Bush Forever site 327. The area comprises tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. As this vegetation is external to the site and is part of Bush Forever site 327 it has been assumed to remain unmanaged in the long term.			

Photo ID:	2	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south of the site in private lots on the southern side of the unconstructed Shenton Road reserve. The area comprises tall mature trees 10 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is within external landholdings not subject to the proposed LSP and as such has been assumed to remain unmanaged in the long term.			

Photo ID:	3	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south (east portion) of the site, within private landholdings and in the unconstructed Shenton Road reserve. This area comprises tall, mature trees (10 - 15 m) with greater than 30% foliage cover over shrubs and grasses. Vegetation within the road alignment will be cleared for the construction of the road. Outside the road reserve, the vegetation is within private landholdings not subject to the proposed LSP and is assumed to remain unmanaged in the long term.			

*Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)*

Photo ID:	4	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south of the site, within private landholdings and in the unconstructed Shenton Road reserve. This area comprises tall, mature trees (10 - 15 m) with greater than 30% foliage cover over shrubs and grasses. Vegetation within the road alignment will be cleared for construction of the road and will not pose a threat long-term. Outside the road reserve, the vegetation is within private landholdings not subject to the proposed LSP and is assumed to remain unmanaged in the long-term.			
Photo ID:	5	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south of the site, within private landholdings and in the unconstructed Shenton Road reserve. This area comprises tall, mature trees (10 - 15 m) with greater than 30% foliage cover over shrubs and grasses. The vegetation is within private landholdings not subject to the proposed LSP and is assumed to remain unmanaged in the long term.			
Photo ID:	6	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the south of the site, within private landholdings and in the unconstructed Shenton Road reserve. This area comprises tall, mature trees (10 -15 m) with greater than 30% foliage cover over shrubs and grasses. Vegetation within the road alignment will be cleared for construction of the road and will not pose a threat long-term. Outside the road reserve, the vegetation is within private landholdings not subject to the proposed LSP and is assumed to remain unmanaged in the long-term.			

*Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)*

Photo ID:	7	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the east (central portion) of the site, on the eastern side of Benmuni Road associated northern portions of Nanovich Park. The area comprises tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is external to the site and as the timing for development in the area associated with the EWDSP is unknown, it has been assumed to remain unmanaged in the long term.			

Photo ID:	8	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the east (north portion) of the site, on the eastern side of Benmuni Road associated with an unmanaged portion of an external private landholding. The area comprises tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is external to the site and as the timing for development in the area associated with the EWDSP is unknown, it has been assumed to remain unmanaged in the long term.			

Photo ID:	9	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the north of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. As this vegetation is external to the site and is part of Bush Forever site 471, it has been assumed to remain unmanaged in the long term.			

*Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)*

Photo ID:	10	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)	Class A - Forest (Flat/upslope)		
Description / Justification for Classification	Forest (Class A) vegetation has been identified to the north of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. As this vegetation is external to the site and is part of Bush Forever site 471, it has been assumed to remain unmanaged in the long term.		

Photo ID:	11	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)	Class A - Forest (Flat/upslope)		
Description / Justification for Classification	Forest (Class A) vegetation has been identified to the north of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. As this vegetation is external to the site and is part of Bush Forever site 471, it has been assumed to remain unmanaged in the long term.		

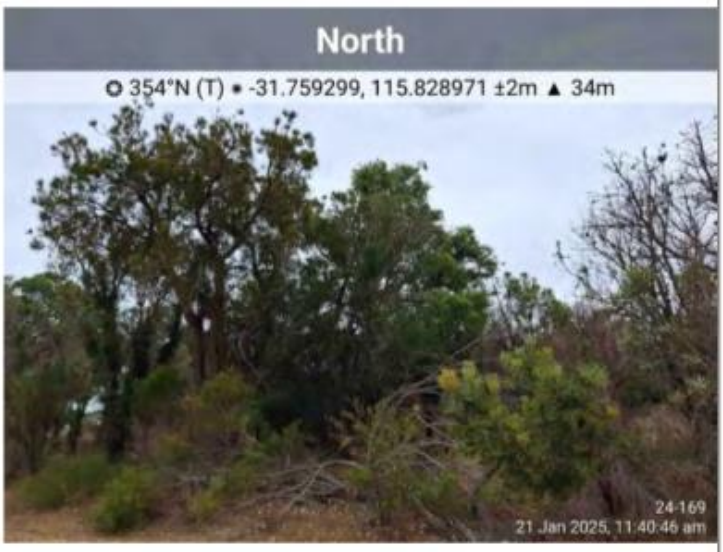

Photo ID:	12	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)	Class A - Forest (Flat/upslope)		
Description / Justification for Classification	Forest (Class A) vegetation has been identified to the north (west portion) of the site. The area is comprised largely of trees less than 6 m in height with a number of tall mature trees 10 – 20 m in height. Left unmanaged the area is assumed to experience regrowth inline with the surrounding forested areas and as such at maturity is expected to consist of large trees 10-15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses.		

*Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)*

Photo ID:	13	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified to the northwest of the site, on the western side of Lenore Road associated with an unmanaged portion of an external private landholding. The area is comprised of tall mature trees 15 – 20 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is external to the site and has been assumed to remain unmanaged in the long term.			

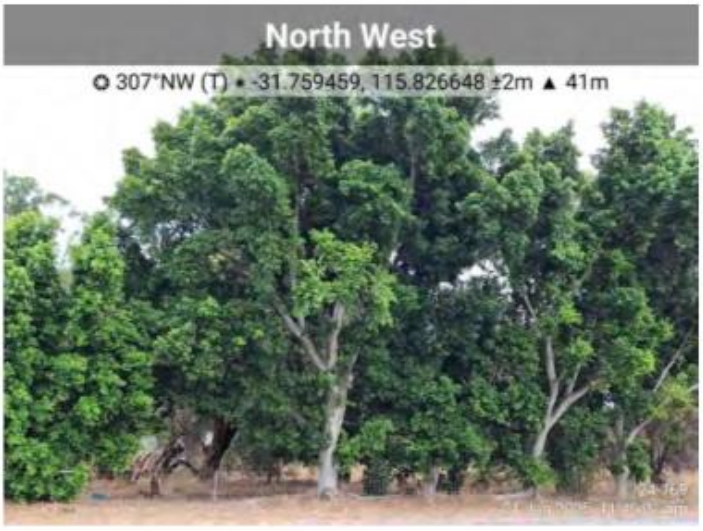

Photo ID:	14	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified within the south east portion of the site associated with Bush Forever site 327. The area is comprised of tall mature trees 10 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is proposed for retention under the LSP within parkland reserve areas and has been assumed to remain unmanaged in the long term.			

Photo ID:	15	**Plot:**	1 & 2
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope) (plot 1) Class A - Forest (downslope 0-5) (plot 2)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified within the central portion of the site associated with a future parkland reserve area. The area is comprised of mature trees 6 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is proposed for retention under the LSP and has been assumed to remain unmanaged in the long term.			

*Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)*

Photo ID:	16	**Plot:**	1 & 2
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope) (plot 1) Class A - Forest (downslope 0-5) (plot 2)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified within the northern portion of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is proposed for retention under the LSP within parkland reserve areas and has been assumed to remain unmanaged in the long term.			

Photo ID:	17	**Plot:**	1
Vegetation classification or exclusion clause (and effective slope)			
Class A - Forest (Flat/upslope)			
Description / Justification for Classification			
Forest (Class A) vegetation has been identified within the northern portion of the site associated with Bush Forever site 471. The area is comprised of tall mature trees 10 – 15 m in height with greater than 30% foliage cover over an understorey of shrubs and grasses. This vegetation is proposed for retention under the LSP within parkland reserve areas and has been assumed to remain unmanaged in the long term.			

Photo ID:	18	**Plot:**	3 & 4
Vegetation classification or exclusion clause (and effective slope)			
Class B - Woodland (Flat/upslope) (plot 3) Class G - Grassland (Flat/upslope) (plot 4)			
Description / Justification for Classification			
Woodland (Class B) (plot 3) and Grassland (Class G) (plot 4) vegetation have been identified to the east of the site within Nanovich Park. Plot 3 is comprised of trees 6-12 m in height with foliage coverage between 10 and 30% over an understorey of grasses. In the background Plot 4 is comprised of unmanaged grasses with no trees. This vegetation will be subject to development in accordance with the EWDSP, however, timing is unknown and therefore is assumed to remain unmanaged.			

*Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)*

Photo ID:	19	**Plot:**	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified to the east of the site associated with Benmuni Road. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted planted or managed grass (low-threat) verges are present but for ease of reference have been shown as non-vegetated.			

Photo ID:	20	**Plot:**	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified to the southwest of the site associated with Lenore Road and residential subdivision. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted gardens and planted verges are present within the existing subdivision area but for ease of reference have been shown as non-vegetated.			

Photo ID:	21	**Plot:**	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified to the west of the site associated with Lenore Road and residential subdivision. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted gardens and planted verges are present within the existing subdivision area but for ease of reference have been shown as non-vegetated.			

*Table 2: AS 3959 vegetation classifications (refer to **Figure 2**)(continued)*

Photo ID:	22	**Plot:**	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified along the east of the site associated with Benmuni Road. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted gardens and planted or managed grass (low-threat) verges are present but for ease of reference have been shown as non-vegetated.			

Photo ID:	23	**Plot:**	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified along the west of the site associated with Lenore Road and residential subdivision. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, although it is noted gardens and planted (low threat) or managed grass verges are present within the existing subdivision area but for ease of reference have been shown as non-vegetated.			

Photo ID:	24	**Plot:**	5
Vegetation classification or exclusion clause (and effective slope)			
Exclusion 2.2.3.2 (e) – non-vegetated			
Description / Justification for Classification			
Non-vegetated areas have been identified along the north of the site associated with established firebreaks. Plot 5 has been excluded in accordance with Section 2.2.3.2(e) of AS 3959, however It is noted that the firebreak also contains portions of slashed (and well managed) grasses however for ease of reference have been shown as non-vegetated.			

3.2 Assessment outputs

The vegetation classifications determined in **Section 3.1** are summarised in **Table 3** and shown in **Figure 2** and incorporate the known changes to vegetation post-development within the site and the determined effective slope.

Table 3: AS 3959 vegetation classification and effective slope applicable to the site

Plot	Applied vegetation classification	Effective slope
1	Class A – Forest	Flat/upslope
2	Class A – Forest	Downslope 0 - 5
3	Class B – Woodland	Flat/upslope
4	Class G – Grassland	Flat/upslope
5	Exclusion 2.2.3.2(e)	Not applicable
6	Exclusion 2.2.3.2(f)	Not applicable

The resultant BAL ratings for the site are shown in **Figure 3**. The BAL ratings are based on the minimum distances outlined in Table 2.5 of AS 3959 for the applicable vegetation classifications and effective slope. The relevant setback distances for the BAL ratings from AS 3959 have been summarised for ease of reference in **Table 4**.

As outlined in **Section 1.5**, topography across the site varies and means that the effective slope applicable to future buildings will be dependent upon its location and staging of development when compared to retained vegetation. For this BMP the internal threats have been split to reflect the effective slope applicable to development in each direction, however it is anticipated that at more detailed subdivision phases, the effective slope assumptions will vary (e.g. more lots are likely to be subject to lesser slopes, or no downslope). The effective slope assumptions are therefore considered to be a conservative assessment.

The BAL assessment indicates that the majority of the site will be subject to BAL-LOW, except for areas within 50 m or 100 m of the external boundaries of the site or proposed parkland reserves. Where road interfaces do not meet the required setback to achieve BAL-29, the development cells will include BAL-40 incursions. These incursions, at most, would be 9 m. The provision of developable areas for habitable buildings can be addressed by appropriately orienting lots at the subdivision stage, and where required the minimum setbacks can be managed through in-lot setbacks (in addition to the road reserve) to ensure habitable buildings are located in BAL-29 or less.

In order to assist with the future design process, the minimum setback distances anticipated to be required to achieve a bushfire attack level (BAL) rating of BAL-29 have been provided in **Table 4**, to provide an understanding of the portion of future lots that may be subject to modification (e.g. an asset protection zone) and assist with the siting of habitable buildings (as part of subdivision).

Table 4: Setback distances based on vegetation classification and effective slope and Table 2.5 of AS 3959, as determined by the method 1 BAL assessment.

Plot number (see Figure 2)	Vegetation classification (see Figure 2)	Effective slope (see Figure 2)	Distance to vegetation (from Table 2.5 of AS 3959)	BAL rating
Plot 1	Forest (Class A)	Flat/upslope	< 16 m	BAL-FZ
			16 - < 21 m	BAL-40
			21 - < 31 m	BAL-29
			31 - < 42 m	BAL-19
			42 - < 100 m	BAL-12.5
			> 100 m	BAL-LOW
Plot 2	Forest (Class A)	Downslope 0 - 5	< 20 m	BAL-FZ
			20 - < 27 m	BAL-40
			27 - < 37 m	BAL-29
			37 - < 50 m	BAL-19
			50 - < 100 m	BAL-12.5
			> 100 m	BAL-LOW
Plot 3	Woodland (Class B)	Flat/upslope	< 10 m	BAL-FZ
			10 - < 14 m	BAL-40
			14 - < 20 m	BAL-29
			20 - < 29 m	BAL-19
			29 - < 100 m	BAL-12.5
			> 100 m	BAL-LOW
Plot 4	Grassland (Class G)	Flat/upslope	< 6 m	BAL-FZ
			6 - < 8 m	BAL-40
			8 - < 12 m	BAL-29
			12 - < 17 m	BAL-19
			17 - < 50 m	BAL-12.5
			> 50 m	BAL-LOW

4 Identification of Bushfire Hazard Issues

From a bushfire hazard management perspective, based on the requirements of SPP 3.7 and the Guidelines, the key issues that are likely to require management and/or consideration as part of future development within the site, particularly the creation of lots and subsequent construction of new habitable buildings, include:

- Provision of appropriate separation distance from bushfire hazards to ensure a BAL rating of BAL-29 or less can be achieved at buildings (built form) within subdivided lots. At structure planning, development cells should have sufficient area to accommodate future lots that can support areas subject to BAL-29.
- Ensuring that site access is designed, constructed and managed to enable safe access and egress for fire fighting vehicles and occupants. At the subdivision stage, staging of development will be a key consideration.
- Ensuring that site landscaping for POS areas is designed, implemented and managed to achieve low threat standards to reduce the risk of fires starting onsite were assumed to be low threat. Parkland reserves are assumed to remain in their existing condition (forest) and are not subject to management, apart from maintaining existing firebreaks.
- Ensuring that the provision of water for firefighting is sufficient and accessible by firefighting services.

4.1 Permanent hazards

The site is located adjacent to areas of classified vegetation to the north, east, south and northwest and is associated with various landholdings not under the control of the proponent, where timing for residential development in accordance with the EWDSP is unknown. In addition, parkland reserve areas within the site are designated for vegetation retention/ revegetation as part of implementing the proposed LSP and are therefore assumed to remain in the long term. Classified vegetation that will be applicable to the site on an ongoing basis includes:

- **Forest (Class A) vegetation** which has been identified to the north, east, and south external to the site within the broader EWDSP area and outside the Bush Forever sites is proposed for future redevelopment. This type of vegetation is also found internally to the site in areas proposed for future parkland reserves.
- **Woodland (Class B) vegetation** is present to the east within Nanovich Park, adjacent to the park's interface with Benmuni Road. This area is also within the broader EWDSP area and proposed for future redevelopment.
- **Grassland (Class G) vegetation** is identified to the east within Nanovich Park and an external privately owned landholding. These areas are also within the broader EWDSP area and are proposed for future redevelopment.

4.2 Temporary hazards

Areas to the east or south of the site (where not identified as Bush Forever sites) may be considered temporary hazards that will be modified as development progresses in line with the EWDSP, however as the timing and exact design of these areas has not been confirmed they have been assumed to remain in their existing condition in the long term.

Notwithstanding the above, this BMP has been prepared under the assumption that the future Shenton Road Reserve area to the south will be developed prior to subdivision commencing within the southern portions of the site. If, at the time of subdivision, this road is not or will not be delivered, a revised approach to development in this area will be required. This will need to consider increased bushfire threat from the south (re-siting of lots away from BAL-FZ or BAL-40) and the implementation of additional perimeter roads and/or EAWs to satisfy access requirements. This can be addressed at subdivision.

It is also noted that, as part of the staged development to implement the LSP, temporary hazards are likely to be present within the site. These hazards are largely associated with remnant/regrowth vegetation that has not been identified for retention within parkland reserves. To ensure the findings of this BMP remain relevant where a staged approach to subdivision is implemented, a suitable width area (up to 27 m to achieve BAL-29 for forest vegetation with an effective slope of downslope 0-5, and up to 100 m for BAL-LOW) can be managed around each development stage within the proponent's landholding as long as the vegetation is not proposed for retention. These hazards and their management will be addressed in future, more detailed stages of the planning process, such as subdivision.

4.3 Vulnerable land use

The definition of vulnerable land use as outlined in SPP 3.7 is a land use which "*is designed to accommodate people who are less physically or mentally able and likely to present evacuation challenges; and/or due to the building design or use, or the number of people accommodated, likely to present evacuation challenges; and or involves visitors who are unfamiliar with the surroundings*" (WAPC 2024b). This generally includes (but is not limited to) schools, hospitals, aged care facilities and similar.

A future primary school site is identified as part of the proposed LSP, within the central portion of the site, adjacent to the southern-most parkland reserve. The primary school site has been designed to ensure a suitable developable area is provided (greater than 5 ha) to locate habitable structures outside of BAL-FZ or BAL-40 areas, away from any significant future bushfire threats. It is noted that over half of the primary school site will be situated on land designated as BAL-LOW. The school is surrounded by a suitable road network providing access to multiple destinations, and therefore the LSP provides a framework to enable bushfire risk to be suitably managed at more detailed stages of design and development. The school will be subject to separate development applications that will address bushfire risk in detail.

5 Assessment Against the Bushfire Protection Criteria

5.1 Bushfire protection criteria

The bushfire protection criteria provided in the Guidelines represent the risk treatments applicable to achieving the intent and the objectives listed in SPP 3.7. The bushfire protection criteria vary depending upon the stage of the planning process and development type and are divided into four subsystems (elements). Each subsystem is provided with an outcome, or an acceptable solution method (predetermined solution). Compliance with each subsystem (as a risk treatment) is required to demonstrate to the decision maker that the risk is within acceptance.

The bushfire protection criteria identified in the Guidelines and addressed as part of this BMP are:

- Element 1: Location
- Element 2: Siting and design
- Element 3: Vehicular access
- Element 4: Water supply

Bushfire Protection Criteria 5 (BCP 5): Structure plans and subdivision applications have been considered for the proposed LSP. The assessment demonstrates that the LSP and future development phases can achieve the objectives of SPP 3.7 and the acceptable solutions in BCP 5; as identified in **Table 5**.

Table 5: Assessment against Bushfire Protection Criteria 5: Structure plans and subdivision applications

Bushfire protection criteria 5	Proposed bushfire management strategies
Element 1: Location	
A1.1a Broader Landscape Type	A landscape assessment, in accordance with Appendix A of the Guidelines, has been undertaken for the site and is outlined in **Table A1.1** below. This assessment shows the site is a Broader Landscape Type A and therefore satisfies BCP 5 A1.1a. The site directly abuts a current local distributor road (Lenore Road), offering direct access to the surrounding road network which can disburse people to the north, south and west, as shown in **Figure 4**. The extent of local distributors will increase as the EWDSP is implemented, with Elliot Road is the site proposed to be a local distributor. Access roads proposed within the site will provide a legible road network. The vegetation mapping presented in **Figure 4** is based on the native vegetation mapping prepared by DPIRD. ***Table A1.1**: Landscape assessment in accordance with Appendix A Table 3 of the Guidelines*

Criteria	Assessment	Points
Proximity of the planning proposal to a suitable destination	1-10km. By road, the subdivision directly to the east is within 1 km.	1
The road pattern from the planning proposal to a suitable destination	Simple and/or direct, as shown in **Figure 4**.	1
The predominant vegetation pattern	A mosaic pattern of vegetation, is shown in **Figure 4**. This is based on current conditions, noting development in accordance with the EWDSP will result in existing vegetation being modified and reduced in some areas.	2
Exposure of the planning proposal to an identified external bushfire hazard (excluding grassland)	One aspect (northeast) has a minor vegetation corridor (broken connection) that abuts the site and extends up to 2km in patches	1
Total points		**5**
Landscape type		**A**

	The proposal complies with **A1.1a**.
Element 2: Siting and design	
A2.1 Siting and design	All proposed development cells intended to support habitable buildings can accommodate lots that provide sufficient separation from classified vegetation to achieve developable areas of BAL-29 or below. The LSP ensures separation from permanent bushfire hazards (forest vegetation) through the strategic placement of public roads and managed POS areas (as shown in **Figure 5**). Additionally, development cells are of sufficient size to accommodate appropriately orientated lots at subdivision, allowing for in-lot setbacks sufficient to achieve BAL-29 where BAL-40 incursions occur (even with a road interface). Overall, the development cells within the site are suitably sized, in combination with the public road network, to meet the minimum separation distances outlined in **Table 4** and shown in **Figure 3**. The proposal can comply with **A2.1**.

Table 5: Assessment against Bushfire Protection Criteria 5: Structure plans and subdivision applications (continued)

Bushfire protection criteria 5	Proposed bushfire management strategies
Element 2: Siting and design (continued)	
A2.2 Asset Protection Zone (APZ)	Development cells have been suitably sized to accommodate lots large enough to provide for minimum separation distances to achieve BAL-29 or below. Future lots will be required to be managed to a low threat standard in accordance with Section 2.2.3.2(e) or (f) with a minimum Asset Protection Zone (APZ) equivalent to enable BAL-29 to be achieved at future habitable buildings. APZs are typically contained within a lot, but can also include areas of low threat vegetation managed in accordance with Section 2.2.3.2 of AS 3959. For the site, this includes managed road reserves, firebreaks and areas of POS. The proposal can comply with **A2.2**.
A2.3 Clearing of native vegetation	The majority of the site is currently cleared, with several remnant or regrowth patches of native vegetation present within the site. The proponent aims to maximise vegetation retention within the LSP area as part of addressing the requirements of the EWDSP and to protect environmental and amenity values. Large patches of remnant and regrowth vegetation have been proposed for retention within future parkland reserves, with no modification assumed for these areas as part of this BMP. Existing firebreaks will be maintained. Opportunities for vegetation and/or tree retention outside the proposed parkland reserves exist within POS, road reserves, and future lot areas. However, these opportunities may be limited by requirements associated with implementing residential subdivision, such as cut and fill needs. Ultimately this will be considered during detailed design, with all landscaping (including vegetation retention) outside of the parkland reserves to be maintained (e.g., grass mown/slashed) to a low-threat standard in accordance with Section 2.2.3.2 of AS 3959. On this basis, the retention of trees outside of the parkland reserves would not change the assumptions within this BMP. Ultimately, it is anticipated that as part of the future subdivision process, more detailed landscape design and identification of vegetation for retention will occur, however, would not significantly change the assumptions for bushfire risks detailed in this BMP. The proposal complies with **A2.3**.
Element 3: Vehicular access	
A3.1 Public roads	The existing public roads surrounding the site as well as the proposed public roads can satisfy the requirements of Appendix B.3 and Table 10 of the Guidelines (an excerpt is provided in **Plate 4** below). The requirements of Appendix B.3 Table 10 of the Guidelines will be referenced to inform subdivision and implementation. The proposal complies with **A3.2.**

Table 5: Assessment against Bushfire Protection Criteria 5: Structure plans and subdivision applications (continued)

Bushfire protection criteria 5	Proposed bushfire management strategies
Element 3: Vehicular access (continued)	
A3.2 Access routes	The LSP provides for an interconnected road network (see **Figure 5**) with multiple access and egress points to the existing public road network via Elliot Road and Nicholas Road within the site, Benmuni Road to the east and Lenore Road to the west, offering access in different directions. There is also provision for connections to the future Shenton Road alignment to the south of the site, which has been assumed to be constructed between the site and the rural residential development further south as part of the subdivision implementation inline with the expectations of the EWDSP. If, at the time of subdivision, Shenton Road is not or will not be delivered, a revised approach to development in this area will be required. This will need to consider the implementation of additional perimeter roads and/or EAWs to satisfy access requirements. This can be addressed at subdivision. The public road access outlined in the LSP can satisfy the acceptable solution. The proposal can comply with **A3.2.**
A3.3a No-through roads	Through road access is provided for the majority of the site via an internal interconnected road network, which connects at several points to Benmuni Road to the east, Lenore Road to the west, and the future Shenton Road alignment to the south. A no-through road will be present within the northwest corner of the site; however, this is a loop road, and no lot would be more than 200 m from a road connection that provides access in multiple directions. The public road network outlined in the LSP can satisfy the acceptable solution. As identified above, if at the time of subdivision, Shenton Road is not or will not be delivered, a revised approach to development in this area will be required. This will need to consider the implementation of additional perimeter roads and/or EAWs to satisfy access requirements. This can be addressed at subdivision. As future development within the site may be staged, consideration is to be given to ensure that all occupiers and visitors have at least two vehicular access routes during all phases of development and/or no through roads meet the requirements of the Guidelines. Therefore, as subdivisions are implemented, temporary no-through roads with suitable turnaround areas and temporary emergency access ways may be required to meet access requirements at all stages of development. The proposal complies with **A3.3a**.
A3.3b No-through road requirements	As outlined above, upon completion, the proposed road network will have one no-through road located in the northwest of the site. This no-through road has been designed to loop back on itself, so it does not require a turn-around area and can meet the minimum technical standards for a public road as detailed in Table 10, Column 2 of Appendix B.3 of the Guidelines (**Plate 4**). Additionally, as already outlined, it is noted that future development within the site may be staged, and temporary access arrangements regarding no-through roads may be applicable. Where relevant, temporary no-through roads should not exceed 200 m in length and be developed in accordance with A3.3b, meeting the minimum technical standards for a public road as detailed in Table 10, Column 2 of Appendix B.3 of the Guidelines (**Plate 4**), and the turn-around area/head standards outlined in Figure 30 of the Guidelines. Where the road length is exceeded, temporary emergency access ways may be required and should also comply with Table 10, Column 2 of Appendix B.3 of the Guidelines (**Plate 4**). The proposal complies with **A3.3b**

Table 5: Assessment against Bushfire Protection Criteria 5: Structure plans and subdivision applications (continued)

Bushfire protection criteria 5	Proposed bushfire management strategies
Element 3: Access (continued)	
A3.4 Emergency access way	Not applicable given the proposal is compliant with A3.2 and A3.3. As already identified, as part of staged development, temporary emergency access ways may be required to ensure access to two different destinations. Emergency access ways should comply with the requirements of Appendix B.3 Table 10 column 3 of the Guidelines (**Plate 4** below) or as agreed with the local government.
A3.5a Perimeter roads	A perimeter road is provided for all residential and commercial development areas where they abut identified or proposed forest, woodland or grassland vegetation. The primary school is provided with a POS interface where directly abutting a small or portion of a parkland reserve with forest vegetation. The proposal can comply with **A3.5a.**
A3.5b Fire service access route	No fire service access route is proposed or required to achieve compliance as the proposal complies with A3.5a based on implementing the subdivision. Therefore **A3.5b** is not applicable.
A3.6 Battle-axe access legs	No battle-axe legs are proposed and therefore **A3.6** is not applicable.
Element 4: Water	
A4.1 Water supply for structure plans	The LSP will be serviced by a reticulated water supply, which is already available within the site bounds which will be extended as part of future development. The proposal complies with **A4.1.**
A4.2 Water supply for subdivision applications	**A4.2** is not applicable to the structure planning stage.
A4.3 Water supply for existing habitable building(s)	Not applicable to the site. There are no existing habitable buildings proposed for retention within the site.

Table 10 Vehicular access technical requirements

	1		2		3		4		5	
TECHNICAL REQUIREMENTS	**PERIMETER ROADS**		**PUBLIC ROADS**		**EMERGENCY ACCESS WAY[2]**		**FIRE SERVICE ACCESS ROUTE[2]**		**BATTLE-AXE & PRIVATE DRIVEWAYS[1]**	
MAP OF BUSH FIRE PRONE AREAS DESIGNATION	**Area 2**	**Area 1**	**Area 2**	**Area 1**	**Area 2**	**Area 1**	**Area 2**	**Area 1**	**Area 2**	**Area 1**
Minimum horizontal clearance (metres)	12	8	See note 5		10	6	10	6	6	
Minimum vertical clearance (metres)	4.5									
Minimum weight capacity (tonnes)	15									
Maximum grade unsealed road[3]	See note 5		See note 5		(..10 (10% or 6°)					
Maximum grade sealed road[3,4]					1:7 (14.3% or 8°)					
Maximum average grade sealed road					(..10 (10% or 6°)					
Minimum inner radius of road curves (metres)					8.5					

Notes:

1. Driveways and battleaxe legs to comply with the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision where not required to comply with the widths in this Appendix or the Guidelines.
2. Dips must have no more than a 1 in 8 (12.5% - 7.1 degrees) entry and exit angle.
3. To have crossfalls between 3 per cent and 6 per cent.
4. For sealed roads only the maximum grade of no more than 1 in 5 (20 per cent) (11.3 degrees) for no more than 50 metres is permissible, except for short constrictions to 3.5 metres for no more than 30 metres in length where an obstruction cannot be reasonably avoided or removed.
5. As outlined in the Institute of Public Works Engineering Australasia (IPWEA) subdivision guidelines, Liveable Neighbourhoods, Austroads Standards Main Roads standard, supplement, policy or guideline and/or any applicable or relevant local government standard or policy.

Plate 4: Excerpt of Table 10 from Appendix B.3 of The Guidelines outlining vehicle access requirements

5.2 Additional management strategies

5.2.1 Future approval considerations

A BAL assessment has been prepared for the site to demonstrate that best practice management strategies can be adopted through future planning and implementation stages to ameliorate the bushfire hazards (i.e., habitable buildings can be located in areas of BAL-29 or less) that would otherwise impact upon its future development.

It is likely a BMP, or as a minimum a bushfire statement, will be required to support future subdivision for the site, to detail how the proposed development layout has or will address the bushfire protection criteria based on the recommendations outlined within this BMP, as well as to determine the likely BAL ratings applicable to the future lots based on hazards applicable to that stage of development.

Where proposed to be constructed and within a designated bushfire prone area, future Class 1, 2, 3 and 10a buildings in an area subject to a BAL rating of BAL-12.5 or higher will need to satisfy higher construction standards in accordance with the National Construction Code (NCC).

5.2.2 Vegetation management

5.2.2.1 Within the site

All residential and local centre lots, once created, are required to be managed by the relevant landowner to a minimal fuel condition and achieve low threat as per Section 2.2.3.2 of AS 3959, in accordance with this BMP and the City of Wanneroo Firebreak Notice (as published).

Road reserves and areas of POS will be managed to achieve low threat in accordance with Section 2.2.3.2 of AS 3959 (and described in **Section 2.2** of this BMP) and will be the responsibility of the proponent initially, and following handover, will be the responsibility of the City of Wanneroo. Nature strips can be excluded as low threat and do not require specific management.

Parkland reserves are assumed to not be subject to ongoing management for bushfire purposes, except for the ongoing maintenance of existing firebreaks.

5.2.2.2 Surrounding the site

Where indicated as low threat in **Figure 2**, it is assumed that areas surrounding the site will be managed by the applicable landowners/land managers in accordance with existing maintenance regimes and where relevant the City of Wanneroo Firebreak Notice (as published). This assumption also applies to the categorisation of the adjacent road reserves.

Where indicated as classified vegetation in **Figure 2**, areas have been assumed to remain a bushfire hazard in the long-term.

5.2.3 City of Wanneroo Firebreaks Notice

The City of Wanneroo releases a Firebreaks Notice on an annual basis to provide a framework for bushfire management within the City. The City of Wanneroo is able to enforce this notice in accordance with Section 33 of the *Bush Fires Act 1954*. In addition, Section 33 1(b) also provides the City with additional power to direct landowners to undertake works to remedy conditions conducive to the outbreak or spread of bushfire.

Until subdivision is progressed within the site, the proponent will be required to comply with the Fire Control Notice, including the maintenance of a minimum 3 m-wide perimeter firebreaks (or as agreed with the City of Wanneroo).

All landowners of future lots will be required to comply with the Fire Control Notice as published, which for residential lots under 4000 m² is likely to include ensuring that the property is cleared of all flammable material, except for living standing trees, and ensuring that grass height is no longer than 50 mm. For all larger lots, inclusive of the parkland reserves, a 3 metre wide trafficable firebreak as close as possible to all external boundaries should be installed.

5.2.4 Public education and preparedness

Community bushfire safety is a shared responsibility between individuals, the community, government, and fire agencies. DFES has an extensive Community Bushfire Education Program including a range of publications, a website, and Bushfire Ready Groups. The DFES website (https://www.dfes.wa.gov.au/bushfire/prepare/) provides a range of materials to help the community prepare for and survive the bushfire season.

The City of Wanneroo provides bushfire safety advice to residents available from their website https://www.wanneroo.wa.gov.au/homepage/61/fire_information, qualified consultants also offer bushfire safety advice and relevant services to residents and businesses in high-risk areas in addition to that provided in this BMP.

In the case of a bushfire in the area, advice would be provided to residents by DFES, Department of Biodiversity Conservation and Attractions (DBCA) and/or the City of Wanneroo on any specific recommendations with regard to responding to the bushfire, including evacuation if required.

6 Responsibilities for Implementation and Management of Bushfire Measures

Table 6 outlines the future responsibilities of the proponent (developer) and the City of Wanneroo associated with implementing the proposed LSP with reference to future mitigation measures to be accommodated as part of subdivision.

Table 6: Responsibilities for the implementation of this BMP

Developer/landowner	
No.	**Implementation and Management actions**
1	Where applicable, as part of the subdivision should provide: • A suitable public road network that provides egress to at least two different destinations and meets the technical requirements of Appendix B.3 of the Guidelines (or as otherwise determined by a bushfire consultant and relevant approval authority). This includes the provision of perimeter roads, as identified in the LSP between residential and commercial lots and areas of retained vegetation. • Where possible, avoid no through roads and battle-axe lots as part of the spatial layout. If these are proposed as part of future development, these will need to be justified from a planning/development perspective and be consistent with the minimum requirements outlined in Appendix B.3 of the Guidelines (or as otherwise determined by a bushfire consultant and relevant approval authority). This includes the provision of suitable turn-around areas. • Ensure future habitable buildings are able to be located in an area subject to BAL-29 or less. The minimum separation distances between habitable buildings and classified vegetation to achieve BAL-29 should be in accordance with **Table 4** in this BMP or as specified in subsequent BAL assessments. These separation distances can be accommodated by locating public roads between the habitable building/s and classified vegetation, and/or the use of and in lot setbacks. Where in lot setbacks are required, lots will need to be deep enough to accommodate the required setback and a habitable building in BAL-29 or less. • Provide a water supply dedicated to firefighting purposes in the form of a reticulated network of water hydrants. Alternatively, in consultation with the City of Wanneroo this could also be addressed through a strategically located static water supply (i.e., water tank).
2	Following approval of the LSP, if required prepare a BMP or bushfire statement in accordance with SPP 3.7, the Guidelines and AS 3959 to support subdivision within portions of the site that are designated as bushfire prone areas under the *Map of Bush Fire Prone Areas*. The BMP should consider the proposed spatial layout of the development.

7 Applicant Declaration

7.1 Accreditation

This assessment has been prepared by Emerge Associates who have been providing bushfire risk management advice for more than 10 years, undertaking detailed bushfire assessments (and associated approvals) to support the land use development industry. Emerge Associates have a number of team members who have undertaken Bushfire Planning and Design (BPAD) Level 1 and Level 2 training and are Fire Protection Association of Australia (FPAA) accredited practitioners.

Anthony Rowe is a FPAA Level 3 BPAD accredited practitioner (BPAD No. 36690) in accordance with clause 9.10 of the Guidelines.

7.2 Declaration

I declare that the information provided is true and correct to the best of my knowledge.

Reviewer signature:

Name: Anthony Rowe

Company: Emerge Associates/Envision Bushfire Planning

Date: 31/03/2025

BPAD Accreditation: BPAD No. 36690

8 References

8.1 General references

The references listed below have been considered as part of preparing this document.

Department of Biodiversity, Conservation and Attractions (DBCA) 2017, *Ramsar Sites (DBCA-010)*.

Department of Biodiversity, Conservation and Attractions (DBCA) 2022a, *Geomorphic Wetlands, Swan Coastal Plain (DBCA-019)*, Western Australia, <https://catalogue.data.wa.gov.au/dataset/geomorphic-wetlands-swan-coastal-plain>.

Department of Biodiversity, Conservation and Attractions (DBCA) 2022b, *Threatened Ecological Communities (DBCA-038)*, Perth, Western Australia <https://catalogue.data.wa.gov.au/dataset/threatened-ecological-communities>.

Department of Planning, Lands and Heritage (DPLH) 2019, *Bush Forever Areas 2000 (DPLH-019)*, <https://catalogue.data.wa.gov.au/org/department-of-planning-lands-and-heritage>.

DPLH and WAPC 2024, *Bushfire Management Plan (BMP) Manual*, Planning.wa.gov.au.

Department of Water and Environmental Regulation (DWER) 2021, *Clearing Regulations - Environmentally Sensitive Areas (DWER-046)*, <https://catalogue.data.wa.gov.au/dataset/clearing-regulations-environmentally-sensitive-areas-dwer-046>.

Gould, J., McCaw, W., Cheney, N., Ellis, P. and Matthews, S. 2007, *Field Guide: Fuel Assessment and Fire Behaviour Prediction in Dry Eucalypt Forest*, CSIRO and Department of Environment and Conservation, Perth, Western Australia.

Office of Bushfire Risk Management (OBRM) 2024, *Map of Bush Fire Prone Areas*, Landgate, https://maps.slip.wa.gov.au/landgate/bushfireprone/.

Standards Australia 2018, *AS 3959:2018 Construction of buildings in bushfire-prone areas*, Sydney.

Western Australian Planning Commission (WAPC) 2024a, *Planning for Bushfire Guidelines*, Western Australia.

Western Australian Planning Commission (WAPC) 2024b, *State Planning Policy 3.7 Busfire*, Western Australia.

8.2 Online references

The online resources that have been utilised in the preparation of this report are referenced in **Section 8.1**, with access date information provided in **Table R-1**.

Table R 1 Access dates for online references

Reference	Date accessed	Website or dataset name
Landgate 2024	29/2/2025	https://map-viewer-plus.app.landgate.wa.gov.au/index.html
(OBRM 2024)	29/2/2025	Bush Fire Prone Areas
(DBCA 2022a)	29/2/2025	Geomorphic Wetlands, Swan Coastal Plain
(DBCA 2017)	29/2/2025	Ramsar Sites
(DBCA 2022b)	29/2/2025	Threatened ecological communities
(DWER 2021)	29/2/2025	Environmentally Sensitive Areas
(DPLH 2019)	29/2/2025	Bush Forever areas

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Figures

Figure 1: Site Location and Topographic Contours

Figure 2: AS 3959 Vegetation Classification and Effective Slope

Figure 3: Bushfire Attack Level Contour Plan

Figure 4: Broader Landscape Assessment

Figure 5: Spatial Representation of Bushfire Management Strategies

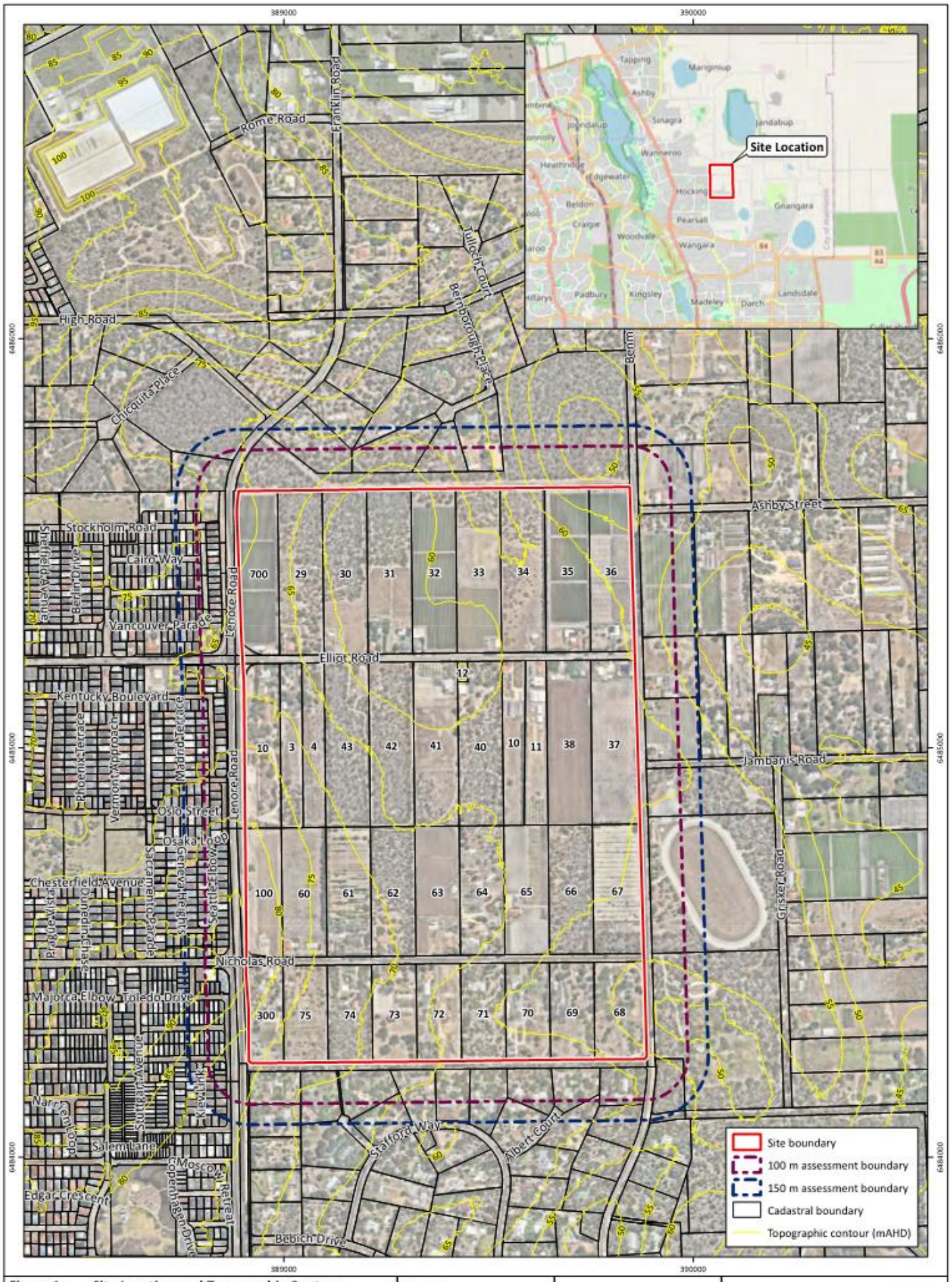

Figure 1: Site Location and Topographic Contours

Project:	Bushfire Management Plan Local Structure Plan - East Wanneroo Precinct 3
Client:	Satterley Property Group

Plan Number: EP24-169(01)--F01

Drawn:	GAR
Date:	05/03/2025
Checked:	CPW
Approved:	AJR
Date:	11/03/2025

N

0 100 200 300
Metres

Scale: 1:12,000@A4

GDA 1994 MGA Zone 50

emerge ASSOCIATES

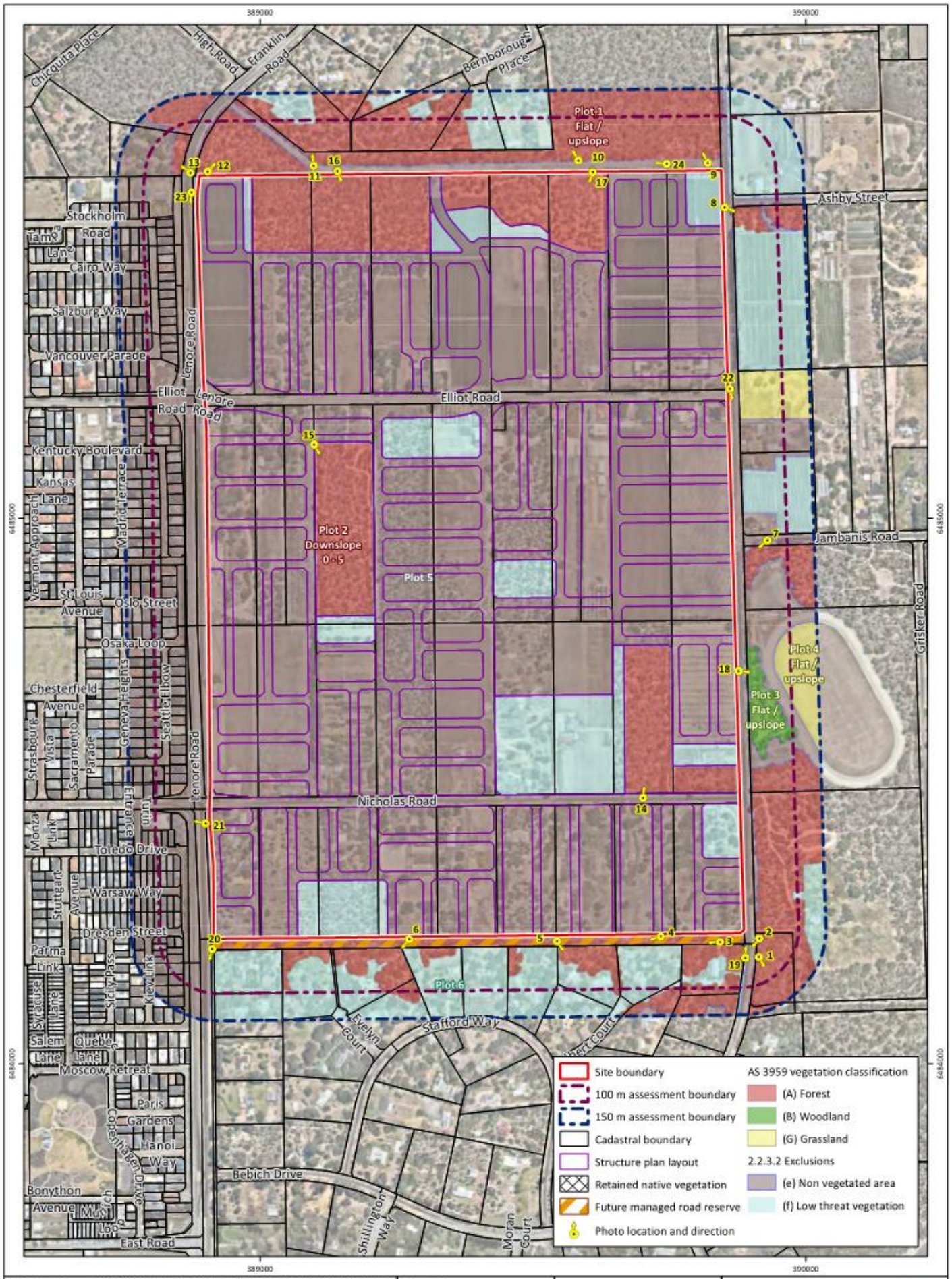

Figure 2: AS 3959 Vegetation Classification and Effective Slope

Project: Bushfire Management Plan
Local Structure Plan - East Wanneroo Precinct 3

Client: Satterley Property Group

Plan Number: EP24-169(01)--F02a
Drawn: GAR
Date: 05/03/2025
Checked: CPW
Approved: AJR
Date: 27/03/2025

emerge ASSOCIATES

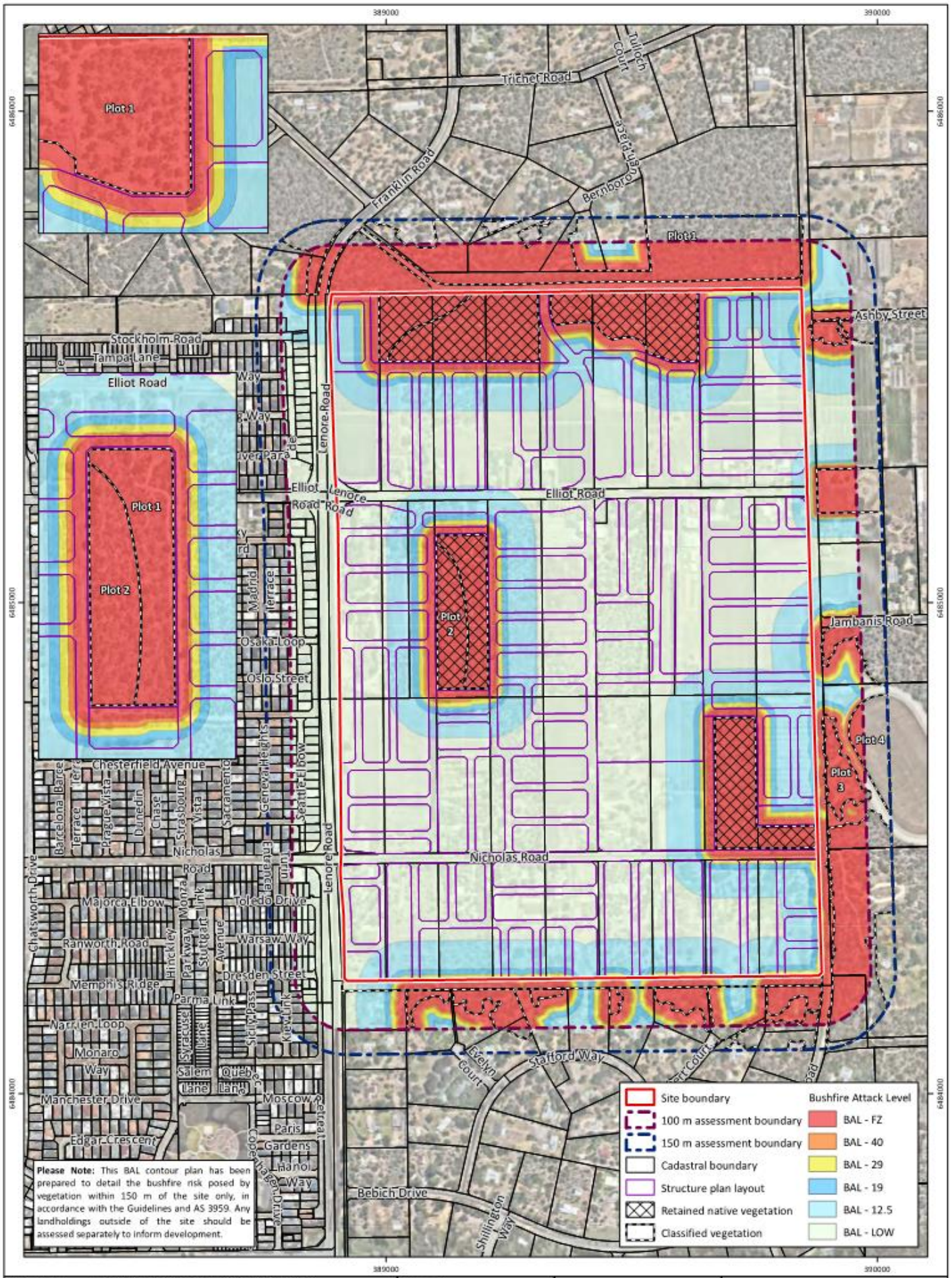

Figure 3: Bushfire Attack Level Contour Plan

Project: Bushfire Management Plan
Local Structure Plan - East Wanneroo Precinct 3

Client: Satterley

Plan Number: EP24-169(01)--F03a

Drawn:	GAR
Date:	05/03/2025
Checked:	CPW
Approved:	AJR
Date:	11/03/2025

emerge ASSOCIATES

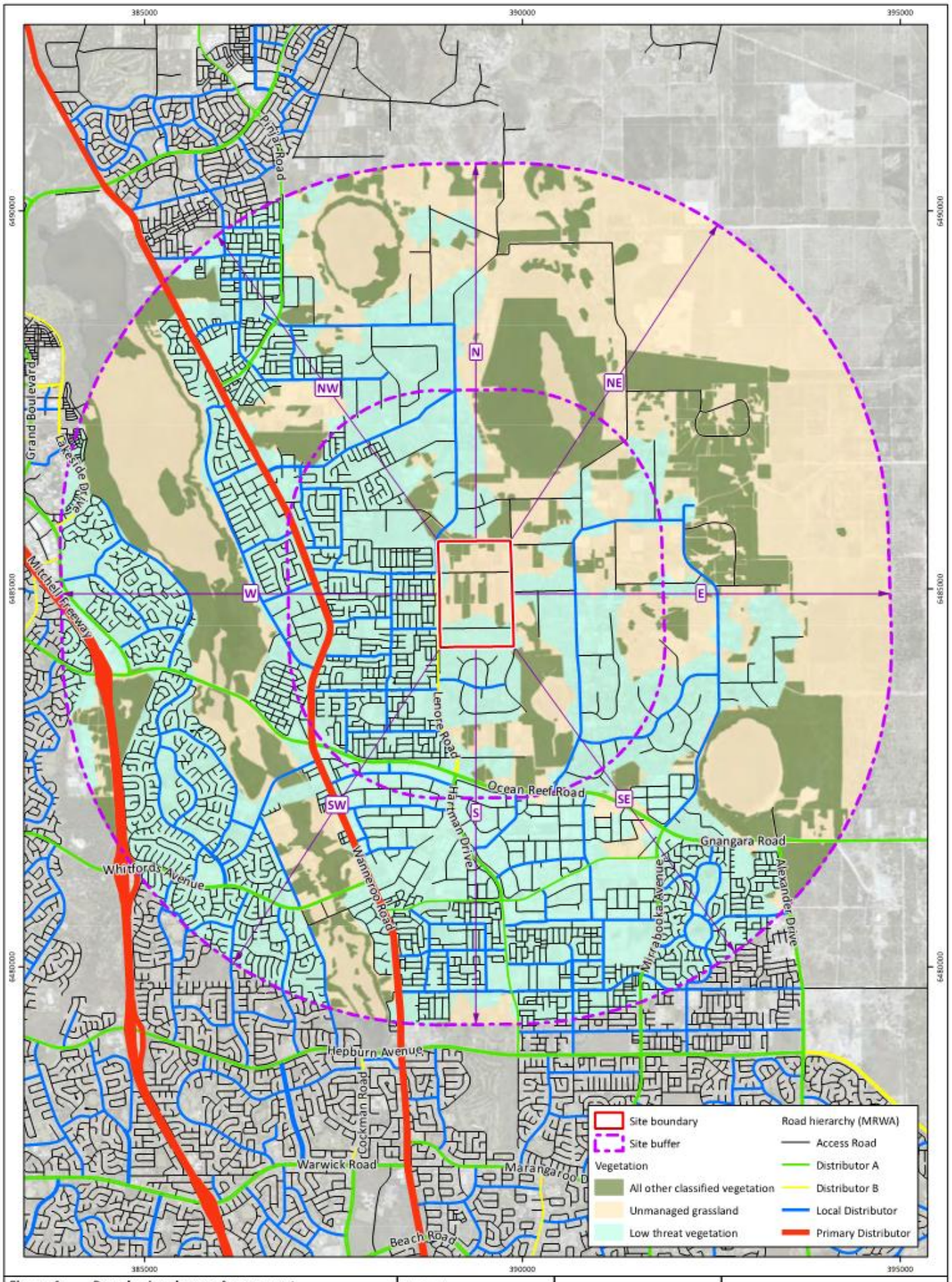

Figure 4: Broader Landscape Assessment

Project: Bushfire Management Plan
Local Structure Plan - East Wanneroo Precinct 3

Client: Satterley

Plan Number: EP24-169(01)--F04
Drawn: GAR
Date: 05/03/2025
Checked: CPW
Approved: AIR
Date: 11/03/2025

N

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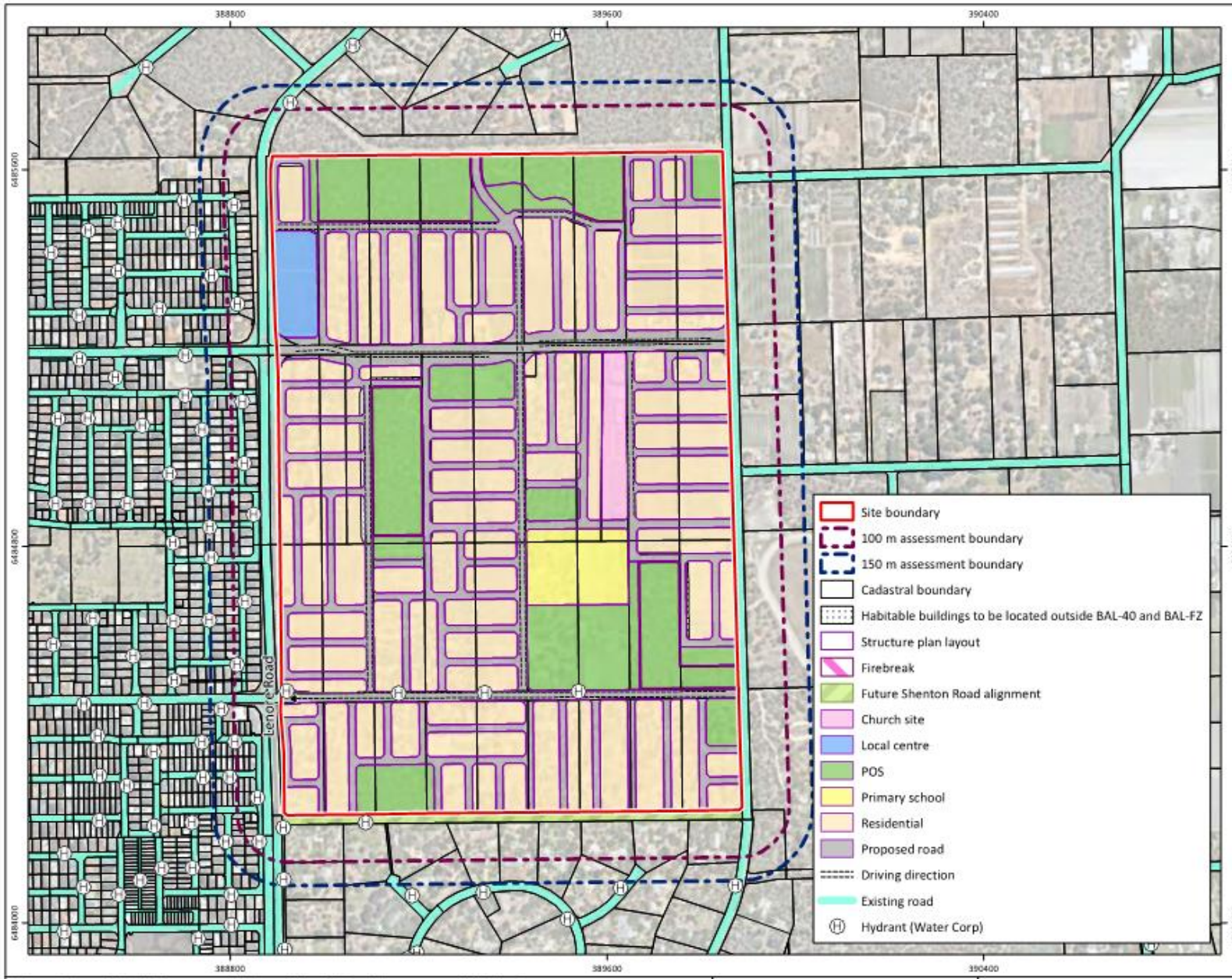
Metres

Scale: 1:65,000@A4

GDA 1994 MGA Zone 50

emerge ASSOCIATES



Lot Siting

No habitable Lots should exceed BAL- 29 (determined in accordance with AS 3959).

Vehicle Access

+ All roads will meet the public road requirements as per Appendix B.3 of the Guidelines or as agreed with the City of Wanneroo.

+ Access to multiple destinations will be provided for each stage of development, unless otherwise agreed with the City of Wanneroo. This will be considered at the subdivision stage as part of a holistic or staged approach. Where required:

- Temporary emergency access ways can be used to facilitate access to multiple destinations if the road network is not fully constructed. These should meet the requirements of the Guidelines unless otherwise agreed.
- Temporary no through roads are to be provided with a suitable turning area and must satisfy the requirements of Appendix B.3 in the Guidelines.

Through Roads

The future development layout ensures that every lot has access to through routes for traffic. The structure plan demonstrates this with only two lots requiring access via a no-through road, which is less than 20 meters in length.

Access to Water

The area will be integrated with a reticulated water supply, ensuring a reliable and consistent source of water for firefighting purposes.

Figure 5: Spatial Representation of Bushfire Management Strategies

Project: Bushfire Management Plan
Local Structure Plan - East Wanneroo Precinct 3

Client: Satterley

Plan Number: EP24-169(01)--F05a
Drawn: GAR
Date: 05/03/2025
Checked: CPW
Approved: AJR
Date: 27/03/2025

N

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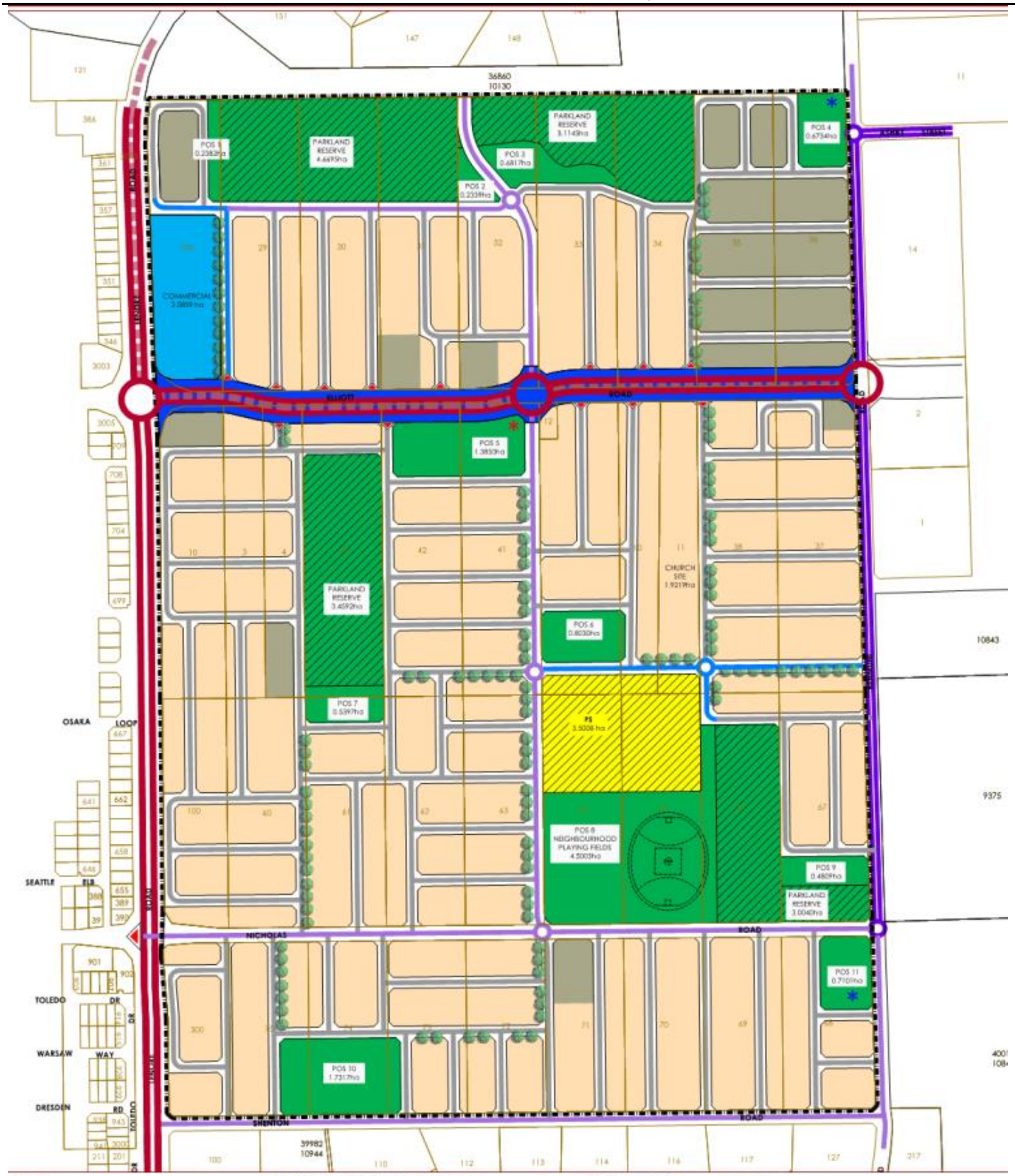
Metres
Scale: 1:12,000@A4
GDA 1994 MGA Zone 50

emerge ASSOCIATES

Appendix A

Precinct 3 Local Structure Plan



LEGEND

- STRUCTURE PLAN AREA

MRS RESERVES
- PARKS AND RECREATION

LOCAL SCHEME
- RESIDENTIAL R30-R60*
- RESIDENTIAL R40-R80
- PUBLIC OPEN SPACE
- PUBLIC PURPOSES - PRIMARY SCHOOL
- PERMANENT WWPS
- TEMPORARY WWPS
- COMMERCIAL

MOVEMENT NETWORK
- TRANSPORT CORRIDOR (45m)
- INTEGRATOR A (35m)
- NEIGHBOURHOOD CONNECTOR A (25m)
- NEIGHBOURHOOD CONNECTOR B (20m)
- ACCESS STREET B (17.9m)
- ACCESS STREET D (15.4m**)
- ROUNDABOUT INTERSECTION***
- LEFT IN/LEFT OUT INTERESECTION***

OTHER
- GREEN STREET*

NOTES:
*REFER TO STRUCTURE PLAN REPORT FOR DETAIL
**MAY BE REDUCED TO 13m ADJACENT TO PUBLIC OPEN SPACE (EXCLUDING AREAS IDENTIFIED FOR CONSERVATION PURPOSES), OR 10m WHERE USED AS A CONTROLLED ACCESS PLACE
***ALL OTHER INTERSECTIONS TO BE PRIORITY CONTROLLED.

All areas and dimensions are subject to survey, engineering and detailed design and may change without notice. © Copyright of Burgess Design Group

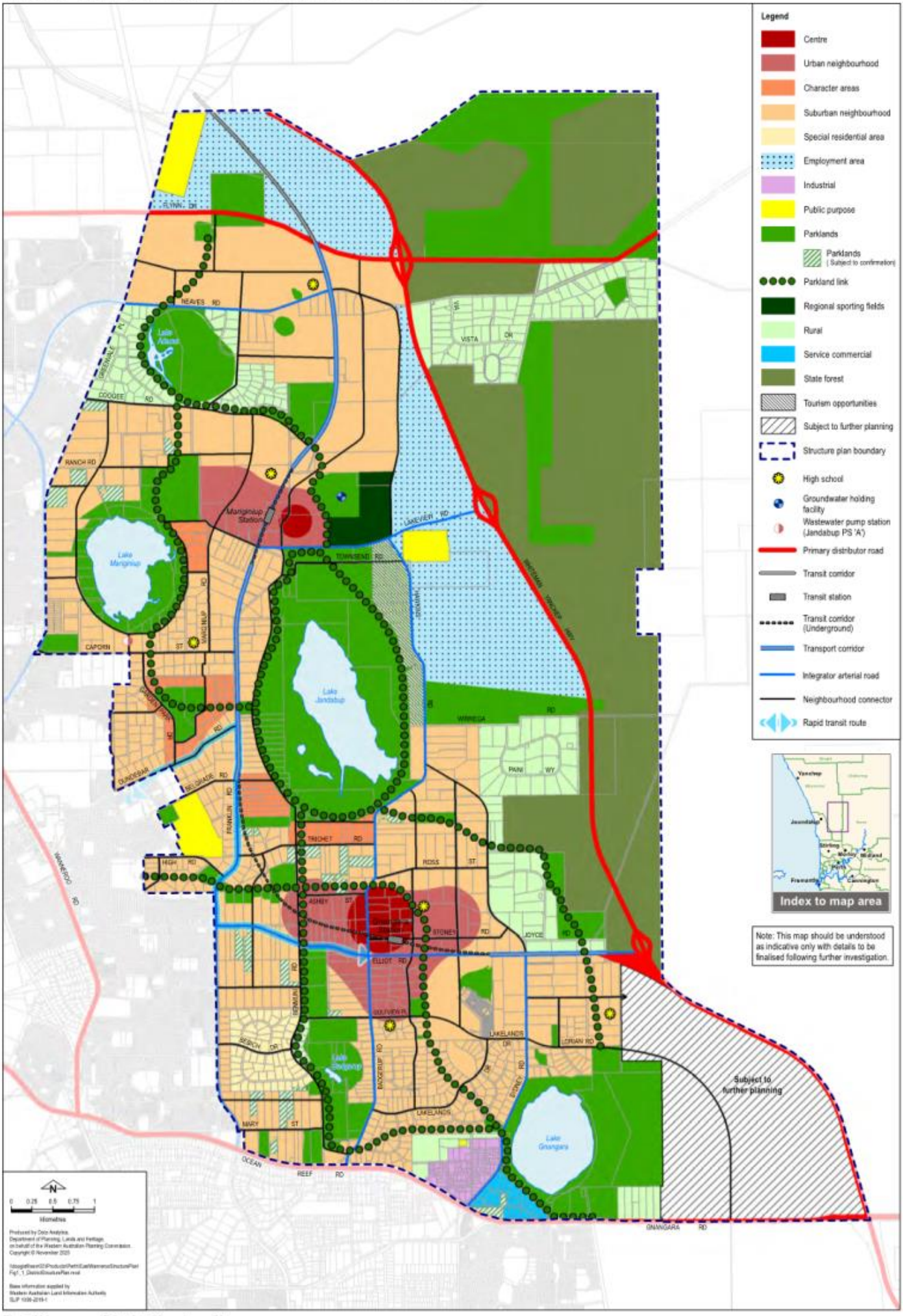
NORTH
SCALE 1:5,000 (A3)

LOCAL STRUCTURE PLAN
EAST WANNEROO PRECINCT 3
WANNEROO

BURGESS PO Box 8779, Perth Business Centre 6849 P (08) 9328 6411 Plan No: SAT PR3.03-07-01 Client: SAT CITY OF WANNEROO

Appendix B

East Wanneroo District Structure Plan


Legend
Centre
Urban neighbourhood
Character areas
Suburban neighbourhood
Special residential area
Employment area
Industrial
Public purpose
Parklands
Parklands (Subject to confirmation)
Parkland link
Regional sporting fields
Rural
Service commercial
State forest
Tourism opportunities
Subject to further planning
Structure plan boundary
High school
Groundwater holding facility
Wastewater pump station (Jandabup PS 'A')
Primary distributor road
Transit corridor
Transit station
Transit corridor (Underground)
Transport corridor
Integrator arterial road
Neighbourhood connector
Rapid transit route
Index to map area
Note: This map should be understood as indicative only with details to be finalised following further investigation.
Subject to further planning
Lake Adams
Lake Marangaroo
Lake Jandabup
Lake Gnangara
Marangaroo Station
NEAVES RD
COOGEE RD
RANCH RD
CAPORN
TOWNSEND RD
LANCIVER RD
WANNEROO RD
ASHBY ST
ROSS ST
ELLIOT RD
STONEY RD
JOYCE RD
LAKELANDS DR
GNANGARA RD
OCEAN REEF RD

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East Wanneroo Precinct 3 Local Structure Plan

Transport Impact Assessment

PREPARED FOR:
Satterley

March 2025

Document history and status

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1 Introduction

This Transport Impact Assessment has been prepared by Transcore on behalf of Satterley with regard to the Local Structure Plan (LSP) for East Wanneroo Precinct 3 in the City of Wanneroo.

The subject site is located approximately 2.5 kilometres southeast of the Wanneroo town centre and is bounded by Lenore Road to the west and Benmuni Road to the east, with Elliot Road and Nicholas Road running east west within the subject site.

The subject site is Precinct 3 of the *East Wanneroo District Structure Plan* (DSP), as shown in **Figure 1**.

This report assesses the traffic flows that will be generated by the land uses proposed in the LSP and the corresponding road network requirements within the LSP area.

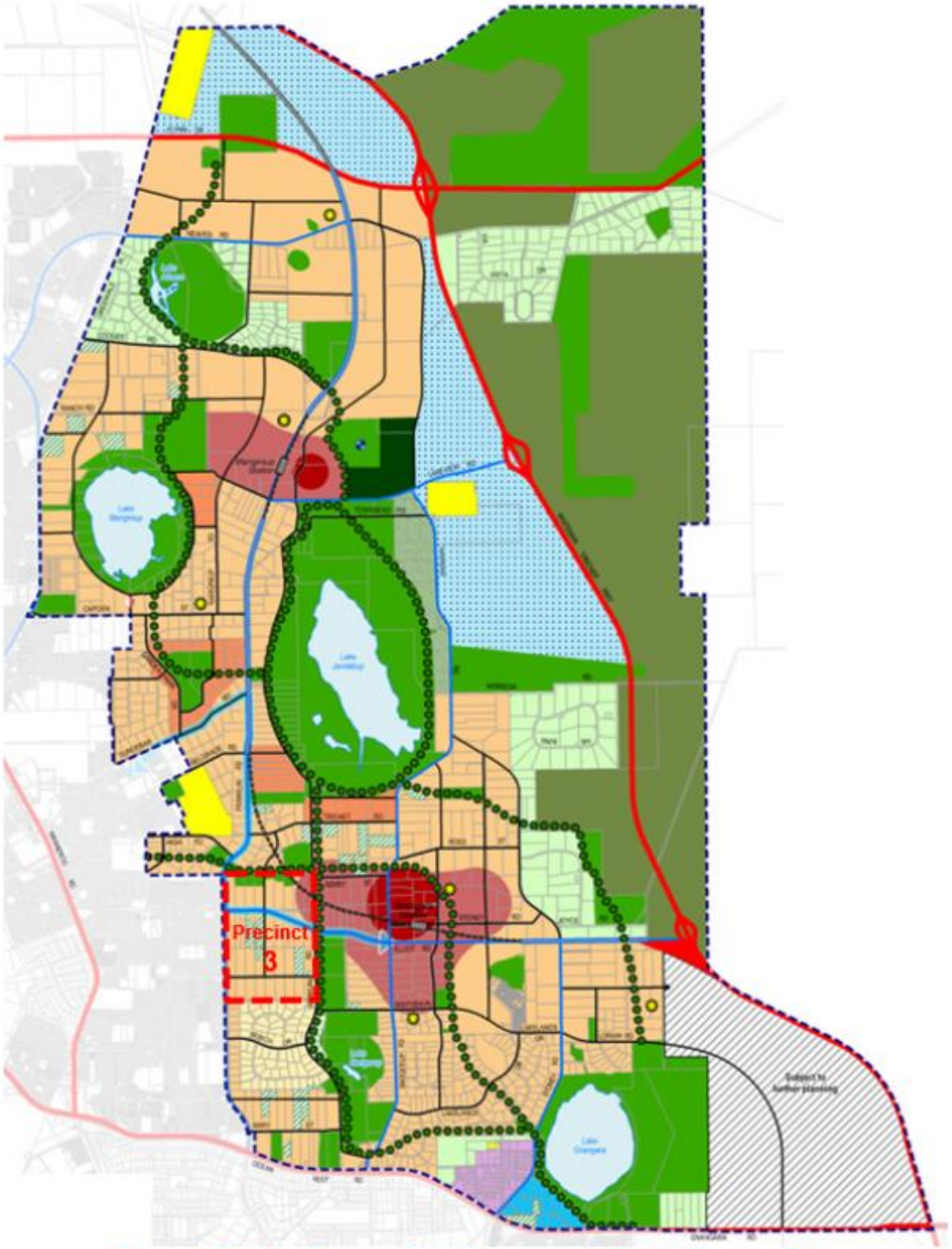

Figure 1: Site location on East Wanneroo District Structure Plan

2 Proposed Local Structure Plan

The proposed Local Structure Plan (LSP) for East Wanneroo Precinct 3 is included at **Appendix A** and a smaller copy (without legend) is shown in **Figure 2**.

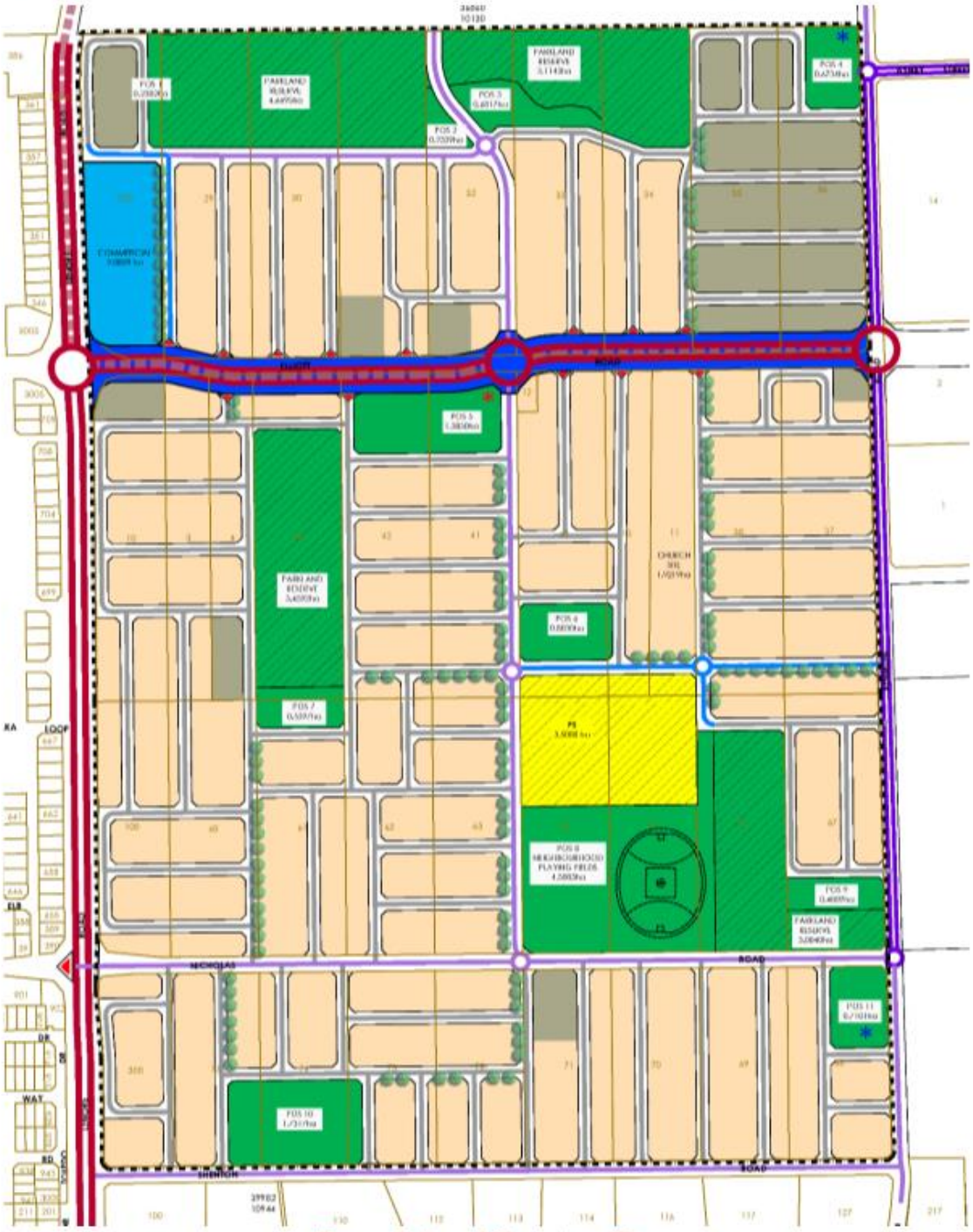

Figure 2: Local Structure Plan

The proposed land uses in the LSP area and anticipated size or quantity for the purpose of this Transport Impact Assessment, are summarised in **Table 1**.

Table 1: Proposed land uses

Land Use	Quantity
Residential	Approx. 1,750 dwellings
Local Centre	7,000m^2 NLA
Primary School	540 students

The main arterial road corridors affecting the LSP area are Lenore Road along the western boundary of this precinct and Elliot Road which runs east west across this precinct.

The District Structure Plan indicates a rapid transit route along Elliott Road (east of Lenore Road through this precinct) and on Lenore and Franklin Roads (north of Elliot Road), as shown in blue on **Figure 1**.

The proposed LSP fpr Precinct 3 proposes a slightly different alignment for the Elliot Road arterial corridor than the DSP. The proposed alignment in the LSP follows more closely to the existing Elliot Road alignment with road widening varying on the north and south sides to minimise impact on existing properties along Elliot Road, as shown in **Figure 2**.

3 Existing Situation

3.1 Existing Land Use

The subject site currently comprises 38 separate lots. Most have a single dwelling and various outbuildings, with the rest of the lot used for various agricultural, horticultural or outdoor storage uses, or still covered by native vegetation, as shown in **Figure 3**.

Figure 3: Existing Land Use

The southern boundary of the LSP area is the unconstructed road reserve of Shenton Road.

Existing land uses to the east of Benmuni Road are similar to the subject site. North and south of the subject site are rural residential subdivisions, and west of Lenore Road is the existing residential suburb of Hocking.

3.2 Existing Road Network

The existing road network and its classification in the Main Roads WA functional road hierarchy is illustrated in **Figure 4**.

Figure 4: Existing road hierarchy

Lenore Road is classified as a District Distributor B south of Elliot Road and a Local Distributor north of Elliot Road in the Main Roads WA functional road hierarchy. The posted speed limit on this section of Lenore Road is 70km/h.

North of Elliot Road, Lenore Road is constructed as a two-lane rural road with partially sealed shoulders, adjacent to the subject site.

South of Elliot Road, Lenore Road has recently been upgraded to dual carriageway standard with two lanes each way separated by an 8m wide median. Both carriageways include an on-road cycle lane.

Elliot Road is classified as an Access Road within the LSP area in the Main Roads WA functional road hierarchy. Within the LSP area it is constructed as a two-lane rural road with sealed width of approximately 7m and unsealed shoulders. It has a posted speed limit of 60km/h within the LSP area.

Nicholas Road is classified as an Access Road within the LSP area in the Main Roads WA functional road hierarchy. It is constructed as a two-lane rural road with sealed width of approximately 6m and unsealed shoulders. It has a posted speed limit of 60km/h within the LSP area.

Benmuni Road is classified as an Access Road in the Main Roads WA functional road hierarchy. It is constructed as a two-lane rural road with sealed width of approximately 6m and unsealed shoulders. It has a posted speed limit of 60km/h south of Nicholas Road and 80km/h north of Nicholas Road.

Shenton Road forms the southern boundary of the LSP area and is currently not constructed. It does not have a classification in the Main Roads WA functional road hierarchy.

The Lenore Rd / Elliot Rd intersection is constructed as a dual lane roundabout.

The Lenore Rd / Nicholas Rd intersection is a 4-way intersection with Give Way sign control on the eastern and western approaches. The Nicholas Road eastern leg has full movements (left and right turns) permitted but the western leg of Nicholas Road is restricted to left in / left out (LILO) only, with a triangular (seagull) traffic island on the western approach.

3.3 Existing Traffic Volumes

No existing traffic counts are available within the LSP area.

Existing traffic counts are available for Lenore Road north of Ocean Reef Road from the Main Roads WA website, as documented in **Table 2**. The 2024 count is from a 24 hour video survey at the Ocean Reef Rd intersection.

For this TIA report it is anticipated that Lenore Road traffic volumes decline progressively as we move further north and would currently be around 15,000vpd at Elliott Road.

Table 2: Existing Traffic Volumes

Road Name	Location	AWT (HV)	AM Peak	PM Peak	Date
Lenore Rd	North of Ocean Reef Rd	23,085 (10.8%)	2,026vph 0730-0830	2,161vph 1545-1645	2020/21
Lenore Rd	North of Ocean Reef Rd	21,417 (5%)	1,776vph 0730-0830	1,965vph 1530-1630	Tues 27 Aug 2024

3.4 Heavy Vehicle Routes

Restricted Access Vehicle (RAV) Network routes are designated for access by large heavy vehicle combinations that require special permits for each trip. Main Roads WA manages the RAV Networks and the permits for trucks to use them. **Figure 5** shows the roads that are permitted for use by Tandem Drive RAV Networks 2 (orange), 3, (light blue) and 4 (dark blue) vehicles in the surrounding area. RAV Networks 2, 3 and 4 permit access by a number of vehicle combinations up to 27.5m long subject to relevant height, width and weight limits.

Lenore Road is currently included in Tandem Drive RAV Network 4 with access south to and from Ocean Reef Road. (This section of Lenore Road is also included in other RAV Networks including Tandem Drive Network 4 Concessional Level 3, Tri Drive Network 1 including Concessional Level 3, PBS Tandem Drive Network 1 Concessional Level 3 and 27.5m Oversize B-Double, which offer other variations on maximum load and vehicle configurations.)

Figure 5: Restricted Access Vehicles Network

3.5 Public Transport

The closest existing bus route to the subject site is Route 467: Whitfords Station – Joondalup Station. The closest bus stops for route 467 are approximately 600m west of the LSP area along Wyatt Road.

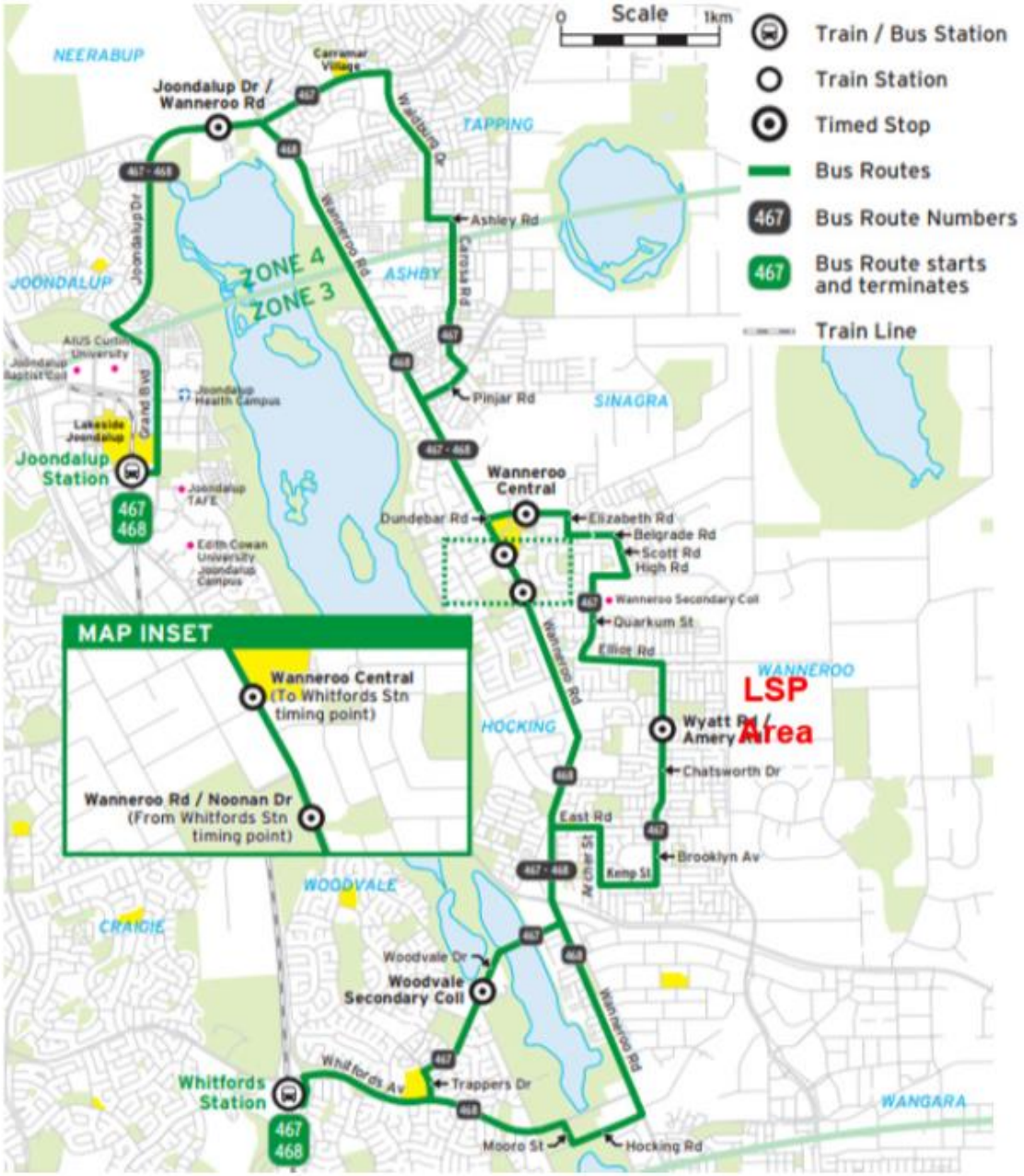

Figure 6: Existing bus routes 467 and 468

3.6 Pedestrian and Cyclist Facilities

Existing bicycle facilities in the surrounding area are illustrated on the Perth Bike Maps published by the Department of Transport, as shown in **Figure 7**. That Bike Map dates back to 2016 and does not show existing facilities on Lenore Road, which has on-road bike lanes and a 2.5m shared path on the western side. There are currently no bicycle facilities on Elliot Road, Nicholas Road and Benmuni Road within the LSP area.

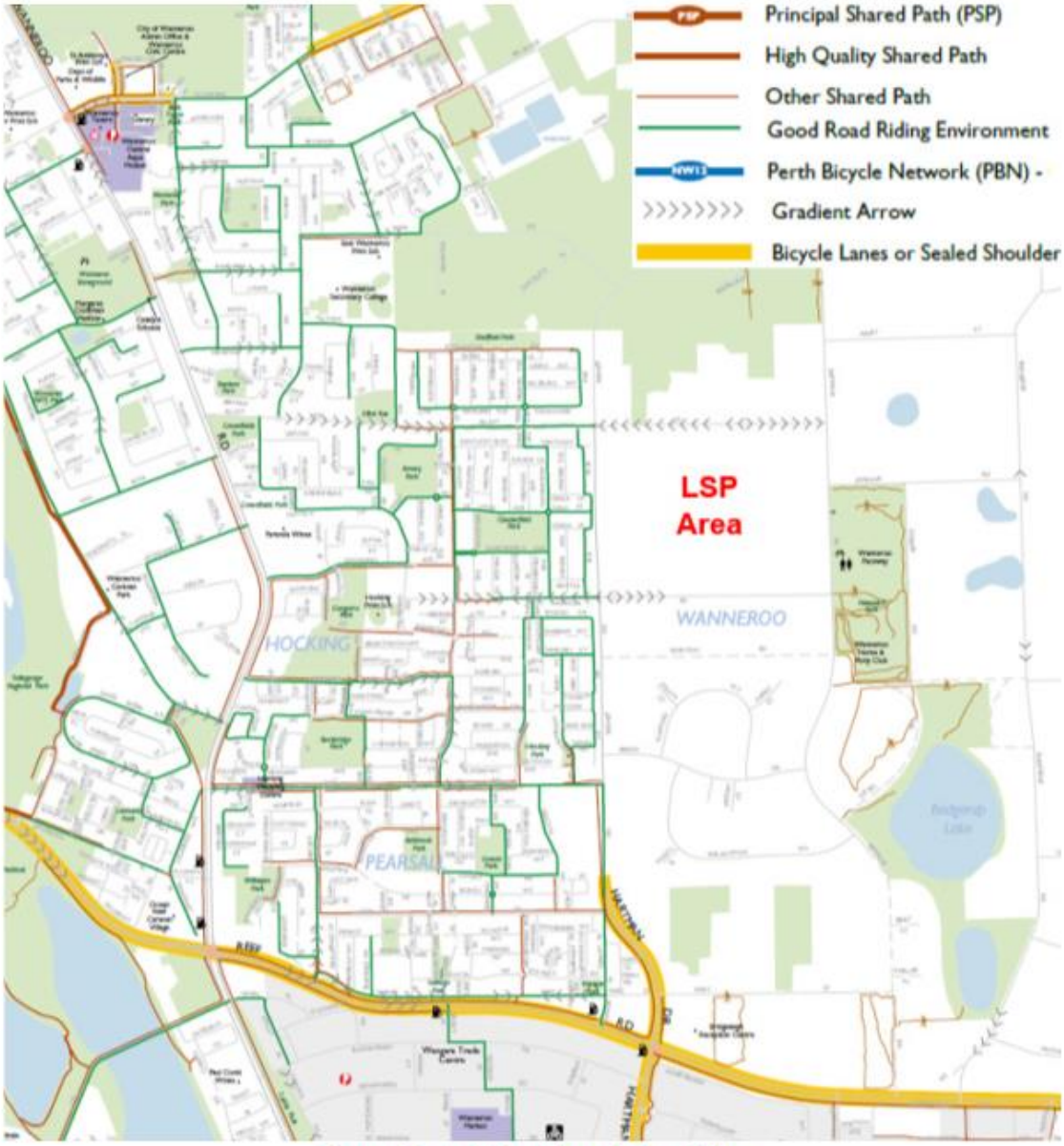

Figure 7: Existing bicycle facilities

High-level future planning for cycling facilities is now set out in Western Australia's Long Term Cycle Network (LTCN), which identifies an aspirational blueprint to ensure State and local governments continue to work together towards the delivery of a continuous cycling network providing additional transport options, recreational opportunities and support for tourism and commercial activity. The LTCN identifies the function of a route - primary, secondary or local - rather than the form it should

take. Function considers the type of activities that take place along a route, and the level of demand (existing and potential). A route's built form is based on the characteristics of the environment, including space availability, topography, traffic conditions (speed, volumes), primary users, and so on.

The LTCN in the East Wanneroo area is illustrated in **Figure 8**, which shows future primary routes (red), secondary routes (blue) and local routes (green).

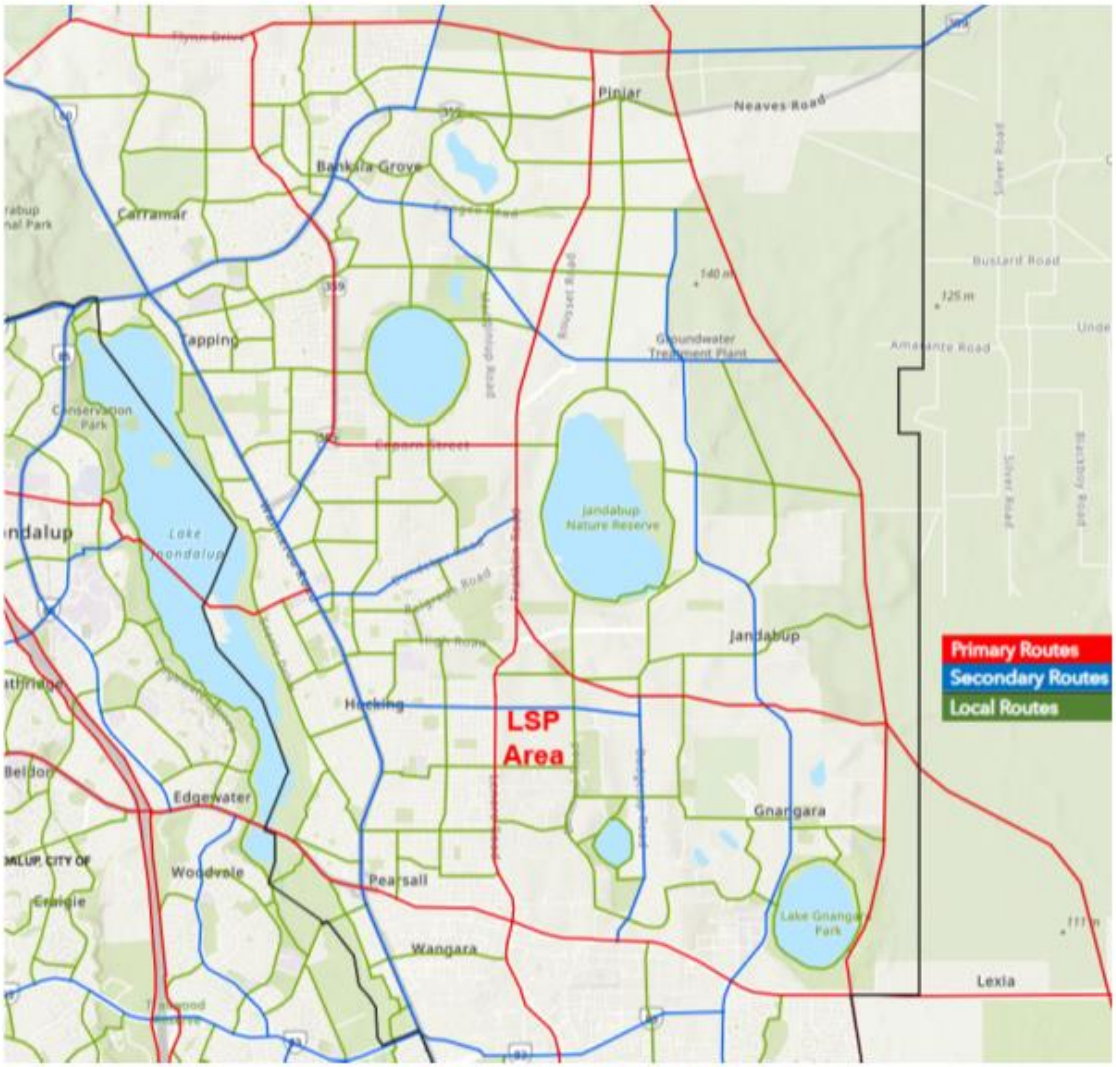

Figure 8: Long Term Cycle Network

A primary route is planned on Lenore Road on the western side of the LSP area. Elliot Road is planned as a secondary route in this area. A number of local routes are also shown in this area including Nicholas Road and Benmuni Road.

3.7 Changes to Surrounding Transport Network

The subject site is Precinct 3 of the *East Wanneroo District Structure Plan* (DSP), as shown in **Figure 1.**

The future arterial road network within the DSP area is illustrated in **Figure 9**. Key features of the future road network that are of particular relevance to Precinct 3 include:

- Whiteman Yanchep Highway (primary distributor) – a future 6-lane, controlled access highway along the eastern boundary of the DSP area;
- Lenore/Franklin Road (integrator arterial) – north south arterial road running along the western side of Precinct 3;
- Elliot Road (integrator arterial) – east west arterial road through Precinct 3 from Lenore Road to Whiteman Yanchep Highway;
- Nicholas Road (neighbourhood connector) – east west road through Precinct 3 from Lenore Road to Benmuni Road;
- Benmuni Road (neighbourhood connector) along the eastern boundary of Precinct 3; and
- A new central neighbourhood connector road running north south through Precinct 3 north of Nicholas Road.

The DSP shows a rapid transit route through Precinct 3 along Elliot Rd – Lenore Rd – Franklin Rd – Dundebar Rd (i.e. linking the existing Wanneroo town centre and the proposed district centre in the DSP area).

The DSP also shows a future railway line cutting across the northeast corner of Precinct 3 but the current status of that proposal is unclear. It is understood that current planning by the Department of Planning, Lands and Heritage (DPLH) may favour an express bus transit system instead of rail. This may take the form of bus lanes in the centre of the road along Elliot Rd – Lenore Rd – Franklin Rd (i.e. combining this section of the 'rail' route and rapid transit route) and may require signalised intersections instead of roundabouts to provide bus priority at key intersections. Preliminary advice indicates the number of bus stops would be limited and would not be located within Precinct 3. It should be noted that signalised intersections along this type of central median bus facility provide pedestrian access to the bus stops in the central median, so signalised intersections may not be necessary where there are no bus stops planned.

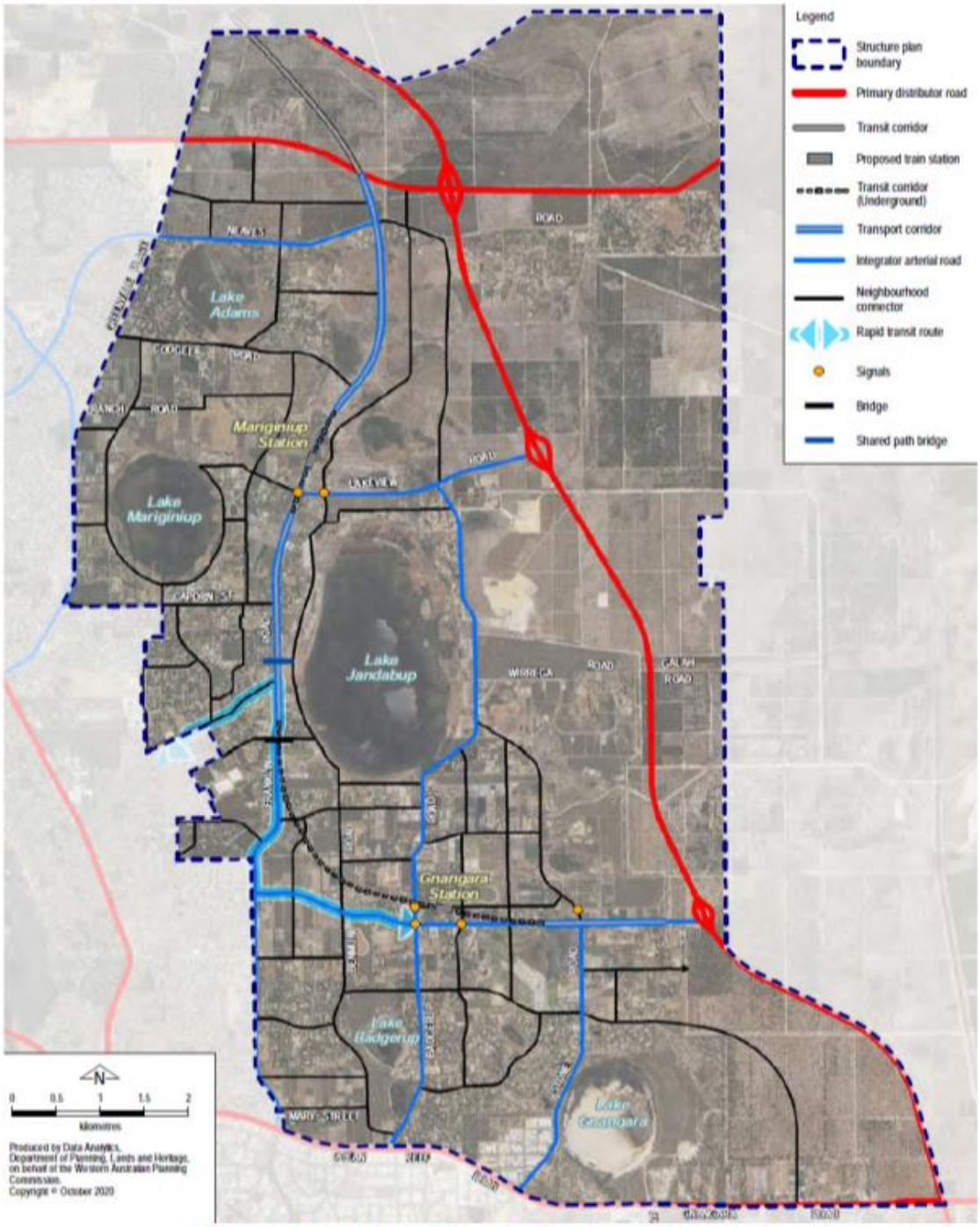

Figure 9: East Wanneroo DSP movement network

4 Proposed Transport Network

4.1 Road Hierarchy

The proposed hierarchy of roads in and around the LSP area is illustrated in **Figure 10** using the road hierarchy defined in the Western Australian Planning Commission *Liveable Neighbourhoods* (LN) policy.

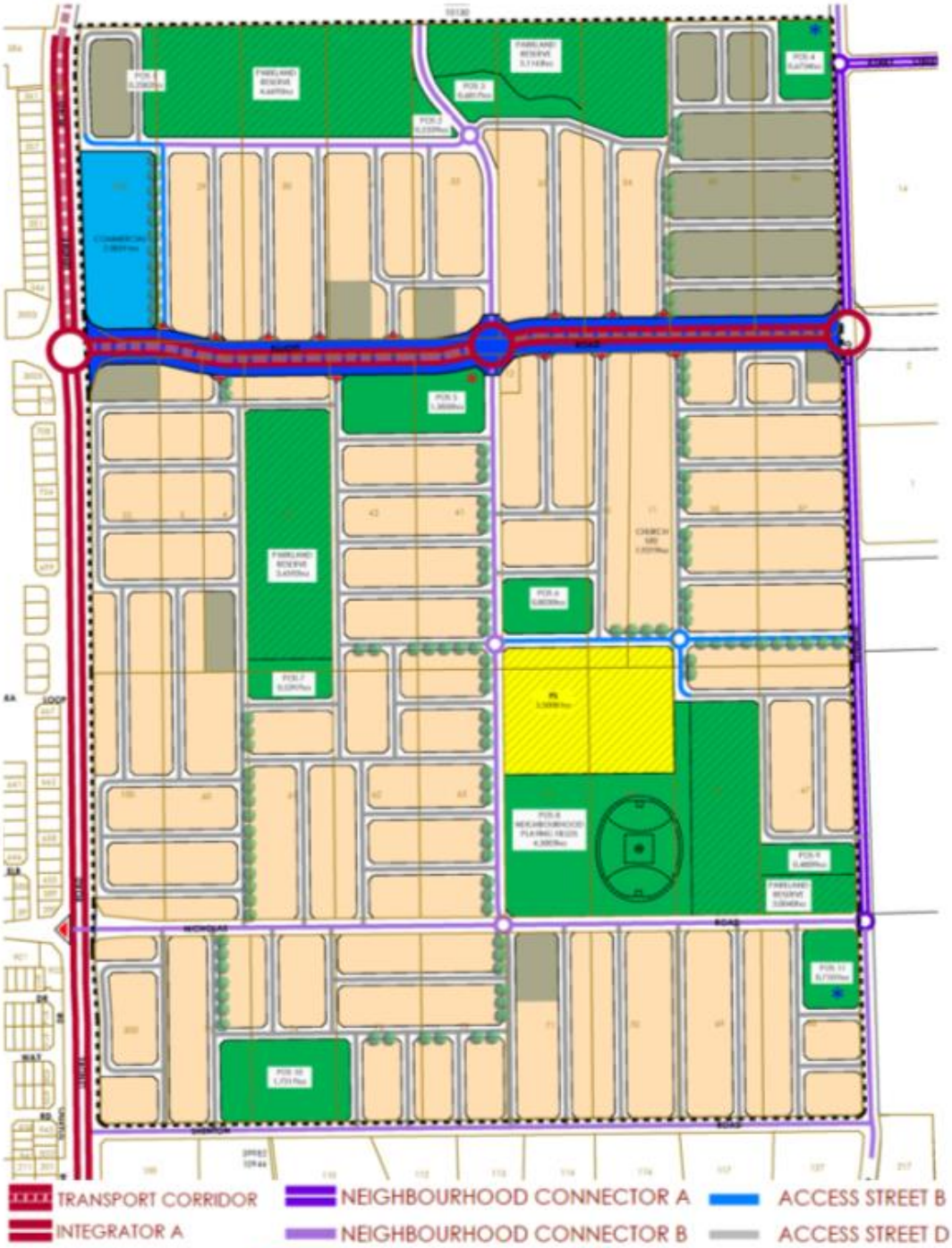

Figure 10: Proposed road hierarchy

The classification of roads in **Figure 10** is based on preliminary analysis of future traffic flows at section 6.3 of this report.

Liveable Neighbourhoods indicates that Integrator A roads are suitable for traffic flows up to 35,000vpd as dual carriageway roads (two lanes each way). However, there are existing examples of equivalent dual carriageway roads (with minimal minor side road or driveway access) in the Perth metro area carrying up to 50,000vpd[1], so traffic volumes above 35,000vpd can be accommodated subject to appropriate intersection treatments.

Integrator B roads are suitable for traffic flows up to 15,000vpd and can accommodate traffic flows up to 20,000vpd with suitable intersection treatments. There are no Integrator B roads within or adjacent to the LSP area

Neighbourhood Connector A roads are suitable for up to 7000vpd but some degree of flexibility with this upper limit may be appropriate in localised situations to avoid overdesigning some lengths of road. The main difference between Integrator B and Neighbourhood Connector A cross-sections is only the width of the median (6m versus 2m) and the Liveable Neighbourhoods policy does allow for the median of an Integrator B to be reduced in width on sections that do not require right turn lanes in the median.

Neighbourhood Connector B roads are suitable for traffic flows up to 3000vpd but again some degree of flexibility with this upper limit should be considered appropriate in localised situations.

An Access Street B is suitable for traffic flows up to 3000vpd and can accommodate embayed parking on both sides. Access Street B is recommended for access streets abutting school sites but would typically only have parking on one side adjacent to the school site to avoid having students cross the road to access parked cars.

An Access Street C is suitable for traffic flows up to 3000vpd. Its 7.2m sealed width accommodates on-street parking without restricting two-way traffic flow.

An Access Street D is suitable for traffic flows up to 1000vpd. Its 6m sealed width accommodates on-street parking but parked vehicles do restrict simultaneous two-way traffic flow.

Proposed road cross-sections for the Integrator A roads are provided in the *East Wanneroo District Structure Plan Road Planning Study* report (11 Sep 2019). The standard Option 1 cross-section is included at **Appendix B**. Option 1 (outside of neighbourhood and district centres) has 6m median, four 3.5m traffic lanes and two 2m cycle lanes in a 35m road reserve.

[1] For example, Armadale Rd west of Warton Rd, dual carriageway (2 lanes each way) carried 49,342vpd average weekday traffic in 2023/24.

The Transport Corridor shown in Figure 10 on Elliot Road (east of Lenore Road) and on Lenore Road (north of Elliot Road) is nominally widened to 45m in the LSP plan. This is basically an Integrator A with a substantially widened central median to accommodate two 3.5m bus lanes, as discussed in sections **3.7** and **4.2**. The transport corridor cross-section would be subject to detailed design at a later stage of transport network planning for this area.

Standard cross-sections from the WAPC Liveable Neighbourhoods policy for the Integrator B, Neighbourhood Connectors and Access Streets are shown in **Appendix B**.

4.2 Public Transport

Public transport planning in the DSP is discussed in section 3.7. As discussed, that public transport planning is currently unclear.

The LSP provides a 45m wide Transport Corridor along the Lenore Road / Elliot Road to accommodate potential bus lanes in the central median in accordance with most recent advice available from DPLH.

Those express bus lanes along Lenore Road / Elliot Road may not include any bus stops within the LSP area, so local bus services may also be required within the LSP area.

All of the proposed neighbourhood connectors and integrator arterial roads shown on **Figure 10** would be of suitable standard to accommodate bus services through this area, providing suitable options for future local bus routes to the neighbourhood centre and district centre to service this area. This allows suitable flexibility for the Public Transport Authority to plan future bus routes within this area.

4.3 Pedestrian and Cyclist Facilities

All of the proposed neighbourhood connectors and integrator arterial roads shown on **Figure 10** would have paths on both sides in accordance with Liveable Neighbourhoods guidelines, including a shared path on one side.

Paths would be required on at least one side of all roads in accordance with Liveable Neighbourhoods guidelines.

On-street cycle lanes are normally included only on Neighbourhood Connector A roads and above, due to traffic flows above 3000vpd on these categories of roads.

The resultant path network associated with the road network within the LSP area is indicated in **Figure 11**. This does not include paths outside of the road network, such as within public open space, which will be addressed by other consultants for this LSP.

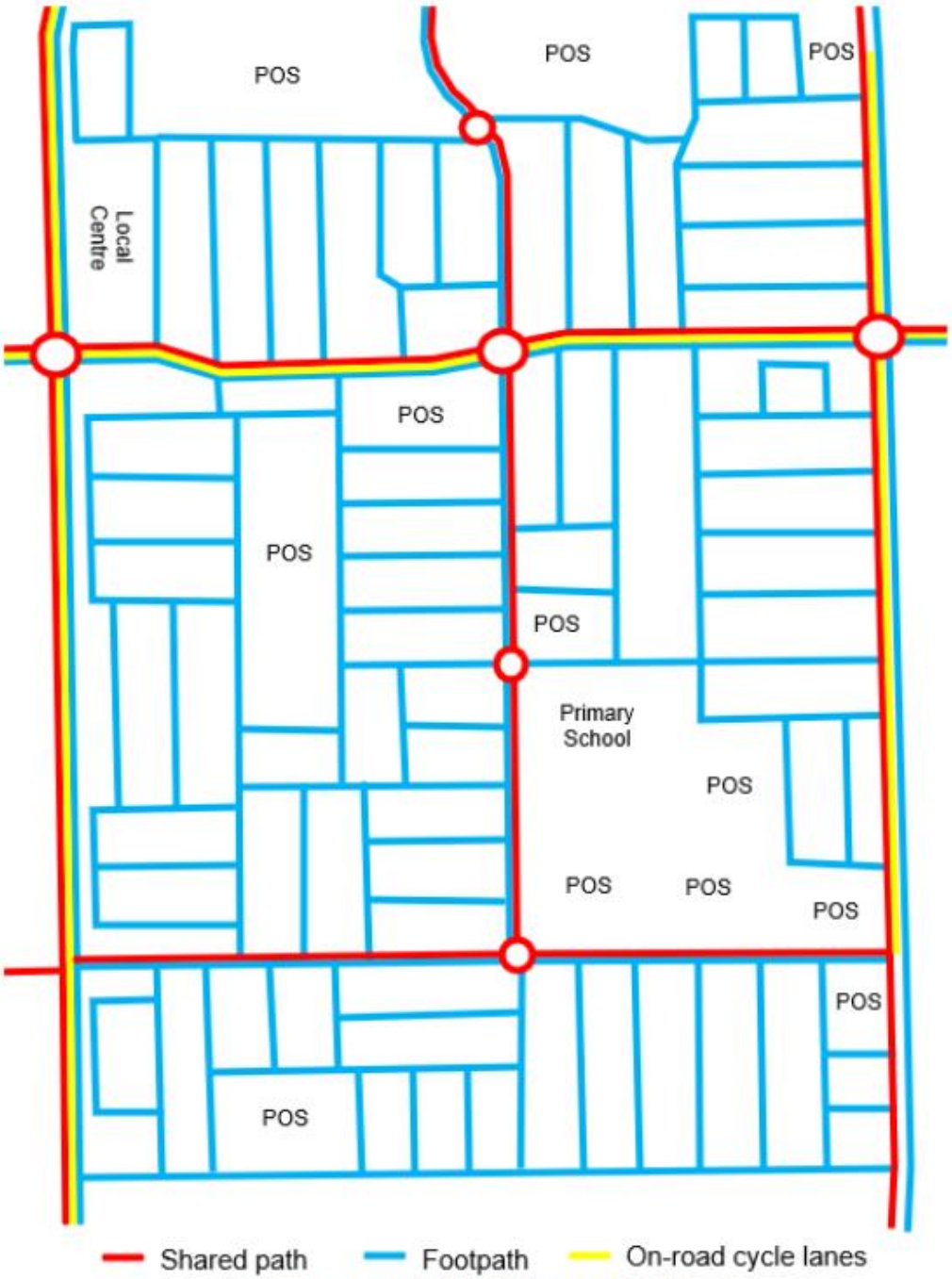

Figure 11: Pedestrian / Cycle Network

5 Integration with Surrounding Area

The *East Wanneroo District Structure Plan* (DSP) provides an overall plan to ensure coordination of future development of the subject site and the surrounding area. The proposed local structure plan for the subject site respects the principles and external connections of the DSP to ensure that good connectivity and integration with the surrounding area are achieved.

6 Analysis of the Transport Network

6.1 Assessment Period

The traffic assessment undertaken for the subject site is guided by the 2051 traffic projections reported for the arterial road network of the DSP area in the *East Wanneroo District Structure Plan Road Planning Study* report (2019) with full development of all land uses within the DSP area.

6.2 Traffic Generation and Distribution

The residential daily traffic generation rate used in the LSP area is 8 vehicle trips per day (vpd) per dwelling, which corresponds to peak hour trip generation rates of 0.8vph per dwelling recommended in the Western Australian Planning Commission (WAPC) *Transport Impact Assessment Guidelines* (2016). The anticipated yield of approximately 1,750 dwellings in the LSP area will therefore generate approximately 14,000vpd.

Information provided in the Department of Education's *Primary School Brief* indicates a daily trip rate of 2.6vpd per student is appropriate for new schools, with 1.0vph per student during before and after school peak periods. This is consistent with peak hour trip rates for schools in the WAPC TIA Guidelines. Therefore, the proposed primary school (540 students) is anticipated to generate approximately 1,400vpd.

The NSW *Transport Impact Assessment Guidelines* (2024) provides trip rate formulae for shopping centres in various size ranges. The trip rates for a small suburban shopping centre of 6,000 – 10,000m^2 GLFA have been utilised for the proposed local centre in Precinct 3. For 7,000m^2 GLFA with a major tenant of 3,500m^2 GLFA the estimated daily traffic generation is 7,180vpd with 528vph in the site's AM peak hour and 921vph in the site's PM peak hour of traffic generation.

It should be noted that some of the trips calculated above will be internal trips within the LSP area, so the total trips generated within the LSP area is not simply the sum of traffic generations listed above. For example, a trip from home to the local centre would be a single, combined trip rather than separate residential and shopping centre trips.

The sum of traffic generations listed above is approximately 22,580 trip ends within the LSP area, with approximately 20,230 of those being internal-to-external trips or external-to-internal trips across the LSP area boundary.

Trip distribution of these external trips for the LSP area has been modelled to approximately reproduce the same overall trip pattern evidenced by the DSP traffic projections in the *East Wanneroo District Structure Plan Road Planning Study* report. The resultant external traffic distribution of traffic to and from the LSP area is as follows:

- 21.2% North (Lenore Rd and Benmuni Rd)
- 3.3% West (Elliot Rd)
- 41.0% East (Elliot Rd and local roads)
- 34.5% South (Lenore Rd and Benmuni Rd)

6.3 Traffic Flow Forecasts

Daily traffic flows generated by the LSP area and through traffic through this precinct generated by the rest of the DSP area have been assigned on the LSP area road network and existing through traffic on Lenore Road has been added to determine future, full development, daily traffic flows on the LSP area road network.

The resultant total daily traffic flows on the LSP area road network are shown in **Figure 12**. The component of these total traffic flows that has an origin or destination within the LSP area is shown in brackets.

For comparison, the *East Wanneroo District Structure Plan Road Planning Study* (2019) modelled 2051 daily traffic volumes of 47,000vpd on Lenore Rd (between Ocean Reef Rd and Elliot Rd) and 15,000vpd on Elliot Rd (between Lenore Rd and Badgerup Rd).

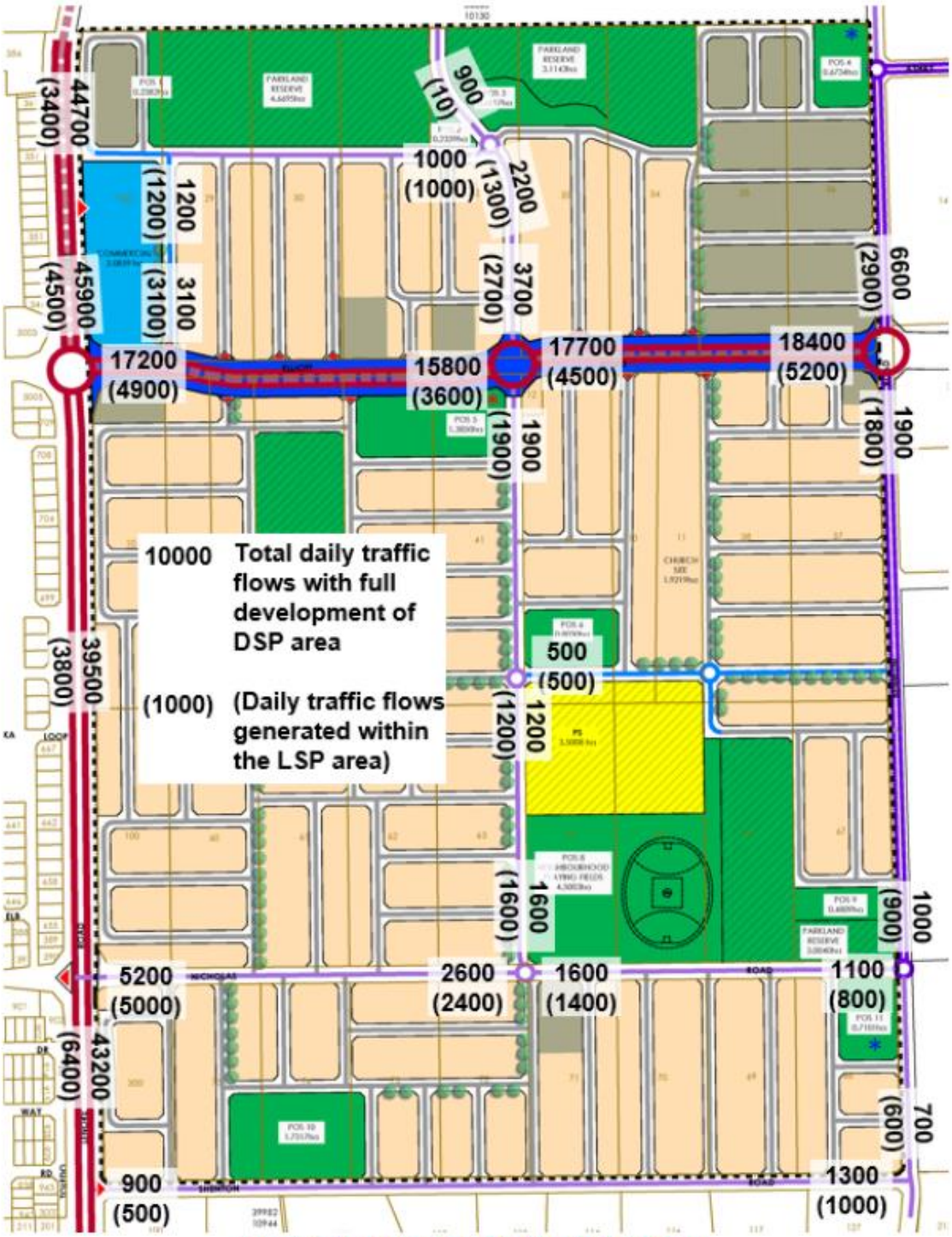

Figure 12: Future total daily traffic flows

6.4 Roads and Intersections

The anticipated future road network around the subject site has been detailed in section 4 of this transport impact assessment, including discussion of the proposed road hierarchy in section 4.1.

Advice on current planning from the Department of Planning, Lands and Heritage (DPLH) indicates they are looking at an express bus transit system (instead of rail) with bus lanes in the centre of the road along Elliot Rd – Lenore Rd – Franklin Rd.

The *East Wanneroo District Structure Plan Road Planning Study* report (2019) identifies the Lenore Road / Elliot Road 4-way intersection as a future roundabout or signalised intersection. The *East Wanneroo District Structure Plan* report (2021, figure 2.12) does identify a number of future signalised intersections within the DSP area but does not indicate a signalised intersection at the Lenore Road / Elliot Road intersection.

Accordingly, the Precinct 3 LSP anticipates the Lenore Road / Elliot Road intersection will remain as a multi-lane roundabout. Advice on current planning from DPLH in December 2024 indicated they were looking at grade-separation of bus lanes over the roundabout so express buses would have no delays at this major intersection.

The two neighbourhood connector intersections along Elliot Road through the LSP area (at the central north south neighbourhood connector and at Benmuni Road) are proposed as multi-lane roundabouts in the Precinct 3 LSP. Right turn traffic from Elliot Road (and U-turn trafficon Elliot Road) would need to merge right into the central median bus lanes on approach to these roundabouts (similar to the way left turn traffic is allowed to merge left into the more conventional kerbside bus lanes about 50m before each intersection on a number of other major roads throughout the Perth metropolitan area). This system would still provide significant priority for buses at these roundabouts.

All other access street intersections along this section of Lenore Road would be restricted to left in / left out only, with U-turns accommodated at the three roundabouts.

Lenore Road is currently being upgraded to dual carriageway (two lanes each way) adjacent to the LSP area including channelisation of the Lenore Road / Nicholas Road intersection. The eastern approach is being constructed to accommodate full movements including right turns, whereas the western approach is restricted to left in / left out only. It is anticipated that this intersection would be upgraded in future with traffic signals to facilitate those right turn movements when required as traffic volumes increase in future.

Other four-way intersections on lower order roads (mainly along the neighbourhood connectors) are proposed as single-lane roundabouts in this LSP area.

The location and type of intersection treatment of key intersections are shown in **Figure 13**.

Figure 13: Key intersections

6.5 Intersection Analysis

Intersection capacity analysis has been undertaken for five key intersections along Lenore Road and Elliot Road for the weekday AM peak and PM peak hour flows that correspond to the modelled 2051 daily traffic flows in **Figure 12**. The peak hours adopted for this analysis are 8-9AM and 3-4PM to include before and after school peak traffic, which is anticipated to be a particularly significant factor in determining peak periods in this vicinity. Nominal express bus lane flows of 60 buses per hour each way are assumed in the Elliot Road bus lanes for this analysis.

The key intersections analysed are as follows:

- Lenore Rd / Elliot Rd roundabout;
- Lenore Rd / Nicholas Rd signalised intersection (western leg LILO only);
- Lenore Rd / Shenton Rd T-interscetion (LILO);
- Elliot Rd / central neighbourhood connector roundabout (with bus lanes); and
- Elliot Rd / Benmuni Rd roundabout (with bus lanes).

Capacity analysis of these intersections has been undertaken using SIDRA Network analysis in the SIDRA computer software package. SIDRA is an intersection modelling tool commonly used by traffic engineers for all types of intersections. SIDRA outputs are presented in the form of Degree of Saturation, Level of Service, Average Delay and 95% Queue. These characteristics are defined as follows:

- Degree of Saturation is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The Degree of Saturation ranges from close to zero for infrequent traffic flow up to one for saturated flow or capacity.
- Level of Service is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. In general, there are 6 levels of service, designated from A to F, with Level of Service A representing the best operating condition (i.e. free flow) and Level of Service F the worst (i.e. forced or breakdown flow).
- Average Delay is the average of all travel time delays for vehicles through the intersection.
- 95% Queue is the queue length below which 95% of all observed queue lengths fall.

The results of the SIDRA analysis are summarised in **Appendix C**. Each of the intersections along Lenore Road will have some minor movements that will experience some degree of congestion commensurate with the relatively high 2051 traffic volumes on Lenore Road, but all three intersections will have sufficient capacity to accommodate the modelled 2051 traffic flows.

The two roundabouts with central bus lanes on Elliott Road both operate satisfactorily with very good level of service A or B for all movements.

Schematic diagrams from the SIDRA analysis of the five intersections assessed are shown in **Appendix C**, including a mark-up of the Lenore Rd / Elliot Rd roundabout with grade-separated bus lanes to help visualise that concept. Note that these

diagrams are not to scale and are not design drawings. They are purely intended to illustrate the number and arrangement of traffic lanes required at each intersection to accommodate the modelled future traffic flows.

6.6 Access to Frontage Properties

The WAPC Liveable Neighbourhoods policy requires that *"Development along integrator B and neighbourhood connector streets with ultimate vehicle volumes over 5,000 vehicles per day should be designed either so vehicles entering the street can do so travelling forward, or are provided with alternative forms of vehicle access."*

There is to be no direct driveway access to residential development on zoned land within the LSP area from the Integrator A roads – Lenore Road and Elliot Road.

It is anticipated that a left in / left out driveway crossover would be provided on Lenore Road for the proposed Local Centre.

The only other road within the LSP area carrying more than 5,000vpd is Benmuni Road north of Elliot Road. It is proposed that residential lots along the western side of that section of Benmuni Road would be oriented towards the side streets and have driveway access from those side streets to avoid driveway access on this section of Benmuni Road.

All of the other roads in the LSP area are expected to carry less than 5,000vpd, so no restriction on vehicular access is required.

6.7 Pedestrian / Cycle Networks

The proposed network of footpaths and shared paths for pedestrians and cyclists is described in section 4.3 of this Transport Impact Assessment. This network of paths will provide an excellent level of accessibility and permeability for pedestrians and cyclists within the LSP area, and connections to neighbouring precincts at strategic locations.

The WAPC *Transport Impact Assessment Guidelines* (2016) provides guidance on the levels of traffic volumes that are likely to affect the ability for pedestrians to cross various types of road. Based on that guidance an undivided two-lane road should be acceptable for pedestrians crossing traffic volumes of up to approximately 11,000 vpd and this threshold can be increased to around 28,000 vpd by adding a central median or pedestrian refuge islands. On a four-lane road, because of its greater carriageway width, this threshold is lower; even with a median island the threshold is only around 16,000 vpd.

Only Lenore Road and Elliot Road are expected to carry future traffic flows above these levels.

The future signalised intersection at Lenore Rd / Nicholas Rd will include appropriate pedestrian phasing to assist pedestrians and cyclists crossing Lenore Road at that location.

An additional pedestrian crossing facility should be provided on Lenore Road north of Elliot Road to assist pedestrian and cyclist movements from residential areas west of Lenore Road to access the local centre. This could be in the form of a signalised pedestrian crossing when traffic and pedestrian numbers meet the warrants for that type of facility, or potentially a pedestrian overpass or underpass if required.

A suitable pedestrian crossing facility should also be provided on Elliot Road east of the local centre to assist pedestrian and cyclist movements from residential areas west of Lenore Road to access the local centre. This could be in the form of a signalised pedestrian crossing when traffic and pedestrian numbers meet the warrants for that type of facility. The location of that facility should be subject to future investigation in conjunction with public transport planning along Elliot Road to ensure it also serves bus passengers that will need to cross Elliot Road.

It is anticipated that a guard-controlled school crossing would be appropriate at the primary school site to assist students crossing the adjacent neighbourhood connector road before and after school. Guard-controlled school crossings can easily be accommodated on that neighbourhood connector at any location that suits the internal and external access routes of the school at detailed design stage.

Information from the 2002-2006 Perth & Regions Travel Survey (PARTS) indicated that 25.4% of primary school students walk or cycle to school and 26.7% walk or cycle home from school. Therefore a 540-student primary school would typically have about 140 students walking or cycling.

The Children's Crossings and Road Safety Committee documents *Application for a Type A Children's Crossing* and *Application for a Type B Children's Crossing* indicate *"the warrant criteria for a children's crossing are contained in the Main Roads WA publication Planning and Designing for Pedestrians: Guidelines (version 4 dated 30 November 2011). Generally, the warrant criteria of minimum student pedestrian numbers and vehicle numbers must be met for an application for a new [Type A or] Type B children's crossing to be viewed favourably by the Committee; however environmental factors, risk factors and local conditions will also be considered by the Committee."*

Warrant criteria indicate that a Type A Children's Crossing may be provided where a minimum of 20 students and 200 vehicle movements occur within the hour immediately before and immediately after school, for a primary school. The warrants are lower for a Type B Children's Crossing at 10 students and 100 vehicle movements.

Such facilities can only be applied for by a School Principal or the President / Secretary of the relevant school/parent organisation (eg. P&C or P&F). The anticipated numbers of primary students crossing the Neighbourhood Connector road on the western side of the primary school would potentially meet these warrants in future so it would be expected that the school would apply for this type of facility when future student numbers and movements meet those warrants..

6.8 Access to Public Transport

As noted in section 3.7, it is understood that current planning by DPLH may favour an express bus transit system instead of rail. This may take the form of bus lanes in the centre of the road along Elliot Rd – Lenore Rd – Franklin Rd (i.e. combining this section of the 'rail' route and rapid transit route). Preliminary advice indicates the number of bus stops would be limited and would not be located within Precinct 3.

Accordingly, other local bus services would be required to provide public transport access for residents of the LSP area.

At this stage of the structure planning process those local bus routes are not known. As noted in section 4.2, all of the proposed neighbourhood connectors and integrator arterial roads shown on **Figure 10** would be of suitable standard to accommodate bus services through this area, providing suitable options for future feeder bus routes to the district centre where they would also have access to that express bus transit system for longer trips. This allows suitable flexibility for the Public Transport Authority to plan future bus routes within this area.

7 Conclusions

This Transport Impact Assessment relates to the Local Structure Plan (LSP) for Precinct 3 of the East Wanneroo District Structure Plan in the City of Wanneroo.

The subject site is located approximately 2.5 kilometres southeast of the Wanneroo town centre and is bounded by Lenore Road to the west and Benmuni Road to the east, with Elliot Road and Nicholas Road running east west within the subject site.

The DSP shows a future railway line cutting across the northeast corner of Precinct 3 but the current status of that proposal is unclear. It is understood that current planning by the Department of Planning, Lands and Heritage (DPLH) may favour an express bus transit system instead of rail. This may take the form of bus lanes in the centre of the road along Elliot Rd – Lenore Rd – Franklin Rd.

Preliminary advice indicates the number of bus stops on this express bus route would be limited and would not be located within Precinct 3, so it is anticipated that additional local bus services would be provided in future. All of the proposed neighbourhood connectors and integrator arterial roads in the LSP area would be of suitable standard to accommodate bus services, providing suitable options for local bus routes to the district centre. This allows suitable flexibility for the Public Transport Authority to plan future bus routes within this area.

Precinct 3 will include residential neighbourhoods for approximately 1,750 dwellings, a local activity centre and a primary school.

The traffic flows generated within the LSP area will result in approximately 20,230vpd of internal-to-external trips or external-to-internal trips across the LSP area boundary, as well as internal traffic flows between land uses within the LSP area.

The main arterial roads within the LSP area are Lenore Road running north south along the western boundary and Elliot Road running east west through the middle of the LSP area. Ultimately, traffic volumes in the order of 40,000 to 46,000vpd are forecast on this section of Lenore Road and 15,000 to 18,000vpd on Elliot Road.

Five key intersections along Lenore Road and Elliot Road within the LSP area have been analysed to determine likely future intersection requirements.

A comprehensive network of paths and on-road cycle lanes are planned on the LSP area road network in accordance with *Liveable Neighbourhoods* policy guidelines.

The proposed signalised intersection on Lenore Road and Nicholas Road will assist pedestrians and cyclists crossing Lenore Road at that location but additional pedestrian facilities should be planned across Lenore Road and Elliott Road in the vicinity of the proposed local centre.

A guard-controlled school crossing would be anticipated on the north south neighbourhood connector road adjacent to the primary school site in future.

Appendix A

LOCAL STRUCTURE PLAN

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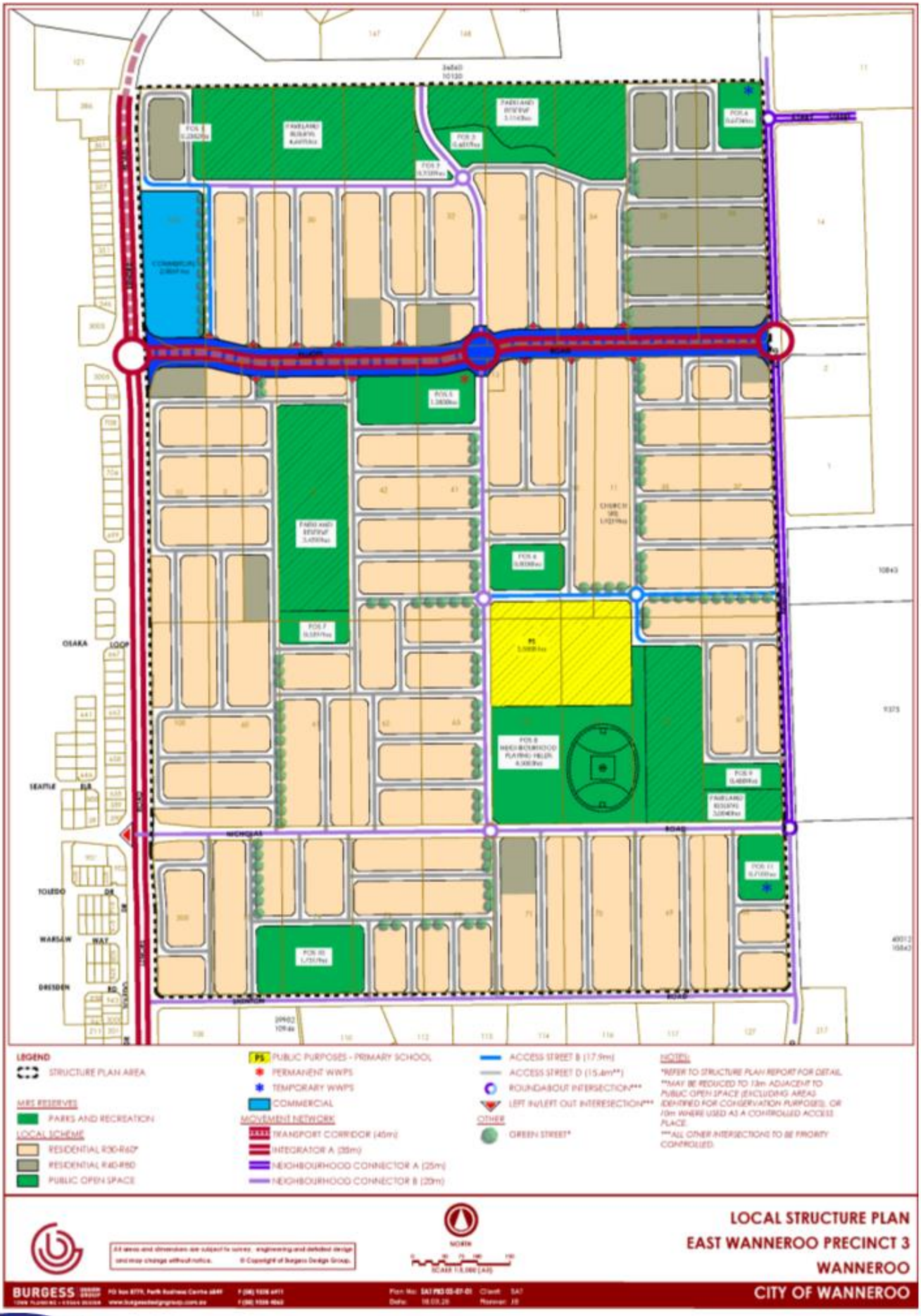
Engineering a better future for over 20 years!


LEGEND
STRUCTURE PLAN AREA
MRS RESERVES
PARKS AND RECREATION
LOCAL SCHEME
RESIDENTIAL R30-R60*
RESIDENTIAL R40-R80
PUBLIC OPEN SPACE
PS PUBLIC PURPOSES - PRIMARY SCHOOL
PERMANENT WWPS
TEMPORARY WWPS
COMMERCIAL
MOVEMENT NETWORK
TRANSPORT CORRIDOR (45m)
INTEGRATOR A (35m)
NEIGHBOURHOOD CONNECTOR A (25m)
NEIGHBOURHOOD CONNECTOR B (20m)
ACCESS STREET B (17.9m)
ACCESS STREET D (15.4m**)
ROUNDABOUT INTERSECTION***
LEFT IN/LEFT OUT INTERSECTION***
OTHER
GREEN STREET*
NOTES:
*REFER TO STRUCTURE PLAN REPORT FOR DETAIL
**MAY BE REDUCED TO 13m ADJACENT TO PUBLIC OPEN SPACE (EXCLUDING AREAS IDENTIFIED FOR CONSERVATION PURPOSES), OR 10m WHERE USED AS A CONTROLLED ACCESS PLACE.
***ALL OTHER INTERSECTIONS TO BE PRIORITY CONTROLLED.
NORTH
LOCAL STRUCTURE PLAN
EAST WANNEROO PRECINCT 3
WANNEROO
BURGESS
CITY OF WANNEROO

Appendix B

TYPICAL ROAD CROSS SECTIONS

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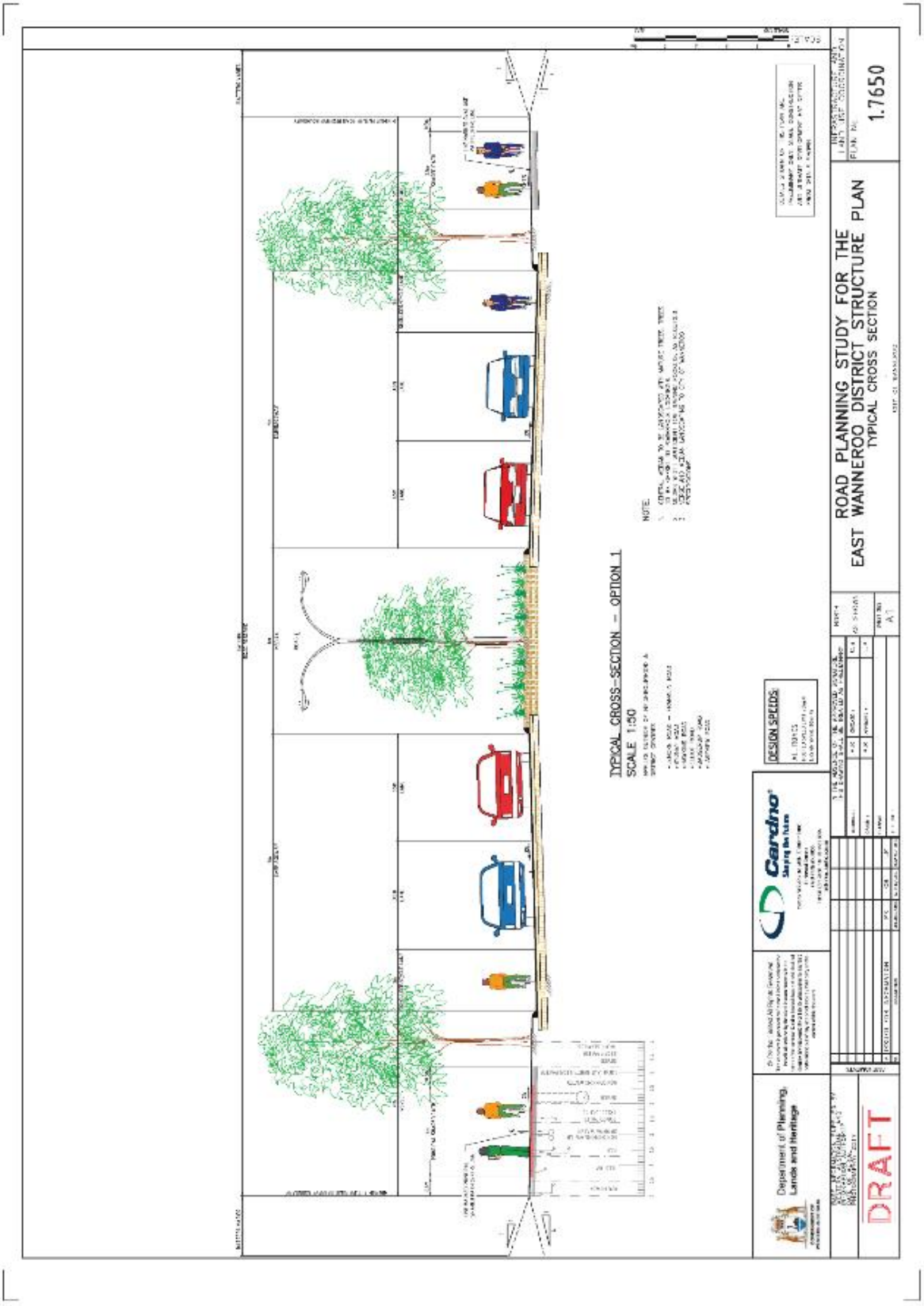
ROAD PLANNING STUDY FOR THE
EAST WANNEROO DISTRICT STRUCTURE PLAN
TYPICAL CROSS SECTION
1.7650
TYPICAL CROSS-SECTION – OPTION 1
SCALE 1:50
NOTE
DESIGN SPEEDS
Cardno
Department of Planning, Lands and Heritage
DRAFT

Integrator B - arterial streets

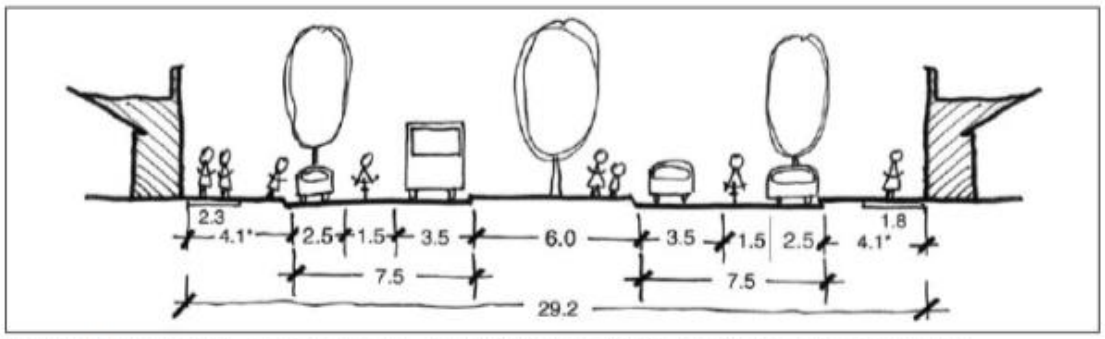

Figure 15: Integrator B – outside centres – 60 km/hr (up to 15 000 vehicles per day - see note 2).

Two lanes, central median, buses, cycle lanes and parking. Development fronting, forward vehicle exiting.

Note:
1. Central median may be reduced along sections where right-hand turn lanes are not required.
2. Traffic volumes up to 20 000 vehicles per day may be acceptable provided that detailed design addresses intersections, parking, access and bus movement (**table 1**).
3. The 6.0 m median is required for staged vehicle crossings and for clearance to trees.
4. The 2.5 m parking bays may be indented into the verge. If parking is indented, then the verge may be increased to 5.5 m minimum including parking, and reserve width may be decreased as a result, to 27 m.

* Where a wider shared path, extensive street furniture or provision for reversing into parking lane is required, the verge width will need to be widened. Typically verges may be up to 4.5 m and total reserve width 30 m.

Neighbourhood connector streets

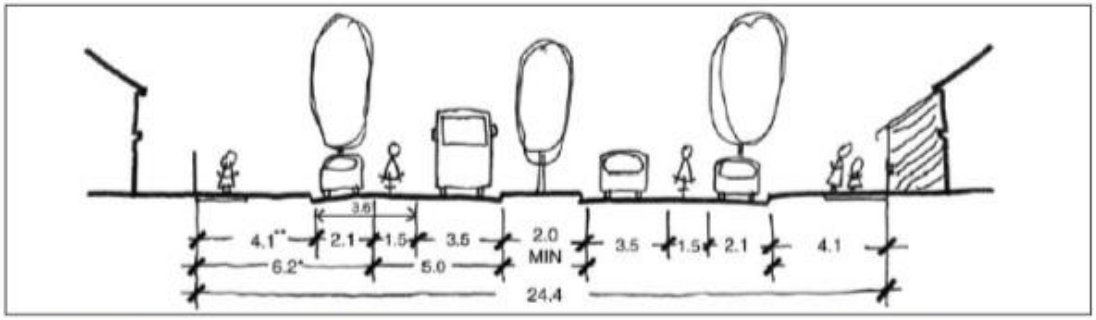

Figure 17: Neighbourhood connector A – 50 km/hr (up to 7000 vehicles per day, with >3000 vehicles per day preferred).

Central median, buses, cycle lanes and parking. Bus stops are normally in travel lane against kerb extensions in parking lane.

Note:
1. * For volumes less than 3000 vehicles per day and the street is not ever likely to be a bus route, the road pavement may be reduced from 5.0 m to 4.0 m with no marked cycle lane, and the total reserve width reduced to 22.4 m.
2. Reversing out from abutting dwellings is acceptable if less than 5000 vehicles per day. For 5000-7000 vehicles per day, protected reversing spaces may be used for larger lots using paired driveway crossovers with ability to reverse into the parking lane.
3. Median will need appropriately located breaks to allow U-turns to frontage-access properties.
4. ** Verge width (including parking) can often be reduced from 6.2 m to 5.5 m with indented parking, to reduce overall reserve width to 23.0 m.
5. For larger trees, central median widths of 2.5-4 m are preferred. For medians with drainage swales, a minimum median width of 6 m is suggested.
6. Where a visually narrower carriageway is needed to assist with speed control, or where parking turnover is high, the parking lane may be widened to 2.3 m and the cycle lane narrowed to 1.2 m.
7. In some circumstances the median may be omitted. On these sections, indented parking should normally be used to assist in visually narrowing the carriageway. If parking is indented, then the reserve width will be 22.4 m.

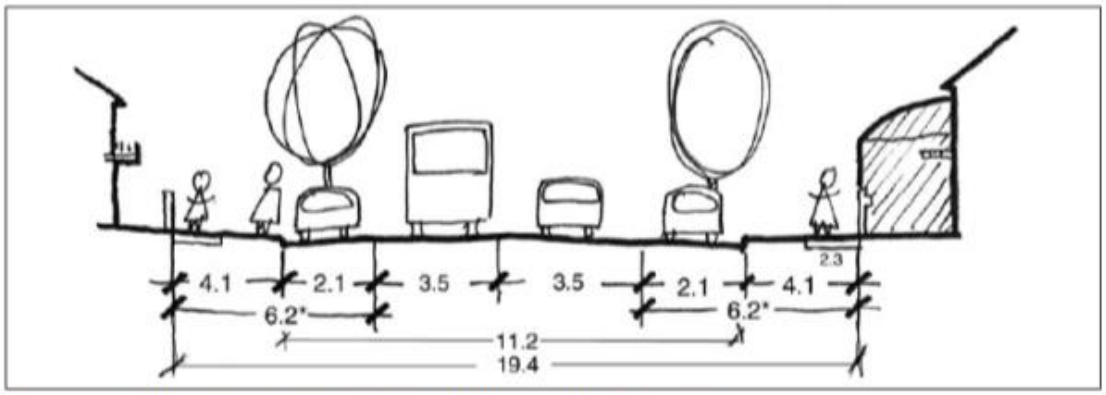

Figure 18: Neighbourhood connector B – 50 km/hr (<3000 vehicles per day).

Lower volume neighbourhood connector, bus route, no cycle lanes, parking. Typically a residential environment with low parking turnover. Detailing of design to visually narrow street (eg including trees in parking lane, painted parking line), together with other speed control mechanisms to limit typical operating speeds to less than 50 km/hr. Bus stops in travel lane against kerb extension in parking lane. A2-2.3 m shared path provided on at least one verge in lieu of on-street cycle lane.

Note: * Verge width (including parking) can often be reduced from 6.2 m to 5.5 m with indented parking, to reduce overall reserve width to 18.0 m.

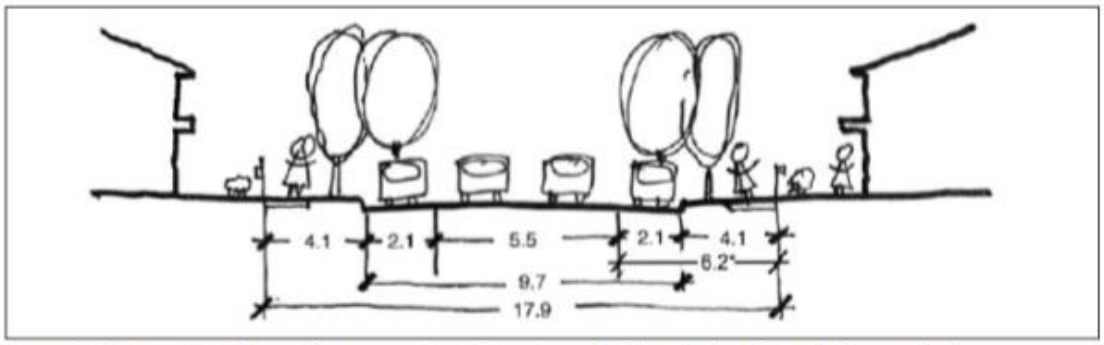

Figure 20: Access street B – wider access street Target speed 40 km/hr (< 3000 vehicles per day).

Wider access street suited to higher density residential areas (typically R30–R40+, or where dwelling density is greater than around 1 per 250 m²) with higher parking demand. Extensive parking, no bike lane, no buses, trees in verge, with additional trees in parking lane if required.

Note:
1. May reduce verge adjacent to park to 1.0 m when fronting public parkland.
2. Trees may be in verge and/or in parking lane.
3. * Verge and parking lane as shown (6.2 m) can often be reduced to 5.5 m if parking is indented, and total street width reduced to 16.5 m.

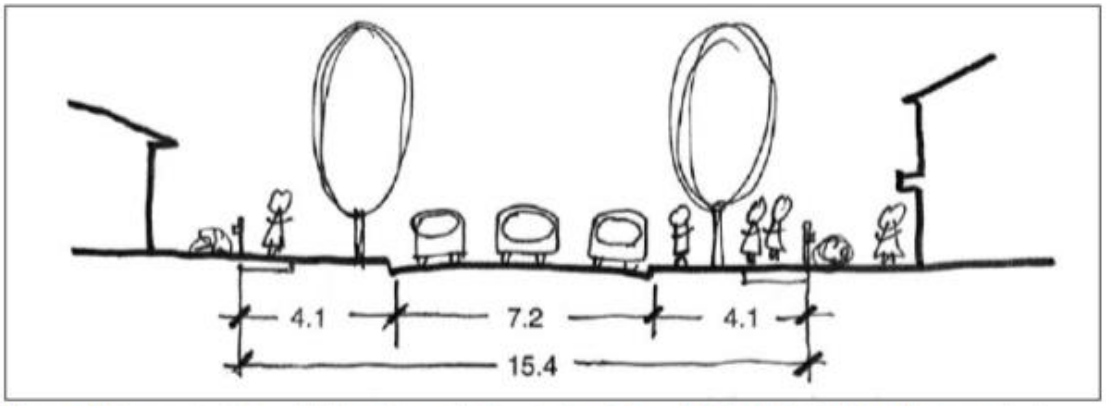

Figure 21: Access street C – yield (or give way) street – Target speed 40 km/hr (< 3000 vehicles per day).

Standard access street or yield (or give way) street. Relatively frequent parking on both sides of street (on the pavement) desirable and needed as part of speed control. No buses, no bike lane. This is likely to be the most common residential street in densities up to and often including R30 - R35 (or a typical lot size down to 250-300 m²).

Note: May reduce verge adjacent to park to 1.0 m when fronting public parkland.

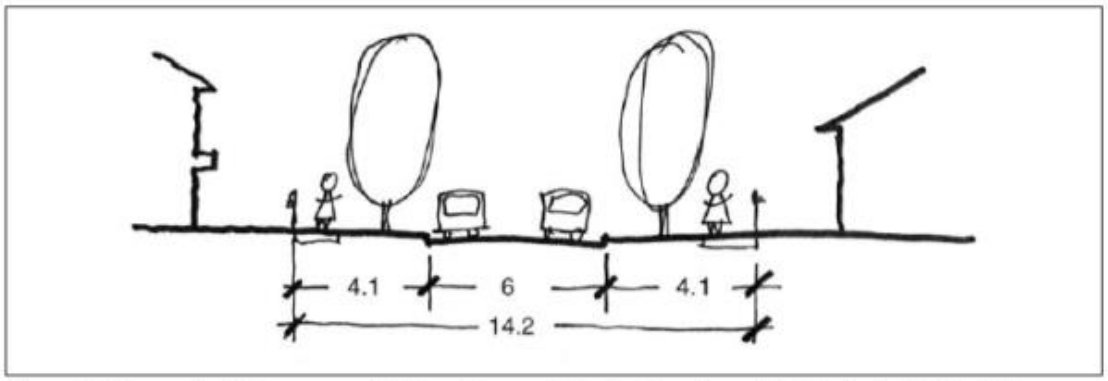

Figure 22: Access street D – narrow yield (or give way) street – Target speed 30 km/hr (< 1000 vehicles per day).

Narrower access street for shorter lengths, low parking demand, serving larger lots. No buses, no bike lanes, no indented parking. Staggered parking on both sides of street as part of speed control, low speed. Not through route, low traffic volume.

Note:
1. May reduce verge adjacent to park to 1.0 m when fronting public parkland.
2. Where the street is short and vehicle volume is less than 150 vehicles per day, pavement may be reconfigured as a slow speed, comprehensively-designed street, with a 3.4 m travel lane and 2.1 m embayed parking spaces. Passing bays are to be provided every 70-80 m, and maximum length 150 m. If a street is comprehensively designed and designated as a shared space for pedestrians and vehicles and target speed is <20 km/hr, no footpath may be required.
3. A pavement width of 5.5 m may be considered, subject to the agreement of the local authority. The reserve should remain at 14.2 m to allow for future flexibility.

Appendix C

SIDRA INTERSECTION ANALYSIS

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Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.

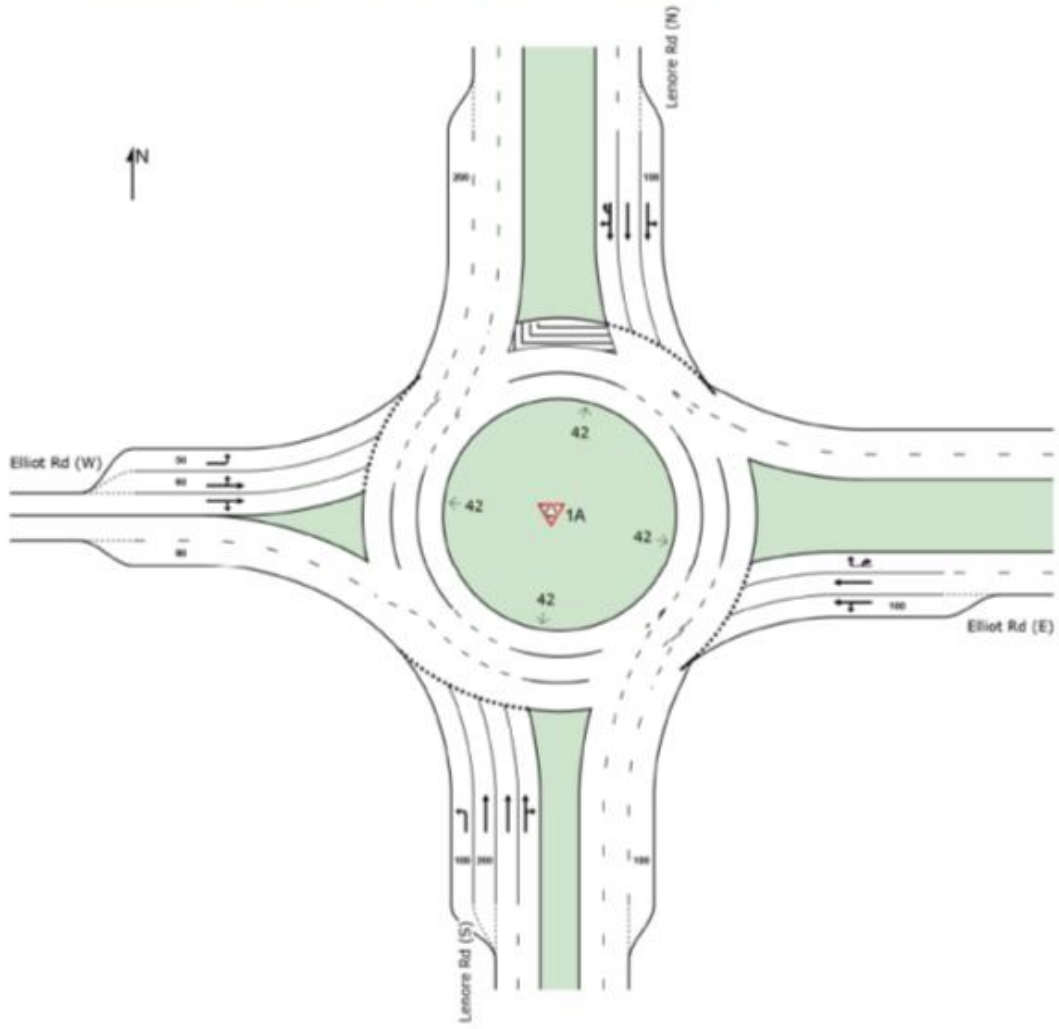
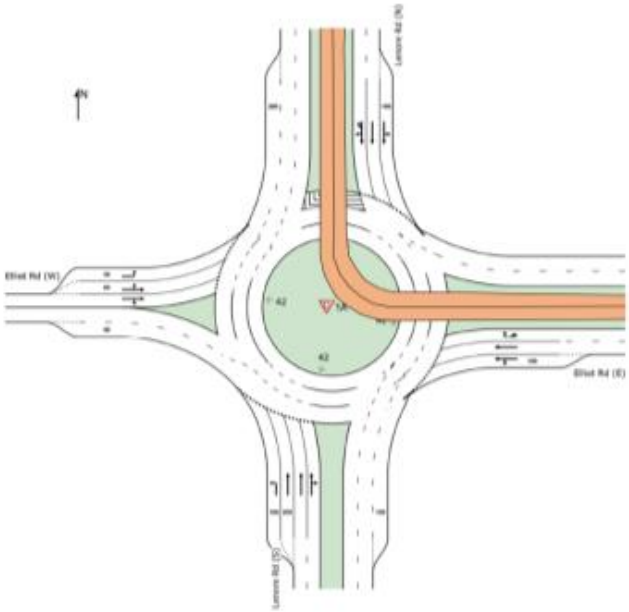


Figure C1. Lenore Rd / Elliot Rd roundabout layout analysed in SIDRA



Note: The roundabout is proposed to have bus lanes in the central median on the east and north approaches and grade-separated on a bridge over the roundabout. This does not affect the operation of the roundabout and has not been modelled in SIDRA.

Table C1a. SIDRA results – Lenore Rd / Elliot Rd roundabout – 2051 weekday 8-9AM peak

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Lenore Rd (S)															
10	L2	All MCs	76	3.3	76	3.3	0.105	7.9	LOS A	0.4	3.2	0.62	0.66	0.62	54.8
11	T1	All MCs	1144	5.5	1144	5.5	0.483	8.0	LOS A	2.8	22.1	0.74	0.65	0.82	58.7
12	R2	All MCs	62	5.5	62	5.5	0.483	14.2	LOS B	2.6	19.9	0.73	0.71	0.83	54.6
Approach			1282	5.4	1282	5.4	0.483	8.3	LOS A	2.8	22.1	0.73	0.65	0.81	58.3
East: Elliot Rd (E)															
1	L2	All MCs	44	5.5	44	5.5	0.640	31.2	LOS C	3.8	29.0	0.92	1.07	1.33	40.5
2	T1	All MCs	528	3.3	528	3.3	0.853	23.8	LOS C	6.7	51.1	0.95	1.20	1.73	39.1
3	R2	All MCs	293	5.5	293	5.5	0.621	23.1	LOS C	5.2	40.2	1.00	1.08	1.45	44.3
3u	U	All MCs	48	3.3	48	3.3	0.621	25.7	LOS C	5.2	40.2	1.00	1.08	1.45	43.0
Approach			914	4.1	914	4.1	0.853	24.0	LOS C	6.7	51.1	0.96	1.15	1.61	41.3
North: Lenore Rd (N)															
4	L2	All MCs	164	5.5	164	5.5	0.553	6.7	LOS A	3.8	30.1	0.66	0.62	0.72	54.3
5	T1	All MCs	2125	5.5	2125	5.5	0.686	10.1	LOS B	6.3	49.2	0.70	0.65	0.80	52.7
6	R2	All MCs	167	3.3	167	3.3	0.686	14.7	LOS B	6.2	47.8	0.75	0.76	0.89	49.4
6u	U	All MCs	19	3.3	19	3.3	0.686	17.7	LOS B	6.2	47.8	0.75	0.76	0.89	55.4
Approach			2476	5.3	2476	5.3	0.686	10.3	LOS B	6.3	49.2	0.70	0.66	0.80	52.6
West: Elliot Rd (W)															
7	L2	All MCs	324	3.3	324	3.3	0.324	6.8	LOS A	1.7	13.2	0.77	0.63	0.78	51.2
8	T1	All MCs	221	3.3	221	3.3	0.324	4.4	LOS A	1.5	11.1	0.73	0.63	0.77	48.7
9	R2	All MCs	159	3.3	159	3.3	0.324	10.8	LOS B	1.5	11.1	0.73	0.81	0.77	36.5
Approach			704	3.3	704	3.3	0.324	6.9	LOS A	1.7	13.2	0.75	0.67	0.77	48.1
All Vehicles			5376	4.9	5376	4.9	0.853	11.7	LOS B	6.7	51.1	0.76	0.74	0.94	51.2

Table C1b. SIDRA results – Lenore Rd / Elliot Rd roundabout – 2051 weekday 3-4PM peak

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Lenore Rd (S)															
10	L2	All MCs	116	3.3	116	3.3	0.171	8.7	LOS A	0.7	5.5	0.62	0.77	0.62	54.8
11	T1	All MCs	2085	5.5	2085	5.5	0.982	48.0	LOS D	23.3	181.7	0.99	1.70	3.12	45.1
12	R2	All MCs	171	5.5	171	5.5	0.982	41.1	LOS D	19.0	148.3	0.99	1.67	3.11	41.9
Approach			2372	5.4	2372	5.4	0.982	45.6	LOS D	23.3	181.7	0.97	1.65	3.00	45.1
East: Elliot Rd (E)															
1	L2	All MCs	26	5.5	26	5.5	0.236	12.2	LOS B	1.3	9.9	0.86	0.76	0.86	47.4
2	T1	All MCs	268	3.3	268	3.3	0.314	8.1	LOS A	1.7	12.8	0.86	0.77	0.87	48.1
3	R2	All MCs	339	5.5	339	5.5	0.811	24.9	LOS C	8.1	63.1	1.00	1.21	1.73	43.3
3u	U	All MCs	154	3.3	154	3.3	0.811	27.5	LOS C	8.1	63.1	1.00	1.21	1.73	42.1
Approach			787	4.3	787	4.3	0.811	19.2	LOS B	8.1	63.1	0.95	1.04	1.41	44.4
North: Lenore Rd (N)															
4	L2	All MCs	355	5.5	355	5.5	0.572	8.1	LOS A	4.1	32.3	0.78	0.79	0.93	53.9
5	T1	All MCs	1447	5.5	1447	5.5	0.710	8.9	LOS A	7.1	55.3	0.83	0.81	1.05	51.0
6	R2	All MCs	267	3.3	267	3.3	0.710	16.6	LOS B	6.3	48.9	0.86	0.93	1.14	47.2
6u	U	All MCs	89	3.3	89	3.3	0.710	19.6	LOS B	6.3	48.9	0.86	0.93	1.14	53.1
Approach			2159	5.1	2159	5.1	0.710	10.2	LOS B	7.1	55.3	0.83	0.83	1.05	51.2
West: Elliot Rd (W)															
7	L2	All MCs	129	3.3	129	3.3	0.423	51.7	LOS E	2.6	20.2	0.97	1.01	1.16	43.1
8	T1	All MCs	371	3.3	371	3.3	0.758	36.5	LOS D	8.1	61.9	0.99	1.32	1.85	32.8
9	R2	All MCs	123	3.3	123	3.3	0.758	38.1	LOS D	5.2	39.7	0.97	1.24	1.68	21.1
Approach			623	3.3	623	3.3	0.758	39.9	LOS D	8.1	61.9	0.98	1.24	1.67	32.8
All Vehicles			5941	4.9	5941	4.9	0.982	28.6	LOS C	23.3	181.7	0.91	1.23	1.94	45.1

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.

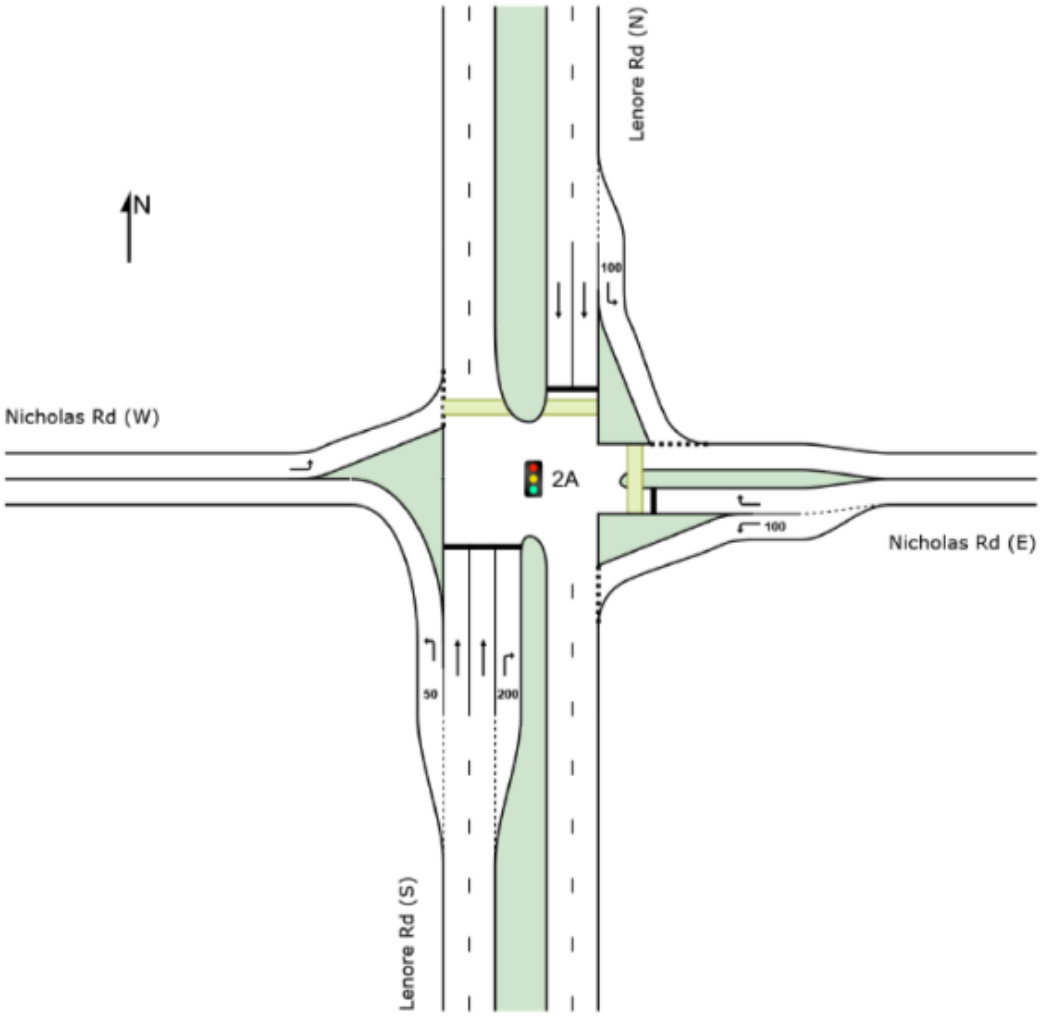


Figure C2. Lenore Rd / Nicholas Rd signalised intersection layout analysed in SIDRA

Table C2a. SIDRA results – Lenore Rd / Nicholas Rd signalised intersection – 2051 weekday 8-9AM peak

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h]	HV %	Arrival Flows [Total veh/h]	HV %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh]	Dist m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Lenore Rd (S)															
10	L2	All MCs	31	3.3	31	3.3	0.017	6.9	LOS A	0.0	0.0	0.00	0.57	0.00	47.2
11	T1	All MCs	1219	5.5	1219	5.5	0.428	7.2	LOS A	15.1	117.6	0.38	0.34	0.38	47.8
12	R2	All MCs	233	3.3	233	3.3	*0.920	92.4	LOS F	19.6	149.2	1.00	0.99	1.31	19.8
Approach			1482	5.1	1482	5.1	0.920	20.6	LOS C	19.6	149.2	0.47	0.45	0.51	31.5
East: Nicholas Rd (E)															
1	L2	All MCs	316	3.3	316	3.3	0.663	76.5	LOS E	19.2	146.7	0.95	1.05	0.95	20.7
3	R2	All MCs	63	3.3	63	3.3	*0.874	111.8	LOS F	5.2	39.7	1.00	0.93	1.39	14.9
Approach			379	3.3	379	3.3	0.874	82.4	LOS F	19.2	146.7	0.96	1.03	1.03	16.6
North: Lenore Rd (N)															
4	L2	All MCs	346	3.3	346	3.3	0.237	23.8	LOS C	5.2	39.4	0.25	0.66	0.25	54.7
5	T1	All MCs	2301	5.5	2301	5.5	*0.922	34.0	LOS C	78.0	608.8	0.93	0.88	0.97	40.2
Approach			2647	5.2	2647	5.2	0.922	32.7	LOS C	78.0	608.8	0.84	0.85	0.88	38.1
West: Nicholas Rd (W)															
7	L2	All MCs	11	3.3	11	3.3	0.014	7.4	LOS A	0.1	1.1	0.24	0.55	0.24	27.2
Approach			11	3.3	11	3.3	0.014	7.4	LOS A	0.1	1.1	0.24	0.55	0.24	27.2
All Vehicles			4519	5.0	4519	5.0	0.922	32.8	LOS C	78.0	608.8	0.72	0.74	0.77	33.7

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped]	Dist m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Nicholas Rd (E)											
P1	Full	53	9.4	LOS A	0.1	0.1	0.35	0.35	26.1	20.0	0.77
North: Lenore Rd (N)											
P21	Stage 1	53	49.7	LOS E	0.2	0.2	0.82	0.82	66.4	20.0	0.30
P22	Stage 2	53	69.3	LOS F	0.2	0.2	0.96	0.96	85.9	20.0	0.23
All Pedestrians		158	42.8	LOS E	0.2	0.2	0.71	0.71	59.5	20.0	0.34

Table C2b. SIDRA results – Lenore Rd / Nicholas Rd signalised intersection – 2051 weekday 3-4PM peak

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Lenore Rd (S)															
10	L2	All MCs	66	3.3	66	3.3	0.037	7.2	LOS A	0.0	0.0	0.00	0.57	0.00	47.2
11	T1	All MCs	2326	5.5	2326	5.5	*0.855	18.4	LOS B	52.3	408.0	0.76	0.70	0.76	36.1
12	R2	All MCs	389	3.3	389	3.3	0.755	57.5	LOS E	24.5	186.9	0.97	0.87	0.99	26.7
Approach			2782	5.1	2782	5.1	0.855	23.8	LOS C	52.3	408.0	0.77	0.72	0.78	28.8
East: Nicholas Rd (E)															
1	L2	All MCs	243	3.3	243	3.3	0.312	27.4	LOS C	10.7	81.5	0.70	0.84	0.70	32.1
3	R2	All MCs	45	3.3	45	3.3	*0.585	82.2	LOS F	3.3	25.0	1.00	0.77	1.06	16.6
Approach			288	3.3	288	3.3	0.585	36.0	LOS D	10.7	81.5	0.75	0.83	0.76	28.0
North: Lenore Rd (N)															
4	L2	All MCs	112	3.3	112	3.3	0.088	21.1	LOS C	2.1	15.7	0.32	0.66	0.32	53.5
5	T1	All MCs	1485	5.5	1485	5.5	0.762	31.0	LOS C	40.3	314.6	0.85	0.78	0.85	40.8
Approach			1597	5.3	1597	5.3	0.762	30.3	LOS C	40.3	314.6	0.81	0.77	0.81	38.9
West: Nicholas Rd (W)															
7	L2	All MCs	11	3.3	11	3.3	0.029	25.2	LOS C	0.4	2.9	0.59	0.63	0.59	13.0
Approach			11	3.3	11	3.3	0.029	25.2	LOS C	0.4	2.9	0.59	0.63	0.59	13.0
All Vehicles			4678	5.1	4678	5.1	0.855	26.7	LOS C	52.3	408.0	0.78	0.74	0.79	33.2

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
East: Nicholas Rd (E)											
P1	Full	53	18.6	LOS B	0.1	0.1	0.52	0.52	35.2	20.0	0.57
North: Lenore Rd (N)											
P21	Stage 1	53	31.0	LOS D	0.1	0.1	0.67	0.67	47.6	20.0	0.42
P22	Stage 2	53	64.3	LOS F	0.2	0.2	0.96	0.96	80.9	20.0	0.25
All Pedestrians		158	37.9	LOS D	0.2	0.2	0.71	0.71	54.6	20.0	0.37

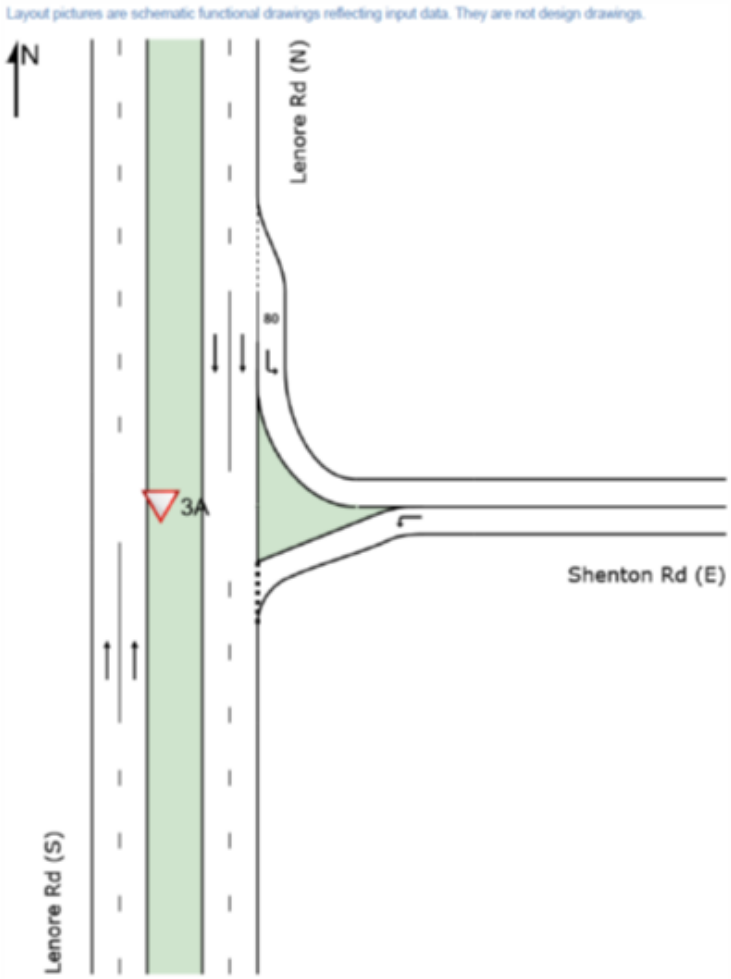


Figure C3. Lenore Rd / Shenton Rd LILO intersection layout analysed in SIDRA

Table C3a. SIDRA results – Lenore Rd / Shenton Rd LILO intersection – 2051 weekday 8-9AM peak

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h]	HV [ ] %	Arrival Flows [Total veh/h]	HV [ ] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh]	Dist [ ] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Lenore Rd (S)															
11	T1	All MCs	1482	5.5	1482	5.5	0.399	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	69.7
Approach			1482	5.5	1482	5.5	0.399	0.1	NA	0.0	0.0	0.00	0.00	0.00	69.7
East: Shenton Rd (E)															
1	L2	All MCs	148	3.0	148	3.0	0.701	43.4	LOS E	3.9	29.8	0.94	1.21	1.79	33.8
Approach			148	3.0	148	3.0	0.701	43.4	LOS E	3.9	29.8	0.94	1.21	1.79	33.8
North: Lenore Rd (N)															
4	L2	All MCs	11	3.0	11	3.0	0.006	6.7	LOS A	0.0	0.0	0.00	0.57	0.00	55.5
5	T1	All MCs	2616	5.5	2616	5.5	0.704	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	68.9
Approach			2626	5.5	2626	5.5	0.704	0.2	NA	0.0	0.0	0.00	0.00	0.00	68.8
All Vehicles			4257	5.4	4257	5.4	0.704	1.7	NA	3.9	29.8	0.03	0.04	0.06	65.3

Table C3b. SIDRA results – Lenore Rd / Shenton Rd LILO intersection – 2051 weekday 3-4PM peak

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h]	HV [ ] %	Arrival Flows [Total veh/h]	HV [ ] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh]	Dist [ ] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Lenore Rd (S)															
11	T1	All MCs	2783	5.5	2783	5.5	0.749	0.5	LOS A	3.2	25.3	0.00	0.00	0.00	68.6
Approach			2783	5.5	2783	5.5	0.749	0.5	NA	3.2	25.3	0.00	0.00	0.00	68.6
East: Shenton Rd (E)															
1	L2	All MCs	64	3.0	64	3.0	0.134	12.5	LOS B	0.5	3.8	0.66	0.85	0.66	48.9
Approach			64	3.0	64	3.0	0.134	12.5	LOS B	0.5	3.8	0.66	0.85	0.66	48.9
North: Lenore Rd (N)															
4	L2	All MCs	11	3.0	11	3.0	0.006	6.7	LOS A	0.0	0.0	0.00	0.57	0.00	55.5
5	T1	All MCs	1728	5.5	1728	5.5	0.465	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	69.6
Approach			1739	5.5	1739	5.5	0.465	0.1	NA	0.0	0.0	0.00	0.00	0.00	69.5
All Vehicles			4586	5.5	4586	5.5	0.749	0.5	NA	3.2	25.3	0.01	0.01	0.01	68.3

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.

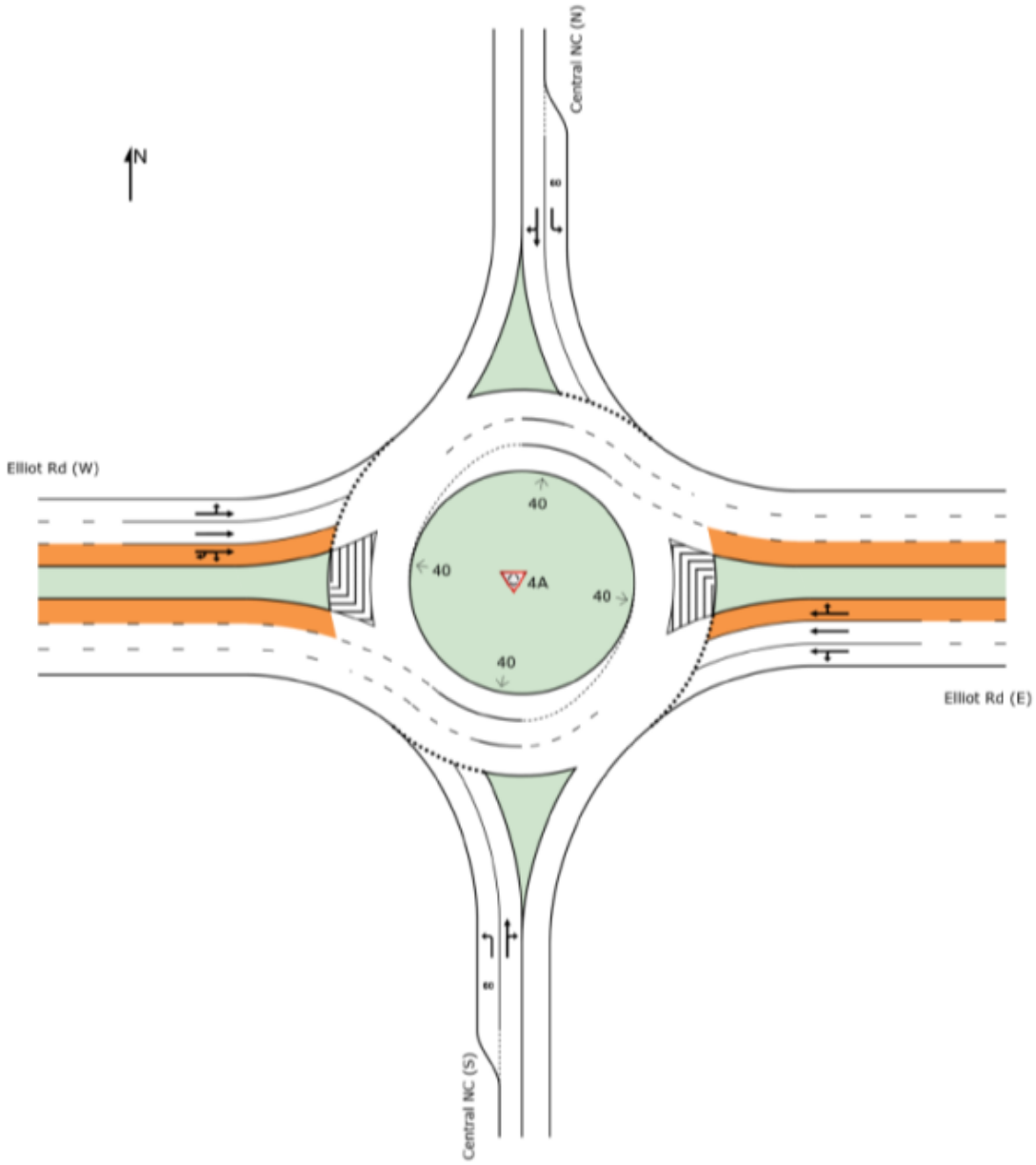


Figure C4. Elliot Rd / central neighbourhood connector roundabout layout analysed in SIDRA

Table C4a. SIDRA results – Elliot Rd / central neighbourhood connector roundabout – 2051 weekday 8-9AM peak

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h]	HV %	Arrival Flows [Total veh/h]	HV %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh]	Dist m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Central NC (S)															
10	L2	All MCs	19	3.3	19	3.3	0.032	7.1	LOS A	0.1	0.7	0.50	0.69	0.50	52.5
11	T1	All MCs	16	3.3	16	3.3	0.094	5.9	LOS A	0.3	2.3	0.47	0.74	0.47	55.7
12	R2	All MCs	78	3.3	78	3.3	0.094	12.7	LOS B	0.3	2.3	0.47	0.74	0.47	51.9
Approach			113	3.3	113	3.3	0.094	10.8	LOS B	0.3	2.3	0.48	0.73	0.48	52.5
East: Elliot Rd (E)															
1	L2	All MCs	43	3.3	43	3.3	0.264	3.9	LOS A	1.7	13.2	0.33	0.35	0.33	56.6
2	T1	All MCs	819	13.2	819	13.2	0.264	3.7	LOS A	1.7	13.2	0.34	0.37	0.34	50.9
3	R2	All MCs	47	3.3	47	3.3	0.117	10.2	LOS B	0.6	6.4	0.36	0.49	0.36	54.4
Approach			909	12.2	909	12.2	0.264	4.1	LOS A	1.7	13.2	0.34	0.37	0.34	51.4
North: Central NC (N)															
4	L2	All MCs	187	3.3	187	3.3	0.170	5.4	LOS A	0.5	4.1	0.40	0.57	0.40	56.4
5	T1	All MCs	38	3.3	38	3.3	0.129	5.9	LOS A	0.4	3.0	0.41	0.68	0.41	56.7
6	R2	All MCs	81	3.3	81	3.3	0.129	12.6	LOS B	0.4	3.0	0.41	0.68	0.41	49.9
Approach			306	3.3	306	3.3	0.170	7.4	LOS A	0.5	4.1	0.40	0.61	0.40	54.6
West: Elliot Rd (W)															
7	L2	All MCs	1	3.3	1	3.3	0.136	2.6	LOS A	0.8	6.1	0.29	0.20	0.29	53.0
8	T1	All MCs	473	18.9	473	18.9	0.136	2.2	LOS A	0.8	6.1	0.31	0.24	0.31	51.4
9	R2	All MCs	20	3.3	20	3.3	0.095	8.0	LOS A	0.5	5.4	0.35	0.45	0.35	53.8
9u	U	All MCs	5	3.3	5	3.3	0.095	12.7	LOS B	0.5	5.4	0.35	0.45	0.35	50.8
Approach			499	18.1	499	18.1	0.136	2.5	LOS A	0.8	6.1	0.31	0.25	0.31	51.5
All Vehicles			1827	11.8	1827	11.8	0.264	4.6	LOS A	1.7	13.2	0.35	0.40	0.35	52.0

Table C4b. SIDRA results – Elliot Rd / central neighbourhood connector roundabout – 2051 weekday 3-4PM peak

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Central NC (S)															
10	L2	All MCs	24	3.3	24	3.3	0.036	6.6	LOS A	0.1	0.8	0.47	0.67	0.47	52.7
11	T1	All MCs	22	3.3	22	3.3	0.075	5.8	LOS A	0.2	1.8	0.45	0.70	0.45	56.4
12	R2	All MCs	54	3.3	54	3.3	0.075	12.6	LOS B	0.2	1.8	0.45	0.70	0.45	52.5
Approach			100	3.3	100	3.3	0.075	9.6	LOS A	0.2	1.8	0.46	0.70	0.46	53.4
East: Elliot Rd (E)															
1	L2	All MCs	79	3.3	79	3.3	0.248	3.9	LOS A	1.5	12.0	0.30	0.35	0.30	56.7
2	T1	All MCs	745	14.0	745	14.0	0.248	3.7	LOS A	1.5	12.0	0.32	0.37	0.32	51.0
3	R2	All MCs	97	3.3	97	3.3	0.148	10.1	LOS B	0.8	7.6	0.33	0.52	0.33	54.0
Approach			921	12.0	921	12.0	0.248	4.3	LOS A	1.5	12.0	0.32	0.38	0.32	51.8
North: Central NC (N)															
4	L2	All MCs	73	3.3	73	3.3	0.086	6.2	LOS A	0.3	2.1	0.50	0.64	0.50	56.0
5	T1	All MCs	34	3.3	34	3.3	0.076	6.0	LOS A	0.2	1.9	0.48	0.68	0.48	57.1
6	R2	All MCs	40	3.3	40	3.3	0.076	12.7	LOS B	0.2	1.9	0.48	0.68	0.48	50.2
Approach			146	3.3	146	3.3	0.086	7.9	LOS A	0.3	2.1	0.49	0.66	0.49	54.5
West: Elliot Rd (W)															
7	L2	All MCs	15	3.3	15	3.3	0.274	2.8	LOS A	1.7	13.3	0.35	0.23	0.35	52.6
8	T1	All MCs	863	12.8	863	12.8	0.274	2.2	LOS A	1.7	13.3	0.36	0.26	0.36	51.0
9	R2	All MCs	45	3.3	45	3.3	0.127	8.2	LOS A	0.6	6.7	0.38	0.51	0.38	52.5
9u	U	All MCs	13	3.3	13	3.3	0.127	12.9	LOS B	0.6	6.7	0.38	0.51	0.38	49.6
Approach			936	12.1	936	12.1	0.274	2.7	LOS A	1.7	13.3	0.37	0.28	0.37	51.0
All Vehicles			2103	11.0	2103	11.0	0.274	4.1	LOS A	1.7	13.3	0.36	0.37	0.36	51.7

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.

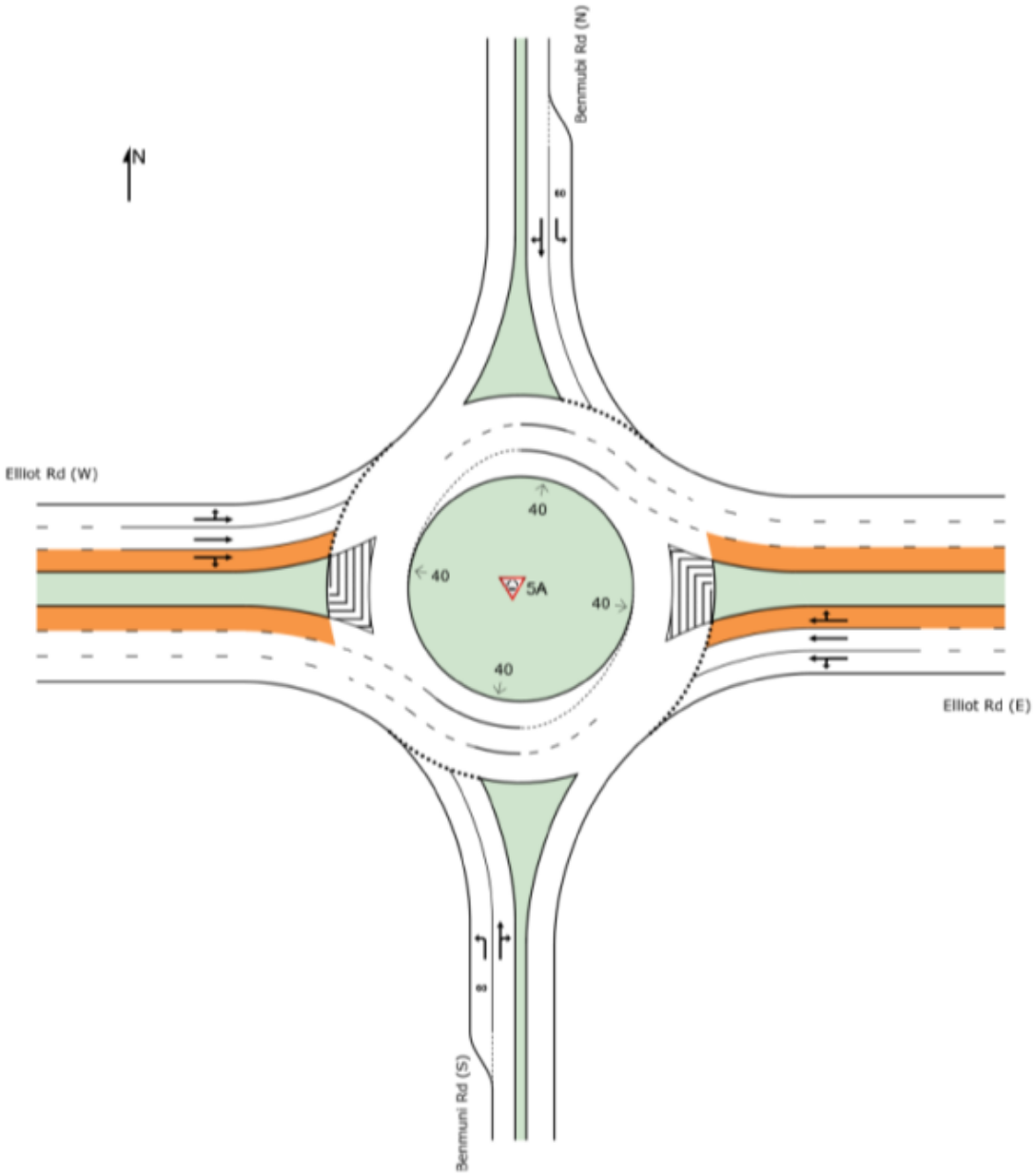


Figure C5. Elliot Rd / Benmuni Rd roundabout layout analysed in SIDRA

Table C5a. SIDRA results – Elliot Rd / Benmuni Rd roundabout – 2051 weekday 8-9AM peak

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Benmuni Rd (S)															
10	L2	All MCs	1	3.3	1	3.3	0.002	7.2	LOS A	0.0	0.0	0.54	0.59	0.54	52.4
11	T1	All MCs	35	3.3	35	3.3	0.086	6.2	LOS A	0.3	2.3	0.53	0.70	0.53	56.8
12	R2	All MCs	43	3.3	43	3.3	0.086	12.9	LOS B	0.3	2.3	0.53	0.70	0.53	52.8
Approach			79	3.3	79	3.3	0.086	9.9	LOS A	0.3	2.3	0.53	0.69	0.53	54.5
East: Elliot Rd (E)															
1	L2	All MCs	32	3.3	32	3.3	0.227	4.4	LOS A	1.5	11.7	0.48	0.40	0.48	55.7
2	T1	All MCs	644	15.3	644	15.3	0.241	4.4	LOS A	1.5	13.1	0.49	0.43	0.49	50.2
3	R2	All MCs	186	3.3	186	3.3	0.241	10.9	LOS B	1.5	13.1	0.52	0.59	0.52	52.7
Approach			862	12.3	862	12.3	0.241	5.8	LOS A	1.5	13.1	0.50	0.47	0.50	50.9
North: Benmubi Rd (N)															
4	L2	All MCs	160	3.3	160	3.3	0.195	6.2	LOS A	0.7	5.0	0.49	0.65	0.49	56.0
5	T1	All MCs	16	3.3	16	3.3	0.279	5.9	LOS A	1.0	7.9	0.50	0.75	0.50	55.0
6	R2	All MCs	268	3.3	268	3.3	0.279	12.7	LOS B	1.0	7.9	0.50	0.75	0.50	48.6
Approach			444	3.3	444	3.3	0.279	10.1	LOS B	1.0	7.9	0.50	0.71	0.50	51.2
West: Elliot Rd (W)															
7	L2	All MCs	131	3.3	131	3.3	0.270	3.1	LOS A	1.8	13.8	0.45	0.31	0.45	52.1
8	T1	All MCs	681	14.8	681	14.8	0.270	2.8	LOS A	1.8	13.8	0.47	0.33	0.47	50.6
9	R2	All MCs	5	3.3	5	3.3	0.094	8.6	LOS A	0.5	5.8	0.48	0.47	0.48	54.0
Approach			817	12.9	817	12.9	0.270	2.9	LOS A	1.8	13.8	0.47	0.33	0.47	50.9
All Vehicles			2202	10.4	2202	10.4	0.279	5.7	LOS A	1.8	13.8	0.49	0.47	0.49	51.1

Table C5b. SIDRA results – Elliot Rd / Benmuni Rd roundabout – 2051 weekday 3-4PM peak

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Benmuni Rd (S)															
10	L2	All MCs	1	3.3	1	3.3	0.002	7.3	LOS A	0.0	0.0	0.55	0.60	0.55	52.3
11	T1	All MCs	42	3.3	42	3.3	0.101	6.3	LOS A	0.4	2.8	0.56	0.70	0.56	56.8
12	R2	All MCs	47	3.3	47	3.3	0.101	13.0	LOS B	0.4	2.8	0.56	0.70	0.56	52.8
Approach			91	3.3	91	3.3	0.101	9.8	LOS A	0.4	2.8	0.56	0.70	0.56	54.6
East: Elliot Rd (E)															
1	L2	All MCs	41	3.3	41	3.3	0.256	4.4	LOS A	1.7	13.6	0.49	0.40	0.49	55.7
2	T1	All MCs	712	14.4	712	14.4	0.275	4.4	LOS A	1.7	15.1	0.50	0.44	0.50	50.1
3	R2	All MCs	226	3.3	226	3.3	0.275	10.9	LOS B	1.7	15.1	0.54	0.60	0.54	52.5
Approach			979	11.4	979	11.4	0.275	5.9	LOS A	1.7	15.1	0.51	0.47	0.51	50.9
North: Benmubi Rd (N)															
4	L2	All MCs	177	3.3	177	3.3	0.223	6.4	LOS A	0.8	6.1	0.54	0.66	0.54	55.8
5	T1	All MCs	47	3.3	47	3.3	0.284	6.1	LOS A	1.1	8.5	0.55	0.75	0.55	55.4
6	R2	All MCs	227	3.3	227	3.3	0.284	12.8	LOS B	1.1	8.5	0.55	0.75	0.55	48.9
Approach			452	3.3	452	3.3	0.284	9.6	LOS A	1.1	8.5	0.54	0.72	0.54	52.1
West: Elliot Rd (W)															
7	L2	All MCs	211	3.3	211	3.3	0.345	3.4	LOS A	2.4	19.0	0.53	0.36	0.53	51.8
8	T1	All MCs	776	13.6	776	13.6	0.345	3.1	LOS A	2.4	19.0	0.54	0.37	0.54	50.2
9	R2	All MCs	12	3.3	12	3.3	0.103	8.9	LOS A	0.5	6.2	0.52	0.51	0.52	53.3
Approach			998	11.3	998	11.3	0.345	3.2	LOS A	2.4	19.0	0.54	0.37	0.54	50.6
All Vehicles			2519	9.6	2519	9.6	0.345	5.6	LOS A	2.4	19.0	0.53	0.48	0.53	51.1

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Transportation Noise Assessment

East Wanneroo Precinct 3

Reference: 22107686-01

Prepared for:
Satterley

Reference: 22107686-01

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Date	Rev	Description	Author	Verified
14-Mar-25	0	Issued to Client	Terry George	Matt Moyle

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1. INTRODUCTION

It is proposed to subdivide land referred to as East Wanneroo Precinct 3 (refer *Figure 1-1*) with the proposed structure plan shown in *Figure* 1-2. This report considers the noise impacts from future road traffic. Road traffic noise is assessed against *State Planning Policy No. 5.4 Road and Rail Noise* (SPP 5.4). The current maps associated with SPP 5.4 do not show the area as being impacted by designated roads (refer *Figure 1-3*). However, for the purpose of this study, Lenore Road is given consideration on the basis of information provided by Transcore from the East Wanneroo District Structure Plan.

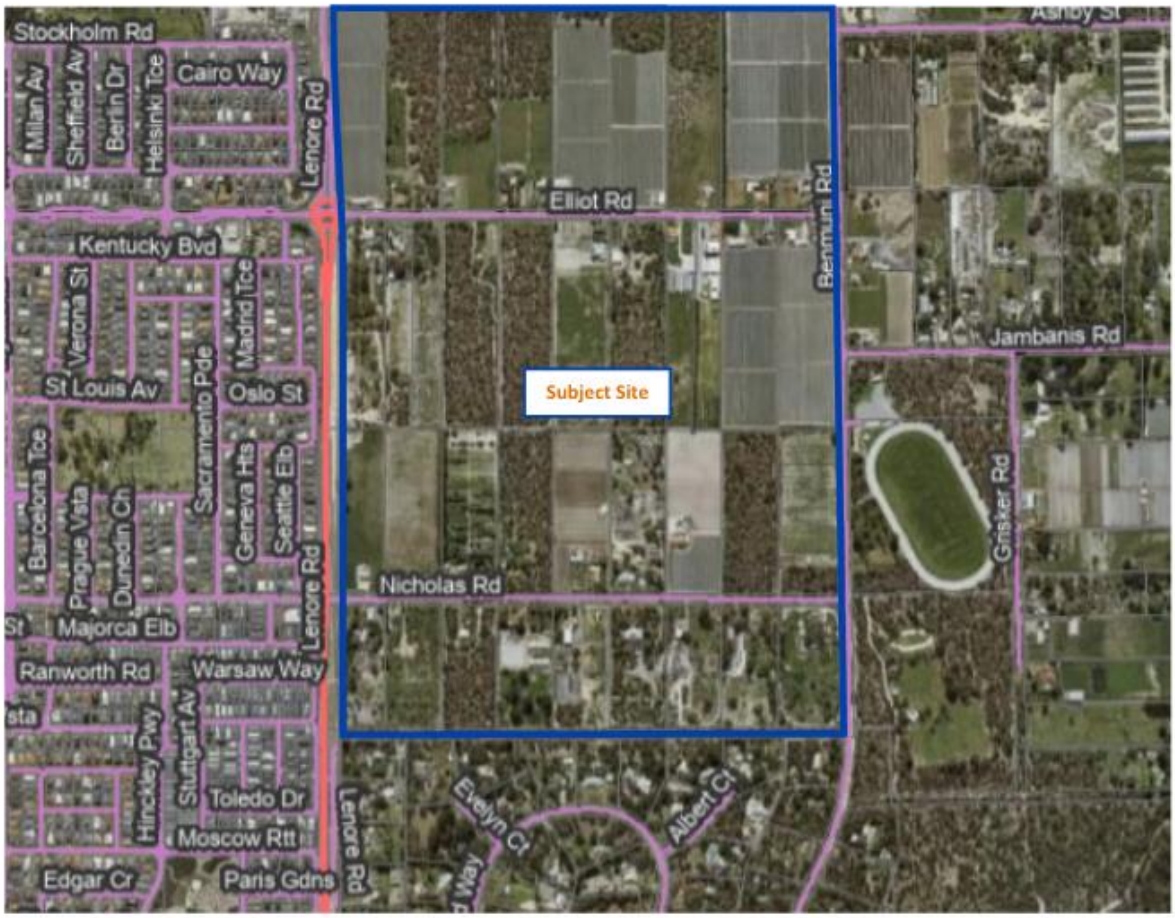


Figure 1-1: Structure Plan Location (Source: DPLH PlanWA)

Appendix B contains a description of some of the terminology used throughout this report.

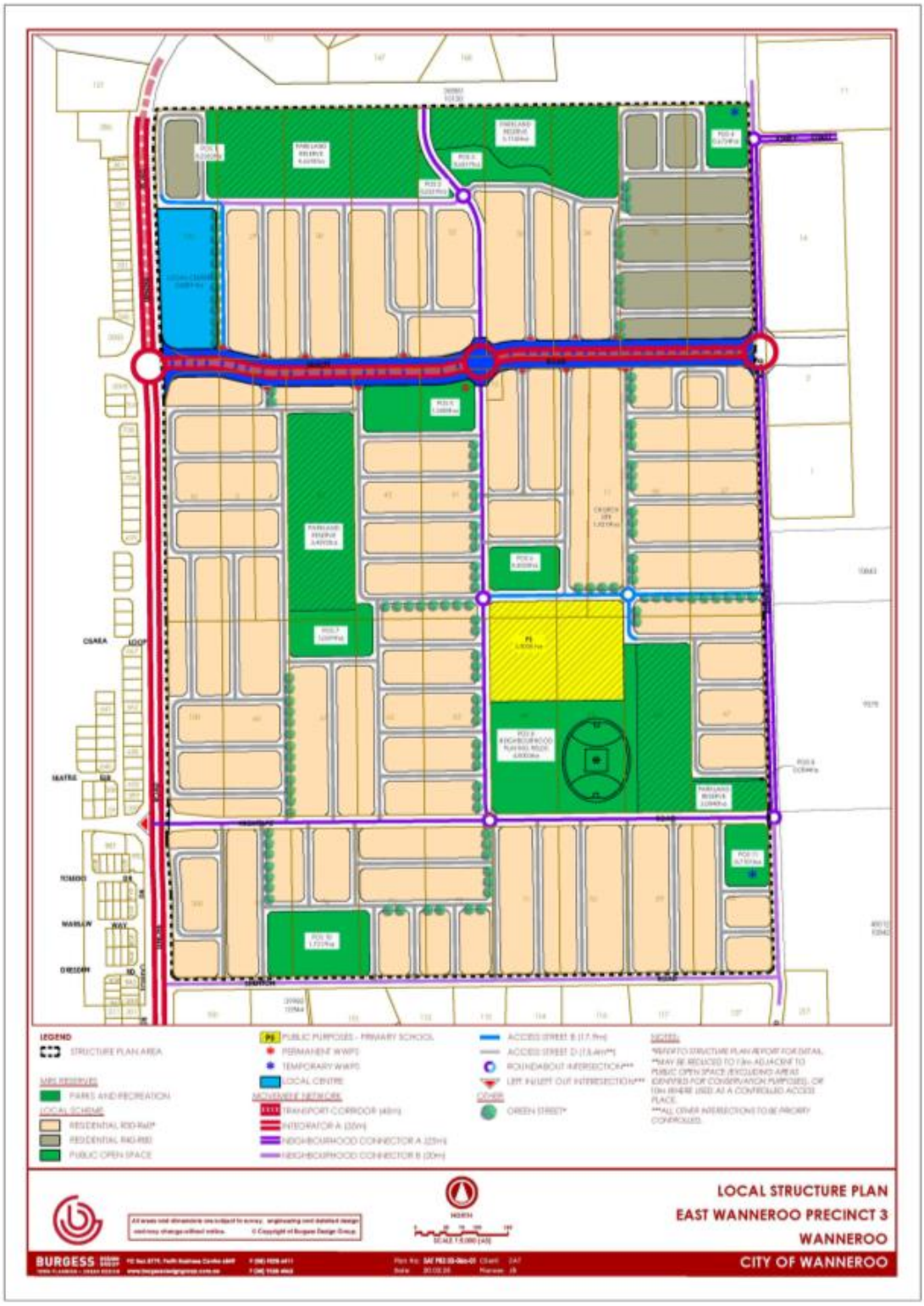


Figure 1-2: Local Structure Plan Layout

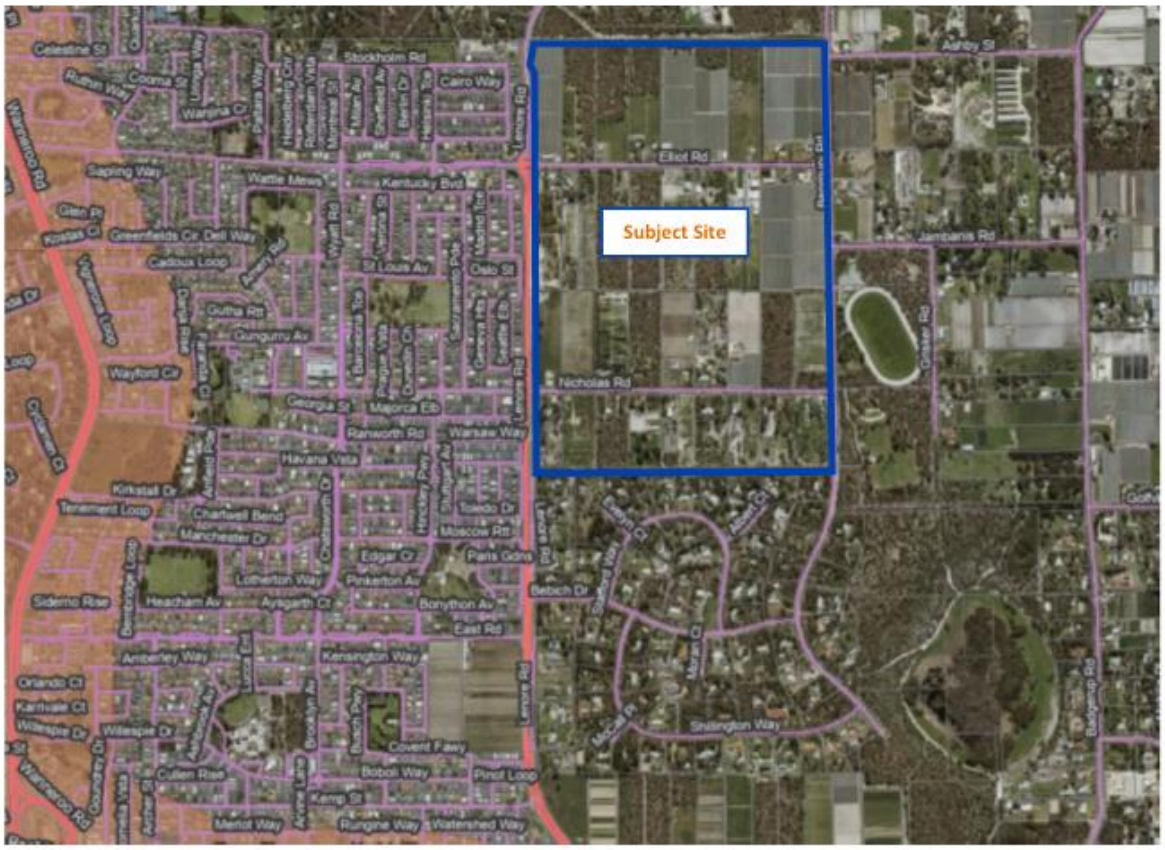


Figure 1-3: SPP 5.4 Designated Roads (Source: DPLH PlanWA)

2. CRITERIA

The criteria relevant to this project is provided in *State Planning Policy No. 5.4 Road and Rail Noise* (hereafter referred to as SPP 5.4) produced by the Western Australian Planning Commission (WAPC). SPP 5.4 is supported by the *Road and Rail Noise Guidelines* (the Guidelines) and the Department of Planning, Lands and Heritage mapping. The objectives of SPP 5.4 are to:

- Protect the community from unreasonable levels of transport noise;
- Protect strategic and other significant freight transport corridors from incompatible urban encroachment;
- Ensure transport infrastructure and land-use can mutually exist within urban corridors;
- Ensure that noise impacts are addressed as early as possible in the planning process; and
- Encourage best practice noise mitigation design and construction standards.

Table 2-1 sets out noise targets that are to be achieved by proposals under which SPP 5.4 applies. Where the targets are exceeded, an assessment is required to determine the likely level of transport noise and management/mitigation required.

Table 2-1: Noise Targets for Noise Sensitive Land-Use

Scenario	Outdoor Noise Target		Indoor Noise Target	
Noise-sensitive land-use and/or development	55 dB $L_{Aeq(Day)}$	50 dB $L_{Aeq(Night)}$	40 dB $L_{Aeq(Day)}$ (Living and Work Areas)	35 dB $L_{Aeq(Night)}$ (Bedrooms)

Notes:

- Day period is from 6am to 10pm and night period from 10pm to 6am.
- The outdoor noise target is to be measured at 1-metre from the most exposed, habitable[1] facade of a noise sensitive building.
- For all noise-sensitive land-use and/or development, indoor noise targets for other room usages may be reasonably drawn from Table 1 of Australian Standard/New Zealand Standard AS/NZS 2107:2016 *Acoustics – Recommended Design Sound Levels and Reverberation Times for Building Interiors* (as amended) for each relevant time period.
- Outdoor targets are to be met at all outdoor areas as far as is reasonable and practicable to do so using the various noise mitigation measures outlined in the Guidelines.

The application of SPP 5.4 is to consider anticipated traffic volumes for the next 20 years from when the noise assessment has been undertaken.

[1] *A habitable room is defined in State Planning Policy 3.1 as a room used for normal domestic activities that includes a bedroom, living room, lounge room, music room, sitting room, television room, kitchen, dining room, sewing room, study, playroom, sunroom, gymnasium, fully enclosed swimming pool or patio.*

3. METHODOLOGY

Noise modelling has been undertaken in accordance with the requirements of SPP 5.4 and associated Guidelines. The computer program *SoundPLAN 8.2* was utilised incorporating the *Calculation of Road Traffic Noise* (CoRTN) algorithms, modified to reflect Australian conditions. The modifications included the following:

- Vehicles were separated into heavy (Austroads Class 3 upwards) and non-heavy (Austroads Class 1 and 2) with non-heavy vehicles having a source height of 0.5 metres above road level and heavy vehicles having two source heights at 1.5 metres and 3.6 metres above road level;
- A -0.8 dB correction has been applied to the lower level heavy vehicle noise source and -8.0 dB to the higher level noise source based on the *Transportation Noise Reference Book*; Paul Nelson (1987), so as to provide consistent results with the CoRTN algorithms;
- Adjustment of -1.7 dB has been applied to the predicted levels for the 'at façade' case, based on the findings of *An Evaluation of the U.K. DoE Traffic Noise Prediction*; Australian Road Research Board, Report 122 ARRB – NAASRA Planning Group (March 1983).

Predictions are made at heights of 1.4 metres above ground floor level and at 1.0-metre from an assumed building façade, resulting in a + 2.5 dB correction due to reflected noise.

Note that no noise monitoring has been undertaken at this stage, although this would be undertaken prior to subdivision stage.

Various input data are included in the modelling and these are discussed in *Section 3.1* to *Section 3.5*.

3.1. Ground Topography

An old (2010) road design for Lenore Road was incorporated into the noise model along with using spot heights from Google outside of Lenore Road. At subdivision, it is expected that finished lot levels and layouts will be available and used for noise modelling.

Indicative building outlines have been included as these can provide barrier attenuation when located between a source and a receiver, in much the same way as a hill or wall. All buildings are assumed to be single storey with heights of 3.5 metres. Note the homestead at #176 Elliot Road is expected to remain and has been included.

3.2. Road Surface

The corrections applied for different road surface finishes are provided in *Table 3-1*.

Table 3-1: Noise Relationship Between Different Road Surfaces

Chip Seal				Asphalt			
14mm	10mm	5mm	Slurry	Dense Graded	Novachip	Stone Mastic	Open Graded
+3.5 dB	+2.5 dB	+1.5 dB	+1.0 dB	0.0 dB	-0.2 dB	-1.5 dB	-2.5 dB

The existing road surface is dense graded asphalt and assumed to remain unchanged into the future.

3.3. Vehicle Speed

The existing posted speed is 70 km/hr and assumed to remain unchanged into the future.

3.4. Traffic Volumes

Forecast (2051) traffic volumes were provided by Transcore taken from the East Wanneroo District Structure Plan and shown in *Figure 3-1*. From *Figure 3-1*, the following volumes were used in the noise model:

- Lenore Road Future Traffic Volumes:
  - South of Nicholas Road 21,600 vehicles per day each direction with 6% heavy vehicles;
  - North of Nicholas Road 19,750 vehicles per day each direction with 6% heavy vehicles; and
  - North of Elliot Road 22,950 vehicles per day each direction with 6% heavy vehicles.

Note there is an existing MRWA Traffic Count (2020/21) that shows heavy vehicle percentage of 10.8% for Lenore Road, just north of Ocean Reef Road (23,085 vehicles per day in both directions). It is expected that the increased traffic volumes in the future will be predominantly light vehicles (cars) and therefore 6% was used.

Under SPP 5.4, an assessable road is either one identified on PlanWA maps or one that carries at least 25,000 vehicles per day, with only Lenore Road meeting this criteria.

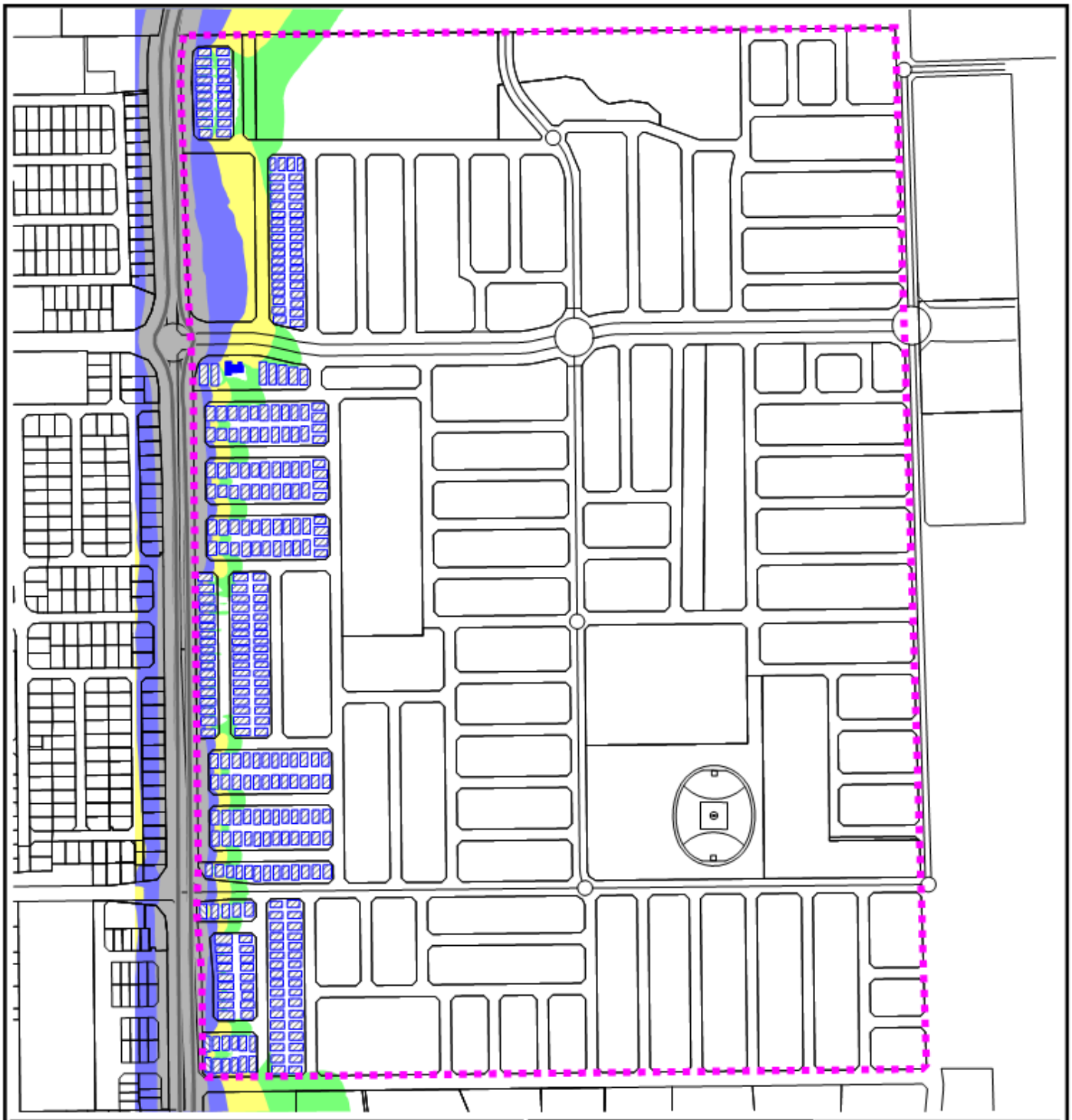
Figure 3-1: Forecast Traffic Volumes

3.5. Ground Absorption

The ground absorption has been assumed to be 0.0 (0%) for the roads, 0.5 (50%) outside of the roads and 1.0 (100%) for public open spaces, noting that 0.0 represents hard reflective surfaces such as water and 1.0 represents absorptive surfaces such as grass.

4. RESULTS

The results of the noise modelling are provided as a noise contour plot in *Figure 4-1*.



Local Structure Plan -
East Wanneroo Precinct 3
Future $L_{Aeq(Day)}$ Noise Level Contours

Ground Floor Level

SoundPLAN v8.2
CoRTN Algorithms

14 March 2025

Signs and symbols
- Lenore Road
- Building
- Existing Homestead
- Indicative 2.4m High Wall
- Precinct 3 Boundary

N

Noise levels $L_{Aeq,Day}$ dB

<= 55	
<= 56	Exposure A
<= 57	
<= 58	
<= 59	Exposure B
<= 60	
<= 61	
<= 62	
<= 63	Exposure C
<= 64	
<= 65	
<= 66	
> 66	Exposure D

SPP 5.4 (May 2019)

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Length Scale 1:7500
0 45 90 180 270 360 m

Figure 4-1

5. ASSESSMENT

The objectives of SPP 5.4 are to achieve:

- Indoor noise levels specified in *Table 2-1* in noise-sensitive areas (e.g. bedrooms and living rooms of houses); and
- A reasonable degree of acoustic amenity for outdoor living areas on each residential lot.

Where the outdoor noise targets of *Table 2-1* are achieved, no further noise controls are necessary.

With reference to the predicted noise levels in *Section 4*, it is evident the outdoor noise target will be exceeded at some lots.

Given the early stages of the Structure Plan, the noise mitigation is indicative only and would be further refined in detailed design. Outlined below are recommendations for road traffic noise to comply with SPP 5.4:

- Where lots are separated from Lenore Road by a local road and will face Lenore Road (e.g. lots north of the Local Centre), Quiet House Packages as per the Policy Guidelines (refer *Appendix A*) can be adopted. The reason this can be appropriate is the outdoor living areas (OLAs) to these dwellings will naturally be located on the side opposite the road corridor. Noise walls can also be considered in this scenario to reduce the Quiet House Package. For instance, where lots are within Exposure C, a noise wall may reduce this to Exposure B or A, depending on height.
- Where dwellings will be side on to the corridor and separated by a local road, Quiet House Packages will again be required. In this case, noise walls can also be provided to reduce the noise levels and also provide more freedom to the location of the OLA. Where noise walls are not provided as part of subdivision, either one would need to be provided by the lot owner on their lot boundary or their OLA is to be located on the east side of the dwelling, so that it is shielded from Lenore Road.
- Where dwellings immediately adjoin the corridor, a minimum 2.4-metre high noise wall is to be provided along with Quiet House Packages.

All of the above will be considered as the design progresses and prior to subdivision design, along with noise monitoring to calibrate the noise model and predicting to possible double storey dwellings. However, the analysis shows that compliance can be achieved with SPP 5.4. A preliminary noise mitigation plan is provided on *Figure 5-1*.

Local Structure Plan -
East Wanneroo Precinct 3
Indicative Noise Mitigation

Ground Floor Level

SoundPLAN v8.2
CoRTN Algorithms

14 March 2025

Signs and symbols

- Lenore Road
- Indicative 2.4m High Wall
- Package A
- Package B
- Package C
- Precinct 3 Boundary

N

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Length Scale 1:7500

0 45 90 180 270 360 m

Figure 5-1

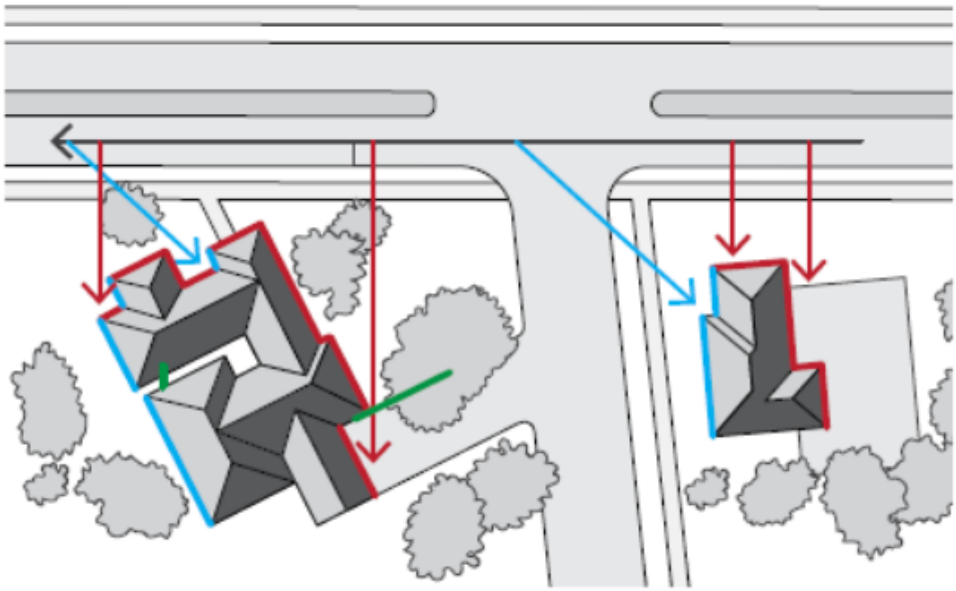
Appendix A – Quiet House Packages

The packages and information provided on the following pages are taken from *Road and Rail Noise Guidelines* (September 2019).

Where outdoor and indoor noise levels received by a noise-sensitive land-use and/or development exceed the policy's noise target, implementation of quiet house requirements is an acceptable solution.

With regards to the packages, the following definitions are provided:

- **Facing** the transport corridor (red): Any part of a building façade is 'facing' the transport corridor if any straight line drawn perpendicular (at a 90 degree angle) to its nearest road lane or railway line intersects that part of the façade without obstruction (ignoring any fence).
- **Side-on** to transport corridor (blue): Any part of a building façade that is not 'facing' is 'side-on' to the transport corridor if any straight line, at any angle, can be drawn from it to intersect the nearest road lane or railway line without obstruction (ignoring any fence).
- **Opposite** to transport corridor (green): Neither 'side on' nor 'facing', as defined above.



Quiet House Package A

56-58 dB $L_{Aeq(Day)}$ & 51-53 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Glazing	Facing	• Up to 40% floor area ($R_w + C_{tr} \geq 28$): – Sliding or double hung with minimum 10mm single or 6mm-12mm-10mm double insulated glazing; – Sealed awning or casement windows with minimum 6mm glass. • Up to 60% floor area ($R_w + C_{tr} \geq 31$): – Sealed awning or casement windows with minimum 6mm glass.	• Up to 40% floor area ($R_w + C_{tr} \geq 25$): – Sliding or double hung with minimum 6mm single or 6mm-12mm-6mm double insulated glazing; • Up to 60% floor area ($R_w + C_{tr} \geq 28$); • Up to 80% floor area ($R_w + C_{tr} \geq 31$).
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	No specific requirements	
External Doors	Facing	• Fully glazed hinged door with certified $R_w + C_{tr} \geq 28$ rated door and frame including seals and 6mm glass.	• Doors to achieve $R_w + C_{tr} \geq 25$: – 35mm Solid timber core hinged door and frame system certified to R_w 28 including seals; – Glazed sliding door with 10mm glass and weather seals.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less.	
	Opposite	No specific requirements	
External Walls	All	• $R_w + C_{tr} \geq 45$: – Two leaves of 90mm thick clay brick masonry with minimum 20mm cavity; or – Single leaf of 150mm brick masonry with 13mm cement render on each face; or – One row of 92mm studs at 600mm centres with: ▪ Resilient steel channels fixed to the outside of the studs; and ▪ 9.5mm hardboard or fibre cement sheeting or 11mm fibre cement weatherboards fixed to the outside; ▪ 75mm thick mineral wool insulation with a density of at least 11kg/m^3; and ▪ 2 x 16mm fire-rated plasterboard to inside.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 35$: • Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard.	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2 metres height above ground level.	

Quiet House Package B

59-62 dB $L_{Aeq(Day)}$ & 54-57 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Glazing	Facing	• Up to 40% floor area ($R_w + C_{tr} \geq 31$): – Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 60% floor area ($R_w + C_{tr} \geq 34$): – Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.	• Up to 40% floor area ($R_w + C_{tr} \geq 28$): – Sliding or double hung with 6mm-12mm-10mm double insulated glazing; – Sealed awning or casement windows with minimum 6mm glass. • Up to 60% floor area ($R_w + C_{tr} \geq 31$); • Up to 80% floor area ($R_w + C_{tr} \geq 34$).
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	• Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass.	• Doors to achieve $R_w + C_{tr} \geq 28$: – 40mm Solid timber core hinged door and frame system certified to R_w 32 including seals; – Fully glazed hinged door with certified $R_w + C_{tr} \geq 28$ rated door and frame including seals and 6mm glass.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	• $R_w + C_{tr} \geq 50$: – Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester (24kg/m³). Resilient ties used where required to connect leaves. – Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m³). – Single leaf of 220mm brick masonry with 13mm cement render on each face. – 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. – Single leaf of 90mm clay brick masonry with: ▪ A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; ▪ A cavity of 25mm between leaves; ▪ 50mm glasswool or polyester insulation (11kg/m³) between studs; and ▪ One layer of 10mm plasterboard fixed to the inside face.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 35$: – Concrete or terracotta tile or metal sheet roof with sarking and at least 10mm plasterboard ceiling with R3.0+ fibrous insulation.	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level.	

Quiet House Package C

63-66 dB $L_{Aeq(Day)}$ & 58-61 dB $L_{Aeq(Night)}$

Element	Orientation	Room	
		Bedroom	Indoor Living and Work Areas
External Glazing	Facing	• Up to 20% floor area ($R_w + C_{tr} \geq 31$): – Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 40% floor area ($R_w + C_{tr} \geq 34$): – Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.	• Up to 40% floor area ($R_w + C_{tr} \geq 31$): – Fixed sash, awning or casement with minimum 6mm glass or 6mm-12mm-6mm double insulated glazing. • Up to 60% floor area ($R_w + C_{tr} \geq 34$): – Fixed sash, awning or casement with minimum 10mm glass or 6mm-12mm-10mm double insulated glazing.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Doors	Facing	• Not recommended.	• Doors to achieve $R_w + C_{tr} \geq 30$: – Fully glazed hinged door with certified $R_w + C_{tr} \geq 31$ rated door and frame including seals and 10mm glass; – 40mm Solid timber core side hinged door, frame and seal system certified to R_w 32 including seals. Any glass inserts to be minimum 6mm.
	Side On	As above, except $R_w + C_{tr}$ values may be 3 dB less or max % area increased by 20%.	
	Opposite	As above, except $R_w + C_{tr}$ values may be 6 dB less or max % area increased by 20%.	
External Walls	All	• $R_w + C_{tr} \geq 50$: – Two leaves of 90mm thick clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m³). Resilient ties used where required to connect leaves. – Two leaves of 110mm clay brick masonry with minimum 50mm cavity between leaves and 25mm glasswool or polyester insulation (24kg/m³). – Single leaf of 220mm brick masonry with 13mm cement render on each face. – 150mm thick unlined concrete panel or 200mm thick concrete panel with one layer of 13mm plasterboard or 13mm cement render on each face. – Single leaf of 90mm clay brick masonry with: ▪ A row of 70mm x 35mm timber studs or 64mm steel studs at 600mm centres; ▪ A cavity of 25mm between leaves; ▪ 50mm glasswool or polyester insulation (11kg/m³) between studs; and ▪ One layer of 10mm plasterboard fixed to the inside face.	
Roofs and Ceilings	All	• $R_w + C_{tr} \geq 40$: – Concrete or terracotta tile roof with sarking, or metal sheet roof with foil backed R2.0+ fibrous insulation between steel sheeting and roof battens; – R3.0+ insulation batts above ceiling; – 2 x 10mm plasterboard ceiling or 1 x 13mm sound-rated plasterboard affixed using steel furring channel to ceiling rafters.	
Outdoor Living Areas		At least one outdoor living area located on the opposite side of the building from the transport corridor or at least one ground level outdoor living area screened using a solid continuous fence or other structure of minimum 2.4 metres height above ground level.	

Mechanical Ventilation requirements

In implementing the acceptable treatment packages, fresh air requirements of the National Construction Code must be satisfied on the basis of windows closed. Whilst not the only solution, the most common is mechanical ventilation / air-conditioning is installed with the following considerations:

- Acoustically rated openings and ductwork to provide a minimum sound reduction performance of R_w 40 dB into sensitive spaces;
- Evaporative systems require attenuated ceiling air vents to allow closed windows;
- Refrigerant based systems need to be designed to achieve National Construction Code fresh air ventilation requirements;
- Openings such as eaves, vents and air inlets must be acoustically treated, closed or relocated to building sides facing away from the corridor where practicable.

Notification

Notifications on title advise prospective purchasers of the potential for noise impacts from major transport corridors and help with managing expectations.

The Notification is to state as follows:

This lot is in the vicinity of a transport corridor and is affected, or may in the future be affected, by road and rail transport noise. Road and rail transport noise levels may rise or fall over time depending on the type and volume of traffic.

Appendix B – Terminology

The following is an explanation of the terminology used throughout this report:

- **Decibel (dB)**

The decibel is the unit that describes the sound pressure levels of a noise source. It is a logarithmic scale referenced to the threshold of hearing.

- **A-Weighting**

An A-weighted noise level has been filtered in such a way as to represent the way in which the human ear perceives sound. This weighting reflects the fact that the human ear is not as sensitive to lower frequencies as it is to higher frequencies. An A-weighted sound level is described as L_A, dB.

- **L_{eq}**

The L_{eq} level represents the average noise energy during a measurement period.

- **L_1**

The L_1 level represents the noise level exceeded for 1 percent of the measurement period and is considered to represent the average of the maximum noise levels measured.

- **L_{10}**

The L_{10} level represents the noise level exceeded for 10 percent of the measurement period and is considered to represent the "intrusive" noise level.

- **L_{90}**

The L_{90} level represents the noise level exceeded for 90 percent of the measurement period and is considered to represent the "background" noise level.

- **$L_{Aeq(Day)}$**

The $L_{Aeq(Day)}$ level is the logarithmic average of the L_{Aeq} levels from 6.00am to 10.00pm.

- **$L_{Aeq(Night)}$**

The $L_{Aeq(Night)}$ level is the logarithmic average of the L_{Aeq} levels from 10.00pm to 6.00am.

- **$L_{A10,18hour}$**

The $L_{A10,18hour}$ level is the arithmetic average of the hourly L_{A10} levels between 6.00am and midnight.

- **$L_{Aeq,24hour}$**

The $L_{Aeq,24hour}$ level is the logarithmic average of the L_{Aeq} levels from over an entire day.

- **Noise-sensitive land use and/or development**

Land-uses or development occupied or designed for occupation or use for residential purposes (including dwellings, residential buildings or short-stay accommodation), caravan park, camping ground, educational establishment, child care premises, hospital, nursing home, corrective institution or place of worship.

- **R_w**

This is the weighted sound reduction index. It is a single number rating determined by moving a grading curve in integral steps against the laboratory measured transmission loss until the sum of the deficiencies at each one-third-octave band, between 100 Hz and 3.15 kHz, does not exceed 32 dB. The higher the R_w value, the better the acoustic performance.

- **C_{tr}**

This is a spectrum adaptation term for airborne noise and provides a correction to the R_w value to suit source sounds with significant low frequency content such as road traffic or home theatre systems. A wall that provides a relatively high level of low frequency attenuation (i.e. masonry) may have a value in the order of – 4 dB, whilst a wall with relatively poor attenuation at low frequencies (i.e. stud wall) may have a value in the order of -12 dB.

- **About the Term 'Reasonable'**

An assessment of reasonableness should demonstrate that efforts have been made to resolve conflicts without comprising on the need to protect noise-sensitive land-use activities. For example, have reasonable efforts been made to design, relocate or vegetate a proposed noise barrier to address community concerns about the noise barrier height? Whether a noise mitigation measure is reasonable might include consideration of:

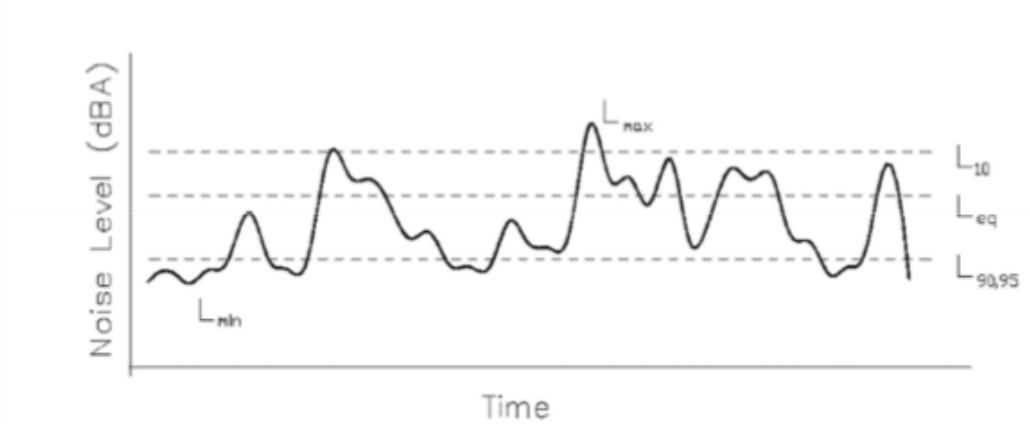
- The noise reduction benefit provided;
- The number of people protected;
- The relative cost vs benefit of mitigation;
- Road conditions (speed and road surface) significantly differ from noise forecast table assumptions;
- Existing and future noise levels, including changes in noise levels;
- Aesthetic amenity and visual impacts;
- Compatibility with other planning policies;
- Differences between metropolitan and regional situations and whether noise modelling requirements reflect the true nature of transport movements;
- Ability and cost for mobilisation and retrieval of noise monitoring equipment in regional areas;
- Differences between Greenfield and infill development;
- Differences between freight routes and public transport routes and urban corridors;
- The impact on the operational capacity of freight routes;
- The benefits arising from the proposed development;
- Existing or planned strategies to mitigate the noise at source.

- **About the Term 'Practicable'**

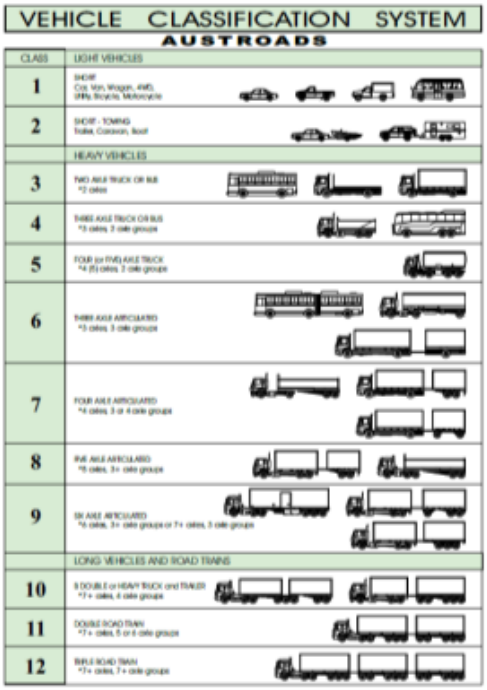
'Practicable' considerations for the purposes of the policy normally relate to the engineering aspects of the noise mitigation measures under evaluation. It is defined as "reasonably practicable having regard to, among other things, local conditions and circumstances (including costs) and to the current state of technical knowledge" (*Environmental Protection Act 1986*). These may include:

- Limitations of the different mitigation measures to reduce transport noise;
- Competing planning policies and strategies;
- Safety issues (such as impact on crash zones or restrictions on road vision);
- Topography and site constraints (such as space limitations);
- Engineering and drainage requirements;
- Access requirements (for driveways, pedestrian access and the like);
- Maintenance requirements;
- Bushfire resistance or BAL ratings;
- Suitability of the building for acoustic treatments.

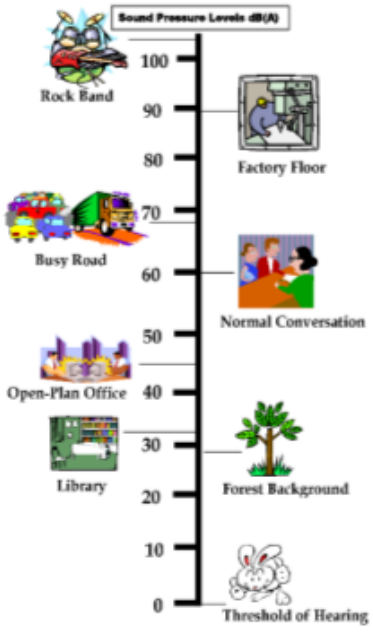
- **Chart of Noise Level Descriptors**



- **Austroads Vehicle Class**



- **Typical Noise Levels**



hyd2o HYDROLOGY

East Wanneroo Precinct 3

Local Water Management Strategy

April 2025

Client: Satterley

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Disclaimer

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Executive Summary

Hyd2o was commissioned by Satterley to prepare this Local Water Management Strategy (LWMS) in support of the proposed local structure plan for East Wanneroo Precinct 3 (herein referred to as the site).

The site is located approximately 20 km north of Perth City Centre within the City of Wanneroo. The site has an approximate area of 136 ha and is bound by rural residential areas to the north and south, Lenore Road and residential lots to the west, with market gardens, rural residential lots, pony clubs, and a racing circuit (Nanovich Park) to the east.

The local structure plan for the site was prepared by Burgess Design Group and will consist of residential lots, associated roads, school, local centre, public open space with stormwater management areas, and retained bushland. The site includes a total of 28 ha of POS/parkland reserve area comprising over 20% of the total site to retain existing areas of Marri/Jarrah and Banksia Woodland.

The site is characterised as rural with market gardens since the early 1970's. Topographically the site is undulating with elevations ranging from approximately 84 mAHD to 55 mAHD, with sandy permeable soils. Groundwater mapping based on local data indicates groundwater flow as to the south west with levels a minimum of 9m below natural surface in low lying areas of the site, ranging to in excess of 40m in elevated areas. The site is considered a Low Risk Classification for development based on Local Planning Policy 4.4 (City of Wanneroo, 2020).

The LWMS considers the overarching East Wanneroo District Structure Plan District Water Management Strategy (Urbaqua, 2021) and its requirements. It is important to note however that the site is different to most of the East Wanneroo District Structure Plan Area and is unconstrained hydrologically, particularly with regards to future groundwater rise considerations and arterial drainage planning and implementation needs to support its development. Given the depth to groundwater and permeable sandy soils in the area, all stormwater within the site can and will be locally managed and infiltrated within Precinct 3.

The LWMS has been prepared in accordance with the principles, objectives, and key criteria of Better Urban Water Management (Western Australian Planning Commission, 2008) and considered other key publications including City of Wanneroo guidelines in developing its approach.

Implementation of the strategy will be undertaken in accordance with Better Urban Water Management through the development and implementation of Urban Water Management Plans for individual stages of development within the site.

Local Water Management Strategy Summary

Strategy Elements	LWMS Method & Approach
Water Use Sustainability	
Water Efficiency	• Use of water efficient fixtures and fittings. • Use of native plantings in POS / stormwater management areas. • Maximise infiltration of stormwater at source. • Retention of Bushland and native vegetation POS areas.
Water Supply	• Water Corporation IWSS for lots with rainwater tanks optional. • POS Irrigation via Superficial Aquifer and existing licences. • No long-term irrigation of conservation areas/Public Open Space.
Wastewater	• Water Corporation reticulated sewerage.
Stormwater	
Ecological Protection/ Water Quality (15 mm Event)	• Implement both structural and non-structural controls. • Use of soakwells at lot scale to retain 15mm on site. • Local centre to retain all stormwater on site up to 1% AEP event. • Total storage volume of 3684 m³ and area of 1.23 ha required for biofiltration systems to treat and infiltrate 15mm events, representing approximately 0.9 % of total site area. • Local scale street scale measures to be detailed at UWMP stage in consultation the City of Wanneroo and project civil engineers.
Serviceability (20% Annual Exceedance Probability Event)	• Road drainage system designed so roads will be passable in the 20% AEP event. • The total area required for management of the 20% AEP event is approximately 1.86 ha or 1.4% of the total site area with a total detention storage volume of approximately 6909 m³.
Flood Protection (1% Annual Exceedance Probability Event)	• Provide flood paths for overland flows which exceed the capacity of piped drainage. • Establish minimum habitable floor levels at 0.3 m above the 1% AEP event flood level in local drainage network. • The total area within the site required for flood storage up to the 1% AEP event is approximately 2.53 ha or 1.9% of the total site area, with a total detention storage volume of approximately 22103 m³. • Establish minimum habitable floor levels at 0.5m above the 1% AEP event flood level of stormwater storage areas.
Groundwater	
Fill & Subsoil Drainage	• Natural surface in excess of 9m above existing groundwater. • No subsoil required and site unaffected by potential future groundwater rise in Urbaqua(2021). • Earthworks for the site will comprise a cut and fill operation. Some fill may be required to meet gradient requirements, level lots, and interface with existing site boundaries and infrastructure.
ASS & Contamination	• No known risk of Contamination and ASS.

1 Introduction

Hyd2o was commissioned by Satterley to prepare this Local Water Management Strategy (LWMS) in support of the proposed local structure plan for East Wanneroo Precinct 3 (herein referred to as the site).

The site is located approximately 20 km north of Perth City Centre within the City of Wanneroo (Figure 1). The site has an approximate area of 136 ha and is bound by rural residential areas to the north and south, Lenore Road and residential lots to the west, with market gardens, rural residential lots, pony clubs, and a racing circuit (Nanovich Park) to the east.

The local structure plan for the site prepared by Burgess Design Group is included as Figure 2. The proposed development will consist of residential lots, associated roads, school, local centre, public open space with stormwater management areas, and retained bushland.

This LWMS details the outcomes of site specific analysis relating to groundwater and surface water investigations, and provides an assessment of the pre-development environment, development of water use sustainability initiatives, a stormwater management strategy, a groundwater management strategy and a plan for implementation. It provides a total water cycle management approach to development and has been prepared with consideration of the overarching East Wanneroo District Structure Plan District Water Management Strategy (Urbaqua, 2021) and its requirements.

This LWMS has been prepared in accordance with the principles, objectives, and key criteria of Better Urban Water Management (Western Australian Planning Commission, 2008) and considered other key publications including council guidelines in developing its approach. Implementation of the strategy will be undertaken in accordance with Better Urban Water Management through the development and implementation of Urban Water Management Plans for individual stages of development within the site.

A copy of the Better Urban Water Management (WAPC, 2008) LWMS Checklist for Developers is included as Appendix A to assist the Department of Water and Environmental Regulation (DWER) and City of Wanneroo (CoW) in review of this document.

1.1 Planning Background

The site is currently zoned 'Urban Deferred' and 'Rural' under the Metropolitan Region Scheme and zoned as 'Rural' under the City of Wanneroo District Planning Scheme No. 2.

The site is located within the East Wanneroo District Structure Plan Area for which a DWMS was previously prepared by Urbaqua (2021).

It is important to note that the site is different to many areas of the East Wanneroo District Structure Plan Area and is unconstrained hydrologically, particularly with regards to future groundwater rise considerations and arterial drainage planning and implementation needs to support development.

The urban water management planning process for the site is shown in Table 1.

This LWMS supports the proposed local structure plan for the site.

Table 1: Integrated Planning and Urban Water Management Process

Planning Phase	Planning Document	Urban Water Management Document and Status
District	District Structure Plan	East Wanneroo District Water Management Strategy (Urbaqua 2021)
Local	Local Structure Plan	East Wanneroo Precinct 3 Local Water Management Strategy **THIS DOCUMENT**
Subdivision	Subdivision Application	Urban Water Management Plan (for individual subdivision applications) **FUTURE PREPARATION**

1.2 Key Documents and Previous Studies

This LWMS uses the following key water management planning documents to define its principles, criteria, and objectives:

- East Wanneroo District Structure Plan District Water Management Strategy (Urbaqua, 2021)
- Stormwater Management Manual for WA (Department of Water and Environmental Regulation, 2022)
- Local Planning Policy 4.4: Urban Water Management (City of Wanneroo, 2020).
- Local Planning Policy 4.3: Public Open Space (City of Wanneroo, 2021).
- Stormwater Drainage Design Guidelines WD5 (City of Wanneroo, 2019)
- Decision Process for Stormwater Management in WA (Department of Water, 2017)
- Better Urban Water Management (WAPC, 2008)

2 Proposed Development

The structure plan for the site is shown in Figure 2. Consideration of the predevelopment environment of the site and existing constraints has guided the development of the plan.

The proposed development consists of residential lots, road reserves, public open spaces, parkland reserves, a local centre, primary school, and grouped dwellings. The proposed average lot size is approximately 400 m^2.

The site includes approximately 26 ha of POS and parkland reserve areas, well above typical 10% POS requirements to retain Bush Forever areas and Marri/Jarrah and Banskia Woodlands.

The site will create multiple use areas with POS for stormwater management at the existing natural low-lying areas of the site.

Details of the sizing of the stormwater management areas are presented in Section 6.

3 Pre-Development Environment

3.1 Site Conditions

A site conditions plan is included as Figure 3, showing an aerial view of the site and its surrounding area.

The existing site is characterised by rural properties with mainly horticultural use, and pockets of Marri/Jarrah and Banksia Woodland remnant vegetation. Horticultural use has been prevalent within the site since the 1970's.

Topography is characterised as undulating and ranges from approximately 84 mAHD near the southwestern corner to 55 mAHD in the upper-middle low lying area of the site.

Climate in the region is defined as Mediterranean, experiencing warm dry summers and cool wet winters. Mean annual rainfall for the site over the period 1964-2024 is 737 mm/yr (BoM station: Wanneroo 009105), with the majority rainfall occurring in the winter months from May to September.

Evaporation predominantly exceeds rainfall, except for the wettest months.

3.2 Geotechnical

Environmental geology mapping on the Perth Metropolitan Region Sheet 2034 II and part 2034 III and 2134 III (Gozzard, 1986) is shown in Figure 4.

The site is characterised as mainly:

- S7 – SAND – Pale and olive yellow, medium to coarse grained, sub angular to sub rounded quartz, trace of feldspar, moderated sorted, of residual origin.

with a very minor area (<0.1% of site area) of

- Cps - PEATY CLAY - dark grey and black soft variable organic content some quartz sand in places of lacustrine origin.

This S7 classification extends over a very wide area around the site also indicating relatively consistent soil conditions across the broader region.

S7 is sand derived from Tamala Limestone (Qts) and is classified as having good permeability and considerable depth to groundwater (Gozzard,1986).

Lithological logs from groundwater bores installed by Hyd2o show fine to medium grained sand across the three bores drilled at the site. Lithological logs are included as Appendix B.

Due to fragmented land ownership, additional geotechnical investigations will be undertaken at UWMP stage to inform detailed design.

3.3 Acid Sulphate Soils

Acid Sulphate Soil (ASS) mapping in the vicinity of the site is shown in Figure 4.

Almost the whole site is classified as no known risk of ASS, with only a very minor portion (~1100 m^2, <0.1% of site area) having a high to moderate risk in the northeastern corner of the site.

3.4 Contaminated Sites

A search of the Department of Water and Environmental Regulation's Contaminated Sites database indicates no known contaminated areas within the site or within a 2 km radius of its boundary.

3.5 Wetlands

An environmental plan is included as Figure 5. According to Department of Environment and Conservation's (DEC's) Geomorphic Wetlands of the Swan Coastal Plain dataset, there are no mapped wetlands located within the site.

The nearest conservation category wetland is located approximately 600m south west of the site, with Lake Jandabup located 950m to the north east.

3.6 Surface Water

There are no defined waterways, watercourses, or drains within the site, and no external catchments drain into the site. All rainfall and surface runoff currently infiltrates through the sandy subsurface profile. Even in major events any diffuse overland flow which may occur in localised areas would be infiltrated on site.

The Urbaqua (2021) East Wanneroo DWMS Extracts provides stormwater management details and high level arterial drainage planning for the East Wanneroo area.

Extracts from the document relevant to the site are contained as Appendix C and summarised in Figure 6. A total storage volume of 22,800 m^3 for Precinct 3 is estimated in Urbaqua (2021) post development.

It is not clear however in the DWMS why large scale transfer of flow (3-4 m^3/s) across Precinct boundaries in this area is required, particularly given permeable sandy soils are present, a high clearance to groundwater exists, and considering this does not represent the predevelopment condition or existing hydrological behaviour. Urbaqua (2021) precinct transfer locations of flows are shown in Figure 6 and Appendix C.

Various agencies (DWER, DPLH, Urbaqua) have been unable to provide any clarification on this matter during the development of this DWMS. The DWMS therefore considers that given sandy soils and high clearance to groundwater that stormwater can be managed and infiltrated onsite up to the 1% AEP event, and operate fully independently of other precincts and without any cross boundary transfers in or out of the precinct being required.

This approach is consistent with best practice for stormwater management.

3.7 Groundwater

3.7.1 Groundwater Levels

In mid 2023, DWER revised the groundwater information reported on their Perth Groundwater Map (online) to report the Gnangara Jandakot maximum and minimum water table contours for 2019. Advice from DWER indicates these revised contours account for the declines and rises in water tables in recent decades and the impacts of current climate trends. These contours are understood to be based on the contouring of the actual recorded maximum and minimum groundwater levels at DWER bores in 2019.

Based on this dataset the 2019 maximum groundwater levels across the site ranged between 40.0 mAHD and 42.0 mAHD, with flow to the south west.

Hyd2o conducted a monthly groundwater level monitoring program from September 2022 through to November 2023 at the three site bores and four DWER bores. A summary of recorded water levels for the monitoring program are shown in Table 3 and Appendix D.

Minimum groundwater levels for the site bores were recorded mainly in March 2022 and ranged from 40.78 mAHD at EW02 to 41.40 mAHD at EW03. Maximum groundwater levels were recorded mainly in October 2022 ranging from 41.23 mAHD at EW02 to 42.13 mAHD at EW03. Maximum recorded levels during this period are shown on Table 3.

Groundwater flow across the site is in a south westerly direction, towards the western site boundary similar to DWER mapping.

DWER long-term hydrographs are included in Appendix E. DWER bores show a historical (2000 – 2023) annual seasonal variations of between 0.1 m – 0.6 m at WM22, between 0.2 m – 0.7 m at JP5B, between 0.1 m – 0.7 m at JB4, and between 0.2 m – 0.8 m at bore WM42.

The long-term hydrographs show a general declining trend in groundwater levels prior to 2000 with increasing levels in recent times. The maximum recorded groundwater levels during the 2022-2023 monitoring period at all DWER bores exceeded their respective AAMGL's for the period since 2000 ranging from 0.29 m to 0.47m above the AAMGL.

Given these results and the predicted future groundwater level rise in the area with development (Urbaqua, 2021) calculation of a historical AAMGL is not considered appropriate for the site to inform development.

Figure 7 therefore contours the maximum groundwater level (MGL) for the 2022-2023 monitoring period and notes the minimum clearance to these groundwater levels from natural surface in the site as approximately 9m in the north-eastern corner. Areas of the site are elevated more than 40m above regional groundwater

Given these clearances, the site will not be adversely affected by any predicted rise of groundwater levels as a result of land use change within the East Wanneroo District Structure Plan area (Urbaqua, 2021).

Table 3: Groundwater Level Summary

	EW01	EW02	EW03	WM22	WM42	JD5B	JB4
Easting	389876	389255	389849	387060	386832	389310	389846
Northing	6484333	6485192	6485613	6486557	6485295	6486042	6486155
TOC (mAHD)	51.94	58.24	54.44	65.52	39.15	77.00	63.48
Natural Surface (mAHD)	54.44	57.74	53.94	65.48	38.57	76.48	62.87
AAMGL (mAHD)*	-	-	-	37.34	27.79	41.63	42.56
MGL (mAHD) (during Hyd2o Monitoring Program 2022-2023)	41.46	41.23	42.13	37.80	28.26	42.01	42.85
Measured MGL (2022-2023) above AAMGL (mAHD)	-	-	-	+0.46	+0.47	+0.38	+0.29
Groundwater Level (mAHD)							
07/09/2022	41.35	41.12	42.05	-	-	-	-
08/10/2022	41.41	41.18	42.12	-	28.13	-	-
25/10/2022	41.46	41.21	42.13	37.65	28.13	41.88	42.82
21/11/2022	41.43	41.23	42.07	37.66	28.12	42.01	42.85
16/12/2022	41.33	41.14	41.95	37.62	27.92	41.79	42.83
24/01/2023	41.17	41.00	41.68	37.51	27.74	41.64	42.75
16/02/2023	41.06	40.95	41.58	37.53	27.63	41.57	42.72
15/03/2023	40.88	40.78	41.40	37.47	27.55	41.42	42.63
12/04/2023	40.85	40.79	41.42	37.47	27.56	41.41	42.60
12/05/2023	40.88	40.80	41.47	37.51	27.63	41.45	42.62
16/06/2023	40.93	40.83	41.62	37.55	27.78	41.48	42.58
18/07/2023	40.93	40.83	41.62	37.55	27.78	41.48	42.58
18/08/2023	41.38	41.21	42.08	37.80	28.26	41.85	42.82
19/09/2023	41.33	41.12	41.97	37.65	28.16	41.75	42.70
17/10/2023	41.35	41.18	42.01	37.62	28.05	41.77	42.75
17/11/2023	41.25	41.10	41.95	37.70	27.91	41.68	42.72

* AAMGL calculated based on DWER bores from 2000-2023

3.7.2 Groundwater Quality

Groundwater quality samples were taken from three site bores (EW01, EW02 and EW03) and one DWER bore (WM42) on five occasions across the predevelopment monitoring period. Groundwater quality results are summarised in Table 4 with detailed results and laboratory reports provided in Appendices F and G. Results are evaluated against ANZECC (2000) guidelines for highly coloured wetland ecosystems in South-west Australia and 95% level of protection for freshwater species.

Key results are summarised as follows:

- Mean EC was recorded as 0.516 mS/cm at EW01, 1.561 mS/cm at EW02, 0.343 mS/cm at EW03, and 1.156 mS/cm at WM42, remaining within ANZECC guidelines (0.300 - 1.500 mS/cm), apart from bore EW02 which slightly exceeded the trigger level.
- Mean pH was recorded as 6.11, 5.24, 6.65 and 6.52, at EW01, EW02, EW03 and WM42 respectively. This indicates groundwater across the site is slightly acidic and within the ANZECC (2000) guideline range of 4.50 - 6.50 pH, apart from bores EW03 and WM42 which are marginally above.
- Mean TN exceeded the ANZECC guidelines (1.5 mg/L) at bores EW02 and EW03. EW01, EW02, EW03 and WM42 were recorded as 0.93 mg/L, 100.40 mg/L, 2.32 mg/L, and 0.94 mg/L respectively. Historical land use is the likely cause of elevated readings at EW02, with historical aerial photographs from Landgate showing horticultural activity around bore EW02 dating back to the early 1970's.
- Mean NOx-N (mg/L) exceeded the ANZECC guideline of 0.1 mg/L at all bores, recording levels at bores EW01, EW02, EW03 and WM42 as 0.55 mg/L, 77.60 mg/L, 1.96 mg/L and 0.68 mg/L, respectively.
- Mean TP remained within the 0.060 mg/L ANZECC guideline at all bores, recording values below the laboratory detectable limit of 0.050 mg/L at all bores on all sampling occasions.
- Mean FRP remained within the ANZECC guideline of 0.03 mg/L at all bores, recording 0.006 mg/L at EW01, 0.005 mg/L at EW02, 0.005 mg/L at EW03, and 0.011 mg/L at WM42.
- Dissolved metals were within the ANZECC guideline trigger values, apart from Zn which exceeded the established 0.008 mg/L criteria at bores EW01, EW02 and WM42 recording mean Zn values of 0.01 mg/L, 0.049 mg/L and 0.019 mg/L, and for Cu which slightly exceeded the ANZECC trigger value of 0.0014 mg/L at bores EW01 (0.0015 mg/L) and EW02 (0.0023 mg/L).
- E.coli was recorded below detectable laboratory limit in all sampling occasions regarding all site bores and WM42.

Table 4: Groundwater Quality Summary

Parameter	ANZECC Guidelines (2000)	EW01 (mean)	EW02 (mean)	EW03 (mean)	WM42 (mean)
EC (mS/cm)	0.300 - 1.500[1]	0.516	1.561	0.343	1.156
pH	4.50 - 6.50[1]	6.11	5.24	6.65	6.52
TN (mg/L)	1.50[1]	0.93	100.40	2.32	0.94
NOx-N (mg/L)	0.10[1]	0.55	77.60	1.96	0.68
TP (mg/L)	0.06[1]	0.05	0.05	0.05	0.05
FRP (mg/L)	0.03[1]	0.006	0.005	0.005	0.011
Al (mg/L)	0.055[2]	0.155	0.032	0.022	0.01
As (mg/L)	0.024[2]	0.001	0.001	0.001	0.001
Cd (mg/L)	0.0002[2]	0.0001	0.0001	0.0001	0.0001
Cr (mg/L)	0.001[2]	0.001	0.001	0.001	0.001
Cu (mg/L)	0.0014[2]	0.0015	0.0023	0.001	0.0011
Fe (mg/L)	no data	1.47	0.147	0.018	0.01
Pb (mg/L)	0.0034[2]	0.001	0.001	0.001	0.001
Ni (mg/L)	0.011[2]	0.001	0.001	0.001	0.001
Zn (mg/L)	0.008[2]	0.01	0.049	0.005	0.019
Hg (mg/L)	0.0006[2]	0.00005	0.00005	0.00005	0.00005

1. ANZECC (2000) guidelines default trigger values for highly coloured wetland ecosystems in South-west Australia.

2. Trigger values for 95th percentile protection of freshwater species.

4 Design Criteria

Key design criteria for the site are shown in Table 5 and have been established consistent with criteria specified in the key reference documents previously detailed in Section 1.3. These design criteria are used in Sections 5, 6 and 7 together with the identified constraints and opportunities of the predevelopment environment (Section 3) to establish the water management strategy for the site.

Table 5: Key Urban Water Management Design Objectives

Water Supply	
Water Efficiency	• Use higher density residential zonings to reduce ex-house use. • Consumption target for water of 100 kL/person/yr. • Water efficient fixtures and fittings. • Retention of Bushland vegetation and use of native plantings in POS.
Water Supply	• Water Corporation IWSS for lots, rainwater tanks. • Groundwater for POS irrigation. • Minimise use of scheme water for non-drinking purposes.
Wastewater	• Water Corporation reticulated sewerage.
Stormwater	
Small Event (15mm Event)	• Use of soakwells at lot scale to infiltrate first 15mm on site. • Biofiltration areas for management and treatment of first 15mm road runoff within POS • Bottomless manholes within road reserves (subject to City of Wanneroo acceptance)
Serviceability (20% AEP Event)	• Piped drainage system sized to convey 20 % AEP event. • 20% AEP event for local stormwater managed and retained within multiple use POS areas.
Flood Protection (1% AEP Event)	• Overland flow paths within road reserves identified for safe conveyance of flows exceeding pipe drainage system capacity. • Minimum habitable floor levels shall be a minimum of 0.3 m above the % AEP storm event flood level in local drainage networks. • 1% AEP event for local stormwater to be all retained and infiltrated on site in POS areas. • Minimum habitable floor levels shall be a minimum of 0.5 m above the 1% AEP storm event in stormwater storage areas. • Local centre to manage up to 1% AEP event on site. • All stormwater to be infiltrated within 96 hrs to prevent mosquito and midge breeding.
Groundwater	
Fill & Subsoil	• Earthworks for the site will comprise a cut and fill operation required to meet gradient requirements, level lots, and interface with existing site boundaries and infrastructure
Acid Sulphate Soils	• Acid sulphate soils to be investigated as a separate process (if required) and reported at later stages of planning.
Implementation	
Process	• Future stages of planning to be consistent with BUWM (WAPC, 2008) requirements. • Post development monitoring to review system performance.

5 Water Use Sustainability Initiatives

5.1 Water Efficiency Measures

Development of the site will lead to an increased demand of potable water for residential use and irrigation of gardens and POS/drainage areas.

Water conservation measures implemented to reduce scheme water consumption within the development will be consistent with Water Corporation's "Waterwise" land development criteria including:

- Promotion of use of waterwise practices including water efficient fixtures and fittings (taps, showerheads, toilets, rainwater tanks, waterwise landscaping).
- Retention of vegetation and bushland areas
- Use of native plants in POS and drainage landscaped area.
- Maximising on site retention of stormwater.

Local aquifer water use is expected to reduce significantly within the site as a result of the change from horticultural land use to urban development.

5.2 Water Supply

Potable water supply to future homes in the site will be via the Water Corporation Integrated Water Supply System (IWSS). Rainwater tanks have been identified as a non-potable source to be integrated as part of the domestic water supply scheme to assist in reducing stormwater generation and minimise scheme water importation.

The site is located within the Wanneroo groundwater management area (GMA) Lake Gnangara Sub Area. DWER's online Water Register for Licence and Water Availability Information indicates that the superficial aquifer is fully allocated within this sub area and therefore further water is not available to be allocated for irrigation purposes. Deeper Leederville and Yaragadee aquifers are also fully allocated.

Based on the DWER's online Water Register, there are seventeen existing licence allocations within the site, totalling 469,588 kL/yr as shown in Table 5. Individual licence details are contained in Appendix H. Licences will be retained within the site to support future development and POS irrigation.

The subdivision application area contains 12.0 ha of active POS inclusive of a playing field and a further 14.3 ha of parkland conservation area (Figure 2). An estimate of the amount of groundwater required for POS irrigation is calculated based on a 12.0 ha POS irrigation area, and assuming an irrigation rate of 6,750 kL/ha/annum. The estimated 81,000 kL/yr required represents only 17% of current allocation within the site.

Indicative landscape concept plans prepared by Emerge Associates are contained as Appendix I. Stormwater management areas will be integrated in POS with landscaped biofiltration and infiltration storage areas for up to the 1% AEP event. Details of calculations for stormwater volumes used to inform landscape planning are contained in Section 6.

Table 5: Groundwater Resource and Licenced Allocation

Groundwater Area	Subarea	Aquifer	Licence	Allocation (kl/yr)	Water Availability
Wanneroo	Lake Gnangara	Superficial	53795	3,500	Fully Allocated
			96251	12,950	
			71191	49,500	
			169281	42,008	
			76456	4,150	
			107897	10,270	
			153256	9,815	
			203361	57,650	
			207394	60,000	
			98646	48,650	
			152615	43,400	
			66050	5,000	
			76617	49,950	
			71195	48,600	
			63494	12,575	
			95232	5,150	
			168640	6,420	
			Total : 469,588 kl/yr		

Further refinement and provision of landscape design plans will occur in consultation with the City of Wanneroo at UWMP stage prior to POS construction as engineering and landscape detailed design is progressed. Detailed landscape plans and engineering for POS will be provided to the CoW for approval during the detailed planning phase of POS.

Groundwater licences to support POS irrigation within the site will be ultimately transferred to the City of Wanneroo upon handover of POS areas.

5.3 Wastewater Management

Wastewater will be deep sewerage (reticulated) with management by the Water Corporation.

6 Stormwater Management Strategy

Stormwater management is proposed to be undertaken consistent with DWER water sensitive design practices, via a combination of lot soakwells and street scale infiltration, and biofiltration areas and multiple use flood storage areas within POS to capture and infiltrate all events on site up to the 1% AEP event. With respect to additional local scale street scale measures, these will be detailed and designed at UWMP stage in consultation the City of Wanneroo and project civil engineers.

The overall key components of stormwater management of the site are as follows :

- Land use types and densities to considerably reduce nutrient application and export relative to existing land use
- Lots to have soakwells/on-site systems to provide 15mm infiltration of stormwater at source.
- Road runoff to be conveyed using piped drainage, with bottomless manholes used (subject to CoW approval) to reduce bottom end infrastructure requirements.
- Treatment of road runoff within each catchment via specified biofiltration areas for water quality, with POS areas designed to be occasionally inundated for flood management in major events.

The site (Precinct 3) has been designed to be self contained in terms of stormwater management with no cross precinct flows in and out across precinct boundaries. Given its sandy soils and depth to groundwater it is not considered to require any regional stormwater infrastructure to facilitate its development.

6.1 Stormwater Modelling

Stormwater modelling for the site was performed using XP-Storm to determine stormwater flood storage requirements. The design storms modelled by XP-Storm were based on methodology in Australian Rainfall & Runoff (AR&R) and the Bureau of Meteorology Computerised Design IFD Rainfall System. The rainfall temporal pattern was assumed to be spatially uniform across the catchment. Storms modelled ranged from 30 mins to 72 hrs.

The following key parameters were used for modelling:

- Seven catchments based on existing topography and POS area locations determined in consultation with project engineering Cossill & Webley (Figure 8).
- 1:0 side slopes for biofiltration areas to a maximum depth of 0.3 m.
- Minimum side slopes of 1 in 6 for minor/major event flood storage.
- Maximum storage depth of 1.2 m (1% AEP Event).
- A saturated hydraulic conductivity of 5 m/day for modelling purposes.

Various runoff coefficients applied to different land uses for each of the events modelled are shown in Table 6. These have been determined using Hyd2o's CURRV runoff rate calculator with detailed calculations included as Appendix J. Hyd2o's CURRV runoff calculator is a standardised approach used by Hyd2o across all development projects to

estimate runoff rates. In estimating runoff rates CURRV considers rainfall IFD's, land use breakdown, percentages of impervious and pervious areas within land use type and likely initial and continuing loss of soil types. It is assumed all residential lots will have soakwells sized to retain a 15 mm event on site, and the local centre will be required to manage all events up to the 1% AEP on site.

Modelling results for the POS storages are provided in Table 6 and Figure 8, with modelling outputs shown in Appendix K. Note that storage shapes shown in Figure 8 are indicative only for determination of POS area requirements in the local structure plan. Landscape plans in Appendix I should be referenced for more detailed information regarding the integration of required storage volumes within POS.

Final infiltration area configurations, locations, and elevations will be documented in future UWMPs and will be dependent on final earthworks, drainage, and road design levels for the development. Tree retention will be a key factor in the final configurations adopted.

6.2 Major Event Flood Protection (1% AEP)

Modelled flood protection storage volumes, areas, and flood rises are detailed in Table 6 and Figure 8 which shows the extent of inundation of POS area for various flood management events. The total area within the site required for flood storage up to the 1% AEP event is approximately 2.53 ha or 1.9% of the total site area, with a total detention storage volume of approximately 25,265 m^3. This compares with 22,800 m^3 estimated for the Precinct in Urbaqua (2021).

The final storage area configuration (side slopes, treatments etc), location, and elevations will be documented in the UWMP and will be dependent on final earthworks, drainage, and road design levels for the development.

Refinements to catchment areas shown in this report may occur as detailed design proceeds, and stormwater modelling will be updated accordingly if required during the UWMP process. Opportunities for additional distributed storage and treatment throughout the site will also be reviewed at later stages of planning.

All building floor levels will comply with requirements for a 0.3 m clearance above the 100 year flood level within the street drainage system and 0.5 m above the flood level within stormwater storage areas.

6.3 Minor Event Serviceability (20% AEP)

Modelled storage volumes, areas, flood rise and inverts are detailed in Table 6 and Figure 8 for the 20% AEP flood event, showing the extent of inundation of POS area.

The total area required for the 20% AEP event is approximately 1.86 ha or 1.4% of the total site area with a total detention storage volume of approximately 6909 m^3. This compares with 7,500 m^3 estimated for the Precinct in Urbaqua (2021).

Table 6: Stormwater Modelling Summary

Catchment	Catchment A	Catchment B	Catchment C
Residential Lots 36% 1%AEP, 0% 15mm	18.06	10.28	9.35
Road Reserve 84% 1%AEP, 64% 15mm	11.11	5.51	5.21
POS 17% 1%AEP, 0% 15mm	1.39	1.33	0.69
Playing Fields 17% 1%AEP, 0% 15mm	-	-	-
Parkland Reserve 0% 1%AEP, 0% 15mm	3.43	-	-
Church 0% 1%AEP, 0% 15mm	1.96	-	-
Local Centre 0% 1%AEP, 0% 15mm	-	-	-
Primary School 0% 1%AEP, 0% 15mm	-	-	-
Total Catchment (ha)	35.95	17.12	15.25
20%/1%AEP EIA (ha)	16.07	8.55	7.86
15mm EIA (ha)	7.11	3.53	3.34
63% AEP Event (~15mm)			
Side Slopes for Biofiltration (1:v)	0	0	0
Flood Rise (m)	0.3	0.3	0.3
Base Area (m^2)	3550	1770	1680
Volume (m^3)	1067	530	501
Storage Characteristics			
Side Slopes for Flood Storage (1:v)	6	6	6
Nominal Basin Invert (mAHD)	56	56	56
Base Area (m^2)	5000	2450	2240
20% AEP Event			
Flood Rise (m)	0.44	0.50	0.50
Volume (m^3)	1782	1041	976
TWL Area (m^2)	5255	2708	2491
Critical Storm (hr)	3	3	3
1% AEP Event			
Flood Rise (m)	1.17	1.20	1.19
Volume (m^3)	6115	3287	3020
TWL Area (m^2)	6675	3701	3443
Critical Storm (hr)	6	6	6

Table 6: Stormwater Modelling Summary (Continued)

Catchment	Catchment D	Catchment E	Catchment F	Catchment G
Residential Lots 36% 1%AEP, 0% 15mm	11.43	5.87	6.52	4.39
Road Reserve 84% 1%AEP, 64% 15mm	6.29	3.91	3.92	2.60
POS 17% 1%AEP, 0% 15mm	0.70	1.73	1.16	0.51
Playing Fields 17% 1%AEP, 0% 15mm	4.52	-	-	-
Parkland Reserve 0% 1%AEP, 0% 15mm	3.04	-	7.85	-
Church 0% 1%AEP, 0% 15mm	-	-	-	-
Local Centre 0% 1%AEP, 0% 15mm	-	-	2.08	-
Primary School 0% 1%AEP, 0% 15mm	3.52	-	-	-
Total Catchment (ha)	29.50	11.51	21.52	7.50
20%/1%AEP EIA (ha)	10.28	5.69	5.83	3.85
15mm EIA (ha)	4.02	2.50	2.51	1.66
63% AEP Event (~15mm)				
Side Slopes for Biofiltration (1:v)	0	0	0	0
Flood Rise (m)	0.3	0.3	0.3	0.3
Base Area (m^2)	2030	1260	1260	750
Volume (m^3)	609	375	377	225
Storage Characteristics				
Side Slopes for Flood Storage (1:v)	6	6	6	6
Nominal Basin Invert (mAHD)	56	56	56	56
Base Area (m^2)	3010	1590	1650	1025
20% AEP Event				
Flood Rise (m)	0.47	0.50	0.51	0.56
Volume (m^3)	1144	714	739	513
TWL Area (m^2)	3261	1795	1871	1241
Critical Storm (hr)	3	3	3	3
1% AEP Event				
Flood Rise (m)	1.18	1.18	1.17	1.17
Volume (m^3)	3837	2175	2221	1448
TWL Area (m^2)	4399	2578	2646	1823
Critical Storm (hr)	6	6	6	6

6.4 Small Event Water Quality Treatment(15mm)

This LWMS proposes a treatment train approach to water quality management which includes non- structural as well as structural controls:

- **Non-Structural Controls**
  Planning: Lot product and Sizing, POS and storage locations and configuration
  Landscape: Native plantings and Bushland Retention, WSUD integration
  Maintenance: Storage areas, street sweeping manhole eduction
  Monitoring: Post development program and performance review
- **Structural Controls**
  Catchment Scale Infrastructure: Bioretention areas
  Local Scale Infrastructure: Soakwells at lot scale, bottomless manholes with roads

Measures adopted represent known best management practice as detailed in the Stormwater Management Manual for Western Australia (DWER, 2022).

Storm volumes for ecological protection based on the 63% AEP (15mm) event are provided in Table 6 and Figure 8 to provide a guide for storage requirements and areas for water quality treatment consistent with DWER (2022) and DWER (2017).

The total area estimated for biofiltration is approximately 1.23 ha (volume 3684 m^3).

Table 7 details a summary from the Stormwater Management Manual for Western Australia (DWER, 2022) of expected pollutant removal efficiencies for various WSUD measures in relation to water quality design criteria. While DWER (2022) does not provide expected pollutant removal efficiencies for all BMP's, application of a treatment train approach using a combination of the non-structural and structural measures will achieve the design objectives for water quality as detailed in WAPC (2008).

Bioretention areas will be sized to retain treat and infiltrate 15mm in accordance with agency requirements. Biofiltration systems will be designed consistent with the Adoption Guidelines for Stormwater Biofiltration Systems (CRC for Water Sensitive Cities, 2015).

With respect to disease vector and nuisance insect management, modelling shows stormwater management areas will have a maximum duration for standing water following small events (<15mm) of less than 6 hours, well within WAPC (2008) requirement of 96 hours.

Table 7: BMP Water Quality Performance in Relation to Design Criteria

Parameter	Criteria via WAPC (2008) (removal as compared to a development with no WSUD)	Nutrient Output Reduction viq DWER (2022)	
		Bioretention Systems	Detention/ Retention Storages
Total Suspended Solids	80%	60-80%	65-99%
Total Phosphorus	60%	30-50%	40-80%
Total Nitrogen	45%	25-40%	50-70%
Gross Pollutants	70%	-	>90%

6.5 Nutrient Assessment

The UNDO (Urban Nutrient Decision Outcomes) model is a conceptual decision support tool developed by DWER that evaluates nutrient reduction decisions for urban developments on the Swan Coastal Plain. It is designed for ease-of-use by urban development proponents and for assessment by local and state government authorities.

The tool was developed to assess nutrient impacts of urban development on the Swan Coastal Plain in a consistent and scientifically rigorous manner. The tool is web-based and provides users with the ability to implement a range of structural and/or non-structural design options to evaluate and reduce nutrients exported from an urban development.

Modelling outputs of the site's existing land use using UNDO are detailed in Appendix M.

Modelling outputs of the site's existing (pre-development) land use indicate nutrient inputs of 10,245 kg/yr of TN and 1816 kg/yr of TP to the environment annually based on typical rural nutrient application rate estimates. The resultant nutrient export was 810 kg/yr of TN and 12.1 kg/yr of TP. These export estimate considers soil types, groundwater gradients, and depth to groundwater in their calculation. They do not however consider the impact of horticultural use which UNDO doesn't include. DoW's (2010) Survey of Urban Nutrient Inputs on the Swan Coastal Plain publication indicate application for horticultural use are likely to be far greater. Estimates for the existing land use are therefore likely to be considerably underestimated.

Post development UNDO modelling shows the positive impact land use change at the site will have with respect to nutrient application and export. The modelling results indicate land use change will result in nutrient inputs of 4,089 kg/yr for TN and 740 kg/yr TP post development. This indicates a 6,156 kg/yr (60%) reduction in TN input and 1076 kg/yr (59%) reduction in TP input annually.

The resultant nutrient export inclusive of the impact of implementing water sensitive urban design measures was 284 kg/yr of TN and 6.3 kg/yr export of TP following development. This represents a significant 65% reduction in TN export and a 48% reduction in TP export to the environment post development as a result of land use change.

As previously discussed, actual reductions are likely to be much higher than estimated given current horticultural use within the site.

7 Groundwater Management Strategy

As discussed in Section 3.7.1, existing groundwater levels at the site range from a minimum of approximately 9m below surface to in excess of 40m. Given this clearance, the site will not be adversely affected by any predicted rise of groundwater levels as a result of land use change within the East Wanneroo District Structure Plan area (Urbaqua, 2021).

Groundwater levels are therefore not considered a development constraint for the site.

Earthworks for the site will comprise a cut and fill operation required to meet gradient requirements, level lots, and interface with existing site boundaries and infrastructure.

Water quality aspects of groundwater management will be achieved via biofiltration areas in future POS areas to treat stormwater runoff prior to infiltration at source.

Final finished lot levels are a detailed design issue to be addressed during the preparation of detailed engineering design drawings and preparation of the UWMP and will be ultimately submitted for council approval at that stage.

7.1 Acid Sulphate Soils

As previously detailed in Section 3.2, published acid sulphate risk mapping shows almost the whole site as no known risk of ASS, with only a very minor portion (~1100 m^2, <0.1% of site area) having a high to moderate risk in the northeastern corner of the site.

Groundwater in the area of the high to moderate risk ASS is estimated to be approximately 9m below natural surface (Figure 7) and is therefore unlikely to be disturbed during construction.

Further examination of ASS risks if required will be evaluated during the sites geotechnical investigations. Should ASS be identified, management will be addressed as a separate study to the LWMS/UWMP process, however details regarding the outcomes will be included as part of the Urban Water Management Plan (UWMP).

All assessment and management of ASS will be conducted in accordance with the Acid Sulphate Soil Guideline Series documentation (Department of Environmental Regulation, 2015a & b).

8 Urban Water Management Plans

Consistent with processes defined in WAPC (2008), an Urban Water Management Plan (UWMP's) will be developed and submitted to support subdivision development of the site. Given the size of the site, it is considered likely several UWMP's will be required.

The UWMP will address:

- Demonstrated compliance with LWMS criteria and objectives to the satisfaction of the City of Wanneroo and DWER.
- Agreed measures to achieve water conservation and efficiencies of water use.
- Geotechnical investigations, including permeability testing at storage locations.
- Detailed stormwater management design including the refinement of sizes, locations and design of public open space areas, integrating water quality treatment areas, and major and minor flood management capability.
- Details landscape plans developed in consultation with the City of Wanneroo.
- Earthworks, cut/fill, and detailed drainage design plans.
- Specific structural and non-structural BMPs and treatment measures to be implemented including their function, location, maintenance requirements, expected performance and agreed ongoing management arrangements.
- Management of subdivisional works.
- Implementation plan including roles, responsibilities, funding and maintenance arrangements.
- Further specific monitoring at individual stage level and reporting to be undertaken consistent with the monitoring program defined in this LWMS.
- Contingency plans (where necessary).

More detail on stormwater storage integration with POS areas will be provided during the development of the UWMP, including refinement of stormwater modelling, preparation of landscape plans (species selection and treatments), and detailed engineering design drawings.

Preparation of the UWMP will be the responsibility of the developer.

9 Monitoring

9.1 Pre Development Monitoring

Groundwater monitoring to support urban development is typically required for sites where groundwater is close to natural surface (< 4 m).

Predevelopment monitoring for the site has been undertaken consistent with specified requirements of the Urbaqua (2021) district scale monitoring program, and completed across two peak winter periods demonstrating a minimum depth to groundwater of approximately 9m at the site, with depths ranging to more than 40m below natural surface.

Water quality parameters consistent with Urbaquq (2021) requirements were undertaken as detailed in Section 3.2.

No further predevelopment monitoring is considered to be required to inform development of the site.

9.2 Post Development Monitoring

Due to the substantial depth to groundwater across the site, a post development groundwater monitoring program is not proposed.

An alternative program which focusses on the performance of stormwater management measures to function and perform in accordance with design is considered more appropriate as detailed in Table 8.

The monitoring program is proposed to operate over a two year post development period to assess the overall performance of the stormwater storage areas. This period of post development monitoring is considered appropriate to assess the functioning of the surface water management system within individual development areas.

A standardised proforma will be used to assess performance against design intent. The proforma will consider processes such as vegetation health, scour, erosion, deposition, water levels, and retention periods of standing water in bioretention and flood storage areas.

Assessment of monitoring outcomes and system performance will be undertaken as part of the annual review and reporting process. Should the system not be functioning in accordance with design a contingency action plan will be implemented, including:

- Assessing if an isolated, development area or regional occurrence.
- Determining if due to the development or other external factors.
    a) Identify and remove any point sources causing problems.
    b) Review operational and maintenance practices.
    c) Consider alterations to POS areas and the stormwater system.
    d) Consider initiation of community based projects.
- If necessary, inform residents of any required works and their purpose.

The program may need to be modified as data is collected to increase or decrease the monitoring effort in a particular area or to alter the scope of the program itself.

Any modification to the program would be identified through review of the collected data and would require the agreement of the City of Wanneroo and the developer.

Table 8: Post Development Monitoring Program

Monitoring	Parameter	Location	Method	Frequency/Timing
Local stormwater	Performance assessment via proforma	Biofiltration & flood storage areas	Visual assessment	Monthly, typically between June to October (5 times per year) for 2 years

10 Implementation

Table 9 details the roles, responsibilities and funding to implement the LWMS.

Should the UWMP require any deviations to the strategy detailed in this LWMS, this will require the agreement of all parties (DWER, City of Wanneroo, and developer).

Details of construction and maintenance responsibilities will be appropriately detailed at UWMP stage. Operation and maintenance of the stormwater management system will initially be the developer's responsibility, ultimately reverting to the City following handover. Details of maintenance responsibilities will be further outlined at UWMP stage.

The schedule for maintenance works will be consistent with typical requirements of the City of Wanneroo for stormwater management.

Table 9: Implementation Roles and Responsibilities

Implementation Action	Responsibility & Funding		
	Developer	City of Wanneroo	DWER
Preparation of LWMS (this document)	☑		
Review & Approval of UWMP		☑	☑
Preparation of UWMP's for individual stages	☑		
Review & Approval of UWMP's		☑	
Post Development Monitoring Program	☑		
Construction of Stormwater System	☑		
Operation & Maintenance			
a) Prior to Handover	☑		
b) Following Handover		☑	

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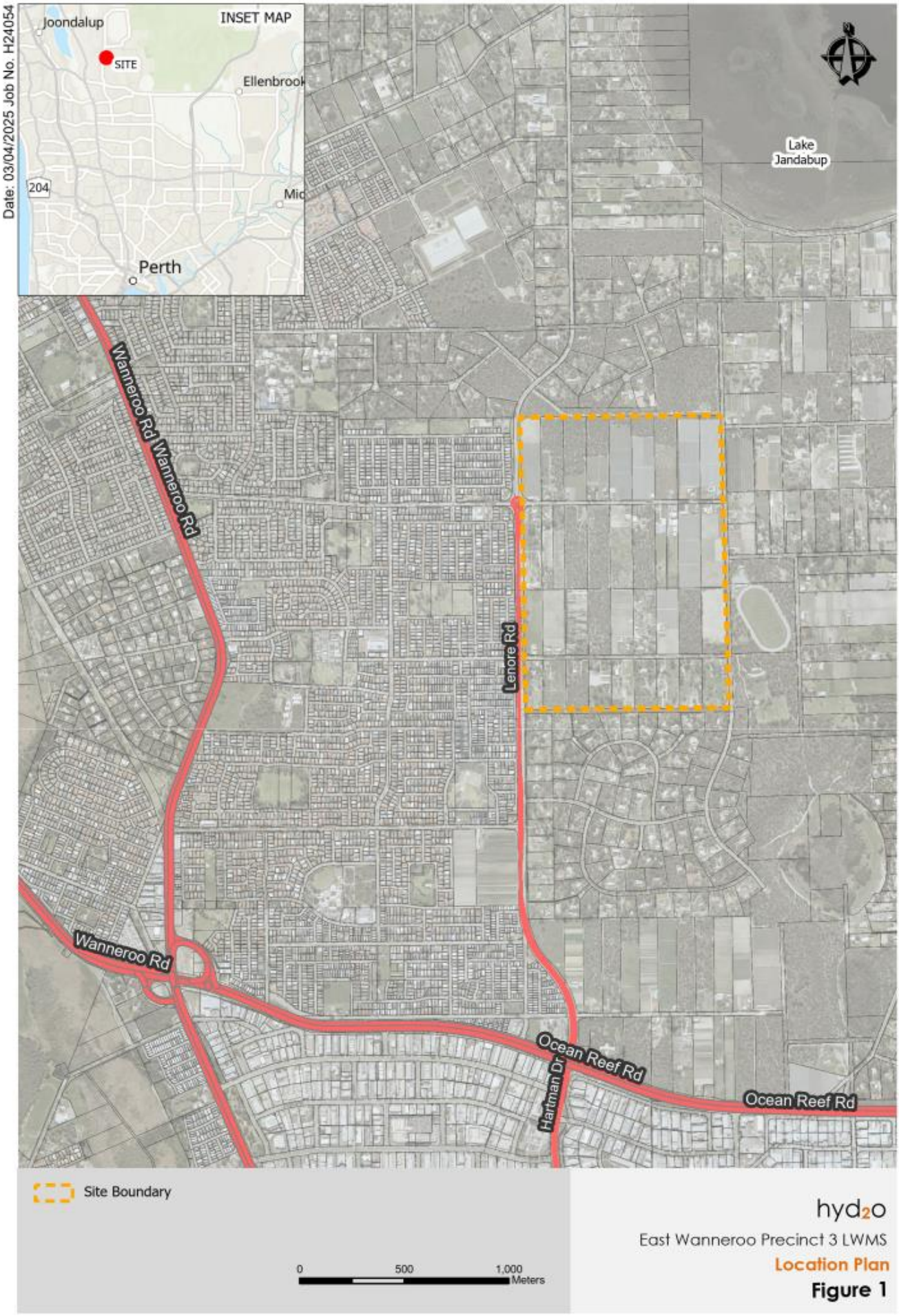
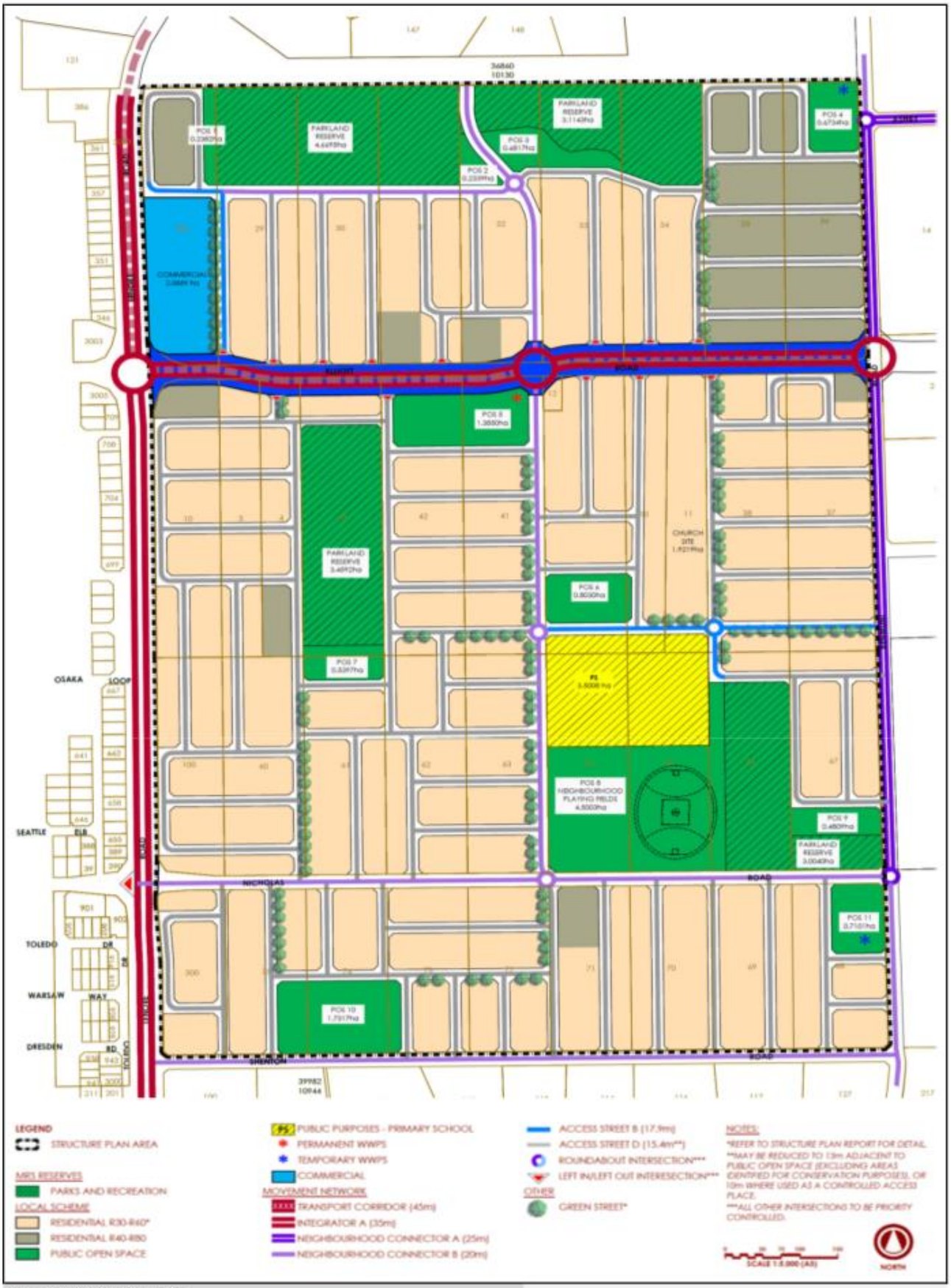
FIGURES


Date: 03/04/2025 Job No. H24054
INSET MAP
Joondalup
SITE
Ellenbrook
204
Perth
Lake Jandabup
Wanneroo Rd
Lenore Rd
Ocean Reef Rd
Hartman Dr
Site Boundary
0
500
1,000
Meters
hyd2o
East Wanneroo Precinct 3 LWMS
Location Plan
Figure 1

Date: 7/4/2025 Job No. H24054



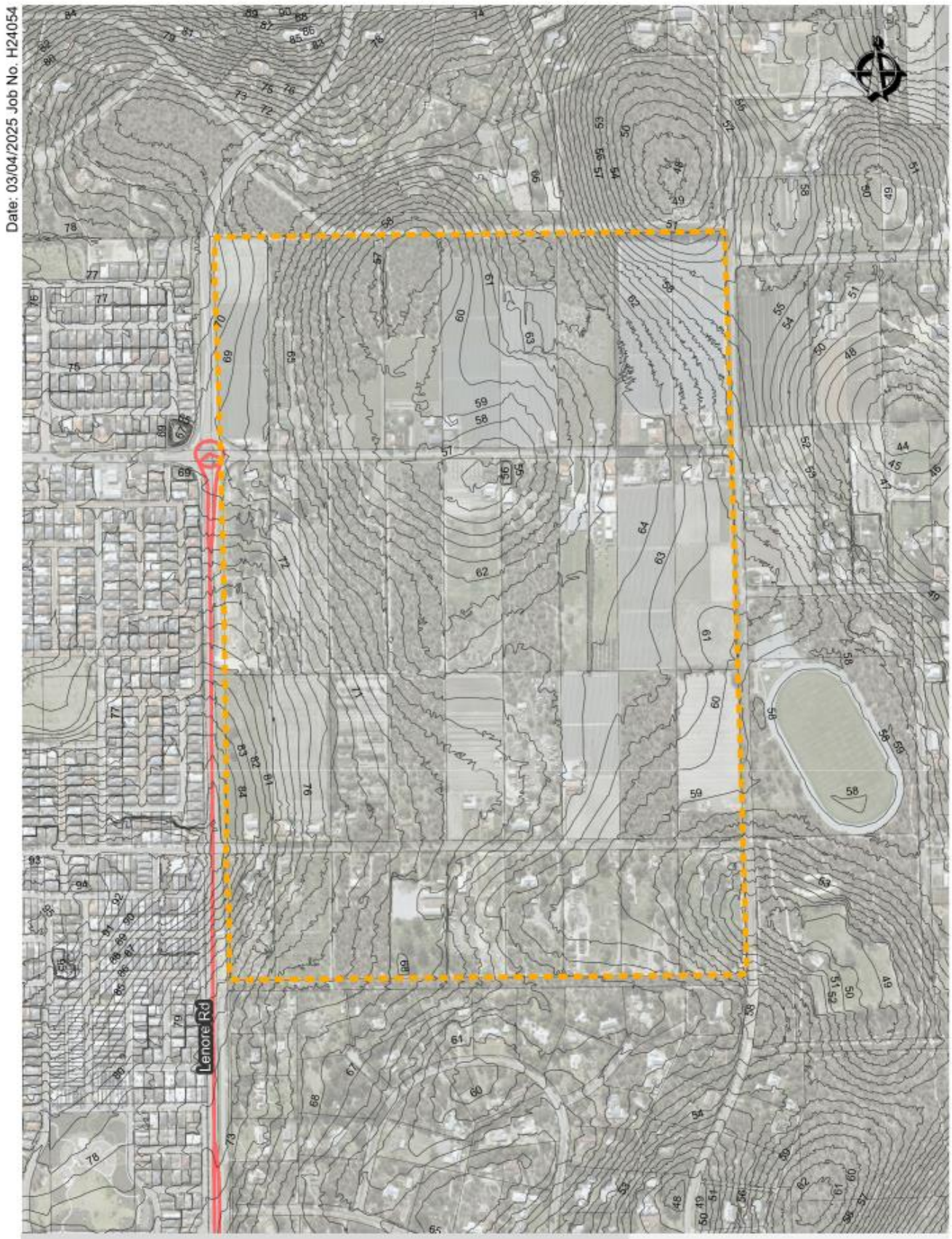
Source : Burgess Design Group 2025

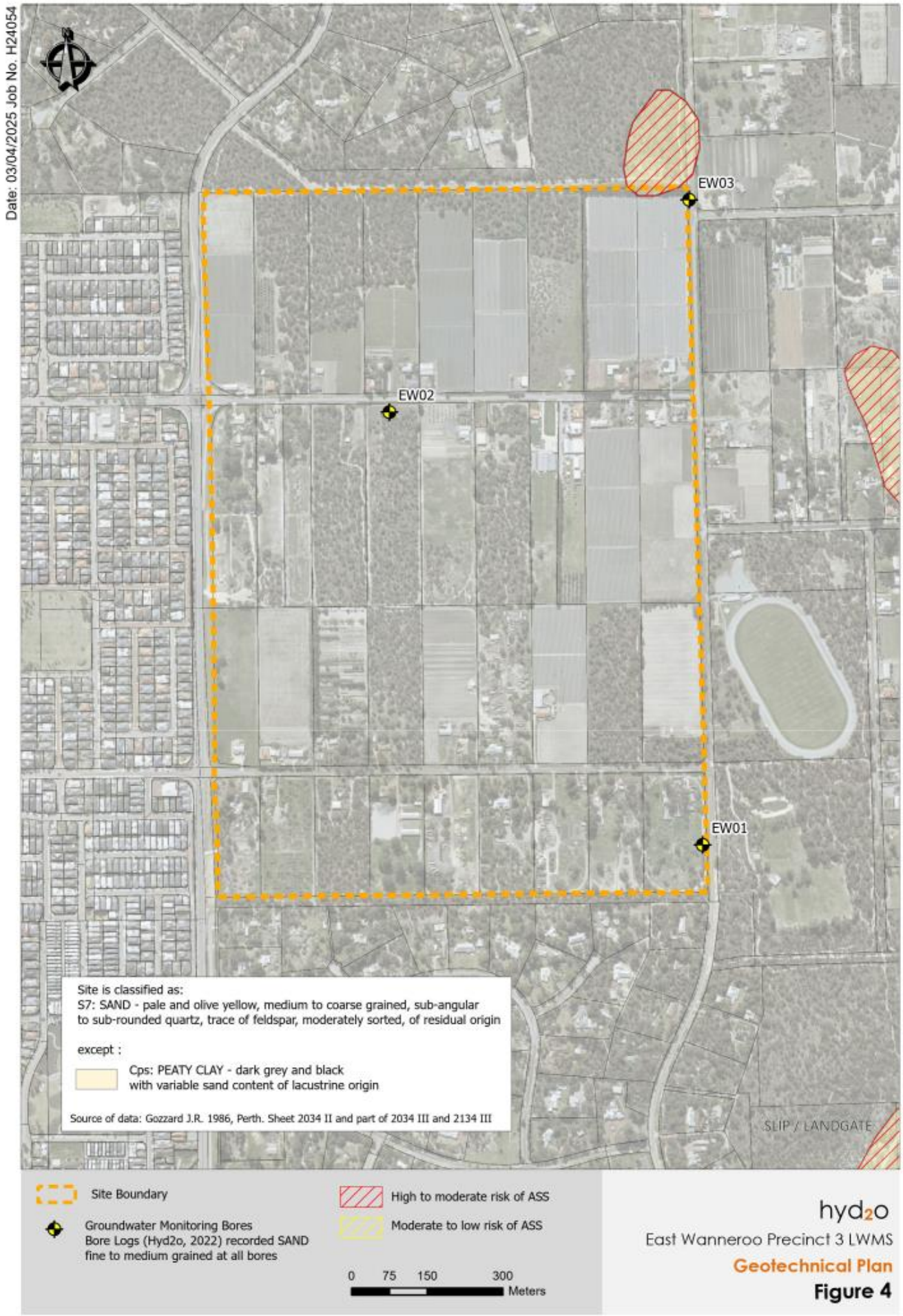
hyd2o

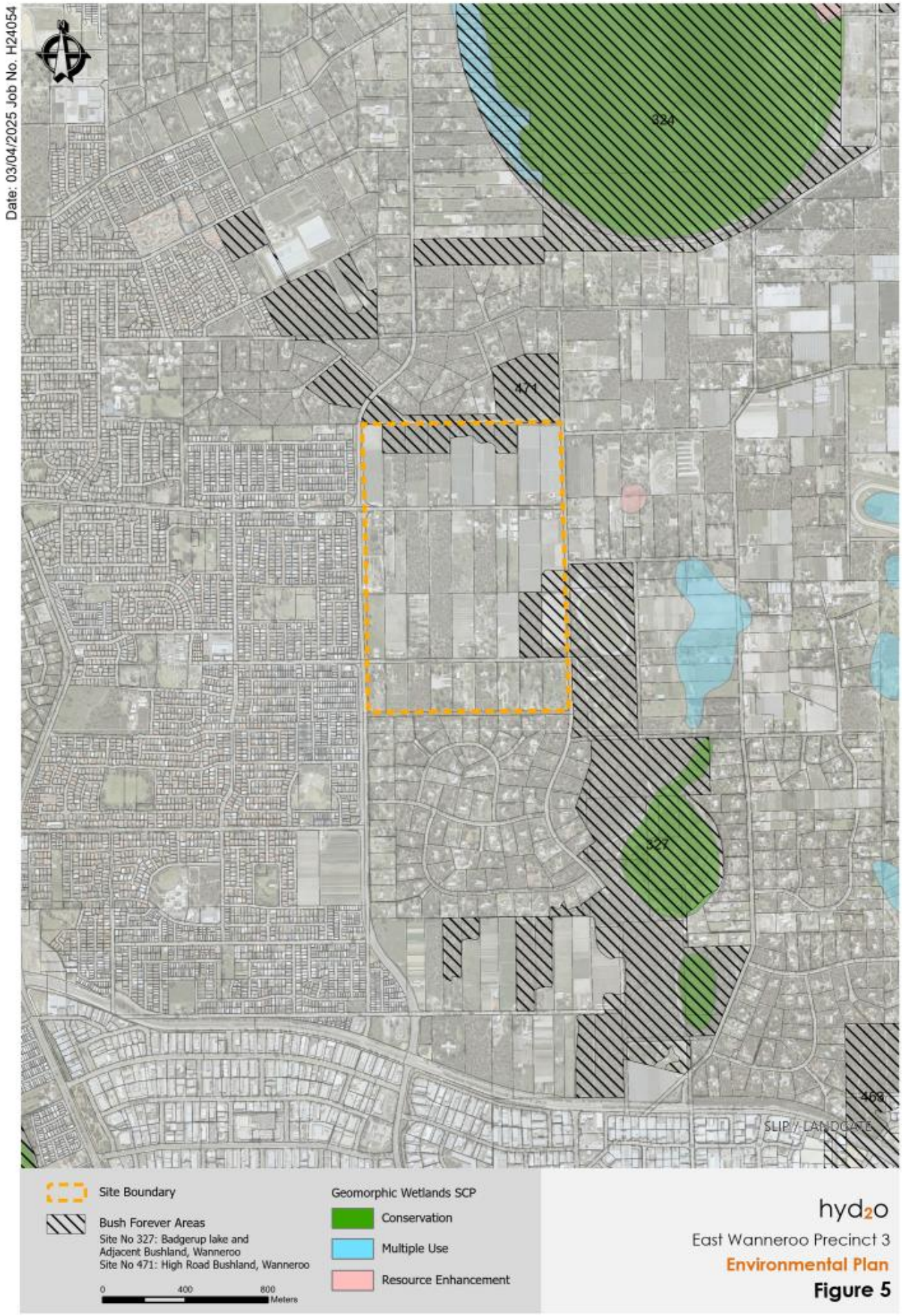
East Wanneroo Precinct 3 LWMS

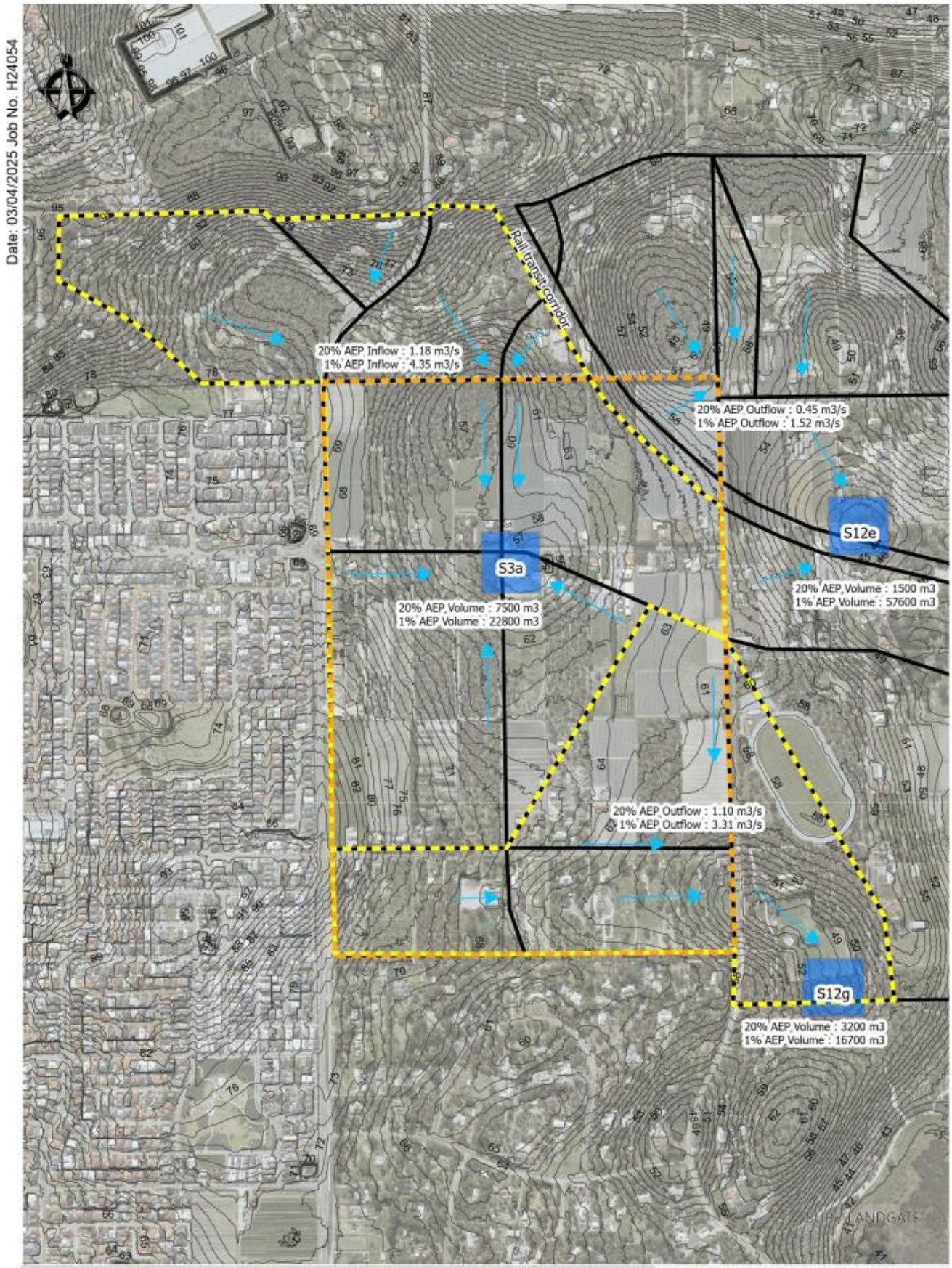
Local Structure Plan

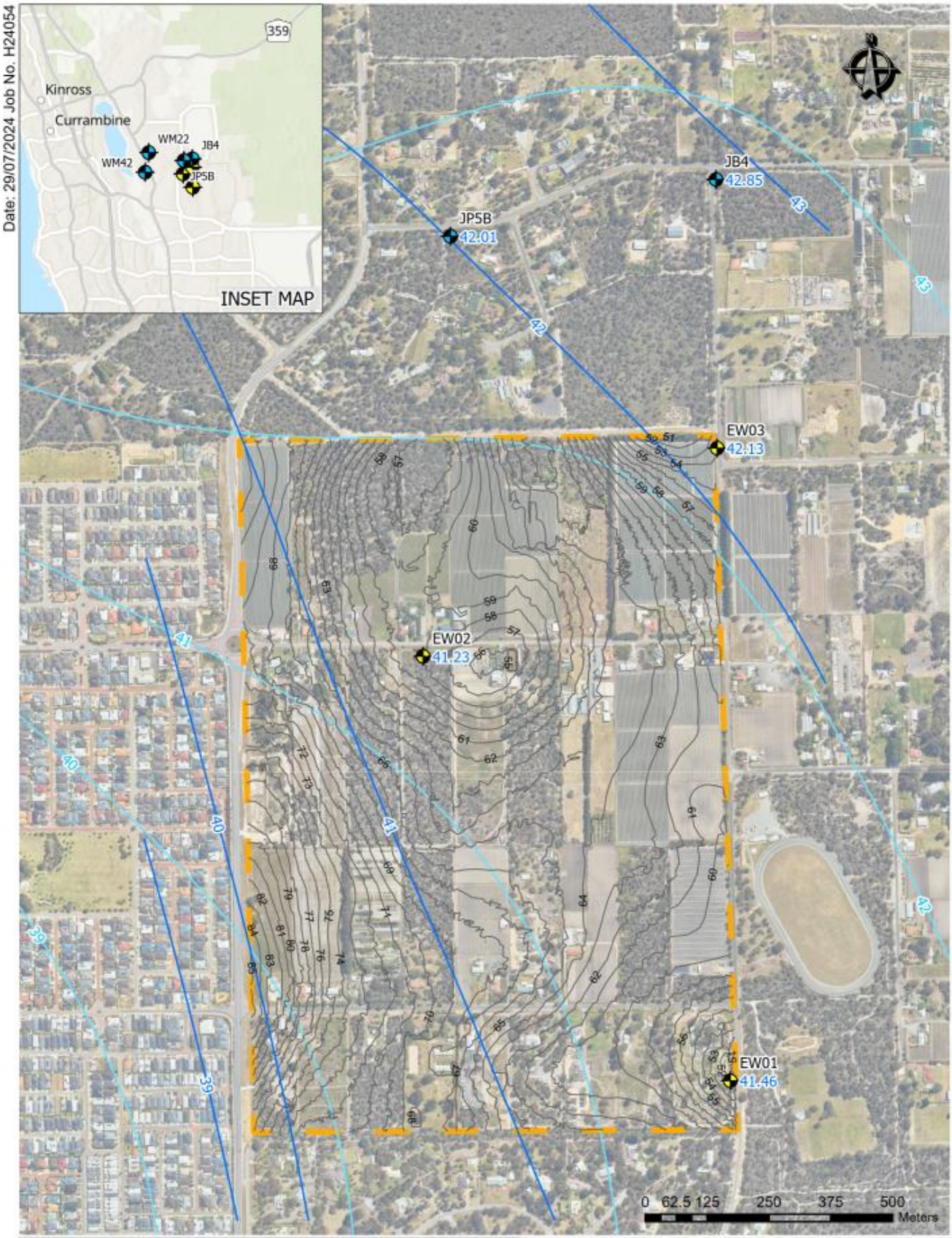
Figure 2


Date: 03/04/2025 Job No. H24054
Lenore Rd
Site Boundary
DWER 1 m LiDAR Contours (mAHD)
0
150
300
Meters
hyd2o
East Wanneroo Precinct 3 LWMS
Site Conditions
Figure 3


Date: 03/04/2025 Job No. H24054
EW03
EW02
EW01
Site is classified as:
S7: SAND - pale and olive yellow, medium to coarse grained, sub-angular to sub-rounded quartz, trace of feldspar, moderately sorted, of residual origin
except :
Cps: PEATY CLAY - dark grey and black with variable sand content of lacustrine origin
Source of data: Gozzard J.R. 1986, Perth. Sheet 2034 II and part of 2034 III and 2134 III
SLIP / LANDGATE
Site Boundary
Groundwater Monitoring Bores
Bore Logs (Hyd2o, 2022) recorded SAND fine to medium grained at all bores
High to moderate risk of ASS
Moderate to low risk of ASS
0 75 150 300
Meters
hyd2o
East Wanneroo Precinct 3 LWMS
Geotechnical Plan
Figure 4


Date: 03/04/2025 Job No. H24054
324
471
327
469
Site Boundary
Bush Forever Areas
Site No 327: Badgerup lake and Adjacent Bushland, Wanneroo
Site No 471: High Road Bushland, Wanneroo
0
400
800
Meters
Geomorphic Wetlands SCP
Conservation
Multiple Use
Resource Enhancement
hyd2o
East Wanneroo Precinct 3
Environmental Plan
Figure 5


Date: 03/04/2025 Job No. H24054
Rail transit corridor
20% AEP Inflow : 1.18 m3/s
1% AEP Inflow : 4.35 m3/s
20% AEP Outflow : 0.45 m3/s
1% AEP Outflow : 1.52 m3/s
S12e
S3a
20% AEP Volume : 7500 m3
1% AEP Volume : 22800 m3
20% AEP Volume : 1500 m3
1% AEP Volume : 57600 m3
20% AEP Outflow : 1.10 m3/s
1% AEP Outflow : 3.31 m3/s
S12g
20% AEP Volume : 3200 m3
1% AEP Volume : 16700 m3
Site Boundary
Modelled Storage (Urbaqua DWMS)
Modelled Subcatchments (Urbaqua DWMS)
Main Site Catchments
Flow Direction
DWER LIDAR Contours (mAHD)
0
200
400
Meters
hyd2o
East Wanneroo Precinct 3 LWMS
Surface Water Plan
Figure 6


Date: 29/07/2024 Job No. H24054
359
Kinross
Currambine
WM22
JB4
WM42
JP5B
INSET MAP
JB4
42.85
JP5B
42.01
EW03
42.13
EW02
41.23
EW01
41.46
0 62.5 125 250 375 500
Meters
Site Boundary
DWER Groundwater Contours Maximum 2019 (mAHD)
MGL for 2022 - 2023 Contours (mAHD)
DWER Monitoring Bore
Site Monitoring Bore
41.46 MGL 2022 - 2023 (mAHD)
hyd2o
East Wanneroo Precinct 3 LWMS
Groundwater Plan
Figure 7

Date: 21/03/2025 Job No. H24054
Catchment F
63% AEP Event (~15mm)
Side Slopes for Biofiltration (1:v): 0
Flood Rise (m): 0.3
Base Area (m2): 1260
Volume (m3): 377
Storage Characteristics
Side Slopes for Flood Storage (1:v): 6
Base Area (m2): 1650
1% AEP Event
Flood Rise (m): 1.17
Volume (m3): 2221
TWL Area (m2): 2646
Critical Storm (hr): 6
Catchment C
63% AEP Event (~15mm)
Side Slopes for Biofiltration (1:v): 0
Flood Rise (m): 0.3
Base Area (m2): 1680
Volume (m3): 501
Storage Characteristics
Side Slopes for Flood Storage (1:v): 6
Base Area (m2): 2240
1% AEP Event
Flood Rise (m): 1.19
Volume (m3): 3020
TWL Area (m2): 3443
Critical Storm (hr): 6
Catchment A
63% AEP Event (~15mm)
Side Slopes for Biofiltration (1:v): 0
Flood Rise (m): 0.3
Base Area (m2): 3550
Volume (m3): 1067
Storage Characteristics
Side Slopes for Flood Storage (1:v): 6
Base Area (m2): 5000
1% AEP Event
Flood Rise (m): 1.17
Volume (m3): 6115
TWL Area (m2): 6675
Critical Storm (hr): 6
Catchment G
63% AEP Event (~15mm)
Side Slopes for Biofiltration (1:v): 0
Flood Rise (m): 0.3
Base Area (m2): 750
Volume (m3): 225
Storage Characteristics
Side Slopes (1:v):6
Base Area (m2): 1025
1% AEP Event
Flood Rise (m): 1.17
Volume (m3): 1448
TWL Area (m2): 1823
Critical Storm (hr): 6
Catchment B
63% AEP Event (~15mm)
Side Slopes for Biofiltration (1:v): 0
Flood Rise (m): 0.3
Base Area (m2): 1770
Volume (m3): 530
Storage Characteristics
Side Slopes for Flood Storage (1:v): 6
Base Area (m2): 2450
1% AEP Event
Flood Rise (m): 1.2
Volume (m3): 3287
TWL Area (m2): 3701
Critical Storm (hr): 6
Catchment D
63% AEP Event (~15mm)
Side Slopes for Biofiltration (1:v): 0
Flood Rise (m): 0.3
Base Area (m2): 2030
Volume (m3): 609
Storage Characteristics
Side Slopes (1:v):6
Base Area (m2): 3010
1% AEP Event
Flood Rise (m): 1.18
Volume (m3): 3837
TWL Area (m2): 4399
Critical Storm (hr): 6
Catchment E
63% AEP Event (~15mm)
Side Slopes for Biofiltration (1:v): 0
Flood Rise (m): 0.3
Base Area (m2): 1260
Volume (m3): 375
Storage Characteristics
Side Slopes for Flood Storage (1:v): 6
Base Area (m2): 1590
1% AEP Event
Flood Rise (m): 1.18
Volume (m3): 2175
TWL Area (m2): 2578
Critical Storm (hr): 6
Site Boundary
Catchments
15mm Biofiltration
1%AEP POS Storage
0 50 100 200 300 400
Meters
Land Use
Church
Residential Lots
Road Reserve
Local Centre
Primary School
POS
Reserve
Playing Field
hyd2o
East Wanneroo Precinct 3 LWMS
Stormwater Management Plan
Figure 8

APPENDIX A
LWMS Checklist

Better Urban Water Management LWMS Checklist

Local Water Management Strategy Item	Deliverable	✓	Comments
Executive summary			
Summary of the development design strategy, outlining how the design objectives are proposed to be met	Design elements and requirements for BMP's and critical control points	☑	Executive Summary & Section 4
Introduction			
Total water cycle management - principles and objectives Planning background Previous studies		☑	Introduction, Sections 1.1 & 1.2
Proposed development			
Structure plan, zoning and land use Key landscape features Previous land use	Site context plan Structure plan	☑	Section 1, 2, & 3. Figure 1, Figure 2, Figure 3
Landscape - proposed POS areas, POS credits, water source, bore(s), lake details (if applicable), irrigation areas	Landscape plan	☑	Stormwater Areas and Volumes to inform POS credits in Section 6 & Figure 8. Water availability identified in Section 5.2. Landscape Plan in Appendix I
Design criteria			
Agreed design objective and source of objective		☑	Section 4
Pre-development environment			
Existing information and more detailed assessments (monitoring). How do the site characteristics affect the design?		☑	Section 3 & Figures 3-7
Site conditions- existing topography/ contours, aerial photo underlay, major physical features	Site condition plan	☑	Section 3.1, Figure 3
Geotechnical - topography, soils including acid sulfate soils and infiltration capacity, test pit locations	Geotechnical plan	☑	Section 3.2 & 3.3, Figure 4
Environmental- areas of significant flora and fauna, wetlands and buffers, waterways and buffers, contaminated sites	Environmental plan plus supporting data where appropriate	☑	Sections 3.4-3.5, Figure 5
Surface water- topography, 100 year floodways and flood fringe areas, water quality of flows entering and leaving (if applicable)	Surface water plan	☑	Section 3.6, Figure 6
Groundwater - topography, pre development groundwater levels and water quality, test bore locations	Groundwater plan plus details of groundwater monitoring and testing	☑	Section 3.7, Figure 7, Appendices D,E,F,G
Water use sustainability initiatives			
Water efficiency measures- private and public open spaces including method of enforcement		☑	Section 5.1
Water supply (fit- for-purpose strategy), agreed actions and implementation. If non-potable supply, support with water balance		☑	Section 5.2, Appendix H
Wastewater management		☑	Section 5.3
Stormwater management strategy			
Flood protection - peak flow rates, volumes and top water levels at control points, 100 year flow paths and 100 year detentions storage areas	100yr event plan Long section of critical points	☑	Section 6, 6.1,6.2, Figure 8, Table 6 , Appendix K
Manage serviceability - storage and retention required for the critical 5 year ARI storm events Minor roads should be passable in the 5 year ARI event	5yr event plan	☑	Section 6, 6.1 & 6.3, Figure 8, Table 6, Appendix K
Protect ecology - detention areas for the 1 yr 1 hr ARI event, areas for water quality treatment and types of (including indicative locations for) agreed structural and non-structural best management practices and treatment trains. Protection of waterways, wetlands (and their buffers), remnant vegetation and ecological linkages	1 yr event plan Typical cross sections	☑	Section 6 , 6.1 & 6.4 Figure 8, Table 6-7

Local Water Management Strategy Item	Deliverable	✓	Comments
Groundwater management strategy			
Post development groundwater levels, fill requirements (including existing and likely final surface levels), outlet controls, and subsoil areas/exclusion zones	Groundwater/subsoil plan	☑	Section 7
Actions to address acid sulphate soils or contamination		☑	Section 7.1
The next stage - subdivision and urban water management plans			
Content and coverage of future urban water management plans to be completed at subdivision. Include areas where further investigations are required prior to detailed design		☑	Section 8
Monitoring			
Recommended future monitoring plan including timing, frequency, locations and parameters, together with arrangements for ongoing actions		☑	Section 9
Implementation			
Developer commitments		☑	Section 10
Roles, responsibilities, funding for implementation		☑	Section 10
Review		☑	Section 10

APPENDIX B
Hyd2o Groundwater Bore Lithological Logs

hyd2o HYDROLOGY

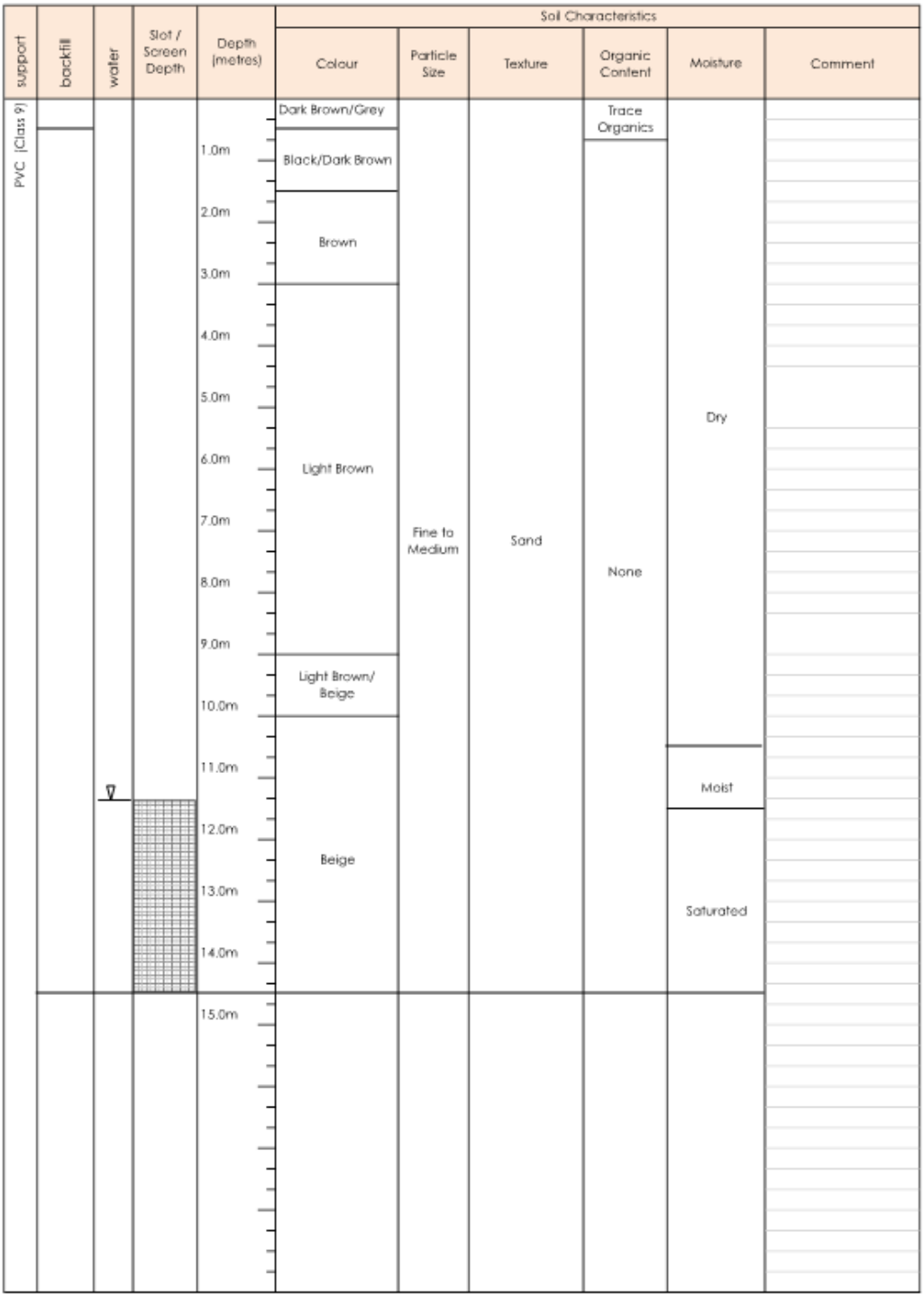
Lithological Log

Hyd2o
Unit 1 387 Hay St
Subiaco, WA 6008

PO Box 1055
Subiaco WA 6904

Date :	12/08/2022	Job Number :	H21064	Bore Name	
Client :	LWP Group Pty Ltd	Start Hole :	11:40		
Project:	East Wanneroo Precinct 3	End Hole :	17:00		
Easting	389876.074	Logged by :	Georgia		
Northing	6484333.08	Total Depth :	14.5 m		
Datum:	MGA Zone 50, GDA 94	RL Top of Casing :	51.937		
Drill type:	Drill Rig Hollow Auger	RL Nat Surface :	51.437		
Hole diameter:	75 mm				

EW01



COLOUR :	Black, White, Beige Dark/Medium/Light : Brown, Red, Orange, Yellow, Grey, Blue Composition : Solid , Blemish, Mottle
PARTICLE SIZE :	Fine, Medium, Course
TEXTURE :	Sand, Loamy Sand, Clayey Sand Silt, Loam, Sandy Loam, Clayey Loam Clay, Sandy Clay
ORGANICS :	High, Medium, Low
MOISTURE :	Dry, Slightly Moist, Moist, Saturated

Static Water Level

Date	12/08/2022
Stickup above NS (m)	0.5
Water Level bTOC (m)	12.0
Water Level bNS (m)	11.5

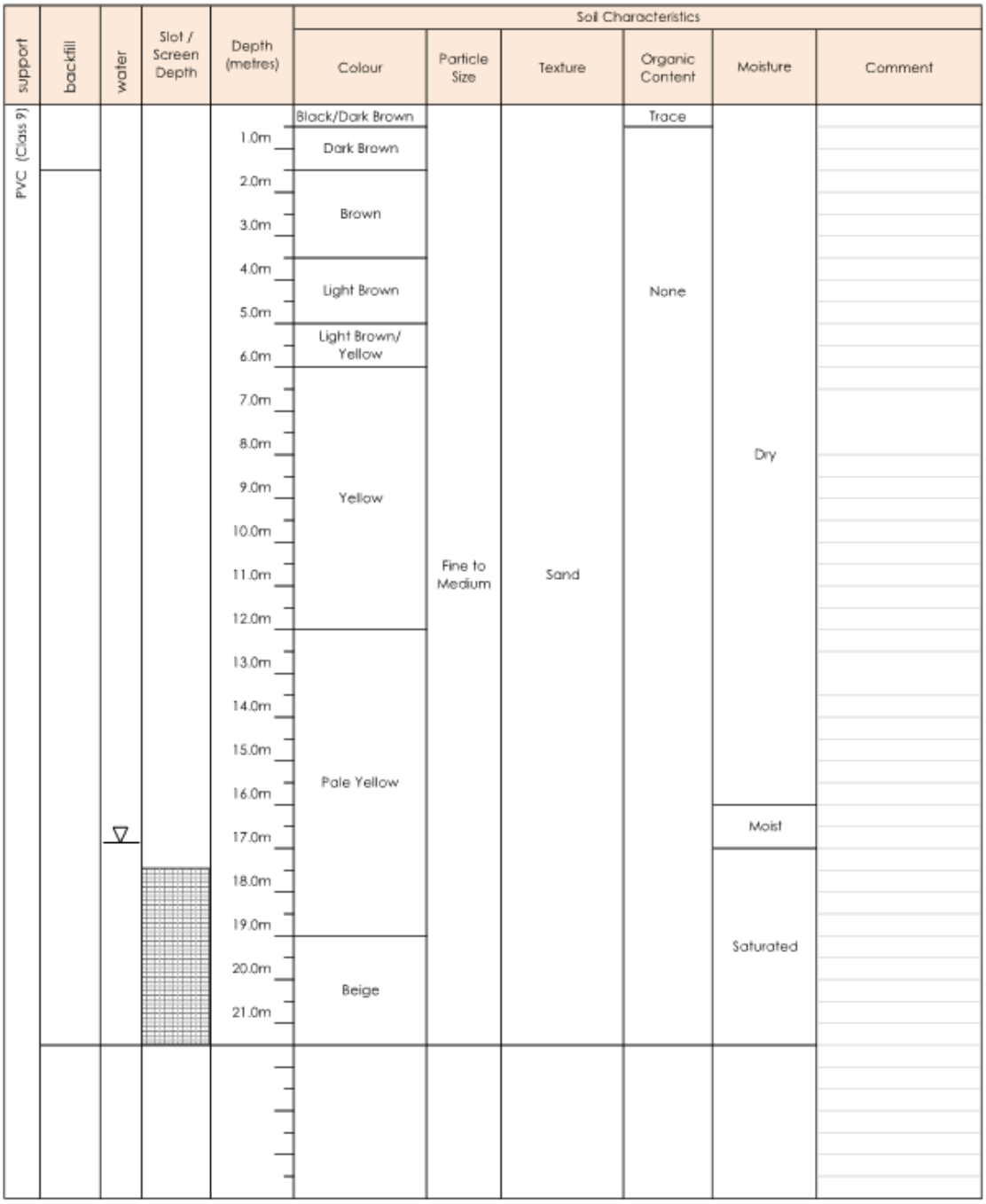
hyd2o HYDROLOGY

Lithological Log

Hyd2o
Unit 1 387 Hay St
Subiaco, WA 6008

PO Box 1055
Subiaco WA 6904

Date :	12/08/2022	Job Number :	H21064	Bore Name	
Client :	LWP Group Pty Ltd	Start Hole :	7:30		
Project:	East Wanneroo Precinct 3	End Hole :	11:20		
Easting	389254.623	Logged by :	Georgia		
Northing	6485192.046	Total Depth :	17.5m	EW02	
Datum:	MGA Zone 50, GDA 94	RL Top of Casing :	58.237		
Drill type:	Drill Rig Hollow Auger	RL Nat Surface :	57.737		
Hole diameter:	75 mm				



COLOUR :	Black, White, Biege Dark/Medium/Light : Brown, Red, Orange, Yellow, Grey, Blue Composition : Solid , Blemish, Mottle
PARTICLE SIZE :	Fine, Medium, Course
TEXTURE :	Sand, Loamy Sand, Clayey Sand Silt, Loam, Sandy Loam, Clayey Loam Clay, Sandy Clay
ORGANICS :	High, Medium, Low
MOISTURE :	Dry, Slightly Moist, Moist, Saturated

Static Water Level

Date	12/08/2022
Stickup above NS (m)	0.5
Water Level bTOC (m)	17.5
Water Level bNS (m)	17

hyd2o HYDROLOGY

Lithological Log

Hyd2o
Unit 1 387 Hay St
Subiaco, WA 6008

PO Box 1055
Subiaco WA 6904

Date :	7/09/2022	Job Number :	H21064	Bore Name	
Client :	LWP Group Pty Ltd	Start Hole :	8:30		
Project:	East Wanneroo Precinct 3	End Hole :	11:00		
Easting	389849.307	Logged by :	Georgia	EW03	
Northing	6485613.339	Total Depth :	16m		
Datum:	MGA Zone 50, GDA 94	RL Top of Casing :	54.435		
Drill type:	Drill Rig Hollow Auger	RL Nat Surface :	53.935		
Hole diameter:	75 mm				

support	backfill	water	Slot / Screen Depth	Depth (metres)	Soil Characteristics: Colour	Particle Size	Texture	Organic Content	Moisture	Comment
PVC (Class 9)				1.0m	Dark Brown/Grey	Fine to Medium	Sand	Trace Organics	Dry	
				2.0m	Light Brown/ Brown Orange					
				3.0m						
				4.0m	Light Brown/ Orange					
				5.0m	Yellow			None		
				6.0m						
				7.0m						
				8.0m						
				9.0m						
				10.0m	Orange					
					Pale Orange					
				11.0m	Pale Orange/ Beige					
					Pale Yellow/ Beige					
				12.0m					Moist	
				13.0m	Beige					
				14.0m					Saturated	
				15.0m						
				16.0m	White					

COLOUR :	Black, White, Biege Dark/Medium/Light : Brown, Red, Orange, Yellow, Grey, Blue Composition : Solid , Blemish, Mottle
PARTICLE SIZE :	Fine, Medium, Course
TEXTURE :	Sand, Loamy Sand, Clayey Sand Silt, Loam, Sandy Loam, Clayey Loam Clay, Sandy Clay
ORGANICS :	High, Medium, Low
MOISTURE :	Dry, Slightly Moist, Moist, Saturated

Static Water Level

Date	7/09/2022
Stickup above NS (m)	0.5
Water Level bTOC (m)	13.5
Water Level bNS (m)	13

APPENDIX C
Urbaqua (2021)
East Wanneroo DWMS Extracts

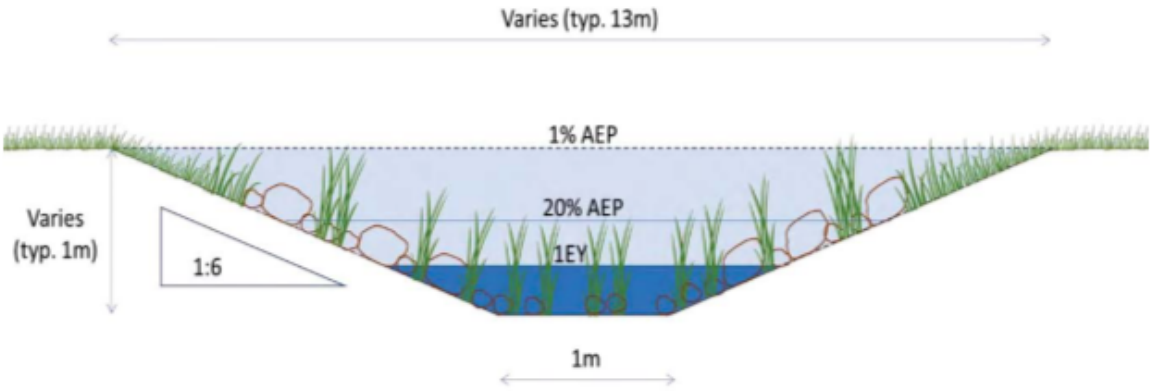


Figure 28: Modelled arterial drainage swale

Preliminary stormwater modelling indicates flows across precinct boundaries will be required in some locations, whilst others may be able to manage all minor (20%AEP) and major (1%AEP) events with their boundaries. Indicative peak flow rates across precinct boundaries are presented in Table 26. However, it will be necessary to undertake more detailed modelling to determine cross-boundary flows to be accommodated within precincts for reporting at the local structure planning (LWMS) stage. Controlled groundwater levels at each crossing locations are also provided in Table 26 and it is recommended that the invert levels of stormwater drainage systems are set at least 0.3m above the local controlled groundwater level.

Table 26: Indicative peak flows crossing precinct boundaries

Location (refer to Figures 32 to 51 in App. C)	Controlled groundwater level (mAHD)	20% AEP Peak flow (m^3/s)	1% AEP Peak flow (m^3/s)
1a	39.63	0.15	0.45
2a	40.54	0.32	1.02
3a	41.27	1.10	3.31
3b	42.58	0.45	1.52
4a	41.38	0.41	1.54
4a	41.38	0.19	0.42
5a	42.31	1.57	5.82
6a	41.66	2.40	8.92
6b	43.03	2.20	8.60
10a	46.50	0.36	1.26
12a	42.86	0.39	1.20
12b	45.22	0.54	1.35
13a	41.86	1.18	4.35
13b	42.66	0.32	1.18
13b	42.66	0.14	0.37
13c	43.07	0.86	3.04
13d	45.40	0.28	0.70
13e	45.22	0.19	0.47
15a	44.51	0.25	0.66

Location (refer to Figures 32 to 51 in App. C)	Controlled groundwater level (mAHD)	20% AEP Peak flow (m^3/s)	1% AEP Peak flow (m^3/s)
15b	44.73	0.63	1.67
15c	44.63	0.18	0.43
15d	42.40	0.37	1.27
17a	41.33	0.79	2.67
23a	44.20	0.53	2.04
23b	41.74	0.64	2.60
23c	42.75	0.68	2.63
23c	42.75	0.17	0.52
23d	44.11	0.49	2.06
24a	49.29	0.25	1.01

Storage requirements

Preliminary stormwater modelling indicates that new infiltration or detention storages will be required in some precincts, whilst others may be able to manage all minor (20%AEP) and major (1%AEP) events with the capacity available in existing wetlands. Indicative volumes are provided for new storages in Table 27. However, it will be necessary to undertake more detailed modelling to determine storage volumes and locations to be accommodated within precincts for reporting at the local structure planning (LWMS) stage. Controlled groundwater levels are provided in Table 27 at the location of each storage and it is recommended that the inverts of stormwater storages are set at least 0.3m above the local controlled groundwater level.

Detailed surface water modelling will be required to support future local structure plans and presented in local water management strategies. This modelling will need to include consideration of the risks associated with surface and groundwater interaction both now and in the future. The establishment of appropriate antecedent conditions in drainage infiltration basins and wetlands functioning as part of the surface water management system will need to consider changing groundwater levels and the performance of subsurface drainage systems under flood conditions.

Table 27: Indicative constructed storage volumes

Location (refer to Figures 32 to 51 in App. C)	Controlled groundwater level (mAHD)	20% AEP Volume (m^3)	1% AEP Volume (m^3)
S1a	39.51	4,400	13,300
S1b	38.38	4,600	5,400
S2a	38.32	4,600	4,600
S3a	41.34	7,500	22,800
S4a	39.66	4,600	5,600
S4b	39.24	4,600	5,500
S6a	39.46	300	4,100
S10a	42.88	1,300	46,800
S10b	43.38	3,200	13,600

Location (refer to Figures 32 to 51 in App. C)	Controlled groundwater level (mAHD)	20% AEP Volume (m^3)	1% AEP Volume (m^3)
S11a	42.60	6,700	43,800
S12a	44.53	11,900	61,300
S12b	44.45	100	10,500
S12c	44.12	12,900	54,100
S12d	43.16	6,400	34,200
S12e	42.86	1,500	57,600
S12f	42.80	8,600	41,600
S12g	41.44	3,200	16,700
S13a	45.14	4,500	15,900
S14b	44.98	200	11,900
S15a	46.00	3,800	23,000
S16a	42.42	7,700	39,800
S16b	39.62	10,300	48,000
S16c	38.43	10,600	49,400
S20a	43.20	600	14,200
S20b	44.36	3,200	13,200
S23a	47.49	2,300	92,100
S23b	48.72	3,400	10,700
S23c	49.61	2,000	8,700
S23d	49.44	1,800	6,900
S23e	48.56	3,900	12,400
S24a	44.03	2,600	11,400
S24c	47.58	4,400	15,800
S25a	41.93	800	145,700

Where existing wetlands are proposed for integration with the arterial drainage system and/or will receive floodwaters during minor or major flood events it is important that the design of the system and its outlets is consistent with protection of wetland values. Guidance for the design of drainage system discharges at their interface with wetlands is provided in section 5.1.3.

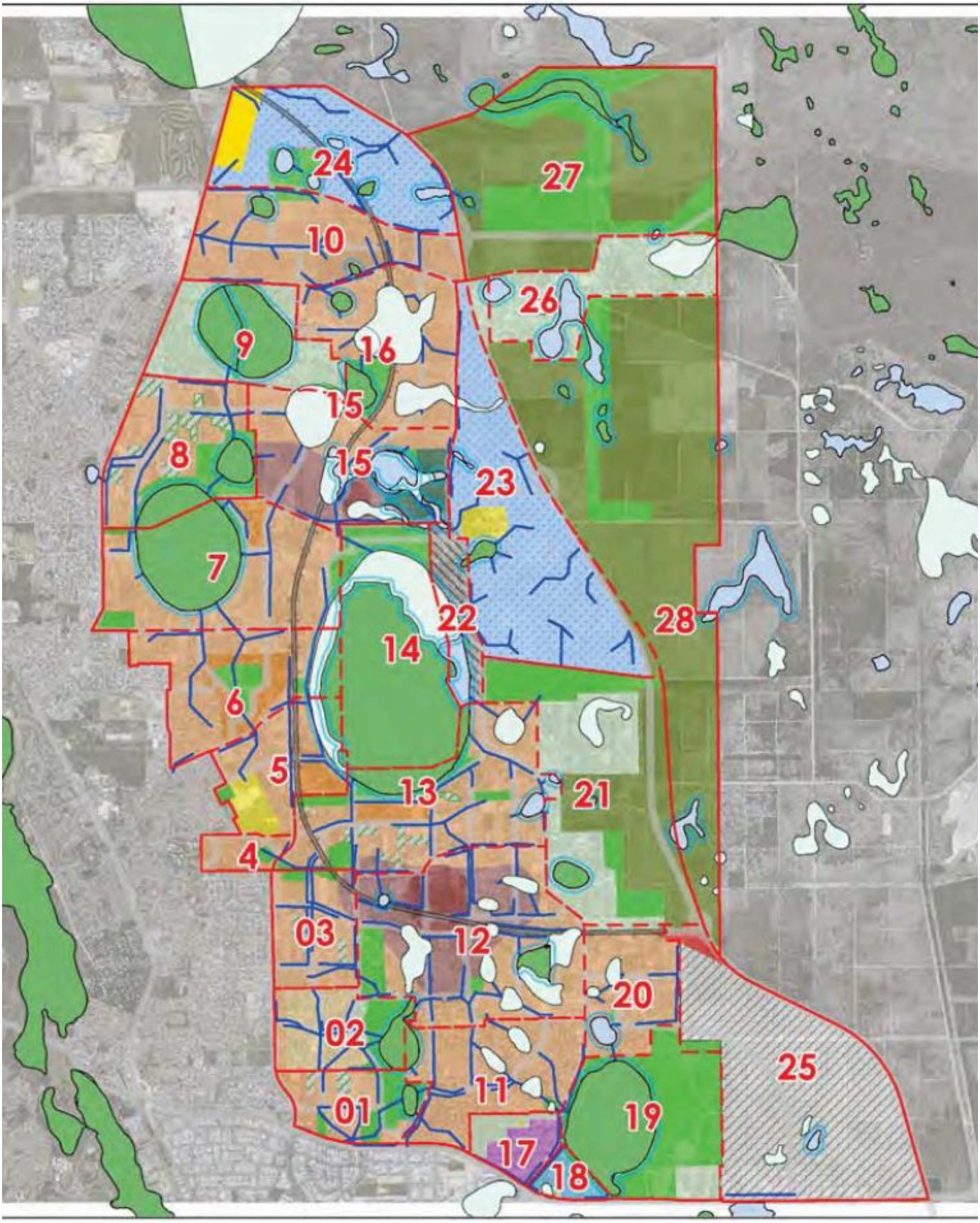
Summary of precinct drainage system requirements

Table 28 provides a summary of stormwater and groundwater drainage system requirements for each precinct.

Table 28: Summary precinct drainage requirements

Precinct	Land Use Context	Wetlands	Stormwater management (Small rainfall events)	Stormwater management (Minor and Major rainfall events)	Groundwater management
P1	Residential area with access to regional reserves and wetland system	Little Badgerup Lake (CCW) is located in the eastern portion of the precinct.	Small rainfall events are to be managed at source (in lots and streets) wherever possible. All small event stormwater management systems are to be accommodated outside of retained wetlands and their buffers.	Contains four catchments. Part of this precinct drains into Little Badgerup Lake located in the east of the precinct, part drains to the north into Precinct 2 via two discharge locations and part drains offsite to the west and may require detention capacity of up to 5ML prior to discharge into the existing adjacent drainage system. The remainder, and largest part of this precinct drains into an infiltration basin located in the south of the precinct with a capacity of up to 15ML.	Approximately 17 hectares of the precinct may require groundwater management in future generating a potential flow rate of around 9L/s. A 24hour shutdown storage volume of 760m3 will need to be accommodated at three potential pump station locations.
P2	Low Density Residential area with access to regional reserves and wetland system	Badgerup Lake (CCW) is located in the eastern portion of the precinct.	Small rainfall events are to be managed at source (in lots and streets) wherever possible. All small event stormwater management systems are to be accommodated outside of retained wetlands and their buffers.	Contains two catchments. Runoff from Precinct 1 enters this precinct at 2 locations on the southern boundary. precincts. The majority of this precinct discharges into Badgerup Lake located partially within the precinct in the east. A very small portion of the precinct drains into a detention basin that may need to have capacity of up to 5ML located in the south west of the precinct prior to discharge offsite.	Approximately 27 hectares of the precinct may require groundwater management in future generating a potential flow rate of around 10L/s. A 24hour shutdown storage volume of 830m3 will need to be accommodated at one potential pump station location.
P3	Residential area. Access is available to regional reserves, however wetland system is some distance to the precinct boundary.	N/A	Small rainfall events are to be managed at source (in lots and streets) wherever possible. All small event stormwater management systems are to be accommodated outside of retained wetlands and their buffers.	Contains two catchments. Runoff from parts of Precinct 4 and Precinct 13 enters this precinct from the north and a portion of this Precinct drains into Precinct 12 to the east. The majority of this precinct drains to a centrally located infiltration basin with capacity of up to 26ML.	Groundwater management is not expected to be required in this precinct
P4	Residential area	N/A	Small rainfall events are to be managed at source (in lots and streets) wherever possible. All small event stormwater management systems are to be accommodated outside of retained wetlands and their buffers.	Contains three catchments. Runoff from part of this precinct drains into Precinct 3 via Precinct 13 precincts. A portion of the precinct in the west drains offsite and will require one or two detention basins of up to 5ML capacity each to protect the downstream system.	Approximately 8 hectares of the precinct may require groundwater management in future generating a potential flow rate of around 6L/s. A 24hour shutdown storage volume of 500m3 will need to be accommodated at one potential pump station location.
P5	Residential area bisected by road and rail corridor. Eastern section has access to regional reserves and wetland systems. Includes area of public purpose reserve (water supply tanks).	Lake Jandabup (CCW) is partially located in this precinct to the east.	Small rainfall events are to be managed at source (in lots and streets) wherever possible. All small event stormwater management systems are to be accommodated outside of retained wetlands and their buffers.	Contains three catchments. Runoff from the western side of this precinct drains into Precinct 6 to the north. The majority of runoff generated within this precinct drains into Lake Jandabup which is partially within the precinct in the east. The precinct is bisected by the proposed rail transit corridor and may require additional detention on the western side of the corridor prior to discharge.	Groundwater management is not expected to be required in this precinct
P6	Residential area including large park and recreation area in the centre. Access to Lake Mariginiup is available through reserve 46711.	Lake Jandabup (CCW) is partially located in this precinct to the east.	Small rainfall events are to be managed at source (in lots and streets) wherever possible. All small event stormwater management systems are to be accommodated outside of retained wetlands and their buffers.	Contains four catchments. The majority of the precinct drains to the north into Precinct 7 within a regional open space corridor prior to discharging into Mariginiup Lake located in Precinct 7. Most of the remaining precinct area drains to the east into Lake Jandabup located partially within the precinct. A very small portion of the precinct drains into a detention basin of up to 5ML capacity located in the south west of the precinct prior to discharge offsite.	Approximately 3 hectares of the precinct may require groundwater management in future generating a potential flow rate of less than 1L/s. A 24hour shutdown storage volume of 30m3 will need to be accommodated at one potential pump station location.
P7	Residential area bisected by road and rail corridor. Access to regional reserves and wetland systems is available both sides of the corridor.	Mariginiup Lake (CCW) is located in this precinct and a small portion of Lake Jandabup is also within the eastern portion of the precinct	Small rainfall events are to be managed at source (in lots and streets) wherever possible. All small event stormwater management systems are to be accommodated outside of retained wetlands and their buffers.	Contains two catchments. Runoff from Precinct 6 enters this precinct from the south and a small portion of Precinct 15 from the north east. The majority of the precinct drains into Mariginiup Lake which is located partially within the precinct. A small portion of the precinct area to the east of the proposed rail transit corridor drains into Lake Jandabup located partially within the precinct.	Groundwater management is not expected to be required in this precinct
P8	Residential area with access to regional reserves and wetland system	The northern portion of Mariginiup Lake (CCW) and the whole of Little Mariginiup	Small rainfall events are to be managed at source (in lots and streets) wherever possible. All small event stormwater management	Contains two catchments. Runoff from portions of Precinct 15 enters this precinct from the east at two locations. The majority of the precinct drains into Mariginiup Lake which is	Approximately 50 hectares of the precinct may require groundwater management in future generating a potential flow rate of around

Department of Planning, Lands and Heritage - East Wanneroo District Structure Plan:
District Water Management Strategy
Figure 33: Layout plan for Figures 34 - 51 Precinct drainage assessment



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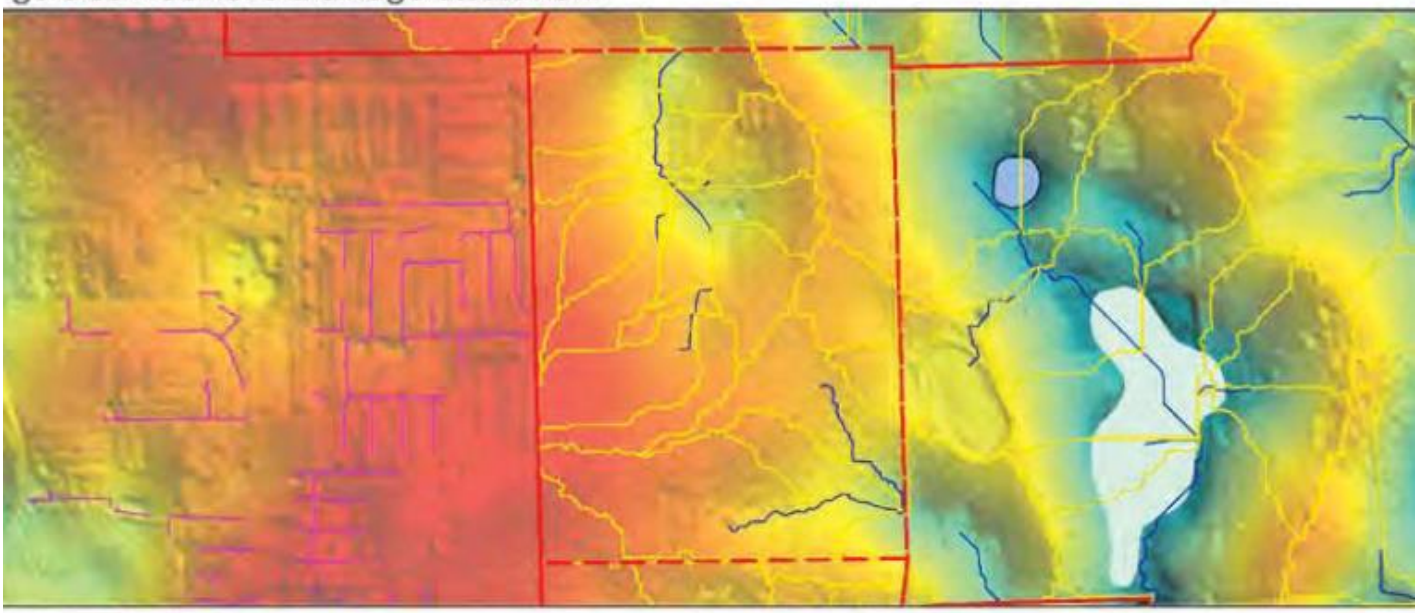
District Water Management Strategy

Figure 36 Precinct 3 drainage assessment



LEGEND:

Structure Plan Boundary

Geomorphic Wetlands
- Conservation
- Resource Enhancement
- Multiple Use

Indicative 50m wetland buffers

Potential contaminated sites

Indicative flowpaths

Topographic subcatchments

Modelled subcatchments

Modelled drainage

Modelled node

EWDSP Land uses
- Centre
- Urban neighbourhood
- Character areas
- Suburban neighbourhood
- Special residential area
- Industrial
- Public purpose
- Regional open space
- Employment area

Precinct boundaries

Rail transit corridor

Road alignments

- High priority vegetation area
- Regional sporting fields
- Rural
- Service commercial
- State forest
- Tourism opportunities
- Intersection area
- Subject to further planning

S1a Modelled storages

1a Precinct boundary crossings

Elevation
85 mAHD
1 mAHD

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Scale 1:20,000 @ A4

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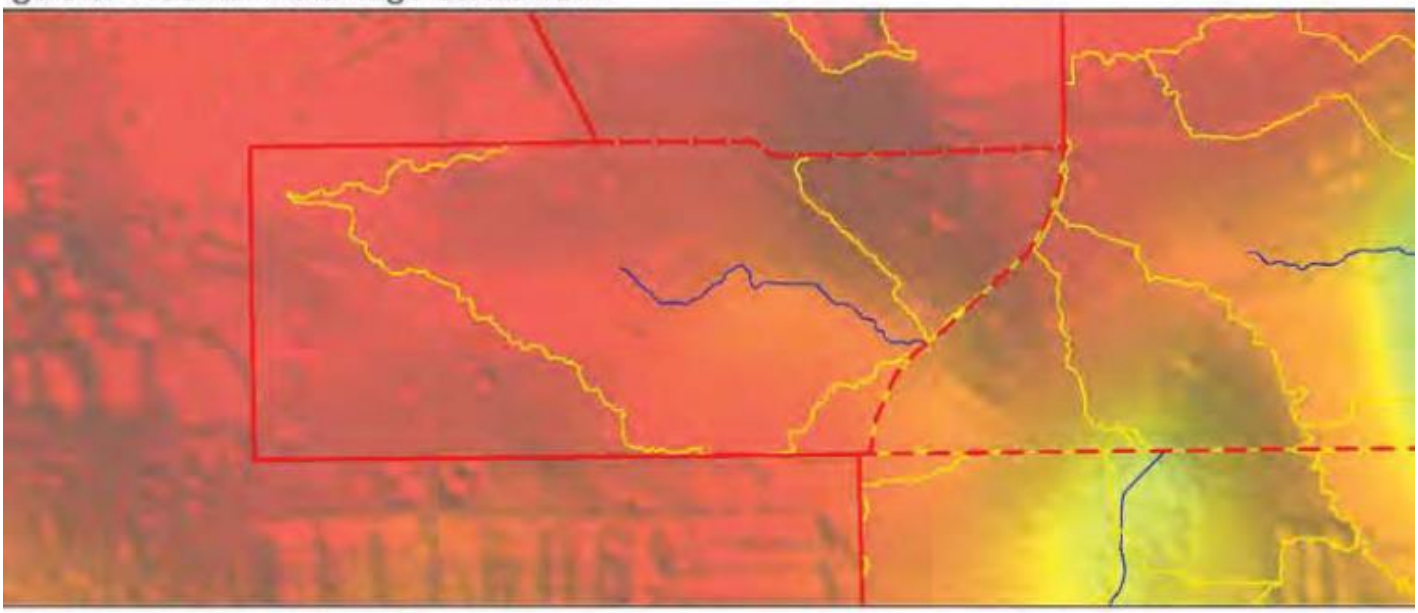
District Water Management Strategy

Figure 37 Precinct 4 drainage assessment



LEGEND:

Structure Plan Boundary

Geomorphic Wetlands
- Conservation
- Resource Enhancement
- Multiple Use

Indicative 50m wetland buffers

Potential contaminated sites

Indicative flowpaths

Topographic subcatchments

Modelled subcatchments

Modelled drainage

Modelled node

EWDSP Land uses
- Centre
- Urban neighbourhood
- Character areas
- Suburban neighbourhood
- Special residential area
- Industrial
- Public purpose
- Regional open space
- Employment area

Precinct boundaries

Rail transit corridor

Road alignments

- High priority vegetation area
- Regional sporting fields
- Rural
- Service commercial
- State forest
- Tourism opportunities
- Intersection area
- Subject to further planning

S1a Modelled storages

1a Precinct boundary crossings

Elevation
85 mAH
1 mAHD

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Scale 1:10,000 @ A4

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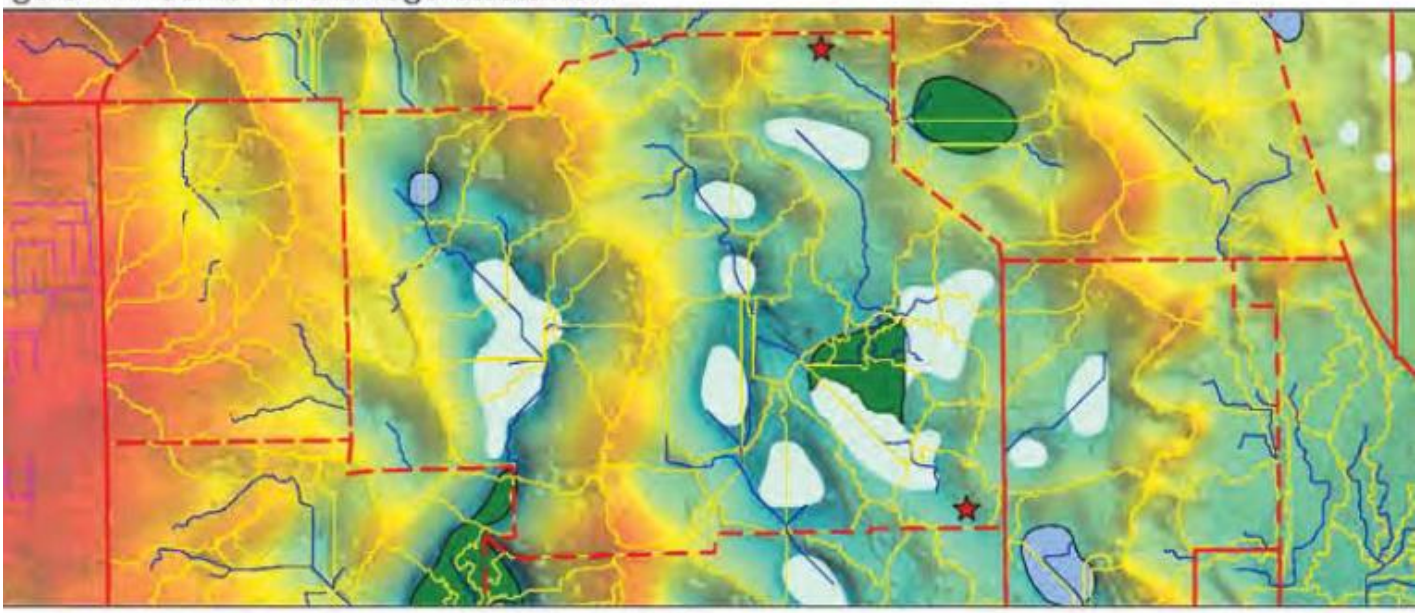
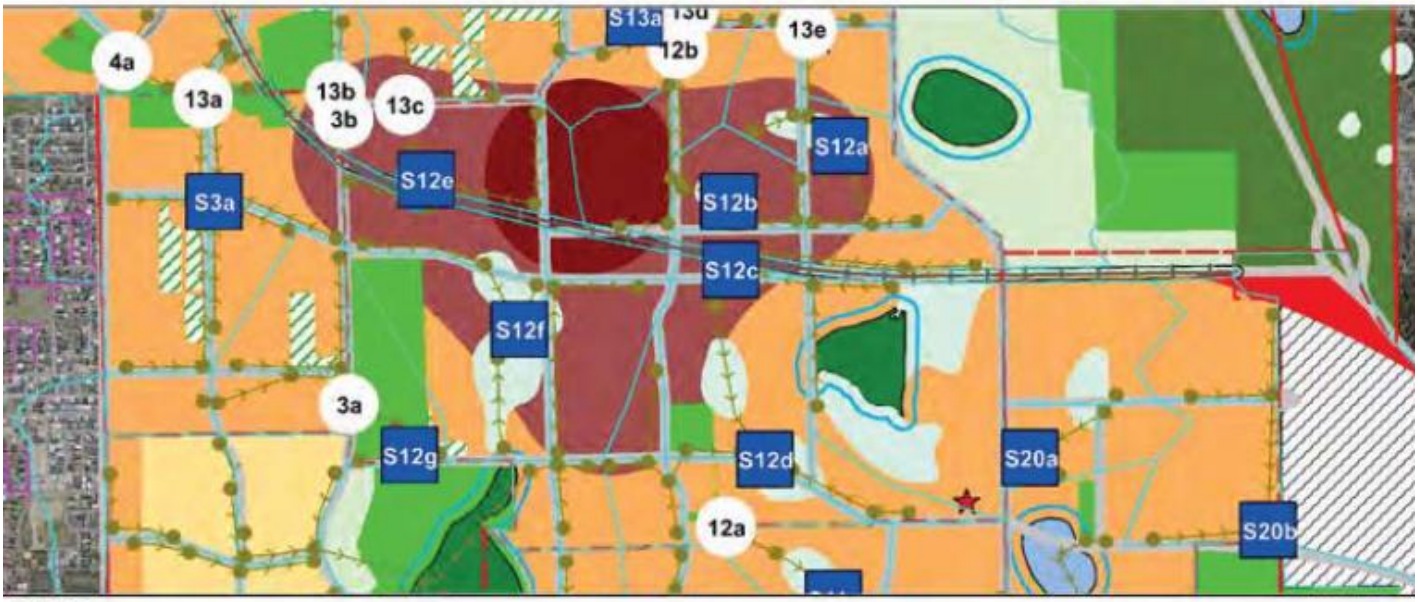
District Water Management Strategy

igure 44 Precinct 12 drainage assessment





GEND:

Structure Plan Boundary

Geomorphic Wetlands

Conservation

Resource Enhancement

Multiple Use

Indicative 50m wetland buffers

Potential contaminated sites

Indicative flowpaths

Topographic subcatchments

Modelled subcatchments

Modelled drainage

Modelled node

EWDSP Land uses

Centre

Urban neighbourhood

Character areas

Suburban neighbourhood

Special residential area

Industrial

Public purpose

Regional open space

Employment area

Precinct boundaries

Rail transit corridor

Road alignments

High priority vegetation area

Regional sporting fields

Rural

Service commercial

State forest

Tourism opperturnities

Intersection area

Subject to further planning

S1a Modelled storages

1a Precinct boundary crossings

Elevation

85 mAH

1 mAHD

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Scale 1:30,000 @ A4

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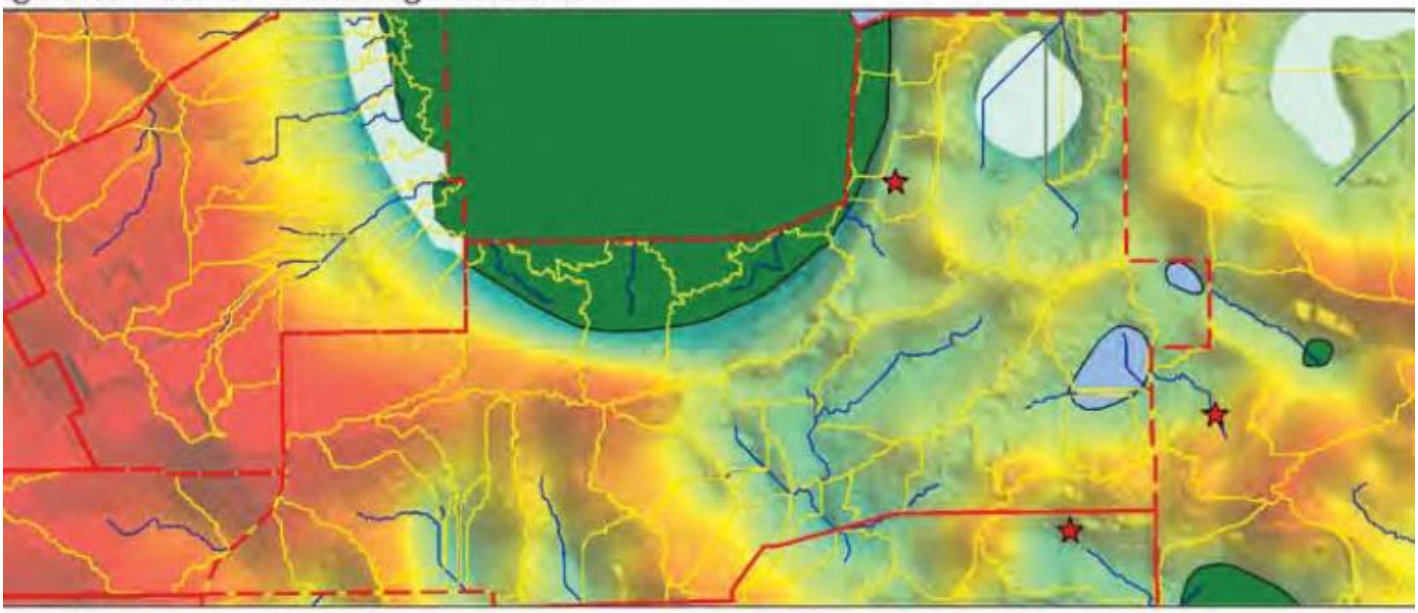
District Water Management Strategy

Figure 45 Precinct 13 drainage assessment



LEGEND:

Structure Plan Boundary

Geomorphic Wetlands
- Conservation
- Resource Enhancement
- Multiple Use

Indicative 50m wetland buffers

Potential contaminated sites

Indicative flowpaths

Topographic subcatchments

Modelled subcatchments

Modelled drainage

Modelled node

EWDSP Land uses
- Centre
- Urban neighbourhood
- Character areas
- Suburban neighbourhood
- Special residential area
- Industrial
- Public purpose
- Regional open space
- Employment area

Precinct boundaries

Rail transit corridor

Road alignments

- High priority vegetation area
- Regional sporting fields
- Rural
- Service commercial
- State forest
- Tourism opportunities
- Intersection area
- Subject to further planning

S1a Modelled storages

1a Precinct boundary crossings

Elevation
85 mAH
1 mAHD

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metres
Scale 1:24,980@ A4

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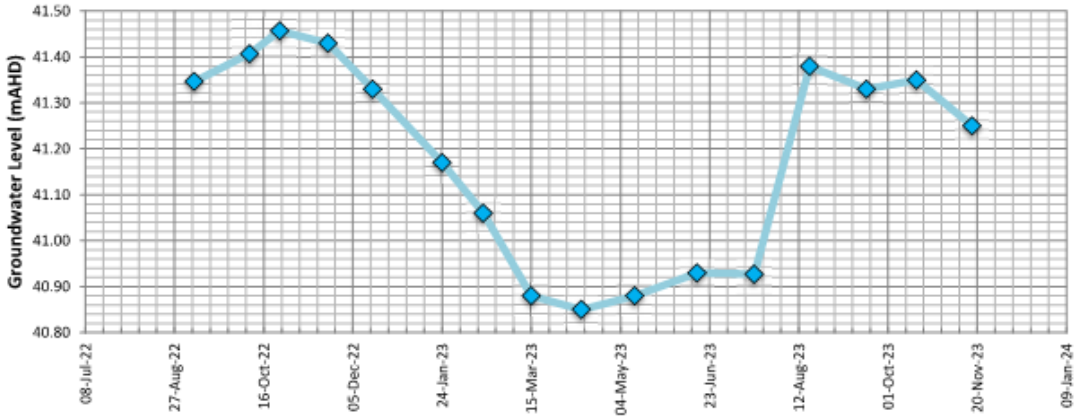
APPENDIX D
Groudwater Level Data

H21064 East Wanneroo Monitoring

EW01 Bore 1 - Nicholas Rd

Data Analysis Period Start Date	7/09/2022	Easting	389876.074	Natural Surface (mAHD)	51.44
Data Analysis Period End Date	17/11/2023	Northing	6484333.08	Top of Casing (m AHD)	51.94
				End of Hole (mAHD)	

Report Date : 7/04/2025



Date	Groundwater bTOC	Groundwater mAHD	Depth Below NS m
7/09/2022	10.59	41.35	10.09
8/10/2022	10.53	41.41	10.03
25/10/2022	10.48	41.46	9.98
21/11/2022	10.51	41.43	10.01
16/12/2022	10.61	41.33	10.11
24/01/2023	10.77	41.17	10.27
16/02/2023	10.88	41.06	10.38
15/03/2023	11.06	40.88	10.56
12/04/2023	11.09	40.85	10.59
12/05/2023	11.06	40.88	10.56
16/06/2023	11.01	40.93	10.51
18/07/2023	11.01	40.93	10.51
18/08/2023	10.56	41.38	10.06
19/09/2023	10.61	41.33	10.11
17/10/2023	10.59	41.35	10.09
17/11/2023	10.69	41.25	10.19

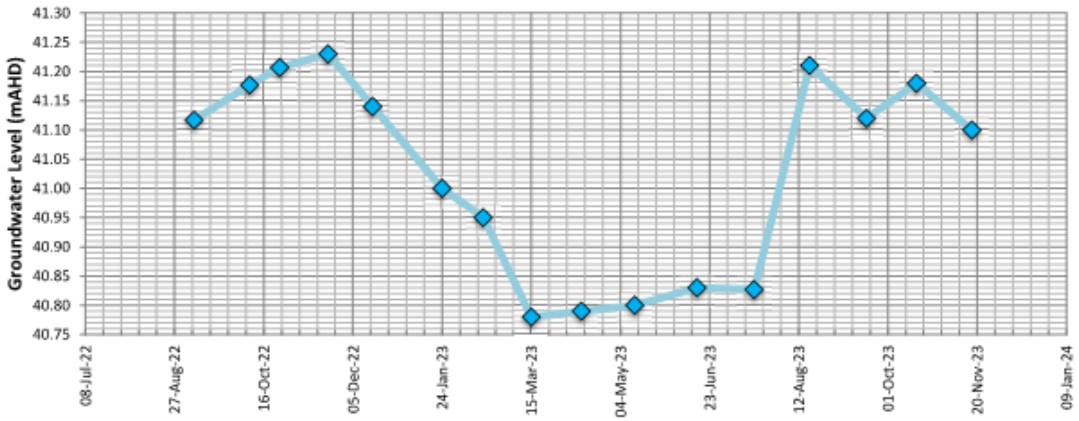
Minimum Recorded Level (mAHD)	40.85
Maximum Recorded Level (mAHD)	41.457

H21064 East Wanneroo Monitoring

EW02 Bore 2 - Lot 206

Data Analysis Period Start Date	7/09/2022	Easting	389254.623	Natural Surface (mAHD)	57.74
Data Analysis Period End Date	17/11/2023	Northing	6485192.046	Top of Casing (m AHD)	58.24
				End of Hole (mAHD)	

Report Date : 7/04/2025



Date	Groundwater bTOC	Groundwater mAHD	Depth Below NS m
7/09/2022	17.12	41.12	16.62
8/10/2022	17.06	41.18	16.56
25/10/2022	17.03	41.21	16.53
21/11/2022	17.01	41.23	16.51
16/12/2022	17.10	41.14	16.60
24/01/2023	17.24	41.00	16.74
16/02/2023	17.29	40.95	16.79
15/03/2023	17.46	40.78	16.96
12/04/2023	17.45	40.79	16.95
12/05/2023	17.44	40.80	16.94
16/06/2023	17.41	40.83	16.91
18/07/2023	17.41	40.83	16.91
18/08/2023	17.03	41.21	16.53
19/09/2023	17.12	41.12	16.62
17/10/2023	17.06	41.18	16.56
17/11/2023	17.14	41.10	16.64

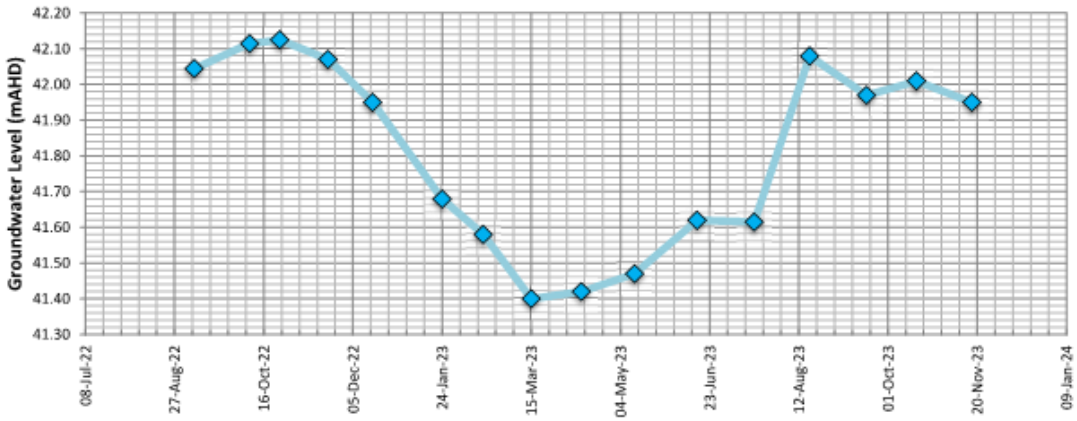
Minimum Recorded Level (mAHD)	40.78
Maximum Recorded Level (mAHD)	41.23

H21064 East Wanneroo Monitoring

EW03 Bore 3 - Carbone

Data Analysis Period Start Date	7/09/2022	Easting	389849.307	Natural Surface (mAHD)	53.94
Data Analysis Period End Date	17/11/2023	Northing	6485613.339	Top of Casing (m AHD)	54.44
				End of Hole (mAHD)	

Report Date : 7/04/2025



Date	Groundwater bTOC	Groundwater mAHD	Depth Below NS m
7/09/2022	12.39	42.05	11.89
8/10/2022	12.32	42.12	11.82
25/10/2022	12.31	42.13	11.81
21/11/2022	12.37	42.07	11.87
16/12/2022	12.49	41.95	11.99
24/01/2023	12.76	41.68	12.26
16/02/2023	12.86	41.58	12.36
15/03/2023	13.04	41.40	12.54
12/04/2023	13.02	41.42	12.52
12/05/2023	12.97	41.47	12.47
16/06/2023	12.82	41.62	12.32
18/07/2023	12.82	41.62	12.32
18/08/2023	12.36	42.08	11.86
19/09/2023	12.47	41.97	11.97
17/10/2023	12.43	42.01	11.93
17/11/2023	12.49	41.95	11.99

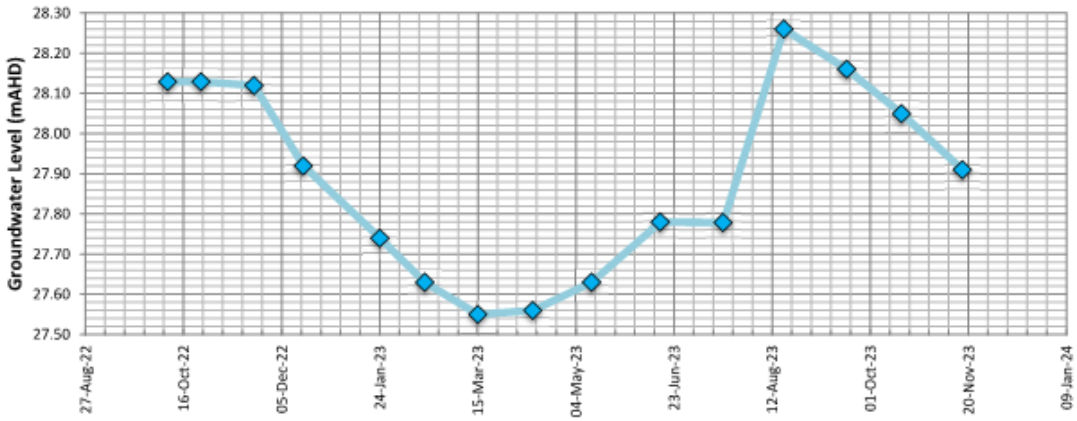
Minimum Recorded Level (mAHD)	41.4
Maximum Recorded Level (mAHD)	42.125

H21064 East Wanneroo Monitoring

WM42 WM42

Data Analysis Period Start Date	7/09/2022	Easting	386832	Natural Surface (mAHD)	38.57
Data Analysis Period End Date	17/11/2023	Northing	6485295	Top of Casing (m AHD)	39.15
				End of Hole (mAHD)	

Report Date : 7/04/2025



Date	Groundwater bTOC	Groundwater mAHD	Depth Below NS m
8/10/2022	11.02	28.13	10.44
25/10/2022	11.02	28.13	10.44
21/11/2022	11.03	28.12	10.45
16/12/2022	11.23	27.92	10.65
24/01/2023	11.41	27.74	10.83
16/02/2023	11.52	27.63	10.94
15/03/2023	11.60	27.55	11.02
12/04/2023	11.59	27.56	11.01
12/05/2023	11.52	27.63	10.94
16/06/2023	11.37	27.78	10.79
18/07/2023	11.37	27.78	10.79
18/08/2023	10.89	28.26	10.31
19/09/2023	10.99	28.16	10.41
17/10/2023	11.10	28.05	10.52
17/11/2023	11.24	27.91	10.66

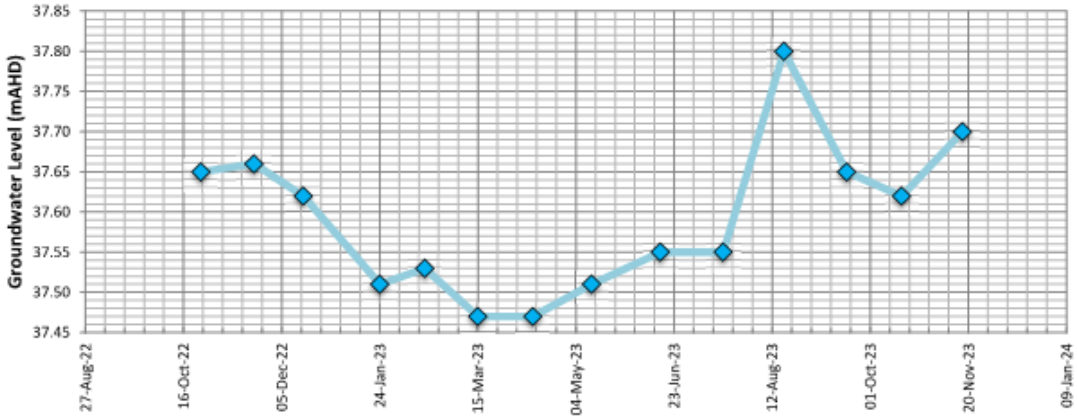
Minimum Recorded Level (mAHD)	27.55
Maximum Recorded Level (mAHD)	28.26

H21064 East Wanneroo Monitoring

WM22 WM22

Data Analysis Period Start Date	7/09/2022	Easting	387060	Natural Surface (mAHD)	65.48
Data Analysis Period End Date	17/11/2023	Northing	6486557	Top of Casing (m AHD)	66.03
				End of Hole (mAHD)	

Report Date : 7/04/2025



Date	Groundwater bTOC	Groundwater mAHD	Depth Below NS m
25/10/2022	28.38	37.65	27.83
21/11/2022	28.37	37.66	27.82
16/12/2022	28.41	37.62	27.86
24/01/2023	28.52	37.51	27.97
16/02/2023	28.50	37.53	27.95
15/03/2023	28.56	37.47	28.01
12/04/2023	28.56	37.47	28.01
12/05/2023	28.52	37.51	27.97
16/06/2023	28.48	37.55	27.93
18/07/2023	28.48	37.55	27.93
18/08/2023	28.23	37.80	27.68
19/09/2023	28.38	37.65	27.83
17/10/2023	28.41	37.62	27.86
17/11/2023	28.33	37.70	27.78

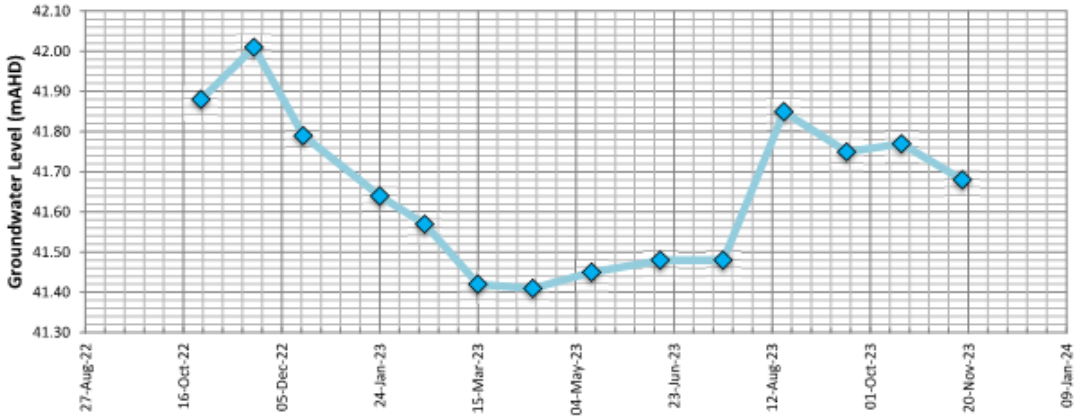
Minimum Recorded Level (mAHD)	37.47
Maximum Recorded Level (mAHD)	37.8

H21064 East Wanneroo Monitoring

JP5B Jandabup Monitoring - JP5B

Data Analysis Period Start Date	7/09/2022	Easting	389310	Natural Surface (mAHD)	76.48
Data Analysis Period End Date	17/11/2023	Northing	6486042	Top of Casing (m AHD)	77.00
				End of Hole (mAHD)	

Report Date : 7/04/2025



Date	Groundwater bTOC	Groundwater mAHD	Depth Below NS m
25/10/2022	35.12	41.88	34.60
21/11/2022	34.99	42.01	34.47
16/12/2022	35.21	41.79	34.69
24/01/2023	35.36	41.64	34.84
16/02/2023	35.43	41.57	34.91
15/03/2023	35.58	41.42	35.06
12/04/2023	35.59	41.41	35.07
12/05/2023	35.55	41.45	35.03
16/06/2023	35.52	41.48	35.00
18/07/2023	35.52	41.48	35.00
18/08/2023	35.15	41.85	34.63
19/09/2023	35.25	41.75	34.73
17/10/2023	35.23	41.77	34.71
17/11/2023	35.32	41.68	34.80

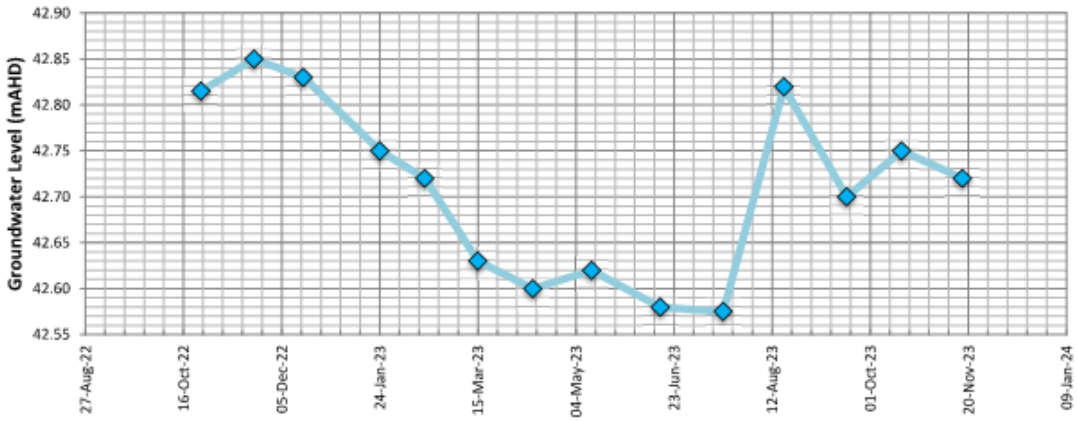
Minimum Recorded Level (mAHD)	41.41
Maximum Recorded Level (mAHD)	42.01

H21064 East Wanneroo Monitoring

JB4 Jandabup Monitoring - JB4

Data Analysis Period Start Date	7/09/2022	Easting	389845.72	Natural Surface (mAHD)	62.87
Data Analysis Period End Date	17/11/2023	Northing	6486155.13	Top of Casing (m AHD)	63.48
				End of Hole (mAHD)	

Report Date : 7/04/2025



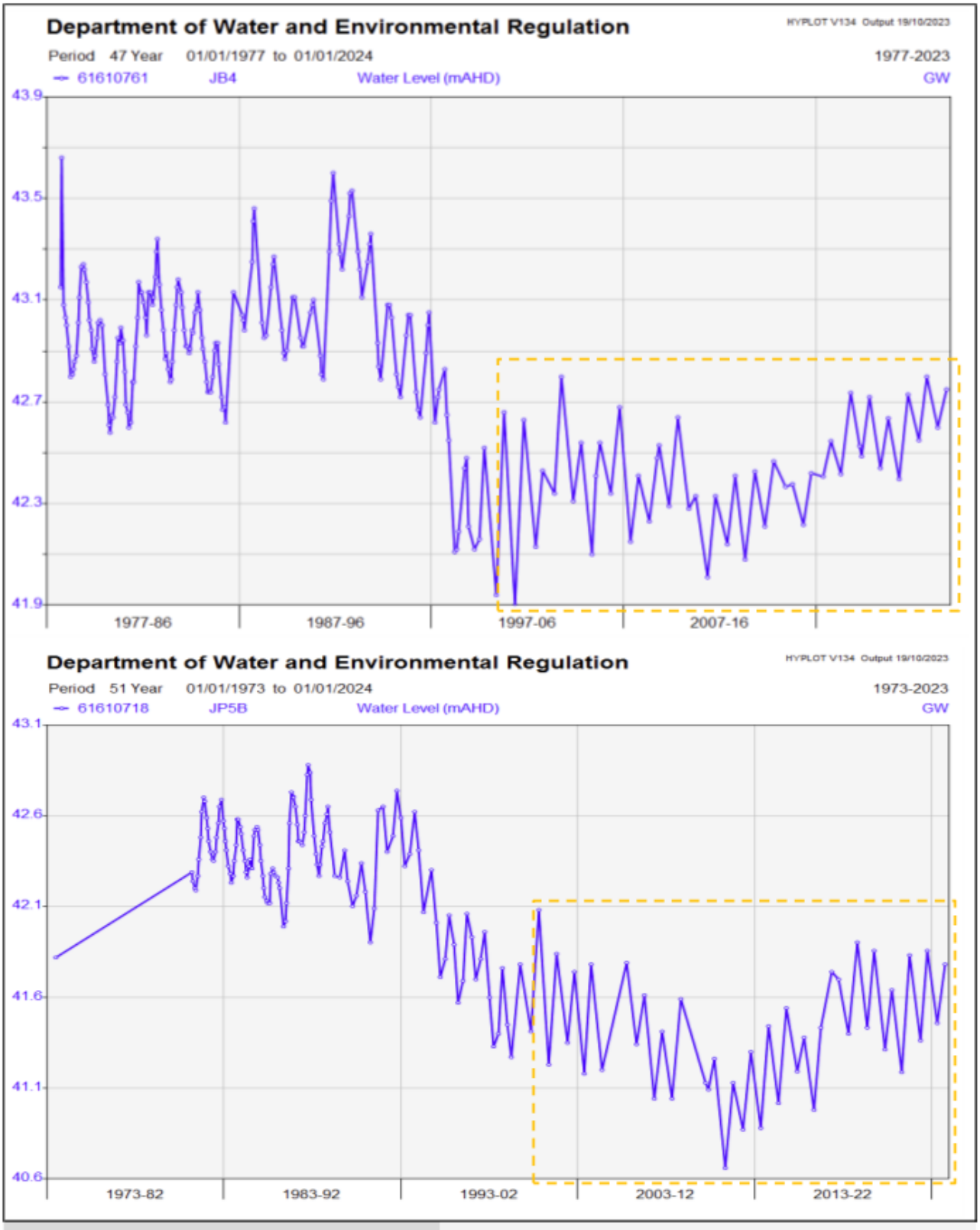
Date	Groundwater bTOC	Groundwater mAHD	Depth Below NS m
25/10/2022	20.66	42.82	20.06
21/11/2022	20.63	42.85	20.02
16/12/2022	20.65	42.83	20.04
24/01/2023	20.73	42.75	20.12
16/02/2023	20.76	42.72	20.15
15/03/2023	20.85	42.63	20.24
12/04/2023	20.88	42.60	20.27
12/05/2023	20.86	42.62	20.25
16/06/2023	20.90	42.58	20.29
18/07/2023	20.90	42.58	20.30
18/08/2023	20.66	42.82	20.05
19/09/2023	20.78	42.70	20.17
17/10/2023	20.73	42.75	20.12
17/11/2023	20.76	42.72	20.15

Minimum Recorded Level (mAHD)	42.575
Maximum Recorded Level (mAHD)	42.85

APPENDIX E

DWER Long Term Bore Hydrographs

Date: 04/04/2025 Job No. H24054



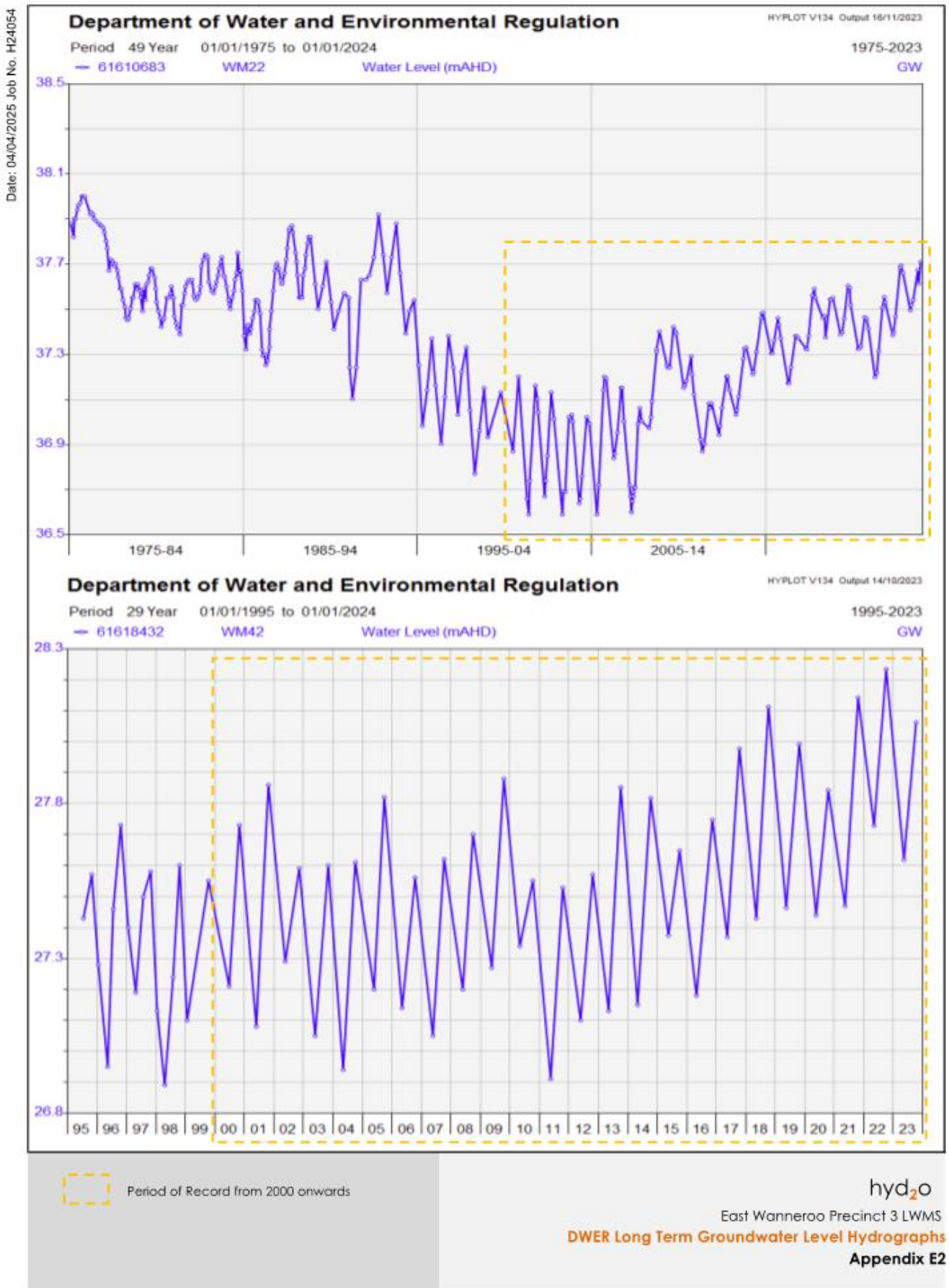
Period of Record from 2000 onwards

hyd2o

East Wanneroo Precinct 3 LWMS

DWER Long term Groundwater Level Hydrographs

Appendix E1


Date: 04/04/2025 Job No. H24054
Department of Water and Environmental Regulation
HYPLOT V134 Output 16/11/2023
Period 49 Year 01/01/1975 to 01/01/2024
1975-2023
61610683 WM22 Water Level (mAHD) GW
38.5
38.1
37.7
37.3
36.9
36.5
1975-84
1985-94
1995-04
2005-14
Department of Water and Environmental Regulation
HYPLOT V134 Output 14/10/2023
Period 29 Year 01/01/1995 to 01/01/2024
1995-2023
61618432 WM42 Water Level (mAHD) GW
28.3
27.8
27.3
26.8
95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Period of Record from 2000 onwards
hyd2o
East Wanneroo Precinct 3 LWMS
DWER Long Term Groundwater Level Hydrographs
Appendix E2

APPENDIX F
Water Quality Results

H21064 East Wanneroo Monitoring

EW01 Bore 1 - Nicholas Rd

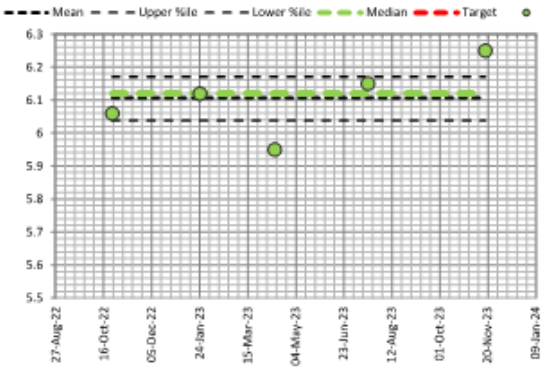
Easting	389876.07	Data Analysis Period Start Date	7/09/2022
Northing	6484333.1	Data Analysis Period End Date	17/11/2023

hydro HYDROLOGY

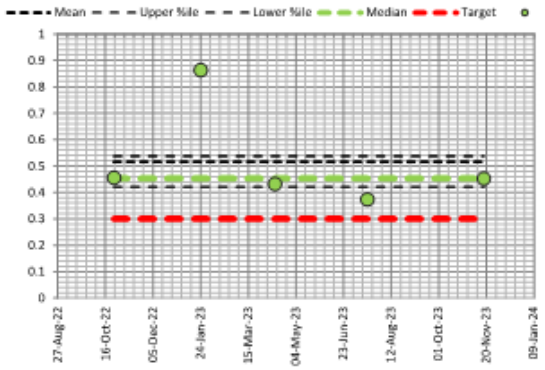
Report Date : 7/04/2025

Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95%	Times Exceeded
GWL bToC	Groundwater Level	mBToC	16	10.48	10.56	10.75	**10.65**	11.01	11.09		0
GWL mAHD	Groundwater Level	mAHD	16	40.85	40.93	41.19	**41.29**	41.38	41.46		0
T	Temperature	°C	5	18.20	21.480	25.000	**22.600**	29.660	33.100		0
EC	Electrical Conductivity	mS/cm	5	0.37	0.421	0.516	**0.453**	0.537	0.863	0.300	5
DO %	Dissolved Oxygen	%	5	1.55	7.51	17.71	**15.80**	23.00	44.60		0
pH	pH	pH	5	5.95	6.04	6.11	**6.12**	6.17	6.25	7-8.5	
TN	Total Nitrogen	mg/L	5	0.30	0.43	0.93	**0.50**	1.27	2.40	1.50	1
TKN	Total Kjeldahl Nitrogen	mg/L	5	0.20	0.24	0.39	**0.27**	0.46	0.88		0
NOx-N	Nitrate + Nitrite as N	mg/L	5	0.05	0.19	0.55	**0.26**	0.82	1.60	0.10	4
NH3	Ammonia	mg/L	5	0.01	0.01	0.03	**0.01**	0.04	0.08	0.90	0
TP	Total Phosphorous	mg/L	5	0.05	0.05	0.05	**0.05**	0.05	0.05	0.06	0
FRP	Filterable Reactive Phosphorous	mg/L	5	0.01	0.01	0.006	**0.005**	0.01	0.01	0.03	0
As	Arsenic	mg/L	5	0.00	0.00	0.001	**0.001**	0.00	0.00	0.02	0
Cd	Cadmium	mg/L	5	0.0001	0.0001	0.0001	**0.0001**	0.0001	0.0001	0.0002	0
Cr	Chromium	mg/L	5	0.0010	0.0010	0.0010	**0.0010**	0.0010	0.0010		0
Cu	Copper	mg/L	5	0.0010	0.0010	0.0015	**0.0013**	0.0018	0.0028	0.0014	2
Pb	Lead	mg/L	5	0.0010	0.0010	0.0010	**0.0010**	0.0010	0.0010	0.0034	0
Ni	Nickel	mg/L	5	0.00	0.00	0.001	**0.001**	0.00	0.00	0.01	0
Zn	Zinc	mg/L	5	0.005	0.005	0.010	**0.010**	0.014	0.014	0.008	3
Hg	Mercury	mg/L	5	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Al	Aluminium	mg/L	3	0.043	0.051	0.155	**0.063**	0.241	0.360		0
Fe	Iron	mg/L	3	0.620	0.812	1.473	**1.100**	2.060	2.700		0
Cl	Chloride	mg/L	3	81.00	81.40	82.33	**82.00**	83.20	84.00		0
SO4	Sulphate	mg/L	3	60.00	60.80	62.00	**62.00**	63.20	64.00		0
E.coli	Pathogen E.coli	cfu/100mL	3	1.00	1.00	4.00	**1.00**	6.40	10.00		0
ON	Organic Nitrogen	mg/L	3	0.19	0.21	0.22	**0.24**	0.24	0.24		0

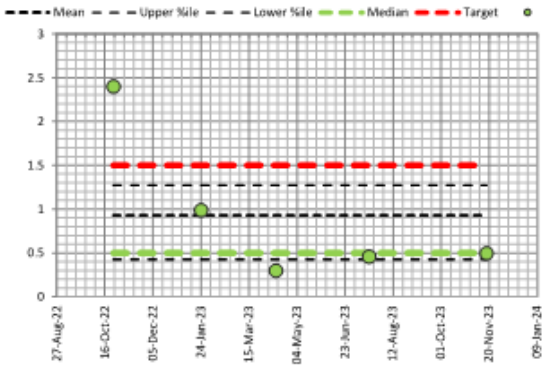
pH



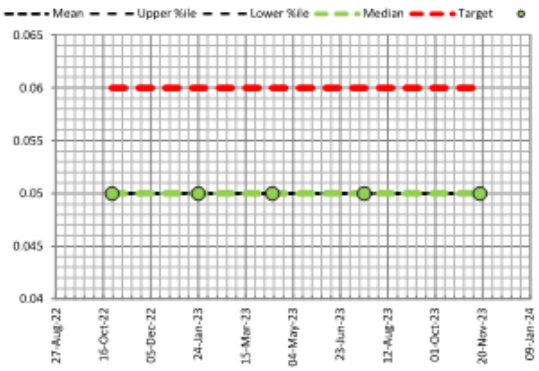
Electrical Conductivity



Total Nitrogen



Total Phosphorous



FieldDAE
Field Data Analysis & Evaluation System

H21064 East Wanneroo Monitoring

EW02 Bore 2 - Lot 206

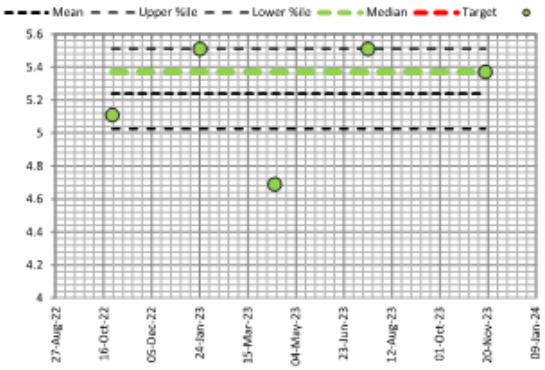
Easting	389254.62	Data Analysis Period Start Date	7/09/2022
Northing	6485192	Data Analysis Period End Date	17/11/2023

hydro HYDROLOGY

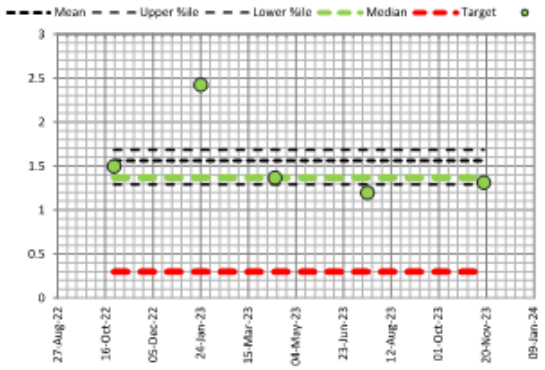
Report Date : 7/04/2025

Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95%	Times Exceeded
GWL bToC	Groundwater Level	mBToC	16	17.01	17.06	17.21	17.13	17.41	17.46		0
GWL mAHD	Groundwater Level	mAHD	16	40.78	40.83	41.03	41.11	41.18	41.23		0
T	Temperature	°C	5	19.20	21.360	23.280	21.900	25.980	27.900		0
EC	Electrical Conductivity	mS/cm	5	1.20	1.291	1.561	1.368	1.683	2.424	0.300	5
DO %	Dissolved Oxygen	%	5	17.70	23.38	28.26	32.60	32.80	33.60		0
pH	pH	pH	5	4.69	5.03	5.24	5.37	5.51	5.51	7-8.5	
TN	Total Nitrogen	mg/L	5	70.00	82.00	100.40	87.00	124.00	140.00	1.50	5
TKN	Total Kjeldahl Nitrogen	mg/L	5	0.10	8.82	24.22	11.00	39.00	67.00		0
NOx-N	Nitrate + Nitrite as N	mg/L	5	72.00	74.40	77.60	76.00	79.20	88.00	0.10	5
NH3	Ammonia	mg/L	5	0.01	0.01	0.01	0.01	0.01	0.02	0.90	0
TP	Total Phosphorous	mg/L	5	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0
FRP	Filterable Reactive Phosphorous	mg/L	5	0.01	0.01	0.005	0.005	0.01	0.01	0.03	0
As	Arsenic	mg/L	5	0.00	0.00	0.001	0.001	0.00	0.00	0.02	0
Cd	Cadmium	mg/L	5	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0002	0
Cr	Chromium	mg/L	5	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010		0
Cu	Copper	mg/L	5	0.0010	0.0014	0.0023	0.0024	0.0028	0.0042	0.0014	4
Pb	Lead	mg/L	5	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010	0.0034	0
Ni	Nickel	mg/L	5	0.00	0.00	0.001	0.001	0.00	0.00	0.01	0
Zn	Zinc	mg/L	5	0.043	0.045	0.049	0.051	0.053	0.055	0.008	5
Hg	Mercury	mg/L	5	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00060	0
Al	Aluminium	mg/L	3	0.028	0.029	0.032	0.030	0.035	0.039		0
Fe	Iron	mg/L	3	0.092	0.123	0.147	0.170	0.176	0.180		0
Cl	Chloride	mg/L	3	130.00	134.00	140.00	140.00	146.00	150.00		0
SO4	Sulphate	mg/L	3	130.00	130.00	133.33	130.00	136.00	140.00		0
E.coli	Pathogen E.coli	cfu/100mL	3	1.00	1.00	4.00	1.00	6.40	10.00		0
ON	Organic Nitrogen	mg/L	3	11.00	19.40	36.67	32.00	53.00	67.00		0

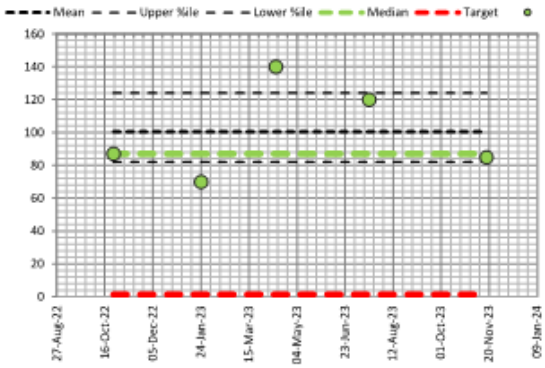
pH



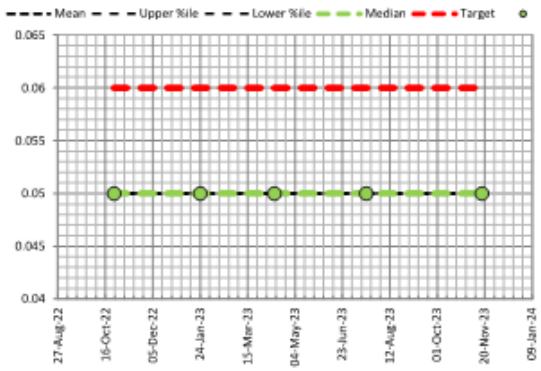
Electrical Conductivity



Total Nitrogen



Total Phosphorous



FieldDAE
Field Data Analysis & Evaluation System

H21064 East Wanneroo Monitoring

EW03 Bore 3 - Carbone

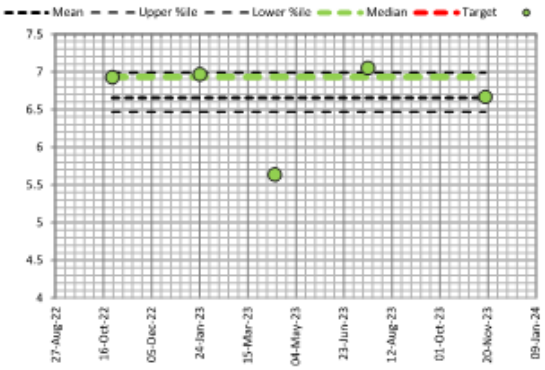
Easting	389849.31	Data Analysis Period Start Date	7/09/2022
Northing	6485613.3	Data Analysis Period End Date	17/11/2023

hydro HYDROLOGY

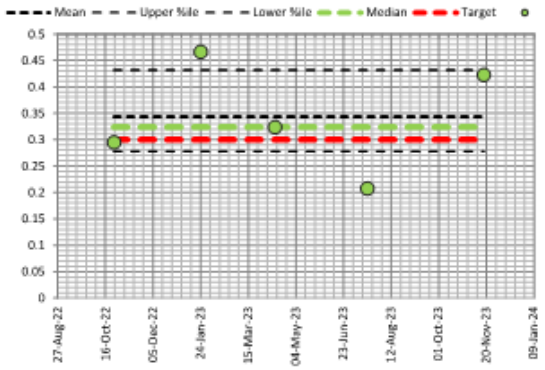
Report Date : 7/04/2025

Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95%	Times Exceeded
GWL bToC	Groundwater Level	mBToC	16	12.31	12.37	12.62	**12.49**	12.86	13.04		0
GWL mAHD	Groundwater Level	mAHD	16	41.40	41.58	41.82	**41.95**	42.07	42.13		0
T	Temperature	°C	5	19.10	22.460	25.380	**24.100**	29.780	30.900		0
EC	Electrical Conductivity	mS/cm	5	0.21	0.278	0.343	**0.324**	0.432	0.466	0.300	3
DO %	Dissolved Oxygen	%	5	53.00	55.08	63.12	**68.20**	68.86	70.30		0
pH	pH	pH	5	5.64	6.46	6.65	**6.93**	6.99	7.05	7-8.5	
TN	Total Nitrogen	mg/L	5	1.00	1.24	2.32	**2.00**	3.32	4.20	1.50	3
TKN	Total Kjeldahl Nitrogen	mg/L	5	0.10	0.28	0.38	**0.36**	0.48	0.70		0
NOx-N	Nitrate + Nitrite as N	mg/L	5	0.94	0.96	1.96	**1.70**	2.86	3.50	0.10	5
NH3	Ammonia	mg/L	5	0.01	0.01	0.01	**0.01**	0.01	0.01	0.90	0
TP	Total Phosphorous	mg/L	5	0.05	0.05	0.05	**0.05**	0.05	0.05	0.06	0
FRP	Filterable Reactive Phosphorous	mg/L	5	0.01	0.01	0.005	**0.005**	0.01	0.01	0.03	0
As	Arsenic	mg/L	5	0.00	0.00	0.001	**0.001**	0.00	0.00	0.02	0
Cd	Cadmium	mg/L	5	0.0001	0.0001	0.0001	**0.0001**	0.0001	0.0001	0.0002	0
Cr	Chromium	mg/L	5	0.0010	0.0010	0.0010	**0.0010**	0.0010	0.0010		0
Cu	Copper	mg/L	5	0.0010	0.0010	0.0010	**0.0010**	0.0010	0.0010	0.0014	0
Pb	Lead	mg/L	5	0.0010	0.0010	0.0010	**0.0010**	0.0010	0.0010	0.0034	0
Ni	Nickel	mg/L	5	0.00	0.00	0.001	**0.001**	0.00	0.00	0.01	0
Zn	Zinc	mg/L	5	0.001	0.001	0.005	**0.002**	0.006	0.015	0.008	1
Hg	Mercury	mg/L	5	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Al	Aluminium	mg/L	3	0.010	0.010	0.022	**0.010**	0.032	0.046		0
Fe	Iron	mg/L	3	0.010	0.012	0.018	**0.016**	0.023	0.028		0
Cl	Chloride	mg/L	3	11.00	12.60	15.00	**15.00**	17.40	19.00		0
SO4	Sulphate	mg/L	3	4.20	4.52	6.10	**5.00**	7.46	9.10		0
E.coli	Pathogen E.coli	cfu/100mL	3	1.00	1.00	4.00	**1.00**	6.40	10.00		0
ON	Organic Nitrogen	mg/L	3	0.10	0.20	0.30	**0.36**	0.40	0.43		0

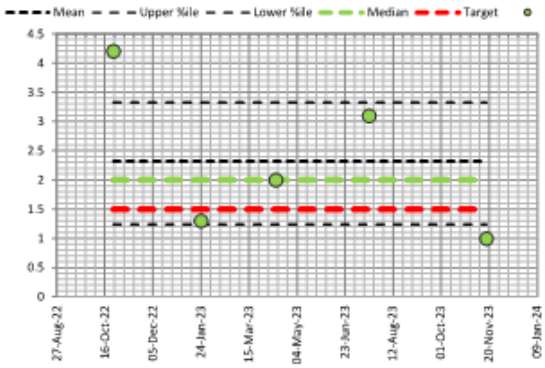
pH



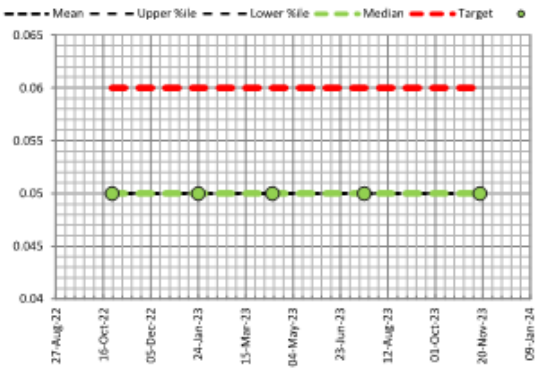
Electrical Conductivity



Total Nitrogen



Total Phosphorous



FieldDAE
Field Data Analysis & Evaluation System

H21064 East Wanneroo Monitoring

WM42 WM42

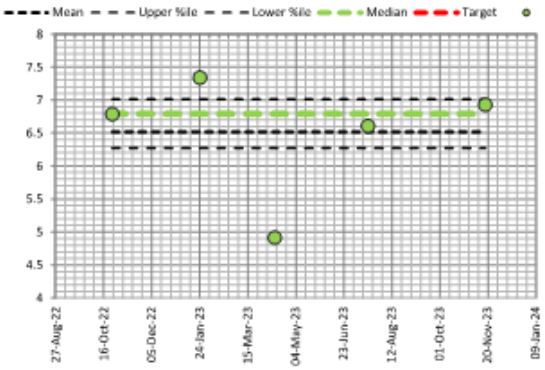
Easting	386832	Data Analysis Period Start Date	7/09/2022
Northing	6485295	Data Analysis Period End Date	17/11/2023

hydro HYDROLOGY

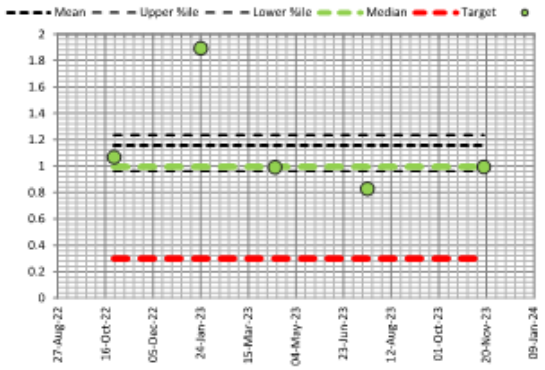
Report Date : 7/04/2025

Parameter	Description	Units	Samples	Minimum	Low %ile 20	Mean	Median	High %ile 80	Maximum	Target ANZECC 95%	Times Exceeded
GWL bToC	Groundwater Level	mBToC	15	10.89	11.02	11.26	**11.24**	11.52	11.60		0
GWL mAHD	Groundwater Level	mAHD	15	27.55	27.63	27.89	**27.91**	28.13	28.26		0
T	Temperature	°C	5	19.30	20.740	24.140	**22.700**	28.380	29.500		0
EC	Electrical Conductivity	mS/cm	5	0.83	0.960	1.156	**0.995**	1.234	1.892	0.300	5
DO %	Dissolved Oxygen	%	5	9.70	14.90	28.04	**27.70**	40.66	47.70		0
pH	pH	pH	5	4.92	6.27	6.52	**6.79**	7.01	7.34	7-8.5	
TN	Total Nitrogen	mg/L	6	0.64	0.72	0.94	**0.78**	1.30	1.40	1.50	0
TKN	Total Kjeldahl Nitrogen	mg/L	6	0.10	0.22	0.26	**0.25**	0.34	0.38		0
NOx-N	Nitrate + Nitrite as N	mg/L	6	0.42	0.53	0.68	**0.60**	0.93	0.97	0.10	6
NH3	Ammonia	mg/L	6	0.01	0.01	0.06	**0.03**	0.06	0.21	0.90	0
TP	Total Phosphorous	mg/L	6	0.05	0.05	0.05	**0.05**	0.05	0.05	0.06	0
FRP	Filterable Reactive Phosphorous	mg/L	6	0.01	0.01	0.011	**0.007**	0.02	0.02	0.03	0
As	Arsenic	mg/L	6	0.00	0.00	0.001	**0.001**	0.00	0.00	0.02	0
Cd	Cadmium	mg/L	6	0.0001	0.0001	0.0001	**0.0001**	0.0001	0.0001	0.0002	0
Cr	Chromium	mg/L	6	0.0010	0.0010	0.0010	**0.0010**	0.0010	0.0010		0
Cu	Copper	mg/L	6	0.0010	0.0010	0.0011	**0.0010**	0.0010	0.0014	0.0014	0
Pb	Lead	mg/L	6	0.0010	0.0010	0.0010	**0.0010**	0.0010	0.0010	0.0034	0
Ni	Nickel	mg/L	6	0.00	0.00	0.001	**0.001**	0.00	0.00	0.01	0
Zn	Zinc	mg/L	6	0.004	0.004	0.019	**0.014**	0.038	0.042	0.008	3
Hg	Mercury	mg/L	6	0.00005	0.00005	0.00005	**0.00005**	0.00005	0.00005	0.00060	0
Al	Aluminium	mg/L	4	0.010	0.010	0.010	**0.010**	0.010	0.010		0
Fe	Iron	mg/L	4	0.010	0.010	0.010	**0.010**	0.010	0.010		0
Cl	Chloride	mg/L	4	160.00	160.00	160.00	**160.00**	160.00	160.00		0
SO4	Sulphate	mg/L	4	170.00	170.00	170.00	**170.00**	170.00	170.00		0
E.coli	Pathogen E.coli	cfu/100mL	4	1.00	1.00	5.50	**5.50**	10.00	10.00		0
ON	Organic Nitrogen	mg/L	4	0.10	0.10	0.15	**0.15**	0.19	0.19		0

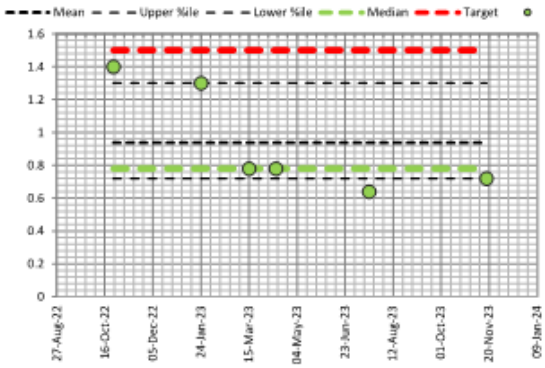
pH



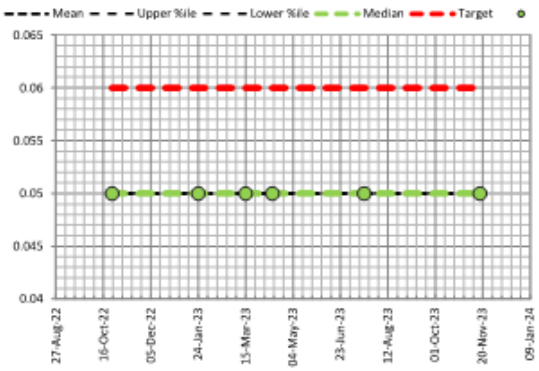
Electrical Conductivity



Total Nitrogen



Total Phosphorous



FieldDAE

Field Data Analysis & Evaluation System

FieldDAE
Field Data Analysis & Evaluation System

Water Quality Monitoring Data

	Date	Site	Monitored	GWL bToC mBToC	GWL mAHD mAHD	T °C	EC mS/cm	DO % %	pH pH	TN mg/L	TKN mg/L	NOx-N mg/L	NH3 mg/L	TP mg/L	FRP mg/L	Aa mg/L	Cd mg/L	Cr mg/L	Cu mg/L	Pb mg/L	Ni mg/L	Zn mg/L	Hg mg/L	Al mg/L	Fe mg/L	Cl mg/L	SO4 mg/L	E.coli cfu/100mL	ON mg/L
1	7/09/2022	EW01	GR	10.59	41.35																								
2	7/09/2022	EW02	GR	17.12	41.12																								
3	7/09/2022	EW03	GR	12.39	42.05																								
4	8/10/2022	EW01	BL	10.53	41.41																								
5	8/10/2022	EW02	BL	17.06	41.18																								
6	8/10/2022	EW03	BL	12.32	42.12																								
7	8/10/2022	WM22	BL																										
8	8/10/2022	WM42	BL	11.02	28.13																								
9	8/10/2022	JP5B	BL																										
10	8/10/2022	JB4	BL																										
11	25/10/2022	EW01	BL	10.48	41.46	22.30	0.456	1.55	6.060	2.40	0.88	1.60	0.08	0.050	0.005	0.001	0.0001	0.001	0.0013	0.001	0.0010	0.014	0.00005						
12	25/10/2022	EW02	BL	17.03	41.21	21.90	1.498	17.70	5.110	87.00	11.0	77.00	0.02	0.050	0.005	0.001	0.0001	0.001	0.0042	0.001	0.0015	0.055	0.00005						
13	25/10/2022	EW03	BL	12.31	42.13	23.30	0.295	70.30	6.930	4.20	0.7	3.50	0.005	0.050	0.005	0.001	0.0001	0.001	0.0010	0.001	0.0010	0.001	0.00005						
14	25/10/2022	WM22	BL	28.38	37.65																								
15	25/10/2022	WM42	BL	11.02	28.13	21.10	1.069	27.70	6.790	1.40	0.38	0.97	0.005	0.050	0.017	0.001	0.0001	0.001	0.0014	0.001	0.0010	0.038	0.00005						
16	25/10/2022	JP5B	BL	35.12	41.88																								
17	25/10/2022	JB4	BL	20.66	42.82																								
18	21/11/2022	EW01	AFR	10.51	41.43																								
19	21/11/2022	EW02	AFR	17.01	41.23																								
20	21/11/2022	EW03	AFR	12.37	42.07																								
21	21/11/2022	WM22	AFR	28.37	37.66																								
22	21/11/2022	WM42	AFR	11.03	28.12																								
23	21/11/2022	JP5B	AFR	34.99	42.01																								
24	21/11/2022	JB4	AFR	20.63	42.85																								
25	16/12/2022	EW01	AFR	10.61	41.33																								
26	16/12/2022	EW02	AFR	17.10	41.14																								
27	16/12/2022	EW03	AFR	12.49	41.95																								
28	16/12/2022	WM22	AFR	28.41	37.62																								
29	16/12/2022	WM42	AFR	11.23	27.92																								
30	16/12/2022	JP5B	AFR	35.21	41.79																								
31	16/12/2022	JB4	AFR	20.65	42.83																								
32	24/01/2023	EW01	AFR	10.77	41.17	33.10	0.863	15.80	6.120	0.99	0.36	0.63	0.005	0.050	0.005	0.001	0.0001	0.001	0.0015	0.001	0.0010	0.0054	0.00005						
33	24/01/2023	EW02	AFR	17.24	41.00	27.90	2.424	32.60	5.510	70.00	0.10	72.00	0.005	0.050	0.005	0.001	0.0001	0.001	0.0015	0.001	0.0013	0.0450	0.00005						
34	24/01/2023	EW03	AFR	12.76	41.68	30.90	0.466	53.00	6.970	1.30	0.32	0.94	0.005	0.050	0.005	0.001	0.0001	0.001	0.001	0.001	0.0010	0.0038	0.00005						
35	24/01/2023	WM22	AFR	28.52	37.51																								
36	24/01/2023	WM42	AFR	11.41	27.74	28.10	1.892	47.70	7.340	1.30	0.34	0.93	0.005	0.050	0.020	0.001	0.0001	0.001	0.001	0.001	0.0010	0.0210	0.00005						
37	24/01/2023	JP5B	AFR	35.36	41.64																								
38	24/01/2023	JB4	AFR	20.73	42.75																								
39	16/02/2023	EW01	AFR	10.88	41.06																								
40	16/02/2023	EW02	AFR	17.29	40.95																								
41	16/02/2023	EW03	AFR	12.86	41.58																								
42	16/02/2023	WM22	AFR	28.50	37.53																								
43	16/02/2023	WM42	AFR	11.52	27.63																								
44	16/02/2023	JP5B	AFR	35.43	41.57																								
45	16/02/2023	JB4	AFR	20.76	42.72																								
46	15/03/2023	EW01	AFR	11.06	40.88																								
47	15/03/2023	EW02	AFR	17.46	40.78																								
48	15/03/2023	EW03	AFR	13.04	41.40																								
49	15/03/2023	WM22	AFR	28.56	37.47																								

FieldDAE
Field Data Analysis & Evaluation System

Water Quality Monitoring Data

	Date	Site	Monitored	GWL bToC	GWL mAHD	T	EC	DO %	pH	TN	TKN	NOx-N	NH3	TP	FRP	Aa	Cd	Cr	Cu	Pb	Ni	Zn	Hg	Al	Fe	Cl	SO4	E.coli	ON
				mBToC	mAHD	°C	mS/cm	%	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	cfu/100mL	mg/L
50	15/03/2023	WM42	AFR	11.60	27.55																								
51	15/03/2023	JP5B	AFR	35.58	41.42																								
52	15/03/2023	JB4	AFR	20.85	42.63																								
53	12/04/2023	EW01	AFR	11.09	40.85	22.60	0.433	9.00	5.950	0.30	0.25	0.045	0.0086	0.050	0.005	0.001	0.0001	0.001	0.001	0.001	0.001	0.0046	0.00005	0.36	1.1	81	62	10	0.24
54	12/04/2023	EW02	AFR	17.45	40.79	21.90	1.368	33.60	4.690	140.00	67.0	76.000	0.005	0.050	0.005	0.001	0.0001	0.001	0.0024	0.001	0.0012	0.0430	0.00005	0.028	0.092	140	140	10	67
55	12/04/2023	EW03	AFR	13.02	41.42	24.10	0.324	68.50	5.640	2.00	0.36	1.700	0.005	0.050	0.005	0.001	0.0001	0.001	0.001	0.001	0.001	0.001	0.00005	0.046	0.028	19	9.1	10	0.36
56	12/04/2023	WM22	AFR	28.56	37.47																								
57	12/04/2023	WM42	AFR	11.59	27.56	22.70	0.993	9.70	4.920	0.78	0.25	0.530	0.0570	0.050	0.0074	0.001	0.0001	0.001	0.001	0.001	0.001	0.0040	0.00005	0.01	0.01	160	170	10	0.19
58	12/04/2023	JP5B	AFR	35.59	41.41																								
59	12/04/2023	JB4	AFR	20.88	42.60																								
60	12/05/2023	EW01	AFR	11.06	40.88																								
61	12/06/2023	EW02	AFR	17.44	40.80																								
62	12/06/2023	EW03	AFR	12.97	41.47																								
63	12/06/2023	WM22	AFR	28.52	37.51																								
64	12/06/2023	WM42	AFR	11.52	27.63																								
65	12/06/2023	JP5B	AFR	35.55	41.45																								
66	12/06/2023	JB4	AFR	20.86	42.62																								
67	16/06/2023	EW01	AFR	11.01	40.93																								
68	16/06/2023	EW02	AFR	17.41	40.83																								
69	16/06/2023	EW03	AFR	12.82	41.62																								
70	16/06/2023	WM22	AFR	28.48	37.55																								
71	16/06/2023	WM42	AFR	11.37	27.78																								
72	16/06/2023	JP5B	AFR	35.52	41.48																								
73	16/06/2023	JB4	AFR	20.90	42.58																								
74	18/07/2023	EW01	BL	11.01	40.93	18.20	0.37	17.60	6.16	0.46	0.2	0.26	0.012	0.050	0.005	0.001	0.0001	0.001	0.0028	0.001	0.002	0.0099	0.00005	0.043	0.62	82	60	1	0.19
75	18/07/2023	EW02	BL	17.41	40.83	19.20	1.20	24.80	5.51	120.00	32.0	88.00	0.005	0.050	0.005	0.001	0.0001	0.001	0.001	0.001	0.0017	0.052	0.00005	0.03	0.18	150	130	1	32
76	18/07/2023	EW03	BL	12.82	41.62	19.10	0.21	68.20	7.05	3.10	0.43	2.70	0.0059	0.050	0.005	0.001	0.0001	0.001	0.001	0.001	0.001	0.015	0.00005	0.01	0.01	15	5	1	0.43
77	18/07/2023	WM22	BL	28.48	37.55																								
78	18/07/2023	WM42	BL	11.37	27.78	19.30	0.83	16.20	6.61	0.64	0.22	0.42	0.21	0.050	0.0055	0.001	0.0001	0.001	0.001	0.001	0.001	0.0076	0.00005	0.01	0.01	160	170	1	0.1
79	18/07/2023	JP5B	BL	35.52	41.48																								
80	18/07/2023	JB4	BL	20.90	42.58																								
81	18/08/2023	EW01	AFR	10.56	41.38																								
82	18/08/2023	EW02	AFR	17.03	41.21																								
83	18/08/2023	EW03	AFR	12.36	42.08																								
84	18/08/2023	WM22	AFR	28.23	37.80																								
85	18/08/2023	WM42	AFR	10.89	28.26																								
86	18/08/2023	JP5B	AFR	35.15	41.85																								
87	18/08/2023	JB4	AFR	20.66	42.82																								
88	19/09/2023	EW01	AFR	10.61	41.33																								
89	19/09/2023	EW02	AFR	17.12	41.12																								
90	19/09/2023	EW03	AFR	12.47	41.97																								
91	19/09/2023	WM22	AFR	28.38	37.65																								
92	19/09/2023	WM42	AFR	10.99	28.16																								
93	19/09/2023	JP5B	AFR	35.25	41.75																								
94	19/09/2023	JB4	AFR	20.78	42.70																								
95	17/10/2023	EW01	AFR	10.59	41.35																								
96	17/10/2023	EW02	AFR	17.06	41.18																								
97	17/10/2023	EW03	AFR	12.43	42.01																								
98	17/10/2023	WM22	AFR	28.41	37.62																								

FieldDAE
Field Data Analysis & Evaluation System

Water Quality Monitoring Data

	Date	Site	Monitored	GWL bToC	GWL mAHD	T	EC	DO %	pH	TN	TKN	NOx-N	NH3	TP	FRP	Aa	Cd	Cr	Cu	Pb	Ni	Zn	Hg	Al	Fe	Cl	SO4	E.coli	ON
				mBToC	mAHD	°C	mS/cm	%	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	cfu/100mL	mg/L
99	17/10/2023	WM42	AFR	11.10	28.05																								
100	17/10/2023	JP5B	AFR	35.23	41.77																								
101	17/10/2023	JB4	AFR	20.73	42.75																								
102	17/11/2023	EW01	AFR & TD	10.69	41.25	28.8	0.453	44.60	6.25	0.50	0.27	0.23	0.03	0.06	0.0079	0.001	0.0001	0.001	0.001	0.001	0.001	0.014	0.00005	0.063	2.7	84	64	1	0.24
103	17/11/2023	EW02	AFR & TD	17.14	41.10	25.5	1.314	32.60	5.37	85.00	11.0	75.00	0.005	0.06	0.0072	0.001	0.0001	0.001	0.0025	0.001	0.0012	0.051	0.00005	0.038	0.17	130	130	1	11
104	17/11/2023	EW03	AFR & TD	12.49	41.95	29.5	0.423	55.60	6.67	1.00	0.1	0.97	0.005	0.05	0.005	0.001	0.0001	0.001	0.001	0.001	0.001	0.0022	0.00005	0.01	0.016	11	4.2	1	0.1
105	17/11/2023	WM22	AFR & TD	28.33	37.70																								
106	17/11/2023	WM42	AFR & TD	11.24	27.91	29.5	0.996	38.90	6.93	0.72	0.1	0.67	0.005	0.05	0.0075	0.001	0.0001	0.001	0.001	0.001	0.001	0.042	0.00005	0.01	0.01	160	170	1	0.1
107	17/11/2023	JP5B	AFR & TD	35.32	41.68																								
108	17/11/2023	JB4	AFR & TD	20.76	42.72																								

APPENDIX G
Laboratory Reports

Envirolab Services (WA) Pty Ltd trading as MPL Laboratories
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Client Details

Client	Hyd2O
Contact	Brian Lau
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21064 East Wanneroo Monitoring
Number of Samples	4 Groundwater
Date Samples Received	25/10/2022
Date Samples Registered	25/10/2022

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	01/11/2022
Date of Issue	01/11/2022

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Accredited for compliance with ISO/IEC 17025. Tests not covered by NATA are denoted with *.

Authorisation Details

Results Approved By	Heram Halim, Operations Manager Michael Hall, Inorganics & Metals Supervisor Michael Mowle, Inorganics Supervisor Todd Lee, Group Operations Manager
Laboratory Manager	Michael Kubiak

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Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PDJ1431-01	EW1	Groundwater	24/10/2022	25/10/2022
PDJ1431-02	EW2	Groundwater	24/10/2022	25/10/2022
PDJ1431-03	EW3	Groundwater	24/10/2022	25/10/2022
PDJ1431-04	WM42	Groundwater	24/10/2022	25/10/2022

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Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PDJ1431-01	PDJ1431-02	PDJ1431-03	PDJ1431-04
Your Reference			EW1	EW2	EW3	WM42
Date Sampled			24/10/2022	24/10/2022	24/10/2022	24/10/2022
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	<0.050

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Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PDJ1431-01	PDJ1431-02	PDJ1431-03	PDJ1431-04
Your Reference			EW1	EW2	EW3	WM42
Date Sampled			24/10/2022	24/10/2022	24/10/2022	24/10/2022
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	1.3	4.2	<1.0	1.4
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	1.5	<1.0	1.0
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	14	55	<1.0	38

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Inorganics (Groundwater)

Envirolab ID	Units	PQL	PDJ1431-01	PDJ1431-02	PDJ1431-03	PDJ1431-04
Your Reference			EW1	EW2	EW3	WM42
Date Sampled			24/10/2022	24/10/2022	24/10/2022	24/10/2022
Ammonia as N	mg/L	0.0050	0.077	0.020	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	1.5	77	3.5	0.97
Nitrite as N	mg/L	0.0050	0.018	<0.0050	<0.0050	<0.0050
Total Nitrogen	mg/L	0.10	2.4	87	4.2	1.4
NOx as N	mg/L	0.0050	1.6	77	3.5	0.97
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.017
Organic Nitrogen by calc.	mg/L	0.10	0.80	11	0.70	0.38
TKN as N by calculation	mg/L	0.10	0.88	11	0.70	0.38
Nitrate as NO3 by calculation	mg/L	0.020	6.8	340	16	4.3
Nitrite as NO2 by calculation	mg/L	0.020	0.058	<0.020	<0.020	<0.020

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Method Summary

Method ID	Methodology Summary
Calc	Calculation
Calc - TKN	TKN determined by calculation (Total Nitrogen - NOx).
INORG-055	Nitrate/Nitrite/NOx/TKN - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils/solids are analysed following a water extraction.
INORG-057	Ammonia - determined colourimetrically. Water samples are filtered on receipt prior to analysis. Soils and OHS media are analysed following a water extraction. Alternatively, Ammonia can be extracted from soil using 1M KCl.
INORG-060	Phosphate - determined colourimetrically using APHA latest edition 4500 P E. Water samples are filtered on receipt prior to analysis. Soils are analysed from a water extract.
INORG-127	Total Nitrogen by high temperature catalytic combustion with chemiluminescence detection. Organic Carbon forms (inorganic, organic, total) determined using a TOC/NDIR analyser via combustion. Dissolved forms require filtering prior to determination.
METALS-020	Determination of various metals by ICP-OES.
METALS-021	Determination of Mercury by Cold Vapour AAS.
METALS-022	Determination of various metals by ICP-MS.

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Result Definitions

Identifier	Description
NR	Not reported
NEPM	National Environment Protection Measure
NS	Not specified
LCS	Laboratory Control Sample
RPD	Relative Percent Difference
>	Greater than
<	Less than
PQL	Practical Quantitation Limit
INS	Insufficient sample for this test
NA	Test not required
NT	Not tested
DOL	Samples rejected due to particulate overload (air filters only)
RFD	Samples rejected due to filter damage (air filters only)
RUD	Samples rejected due to uneven deposition (air filters only)

Quality Control Definitions

Blank

This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, and is determined by processing solvents and reagents in exactly the same manner as for samples.

Surrogate Spike

Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

LCS (Laboratory Control Sample)

This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Matrix Spike

A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

Duplicate

This is the complete duplicate analysis of a sample from the process batch. The sample selected should be one where the analyte concentration is easily measurable.

Certificate of Analysis PDJ1431

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria. Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction. Spikes for Physical and Aggregate Tests are not applicable. For VOCs in water samples, three vials are required for duplicate or spike analysis.

General Acceptance Criteria (GAC) - Analyte specific criteria applies for some analytes and is reflected in QC recovery tables.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% - see ELN-P05 QAQC tables for details (available on request); <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase. Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was typically insufficient in order to satisfy laboratory QA/QC protocols.

Miscellaneous Information

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Two significant figures are reported for the majority of tests and with a high degree of confidence, for results <10*PQL, the second significant figure may be in doubt i.e. has a relatively high degree of uncertainty and is provided for information only.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS where sediment/solids are included by default.

Urine Analysis - The BEI values listed are taken from the 2022 edition of *TLVs and BEIs Threshold Limits by ACGIH.*

Air volume measurements are not covered by Envirolab's NATA accreditation.

Data Quality Assessment Summary PDJ1431

Client Details

Client	Hyd2O
Your Reference	H21064 East Wanneroo Monitoring
Date Issued	01/11/2022

Recommended Holding Time Compliance

Recommended holding time exceedances exist - See detailed list below

Quality Control and QC Frequency

QC Type	Compliant	Details
Blank	Yes	No Outliers
LCS	Yes	No Outliers
Duplicates	Yes	No Outliers
Matrix Spike	No	Matrix Spike Outliers Exist - See detailed list below
Surrogates / Extracted Internal Standards	Yes	No Outliers
QC Frequency	Yes	No Outliers

Surrogates/Extracted Internal Standards, Duplicates and/or Matrix Spikes are not always relevant/applicable to certain analyses and matrices. Therefore, said QC measures are deemed compliant in these situations by default. See Laboratory Acceptance Criteria for more information

Data Quality Assessment Summary PDJ1431

Recommended Holding Time Compliance

Analysis	Sample Number(s)	Date Sampled	Date Extracted	Date Analysed	Compliant
Total Phosphorus | Water	1-4	24/10/2022	27/10/2022	28/10/2022	Yes
Dissolved Metals (LL) | Water	1-4	24/10/2022	27/10/2022	28/10/2022	Yes
Dissolved Metals (LL)-Hg | Water	1-4	24/10/2022	27/10/2022	27/10/2022	Yes
Nitrogen - Ammonia | Water	1-4	24/10/2022	26/10/2022	26/10/2022	Yes
Nitrogen - Nitrate | Water	1-4	24/10/2022	26/10/2022	26/10/2022	Yes
Nitrogen - Nitrite | Water	1-4	24/10/2022	26/10/2022	26/10/2022	Yes
Nitrogen - NOx | Water	1-4	24/10/2022	26/10/2022	26/10/2022	Yes
Nitrogen - Total N | Water	1-4	24/10/2022	27/10/2022	27/10/2022	No
Phosphate as P | Water	1-4	24/10/2022	26/10/2022	26/10/2022	Yes
TKN as N calc | Water	1-4	24/10/2022	31/10/2022	31/10/2022	Yes

Outliers: Matrix Spike

INORG-055|Inorganics (Water)| Batch BDJ2504

Sample ID	Analyte	% Limits	% Recovery
BDJ2504-MS2#	Nitrite as N	70 - 130	##[1]

INORG-127|Inorganics (Water)| Batch BDJ2661

Sample ID	Analyte	% Limits	% Recovery
PDJ1431-02	Total Nitrogen	70 - 130	##[1]

Quality Control PDJ1431

METALS-020 | Acid Extractable Metals (Water) | Batch BDJ2717

Analyte	Units	PQL	Blank	DUP1 BDJ2717-DUP1# Samp | QC | RPD %	DUP2 BDJ2717-DUP2# Samp | QC | RPD %	LCS %	Spike % BDJ2717-MS1#
Phosphorus	mg/L	0.050	<0.050	5.96 | 6.10 | 2.42	<0.050 | <0.050 | [NA]	103	84.3

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-021 | Dissolved Low Level Metals (Water) | Batch BDJ2607

Analyte	Units	PQL	Blank	DUP1 BDJ2607-DUP1# Samp | QC | RPD %	DUP2 BDJ2607-DUP2# Samp | QC | RPD %	LCS %	Spike % BDJ2607-MS1#
Mercury	µg/L	0.050	<0.050	<0.050 | <0.050 | [NA]	<0.050 | <0.050 | [NA]	95.6	99.6

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-021 | Dissolved Low Level Metals (Water) | Batch BDJ2608

Analyte	Units	PQL	Blank	DUP1 PDJ1431-04 Samp | QC | RPD %	DUP2 BDJ2608-DUP2# Samp | QC | RPD %	LCS %	Spike % BDJ2608-MS1#
Mercury	µg/L	0.050	<0.050	<0.050 | <0.050 | [NA]	<0.050 | <0.050 | [NA]	96.0	98.0

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-022 | Dissolved Low Level Metals (Water) | Batch BDJ2703

Analyte	Units	PQL	Blank	DUP1 BDJ2703-DUP1# Samp | QC | RPD %	DUP2 BDJ2703-DUP2# Samp | QC | RPD %	LCS %	Spike % BDJ2703-MS1#
Arsenic	µg/L	1.0	<1.0	1.03 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	107	113
Cadmium	µg/L	0.10	<0.10	<0.10 | <0.10 | [NA]	<0.10 | <0.10 | [NA]	107	111
Chromium	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	108	109
Copper	µg/L	1.0	<1.0	4.20 | 4.32 | 2.82	<1.0 | <1.0 | [NA]	109	107
Lead	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	111	106
Nickel	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	110	106
Zinc	µg/L	1.0	<1.0	<1.0 | 1.00 | [NA]	9.60 | 9.77 | 1.72	110	110

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-022 | Dissolved Low Level Metals (Water) | Batch BDJ2704

Analyte	Units	PQL	Blank	DUP1 PDJ1431-02 Samp | QC | RPD %	DUP2 BDJ2704-DUP2# Samp | QC | RPD %	LCS %	Spike % PDJ1431-03
Arsenic	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	105	108
Cadmium	µg/L	0.10	<0.10	<0.10 | <0.10 | [NA]	<0.10 | <0.10 | [NA]	104	111
Chromium	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	107	108
Copper	µg/L	1.0	<1.0	4.17 | 4.17 | 0.168	<1.0 | <1.0 | [NA]	104	102
Lead	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	107	108
Nickel	µg/L	1.0	<1.0	1.52 | 1.55 | 1.50	<1.0 | <1.0 | [NA]	105	103
Zinc	µg/L	1.0	<1.0	55.3 | 55.5 | 0.419	<1.0 | <1.0 | [NA]	105	109

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

Quality Control PDJ1431

INORG-057|Inorganics (Water) | Batch BDJ2504

Analyte	Units	PQL	Blank	DUP1 BDJ2504-DUP1# Samp | QC | RPD %	DUP2 PDJ1431-01 Samp | QC | RPD %	LCS %	Spike % BDJ2504-MS1#
Ammonia as N	mg/L	0.0050	<0.0050	0.0322 | 0.0287 | 11.6	0.0771 | 0.0746 | 3.31	112	75.7
Nitrate as N	mg/L	0.0050	<0.0050	0.505 | 0.490 | 3.08	1.54 | 1.53 | 0.696	118	113
Nitrite as N	mg/L	0.0050	<0.0050	0.0261 | 0.0259 | 0.635	0.0178 | 0.0177 | 0.480	117	[NA]
NOx as N	mg/L	0.0050	<0.0050	0.532 | 0.516 | 2.96	1.56 | 1.55 | 0.694	118	115
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050 | <0.0050 | [NA]	<0.0050 | <0.0050 | [NA]	113	130
Nitrate as NO3 by calculation	mg/L	0.020	<0.020			[NA]	[NA]
Nitrite as NO2 by calculation	mg/L	0.020	<0.020			[NA]	[NA]

Analyte	Units	PQL	Blank	LCS %	Spike % BDJ2504-MS2#
Nitrite as N	mg/L	0.005		[NA]	##[1]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-127|Inorganics (Water) | Batch BDJ2661

Analyte	Units	PQL	Blank	DUP1 PDJ1431-01 Samp | QC | RPD %	DUP2 BDJ2661-DUP2# Samp | QC | RPD %	LCS %	Spike % PDJ1431-02
Total Nitrogen	mg/L	0.10	<0.10	2.44 | 2.47 | 1.42	8.21 | 8.39 | 2.17	108	##[1]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

QC Comments

Identifier	Description
[1]	Spike recovery is not applicable due to the relatively high analyte background in the sample (>3* spike level). However, the LCS recovery is within acceptance criteria.

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Certificate of Analysis PEA1022

Client Details

Client	Hyd2O
Contact	Andre Righetti
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21064 - East Wanneroo Monitoring
Number of Samples	4 Groundwater
Date Samples Received	24/01/2023
Date Samples Registered	24/01/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	02/02/2023
Date of Issue	03/02/2023

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Todd Lee, Group Operations Manager
Laboratory Manager	Michael Kubiak

Certificate of Analysis PEA1022

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEA1022-01	EW1	Groundwater	24/01/2023	24/01/2023
PEA1022-02	EW2	Groundwater	24/01/2023	24/01/2023
PEA1022-03	EW3	Groundwater	24/01/2023	24/01/2023
PEA1022-04	WM42	Groundwater	24/01/2023	24/01/2023

Certificate of Analysis PEA1022

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PEA1022-01	PEA1022-02	PEA1022-03	PEA1022-04
Your Reference			EW1	EW2	EW3	WM42
Date Sampled			24/01/2023	24/01/2023	24/01/2023	24/01/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	<0.050

Certificate of Analysis PEA1022

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEA1022-01	PEA1022-02	PEA1022-03	PEA1022-04
Your Reference			EW1	EW2	EW3	WM42
Date Sampled			24/01/2023	24/01/2023	24/01/2023	24/01/2023
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	1.5	1.5	<1.0	<1.0
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	1.3	<1.0	<1.0
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	5.4	45	3.8	21

Certificate of Analysis PEA1022

Inorganics (Groundwater)

Envirolab ID	Units	PQL	PEA1022-01	PEA1022-02	PEA1022-03	PEA1022-04
Your Reference			EW1	EW2	EW3	WM42
Date Sampled			24/01/2023	24/01/2023	24/01/2023	24/01/2023
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	0.64	72	0.93	0.93
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Total Nitrogen	mg/L	0.10	0.99	70	1.3	1.3
NOx as N	mg/L	0.0050	0.63	72	0.94	0.93
Phosphate as P	mg/L	0.0050	0.0060	<0.0050	<0.0050	0.020
Organic Nitrogen by calc.	mg/L	0.10	0.36	<0.10	0.32	0.34
TKN as N by calculation	mg/L	0.10	0.36	<0.10	0.32	0.34
Nitrate as NO3 by calculation	mg/L	0.020	2.8	320	4.1	4.1
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020

Certificate of Analysis PEA1022

Method Summary

Method ID	Methodology Summary
Calc	Calculation
Calc - TKN	TKN determined by calculation (Total Nitrogen - NOx).
INORG-055	Nitrate/Nitrite/NOx/TKN - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils/solids are analysed following a water extraction.
INORG-057	Ammonia - determined colourimetrically. Water samples are filtered on receipt prior to analysis. Soils and OHS media are analysed following a water extraction. Alternatively, Ammonia can be extracted from soil using 1M KCl.
INORG-060	Phosphate - determined colourimetrically using APHA latest edition 4500 P E. Water samples are filtered on receipt prior to analysis. Soils are analysed from a water extract.
INORG-127	Total Nitrogen by high temperature catalytic combustion with chemiluminescence detection. Organic Carbon forms (inorganic, organic, total) determined using a TOC/NDIR analyser via combustion. Dissolved forms require filtering prior to determination.
METALS-020	Determination of various metals by ICP-OES.
METALS-021	Determination of Mercury by Cold Vapour AAS.
METALS-022	Determination of various metals by ICP-MS.

Certificate of Analysis PEA1022

Result Definitions

Identifier	Description
NR	Not reported
NEPM	National Environment Protection Measure
NS	Not specified
LCS	Laboratory Control Sample
RPD	Relative Percent Difference
>	Greater than
<	Less than
PQL	Practical Quantitation Limit
INS	Insufficient sample for this test
NA	Test not required
NT	Not tested
DOL	Samples rejected due to particulate overload (air filters only)
RFD	Samples rejected due to filter damage (air filters only)
RUD	Samples rejected due to uneven deposition (air filters only)
##	Indicates a laboratory acceptance criteria outlier, for further details, see Result Comments and/or QC Comments

Quality Control Definitions

Blank

This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, and is determined by processing solvents and reagents in exactly the same manner as for samples.

Surrogate Spike

Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

LCS (Laboratory Control Sample)

This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Matrix Spike

A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

Duplicate

This is the complete duplicate analysis of a sample from the process batch. The sample selected should be one where the analyte concentration is easily measurable.

Certificate of Analysis PEA1022

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria. Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction. Spikes for Physical and Aggregate Tests are not applicable. For VOCs in water samples, three vials are required for duplicate or spike analysis.

General Acceptance Criteria (GAC) - Analyte specific criteria applies for some analytes and is reflected in QC recovery tables.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% - see ELN-P05 QAQC tables for details (available on request); <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase. Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was typically insufficient in order to satisfy laboratory QA/QC protocols.

Miscellaneous Information

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached. We have taken the sampling date as being the date received at the laboratory.

Two significant figures are reported for the majority of tests and with a high degree of confidence, for results <10*PQL, the second significant figure may be in doubt i.e. has a relatively high degree of uncertainty and is provided for information only.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS where sediment/solids are included by default.

Urine Analysis - The BEI values listed are taken from the 2022 edition of *TLVs and BEIs Threshold Limits by ACGIH.*

Air volume measurements are not covered by Envirolab's NATA accreditation.

Data Quality Assessment Summary PEA1022

Client Details

Client	Hyd2O
Your Reference	H21064 - East Wanneroo Monitoring
Date Issued	03/02/2023

Recommended Holding Time Compliance

Recommended holding time exceedances exist - See detailed list below

Quality Control and QC Frequency

QC Type	Compliant	Details
Blank	Yes	No Outliers
LCS	Yes	No Outliers
Duplicates	No	Duplicate Outliers Exist - See detailed list below
Matrix Spike	No	Matrix Spike Outliers Exist - See detailed list below
Surrogates / Extracted Internal Standards	Yes	No Outliers
QC Frequency	Yes	No Outliers

Surrogates/Extracted Internal Standards, Duplicates and/or Matrix Spikes are not always relevant/applicable to certain analyses and matrices. Therefore, said QC measures are deemed compliant in these situations by default. See Laboratory Acceptance Criteria for more information

Data Quality Assessment Summary PEA1022

Recommended Holding Time Compliance

Analysis	Sample Number(s)	Date Sampled	Date Extracted	Date Analysed	Compliant
Total Phosphorus | Water	1-4	24/01/2023	31/01/2023	01/02/2023	Yes
Dissolved Metals (LL) | Water	1-4	24/01/2023	31/01/2023	02/02/2023	Yes
Dissolved Metals (LL)-Hg | Water	1-4	24/01/2023	31/01/2023	01/02/2023	Yes
Nitrogen - Ammonia | Water	1-4	24/01/2023	27/01/2023	27/01/2023	Yes
Nitrogen - Nitrate | Water	1-4	24/01/2023	27/01/2023	27/01/2023	Yes
Nitrogen - Nitrite | Water	1-4	24/01/2023	27/01/2023	27/01/2023	No
Nitrogen - NOx | Water	1-4	24/01/2023	27/01/2023	27/01/2023	Yes
Nitrogen - Total N | Water	1-4	24/01/2023	30/01/2023	01/02/2023	No
Phosphate as P | Water	1-4	24/01/2023	27/01/2023	27/01/2023	No
TKN as N calc | Water	1-4	24/01/2023	24/01/2023	02/02/2023	Yes

Outliers: Duplicates

INORG-060|Inorganics (Water)| Batch BEA2062

Sample ID	Duplicate ID	Analyte	% Limits	RPD
BEA2062-DUP2#	DUP2	Phosphate as P	20.00	200

Outliers: Matrix Spike

METALS-022|Dissolved Low Level Metals (Water)| Batch BEA2294

Sample ID	Analyte	% Limits	% Recovery
BEA2294-MS1#	Zinc	70 - 130	##[1]

Quality Control PEA1022

METALS-020|Acid Extractable Metals (Water) | Batch BEA2268

Analyte	Units	PQL	Blank	DUP1 BEA2268-DUP1# Samp | QC | RPD %	DUP2 PEA1022-01 Samp | QC | RPD %	LCS %	Spike % BEA2268-MS1#
Phosphorus	mg/L	0.050	<0.050	<0.050 | <0.050 | [NA]	<0.050 | <0.050 | [NA]	113	111

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-021|Dissolved Low Level Metals (Water) | Batch BEA2284

Analyte	Units	PQL	Blank	DUP1 BEA2284-DUP1# Samp | QC | RPD %	DUP2 PEA1022-03 Samp | QC | RPD %	LCS %	Spike % BEA2284-MS1#
Mercury	µg/L	0.050	<0.050	<0.050 | <0.050 | [NA]	<0.050 | <0.050 | [NA]	110	102

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-022|Dissolved Low Level Metals (Water) | Batch BEA2294

Analyte	Units	PQL	Blank	DUP1 BEA2294-DUP1# Samp | QC | RPD %	DUP2 BEA2294-DUP2# Samp | QC | RPD %	LCS %	Spike % BEA2294-MS1#
Arsenic	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	108	107
Cadmium	µg/L	0.10	<0.10	<0.10 | <0.10 | [NA]	<0.10 | <0.10 | [NA]	109	108
Chromium	µg/L	1.0	<1.0	2.58 | 3.05 | 16.7	<1.0 | <1.0 | [NA]	102	102
Copper	µg/L	1.0	<1.0	3.03 | 3.02 | 0.331	<1.0 | <1.0 | [NA]	109	111
Lead	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	113	91.3
Nickel	µg/L	1.0	<1.0	1.51 | 1.47 | 2.68	<1.0 | <1.0 | [NA]	109	110
Zinc	µg/L	1.0	<1.0	737 | 757 | 2.63	1.46 | 1.44 | 1.58	109	##[1]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-057|Inorganics (Water) | Batch BEA2062

Analyte	Units	PQL	Blank	DUP1 BEA2062-DUP1# Samp | QC | RPD %	DUP2 BEA2062-DUP2# Samp | QC | RPD %	LCS %	Spike % BEA2062-MS1#
Ammonia as N	mg/L	0.0050	<0.0050	<0.0050 | <0.0050 | [NA]	<0.0050 | <0.0050 | [NA]	96.0	97.4
Nitrate as N	mg/L	0.0050	<0.0050	3.47 | 3.45 | 0.648	2.16 | 2.12 | 1.66	99.5	97.9
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050 | <0.0050 | [NA]	<0.0050 | <0.0050 | [NA]	112	123
NOx as N	mg/L	0.0050	<0.0050	3.47 | 3.45 | 0.646	2.16 | 2.12 | 1.66	99.5	97.4
Phosphate as P	mg/L	0.0050	<0.0050	0.00552 | 0.00532 | 3.69	0.00645 | <0.0050 | 200	105	105
Nitrate as NO3 by calculation	mg/L	0.020	<0.020			[NA]	[NA]
Nitrite as NO2 by calculation	mg/L	0.020	<0.020			[NA]	[NA]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-127|Inorganics (Water) | Batch BEA2197

Analyte	Units	PQL	Blank	DUP1 BEA2197-DUP1# Samp | QC | RPD %	DUP2 PEA1022-01 Samp | QC | RPD %	LCS %	Spike % BEA2197-MS1#
Total Nitrogen	mg/L	0.10	<0.10	70.3 | 72.0 | 2.44	0.993 | 0.999 | 0.592	106	84.5

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

QC Comments

Identifier	Description
[1]	Spike recovery is not applicable due to the relatively high analyte background in the sample (>3* spike level). However, the LCS recovery is within acceptance criteria.

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Certificate of Analysis PED0680

Client Details

Client	Hyd2O
Contact	Sean O'Sullivan
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21064 East Wanneroo Monitoring
Number of Samples	4 Groundwater
Date Samples Received	13/04/2023
Date Samples Registered	13/04/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	20/04/2023
Date of Issue	20/04/2023

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Authorisation Details

Results Approved By	Jessica Miller, Microbiological Supervisor Michael Hall, Inorganics & Metals Supervisor Michael Mowle, Inorganics Supervisor Todd Lee, Group Operations Manager
Laboratory Manager	Michael Kubiak

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Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PED0680-01	EW01	Groundwater	12/04/2023	13/04/2023
PED0680-02	EW02	Groundwater	12/04/2023	13/04/2023
PED0680-03	EW03	Groundwater	12/04/2023	13/04/2023
PED0680-04	WM42	Groundwater	12/04/2023	13/04/2023

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Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PED0680-01	PED0680-02	PED0680-03	PED0680-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			12/04/2023	12/04/2023	12/04/2023	12/04/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	<0.050

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Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PED0680-01	PED0680-02	PED0680-03	PED0680-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			12/04/2023	12/04/2023	12/04/2023	12/04/2023
Aluminium	µg/L	10	360	28	46	<10
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	2.4	<1.0	<1.0
Iron	µg/L	10	1100	92	28	<10
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	1.2	<1.0	<1.0
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	4.6	43	<1.0	4.0

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Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PED0680-01	PED0680-02	PED0680-03	PED0680-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			12/04/2023	12/04/2023	12/04/2023	12/04/2023
Chloride	mg/L	1.0	81	140	19	160
Sulfate	mg/L	1.0	62	140	9.1	170

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Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PED0680-01	PED0680-02	PED0680-03	PED0680-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			12/04/2023	12/04/2023	12/04/2023	12/04/2023
Ammonia as N	mg/L	0.0050	0.0085	<0.0050	<0.0050	0.057
Nitrate as N	mg/L	0.0050	0.042	76	1.7	0.53
Nitrate as NO3 by calculation	mg/L	0.020	0.19	340	7.4	2.4
Nitrite as N	mg/L	0.0050	<0.0050	0.0064	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	0.021	<0.020	<0.020
NOx as N	mg/L	0.0050	0.045	76	1.7	0.53
TKN as N by calculation	mg/L	0.10	0.25	67	0.36	0.25
Organic Nitrogen by calc.	mg/L	0.10	0.24	67	0.36	0.19
Total Nitrogen	mg/L	0.10	0.30	140	2.0	0.78
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.0074

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Microbiological Suite (Groundwater)

Envirolab ID	Units	PQL	PED0680-01	PED0680-02	PED0680-03	PED0680-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			12/04/2023	12/04/2023	12/04/2023	12/04/2023
Thermotolerant Coliforms	cfu/100mL	1	<10 [1]	<10 [1]	<10 [1]	<10 [1]
E.coli	cfu/100mL	1	<10 [1]	<10 [1]	<10 [1]	<10 [1]

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Result Comments

Identifier	Description
[1]	Microbiological testing PQL raised due to high sample turbidity and/or matrix interference.

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Method Summary

Method ID	Methodology Summary
Calc	Calculation
Calc - TKN	TKN determined by calculation (Total Nitrogen - NOx).
INORG-055	Nitrate/Nitrite/NOx/TKN - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils/solids are analysed following a water extraction.
INORG-057	Ammonia - determined colourimetrically. Water samples are filtered on receipt prior to analysis. Soils and OHS media are analysed following a water extraction. Alternatively, Ammonia can be extracted from soil using 1M KCl.
INORG-060	Phosphate - determined colourimetrically using APHA latest edition 4500 P E. Water samples are filtered on receipt prior to analysis. Soils are analysed from a water extract.
INORG-081	Anions determined by Ion Chromatography. Waters samples are filtered on receipt prior to analysis. Solids are analysed from a water extract. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
INORG-127	Total Nitrogen by high temperature catalytic combustion with chemiluminescence detection. Organic Carbon forms (inorganic, organic, total) determined using a TOC/NDIR analyser via combustion. Dissolved forms require filtering prior to determination.
METALS-020	Determination of various metals by ICP-OES.
METALS-021	Determination of Mercury by Cold Vapour AAS.
METALS-022	Determination of various metals by ICP-MS.
MICRO-001B	E. coli/Thermotolerant coliforms: Microbial Water Analysis - in accordance with MICRO-001 (AS4276.5-latest edition). Recommended maximums based on NHMRC Australian Drinking Water Guidelines. Please note that results for this test derived from counts outside of the range 10-100 are considered approximate as per AS4276.1.

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Result Definitions

Identifier	Description
NR	Not reported
NEPM	National Environment Protection Measure
NS	Not specified
LCS	Laboratory Control Sample
RPD	Relative Percent Difference
>	Greater than
<	Less than
PQL	Practical Quantitation Limit
INS	Insufficient sample for this test
NA	Test not required
NT	Not tested
DOL	Samples rejected due to particulate overload (air filters only)
RFD	Samples rejected due to filter damage (air filters only)
RUD	Samples rejected due to uneven deposition (air filters only)
##	Indicates a laboratory acceptance criteria outlier, for further details, see Result Comments and/or QC Comments

Quality Control Definitions

Blank

This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, and is determined by processing solvents and reagents in exactly the same manner as for samples.

Surrogate Spike

Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

LCS (Laboratory Control Sample)

This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Matrix Spike

A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

Duplicate

This is the complete duplicate analysis of a sample from the process batch. The sample selected should be one where the analyte concentration is easily measurable.

Certificate of Analysis PED0680

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria. Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction. Spikes for Physical and Aggregate Tests are not applicable. For VOCs in water samples, three vials are required for duplicate or spike analysis.

General Acceptance Criteria (GAC) - Analyte specific criteria applies for some analytes and is reflected in QC recovery tables.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% - see ELN-P05 QAQC tables for details (available on request); <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase. Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was typically insufficient in order to satisfy laboratory QA/QC protocols.

Miscellaneous Information

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached. We have taken the sampling date as being the date received at the laboratory.

Two significant figures are reported for the majority of tests and with a high degree of confidence, for results <10*PQL, the second significant figure may be in doubt i.e. has a relatively high degree of uncertainty and is provided for information only.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS where sediment/solids are included by default.

Urine Analysis - The BEI values listed are taken from the 2022 edition of *TLVs and BEIs Threshold Limits by ACGIH.*

Air volume measurements are not covered by Envirolab's NATA accreditation.

Data Quality Assessment Summary PED0680

Client Details

Client	Hyd2O
Your Reference	H21064 East Wanneroo Monitoring
Date Issued	20/04/2023

Recommended Holding Time Compliance

No recommended holding time exceedances

Quality Control and QC Frequency

QC Type	Compliant	Details
Blank	Yes	No Outliers
LCS	Yes	No Outliers
Duplicates	Yes	No Outliers
Matrix Spike	Yes	No Outliers
Surrogates / Extracted Internal Standards	Yes	No Outliers
QC Frequency	Yes	No Outliers

Surrogates/Extracted Internal Standards, Duplicates and/or Matrix Spikes are not always relevant/applicable to certain analyses and matrices. Therefore, said QC measures are deemed compliant in these situations by default. See Laboratory Acceptance Criteria for more information

Data Quality Assessment Summary PED0680

Recommended Holding Time Compliance

Analysis	Sample Number(s)	Date Sampled	Date Extracted	Date Analysed	Compliant
Total Phosphorus | Water	1-4	12/04/2023	17/04/2023	17/04/2023	Yes
Dissolved Metals (LL) | Water	1-4	12/04/2023	17/04/2023	18/04/2023	Yes
Dissolved Metals (LL)-Hg | Water	1-4	12/04/2023	13/04/2023	14/04/2023	Yes
Chloride | Water	1-4	12/04/2023	14/04/2023	14/04/2023	Yes
Sulfate | Water	1-4	12/04/2023	14/04/2023	14/04/2023	Yes
Nitrogen - Ammonia | Water	1-4	12/04/2023	14/04/2023	14/04/2023	Yes
Nitrogen - Nitrate | Water	1-4	12/04/2023	14/04/2023	14/04/2023	Yes
Nitrogen - Nitrite | Water	1-4	12/04/2023	14/04/2023	14/04/2023	Yes
Nitrogen - NOx | Water	1-4	12/04/2023	14/04/2023	14/04/2023	Yes
Nitrogen - Total N | Water	1-3	12/04/2023	14/04/2023	14/04/2023	Yes
	4	12/04/2023	14/04/2023	15/04/2023	Yes
Phosphate as P | Water	1-4	12/04/2023	14/04/2023	14/04/2023	Yes
TKN as N calc | Water	1-4	12/04/2023	14/04/2023	14/04/2023	Yes
E. coli & T.T.coli | Water	1-4	12/04/2023	13/04/2023	13/04/2023	Yes

Quality Control PED0680

METALS-020 | Acid Extractable Metals (Water) | Batch BED1311

Analyte	Units	PQL	Blank	DUP1 BED1311-DUP1# Samp | QC | RPD %	DUP2 BED1311-DUP2# Samp | QC | RPD %	LCS %	Spike % BED1311-MS1#
Phosphorus	mg/L	0.050	<0.050	0.514 | 0.513 | 0.261	8.01 | 7.95 | 0.660	108	102

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-021 | Dissolved Low Level Metals (Water) | Batch BED1105

Analyte	Units	PQL	Blank	DUP1 BED1105-DUP1# Samp | QC | RPD %	DUP2 BED1105-DUP2# Samp | QC | RPD %	LCS %	Spike % BED1105-MS1#
Mercury	µg/L	0.050	<0.050	<0.050 | <0.050 | [NA]	<0.050 | <0.050 | [NA]	99.2	99.2

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-022 | Dissolved Low Level Metals (Water) | Batch BED1285

Analyte	Units	PQL	Blank	DUP1 BED1285-DUP1# Samp | QC | RPD %	DUP2 BED1285-DUP2# Samp | QC | RPD %	LCS %	Spike % BED1285-MS1#
Aluminium	µg/L	10	<10	<10 | <10 | [NA]	203 | 203 | 0.187	101	112
Arsenic	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	8.36 | 7.88 | 5.91	101	106
Cadmium	µg/L	0.10	<0.10	<0.10 | <0.10 | [NA]	7.01 | 6.63 | 5.57	102	106
Chromium	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	2.93 | 2.69 | 8.54	101	102
Copper	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	8.46 | 7.46 | 12.6	102	88.4
Iron	µg/L	10	<10	3560 | 3600 | 1.18	648 | 641 | 1.09	114	79.8
Lead	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	104	95.8
Nickel	µg/L	1.0	<1.0	6.91 | 6.73 | 2.57	7.85 | 7.14 | 9.47	101	95.1
Zinc	µg/L	1.0	<1.0	15.9 | 15.6 | 1.43	127 | 122 | 3.86	94.7	81.8

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-081 | Inorganics - Ionic Balance and Indexes (Water) | Batch BED1190

Analyte	Units	PQL	Blank	DUP1 BED1190-DUP1# Samp | QC | RPD %	DUP2 PED0680-01 Samp | QC | RPD %	LCS %	Spike % BED1190-MS1#
Chloride	mg/L	1.0	<1.0	273 | 274 | 0.332	80.7 | 81.0 | 0.295	100	71.3
Sulfate	mg/L	1.0	<1.0	154 | 155 | 0.458	61.9 | 61.9 | 0.127	95.4	100

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-057 | Inorganics - Nutrients (Water) | Batch BED1185

Analyte	Units	PQL	Blank	DUP1 BED1185-DUP1# Samp | QC | RPD %	DUP2 PED0680-01 Samp | QC | RPD %	LCS %	Spike % BED1185-MS1#
Ammonia as N	mg/L	0.0050	<0.0050	0.108 | 0.112 | 3.74	0.00850 | 0.00870 | 2.27	108	98.4
Nitrate as N	mg/L	0.0050	<0.0050	0.525 | 0.519 | 1.11	0.0422 | 0.0425 | 0.733	102	97.0
Nitrate as NO3 by calculation	mg/L	0.020	<0.020			[NA]	[NA]
Nitrite as N	mg/L	0.0050	<0.0050	0.0116 | 0.0120 | 3.39	<0.0050 | <0.0050 | [NA]	111	125
Nitrite as NO2 by calculation	mg/L	0.020	<0.020			[NA]	[NA]
NOx as N	mg/L	0.0050	<0.0050	0.536 | 0.531 | 1.01	0.0454 | 0.0458 | 0.844	102	97.0
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050 | <0.0050 | [NA]	<0.0050 | <0.0050 | [NA]	113	120

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-127 | Inorganics - Nutrients (Water) | Batch BED1203

Analyte	Units	PQL	Blank	DUP1 BED1203-DUP1# Samp | QC | RPD %	DUP2 PED0680-01 Samp | QC | RPD %	LCS %	Spike % BED1203-MS1#
Total Nitrogen	mg/L	0.10	<0.10	0.753 | 0.620 | 19.3	0.297 | 0.297 | 0.0224	108	106

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

Quality Control PED0680

MICRO-001B | Microbiological Suite (Water) | Batch BED1161

Analyte	Units	PQL	Blank	DUP1 BED1161-DUP1# Samp | QC | RPD %	DUP2 BED1161-DUP2# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1	<1	<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1	<1	<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP3 BED1161-DUP3# Samp | QC | RPD %	DUP4 BED1161-DUP4# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		1.00 | 1.00 | 0.00	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		1.00 | 1.00 | 0.00	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP5 BED1161-DUP5# Samp | QC | RPD %	DUP6 BED1161-DUP6# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP7 BED1161-DUP7# Samp | QC | RPD %	DUP8 BED1161-DUP8# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

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Certificate of Analysis PEG1093

Client Details

Client	Hyd2O
Contact	Brian Lau
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21064 - East Wanneroo Monitoring
Number of Samples	4 Groundwater
Date Samples Received	19/07/2023
Date Samples Registered	19/07/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	26/07/2023
Date of Issue	26/07/2023

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Authorisation Details

Results Approved By	Heram Halim, Operations Manager Jessica Miller, Microbiological Supervisor Michael Hall, Inorganics & Metals Supervisor
Laboratory Manager	Michael Kubiak

Certificate of Analysis PEG1093

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEG1093-01	EW01	Groundwater	18/07/2023	19/07/2023
PEG1093-02	EW02	Groundwater	18/07/2023	19/07/2023
PEG1093-03	EW03	Groundwater	18/07/2023	19/07/2023
PEG1093-04	WM42	Groundwater	18/07/2023	19/07/2023

Certificate of Analysis PEG1093

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PEG1093-01	PEG1093-02	PEG1093-03	PEG1093-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			18/07/2023	18/07/2023	18/07/2023	18/07/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	<0.050

Certificate of Analysis PEG1093

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEG1093-01	PEG1093-02	PEG1093-03	PEG1093-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			18/07/2023	18/07/2023	18/07/2023	18/07/2023
Aluminium	µg/L	10	43	30	<10	<10
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	2.8	<1.0	<1.0	<1.0
Iron	µg/L	10	620	180	<10	<10
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	2.0	1.7	<1.0	<1.0
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	9.9	52	15	7.6

Certificate of Analysis PEG1093

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PEG1093-01	PEG1093-02	PEG1093-03	PEG1093-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			18/07/2023	18/07/2023	18/07/2023	18/07/2023
Chloride	mg/L	1.0	82	150	15	160
Sulfate	mg/L	1.0	60	130	5.0	170

Certificate of Analysis PEG1093

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PEG1093-01	PEG1093-02	PEG1093-03	PEG1093-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			18/07/2023	18/07/2023	18/07/2023	18/07/2023
Ammonia as N	mg/L	0.0050	0.012	<0.0050	0.0059	0.21
Nitrate as N	mg/L	0.0050	0.25	88	2.7	0.42
Nitrate as NO3 by calculation	mg/L	0.020	1.1	390	12	1.8
Nitrite as N	mg/L	0.0050	0.0050	0.0064	<0.0050	0.0052
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	0.021	<0.020	<0.020
NOx as N	mg/L	0.0050	0.26	88	2.7	0.42
TKN as N by calculation	mg/L	0.10	0.20	32	0.43	0.22
Organic Nitrogen by calc.	mg/L	0.10	0.19	32	0.43	<0.10
Total Nitrogen	mg/L	0.10	0.46	120	3.1	0.64
Phosphate as P	mg/L	0.0050	<0.0050	<0.0050	<0.0050	0.0055

Certificate of Analysis PEG1093

Microbiological Suite (Groundwater)

Envirolab ID	Units	PQL	PEG1093-01	PEG1093-02	PEG1093-03	PEG1093-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			18/07/2023	18/07/2023	18/07/2023	18/07/2023
Thermotolerant Coliforms	cfu/100mL	1	<1	<1	3	<1
E.coli	cfu/100mL	1	<1	<1	<1	<1

Certificate of Analysis PEG1093

Method Summary

Method ID	Methodology Summary
Calc	Calculation
Calc - TKN	TKN determined by calculation (Total Nitrogen - NOx).
INORG-055	Nitrate/Nitrite/NOx/TKN - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils/solids are analysed following a water extraction.
INORG-057	Ammonia - determined colourimetrically. Water samples are filtered on receipt prior to analysis. Soils and OHS media are analysed following a water extraction. Alternatively, Ammonia can be extracted from soil using 1M KCl.
INORG-060	Phosphate - determined colourimetrically using APHA latest edition 4500 P E. Water samples are filtered on receipt prior to analysis. Soils are analysed from a water extract.
INORG-081	Anions determined by Ion Chromatography. Waters samples are filtered on receipt prior to analysis. Solids are analysed from a water extract. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
INORG-127	Total Nitrogen by high temperature catalytic combustion with chemiluminescence detection. Organic Carbon forms (inorganic, organic, total) determined using a TOC/NDIR analyser via combustion. Dissolved forms require filtering prior to determination.
METALS-020	Determination of various metals by ICP-OES.
METALS-021	Determination of Mercury by Cold Vapour AAS.
METALS-022	Determination of various metals by ICP-MS. Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements.
MICRO-001B	E. coli/Thermotolerant coliforms: Microbial Water Analysis - in accordance with MICRO-001 (AS4276.5-latest edition). Recommended maximums based on NHMRC Australian Drinking Water Guidelines. Please note that results for this test derived from counts outside of the range 10-100 are considered approximate as per AS4276.1.

Certificate of Analysis PEG1093

Result Definitions

Identifier	Description
NR	Not reported
NEPM	National Environment Protection Measure
NS	Not specified
LCS	Laboratory Control Sample
RPD	Relative Percent Difference
>	Greater than
<	Less than
PQL	Practical Quantitation Limit
INS	Insufficient sample for this test
NA	Test not required
NT	Not tested
DOL	Samples rejected due to particulate overload (air filters only)
RFD	Samples rejected due to filter damage (air filters only)
RUD	Samples rejected due to uneven deposition (air filters only)
##	Indicates a laboratory acceptance criteria outlier, for further details, see Result Comments and/or QC Comments

Quality Control Definitions

Blank

This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, and is determined by processing solvents and reagents in exactly the same manner as for samples.

Surrogate Spike

Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

LCS (Laboratory Control Sample)

This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Matrix Spike

A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

Duplicate

This is the complete duplicate analysis of a sample from the process batch. The sample selected should be one where the analyte concentration is easily measurable.

Certificate of Analysis PEG1093

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria. Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction. Spikes for Physical and Aggregate Tests are not applicable. For VOCs in water samples, three vials are required for duplicate or spike analysis.

General Acceptance Criteria (GAC) - Analyte specific criteria applies for some analytes and is reflected in QC recovery tables.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% - see ELN-P05 QAQC tables for details (available on request); <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase. Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was typically insufficient in order to satisfy laboratory QA/QC protocols.

Miscellaneous Information

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached. We have taken the sampling date as being the date received at the laboratory.

Two significant figures are reported for the majority of tests and with a high degree of confidence, for results <10*PQL, the second significant figure may be in doubt i.e. has a relatively high degree of uncertainty and is provided for information only.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS where sediment/solids are included by default.

Urine Analysis - The BEI values listed are taken from the 2022 edition of *TLVs and BEIs Threshold Limits by ACGIH.*

Air volume measurements are not covered by Envirolab's NATA accreditation.

Data Quality Assessment Summary PEG1093

Client Details

Client	Hyd2O
Your Reference	H21064 - East Wanneroo Monitoring
Date Issued	26/07/2023

Recommended Holding Time Compliance

No recommended holding time exceedances

Quality Control and QC Frequency

QC Type	Compliant	Details
Blank	Yes	No Outliers
LCS	Yes	No Outliers
Duplicates	No	Duplicate Outliers Exist - See detailed list below
Matrix Spike	No	Matrix Spike Outliers Exist - See detailed list below
Surrogates / Extracted Internal Standards	Yes	No Outliers
QC Frequency	Yes	No Outliers

Surrogates/Extracted Internal Standards, Duplicates and/or Matrix Spikes are not always relevant/applicable to certain analyses and matrices. Therefore, said QC measures are deemed compliant in these situations by default. See Laboratory Acceptance Criteria for more information

Data Quality Assessment Summary PEG1093

Recommended Holding Time Compliance

Analysis	Sample Number(s)	Date Sampled	Date Extracted	Date Analysed	Compliant
Total Phosphorus | Water	1-4	18/07/2023	21/07/2023	24/07/2023	Yes
Dissolved Metals (LL) | Water	1-4	18/07/2023	20/07/2023	25/07/2023	Yes
Dissolved Metals (LL)-Hg | Water	1-4	18/07/2023	21/07/2023	24/07/2023	Yes
Chloride | Water	1-4	18/07/2023	20/07/2023	21/07/2023	Yes
Sulfate | Water	1-4	18/07/2023	20/07/2023	21/07/2023	Yes
Nitrogen - Ammonia | Water	1-4	18/07/2023	20/07/2023	20/07/2023	Yes
Nitrogen - Nitrate | Water	1-4	18/07/2023	20/07/2023	20/07/2023	Yes
Nitrogen - Nitrite | Water	1-4	18/07/2023	20/07/2023	20/07/2023	Yes
Nitrogen - NOx | Water	1-4	18/07/2023	20/07/2023	20/07/2023	Yes
Nitrogen - Total N | Water	1-4	18/07/2023	21/07/2023	22/07/2023	Yes
Phosphate as P | Water	1-4	18/07/2023	20/07/2023	20/07/2023	Yes
TKN as N calc | Water	1-4	18/07/2023	25/07/2023	25/07/2023	Yes
E. coli & T.T.coli | Water	1-4	18/07/2023	19/07/2023	19/07/2023	Yes

Outliers: Duplicates

INORG-057|Inorganics - Nutrients (Water)| Batch BEG2156

Sample ID	Duplicate ID	Analyte	% Limits	RPD
BEG2156-DUP2#	DUP2	Ammonia as N	20.00	20.4[2]

METALS-022|Dissolved Low Level Metals (Water)| Batch BEG2209

Sample ID	Duplicate ID	Analyte	% Limits	RPD
BEG2209-DUP1#	DUP1	Chromium	20.00	39.6[2]
BEG2209-DUP1#	DUP1	Nickel	20.00	33.0[3]

Outliers: Matrix Spike

METALS-022|Dissolved Low Level Metals (Water)| Batch BEG2209

Sample ID	Analyte	% Limits	% Recovery
BEG2209-MS1#	Aluminium	70 - 130	##[1]
BEG2209-MS1#	Iron	70 - 130	##[1]

Quality Control PEG1093

METALS-020 | Acid Extractable Metals (Water) | Batch BEG2323

Analyte	Units	PQL	Blank	DUP1 BEG2323-DUP1# Samp | QC | RPD %	DUP2 PEG1093-03 Samp | QC | RPD %	LCS %	Spike % BEG2323-MS1#
Phosphorus	mg/L	0.050	<0.050	0.192 | 0.194 | 1.29	<0.050 | <0.050 | [NA]	102	97.0

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-022 | Dissolved Low Level Metals (Water) | Batch BEG2209

Analyte	Units	PQL	Blank	DUP1 BEG2209-DUP1# Samp | QC | RPD %	DUP2 BEG2209-DUP2# Samp | QC | RPD %	LCS %	Spike % BEG2209-MS1#
Aluminium	µg/L	10	<10	486 | 457 | 6.07	441 | 427 | 3.16	112	##[1]
Arsenic	µg/L	1.0	<1.0	8.46 | 8.22 | 2.82	1.46 | 1.41 | 3.48	110	115
Cadmium	µg/L	0.10	<0.10	0.335 | 0.335 | 0.00	<0.10 | <0.10 | [NA]	107	113
Chromium	µg/L	1.0	<1.0	9.31 | 13.9 | 39.6 [2]	3.30 | 3.25 | 1.68	107	107
Copper	µg/L	1.0	<1.0	58.2 | 57.3 | 1.58	2.16 | 2.06 | 4.27	106	106
Iron	µg/L	10	<10	552 | 539 | 2.45	631 | 640 | 1.37	114	##[1]
Lead	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	106	103
Nickel	µg/L	1.0	<1.0	18.6 | 25.9 | 33.0 [3]	1.02 | 1.10 | 7.58	106	105
Zinc	µg/L	1.0	<1.0	13.4 | 13.0 | 3.00	13.3 | 13.1 | 1.70	109	105

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-021 | Dissolved Low Level Metals (Water) | Batch BEG2387

Analyte	Units	PQL	Blank	DUP1 BEG2387-DUP1# Samp | QC | RPD %	DUP2 PEG1093-02 Samp | QC | RPD %	LCS %	Spike % BEG2387-MS1#
Mercury	µg/L	0.050	<0.050	<0.050 | <0.050 | [NA]	<0.050 | <0.050 | [NA]	100	96.0

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-081 | Inorganics - Ionic Balance and Indexes (Water) | Batch BEG2178

Analyte	Units	PQL	Blank	DUP1 BEG2178-DUP1# Samp | QC | RPD %	DUP2 BEG2178-DUP2# Samp | QC | RPD %	LCS %	Spike % BEG2178-MS1#
Chloride	mg/L	1.0	<1.0	1000 | 1000 | 0.443	854 | 860 | 0.756	99.2	103
Sulfate	mg/L	1.0	<1.0	3400 | 3390 | 0.420	2320 | 2340 | 0.802	97.6	82.3

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-057 | Inorganics - Nutrients (Water) | Batch BEG2156

Analyte	Units	PQL	Blank	DUP1 BEG2156-DUP1# Samp | QC | RPD %	DUP2 BEG2156-DUP2# Samp | QC | RPD %	LCS %	Spike % BEG2156-MS1#
Ammonia as N	mg/L	0.0050	<0.0050	0.358 | 0.329 | 8.65	0.00685 | 0.00558 | 20.4 [2]	112	107
Nitrate as N	mg/L	0.0050	<0.0050	<0.0050 | <0.0050 | [NA]	0.185 | 0.189 | 2.29	92.8	113
Nitrate as NO3 by calculation	mg/L	0.020	<0.020			[NA]	[NA]
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050 | <0.0050 | [NA]	0.0151 | 0.0156 | 3.00	101	108
Nitrite as NO2 by calculation	mg/L	0.020	<0.020			[NA]	[NA]
NOx as N	mg/L	0.0050	<0.0050	<0.0050 | <0.0050 | [NA]	0.200 | 0.205 | 2.35	92.8	106
Phosphate as P	mg/L	0.0050	<0.0050	0.0428 | 0.0419 | 2.04	0.0396 | 0.0392 | 0.927	105	113

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-127 | Inorganics - Nutrients (Water) | Batch BEG2290

Analyte	Units	PQL	Blank	DUP1 BEG2290-DUP1# Samp | QC | RPD %	DUP2 BEG2290-DUP2# Samp | QC | RPD %	LCS %	Spike % BEG2290-MS1#
Total Nitrogen	mg/L	0.10	<0.10	43.3 | 43.6 | 0.815	3.07 | 3.08 | 0.230	111	92.8

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

Quality Control PEG1093

INORG-127 | Inorganics - Nutrients (Water) | Batch BEG2291

Analyte	Units	PQL	Blank	DUP1 BEG2291-DUP1# Samp | QC | RPD %	DUP2 BEG2291-DUP2# Samp | QC | RPD %	LCS %	Spike % BEG2291-MS1#
Total Nitrogen	mg/L	0.10	<0.10	<0.10 | <0.10 | [NA]	<0.50 | <0.50 | [NA]	107	109

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

MICRO-001B | Microbiological Suite (Water) | Batch BEG2085

Analyte	Units	PQL	Blank	DUP1 BEG2085-DUP1# Samp | QC | RPD %	DUP2 BEG2085-DUP2# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1	<1	<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1	<1	<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP3 BEG2085-DUP3# Samp | QC | RPD %	DUP4 BEG2085-DUP4# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP5 BEG2085-DUP5# Samp | QC | RPD %	DUP6 BEG2085-DUP6# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP7 BEG2085-DUP7# Samp | QC | RPD %	DUP8 BEG2085-DUP8# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP9 BEG2085-DUP9# Samp | QC | RPD %	DUPA BEG2085-DUPA# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

QC Comments

Identifier	Description
[1]	Spike recovery is not applicable due to the relatively high analyte background in the sample (>3* spike level). However, the LCS recovery is within acceptance criteria.
[2]	Duplicate %RPD may be flagged as an outlier to routine laboratory acceptance, however, where one or both results are <10*PQL, the RPD acceptance criteria increases exponentially.
[3]	The laboratory duplicate RPD acceptance criteria has been exceeded. Sample heterogeneity suspected. 3 sets of data have been provided to help demonstrate the degree of non-homogeneity within the sample as well as assessing the analytical precision.

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Certificate of Analysis PEK1352

Client Details

Client	Hyd2O
Contact	Andre Righetti
Address	Suite 6B, 103 Rokeby Rd, SUBIACO, WA, 6008

Sample Details

Your Reference	H21064 - East Wanneroo Monitoring
Number of Samples	4 Groundwater
Date Samples Received	17/11/2023
Date Instructions Received	17/11/2023

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

Report Details

Date Results Requested by	27/11/2023
Date of Issue	24/11/2023

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Accredited for compliance with ISO/IEC 17025. Tests not covered by NATA are denoted with *.

Authorisation Details

Results Approved By	Heram Halim, Operations Manager Jessica Miller, Microbiological Supervisor Lien Tang, Assistant Operations Manager Todd Lee, Group Operations Manager
Laboratory Manager	Michael Kubiak

Certificate of Analysis PEK1352

Samples in this Report

Envirolab ID	Sample ID	Matrix	Date Sampled	Date Received
PEK1352-01	EW01	Groundwater	17/11/2023	17/11/2023
PEK1352-02	EW02	Groundwater	17/11/2023	17/11/2023
PEK1352-03	EW03	Groundwater	17/11/2023	17/11/2023
PEK1352-04	WM42	Groundwater	17/11/2023	17/11/2023

Certificate of Analysis PEK1352

Acid Extractable Metals (Groundwater)

Envirolab ID	Units	PQL	PEK1352-01	PEK1352-02	PEK1352-03	PEK1352-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			17/11/2023	17/11/2023	17/11/2023	17/11/2023
Phosphorus	mg/L	0.050	<0.050	<0.050	<0.050	<0.050

Certificate of Analysis PEK1352

Dissolved Low Level Metals (Groundwater)

Envirolab ID	Units	PQL	PEK1352-01	PEK1352-02	PEK1352-03	PEK1352-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			17/11/2023	17/11/2023	17/11/2023	17/11/2023
Aluminium	µg/L	10	63	39	<10	<10
Arsenic	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	µg/L	0.10	<0.10	<0.10	<0.10	<0.10
Chromium	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Copper	µg/L	1.0	<1.0	2.5	<1.0	<1.0
Iron	µg/L	10	2700	170	16	<10
Mercury	µg/L	0.050	<0.050	<0.050	<0.050	<0.050
Nickel	µg/L	1.0	<1.0	1.2	<1.0	<1.0
Lead	µg/L	1.0	<1.0	<1.0	<1.0	<1.0
Zinc	µg/L	1.0	14	51	2.2	42

Certificate of Analysis PEK1352

Inorganics - Ionic Balance and Indexes (Groundwater)

Envirolab ID	Units	PQL	PEK1352-01	PEK1352-02	PEK1352-03	PEK1352-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			17/11/2023	17/11/2023	17/11/2023	17/11/2023
Chloride	mg/L	1.0	84	130	11	160
Sulfate	mg/L	1.0	64	130	4.2	170

Certificate of Analysis PEK1352

Inorganics - Nutrients (Groundwater)

Envirolab ID	Units	PQL	PEK1352-01	PEK1352-02	PEK1352-03	PEK1352-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			17/11/2023	17/11/2023	17/11/2023	17/11/2023
Ammonia as N	mg/L	0.0050	0.030	<0.0050	<0.0050	<0.0050
Nitrate as N	mg/L	0.0050	0.23	75	0.97	0.67
Nitrate as NO3 by calculation	mg/L	0.020	1.0	330	4.3	2.9
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Nitrite as NO2 by calculation	mg/L	0.020	<0.020	<0.020	<0.020	<0.020
NOx as N	mg/L	0.0050	0.23	75	0.97	0.67
TKN as N by calculation	mg/L	0.10	0.27	11	<0.10	<0.10
Organic Nitrogen by calc.	mg/L	0.10	0.24	11	<0.10	<0.10
Total Nitrogen	mg/L	0.10	0.50	85	1.0	0.72
Phosphate as P	mg/L	0.0050	0.0079	0.0072	<0.0050	0.0075

Certificate of Analysis PEK1352

Microbiological Suite (Groundwater)

Envirolab ID	Units	PQL	PEK1352-01	PEK1352-02	PEK1352-03	PEK1352-04
Your Reference			EW01	EW02	EW03	WM42
Date Sampled			17/11/2023	17/11/2023	17/11/2023	17/11/2023
Thermotolerant Coliforms	cfu/100mL	1	<1	2	<1	<1
E.coli	cfu/100mL	1	<1	<1	<1	<1

Certificate of Analysis PEK1352

Method Summary

Method ID	Methodology Summary
Calc	Calculation
Calc - TKN	TKN determined by calculation (Total Nitrogen - NOx).
INORG-055	Nitrate/Nitrite/NOx/TKN - determined colourimetrically. Waters samples are filtered on receipt prior to analysis. Soils/solids are analysed following a water extraction.
INORG-057	Ammonia - determined colourimetrically. Water samples are filtered on receipt prior to analysis. Soils and OHS media are analysed following a water extraction. Alternatively, Ammonia can be extracted from soil using 1M KCl.
INORG-060	Phosphate - determined colourimetrically using APHA latest edition 4500 P E. Water samples are filtered on receipt prior to analysis. Soils are analysed from a water extract.
INORG-081	Anions determined by Ion Chromatography. Waters samples are filtered on receipt prior to analysis. Solids are analysed from a water extract. Alternatively determined by colourimetry/turbidity using Discrete Analyser.
INORG-127	Total Nitrogen by high temperature catalytic combustion with chemiluminescence detection. Organic Carbon forms (inorganic, organic, total) determined using a TOC/NDIR analyser via combustion. Dissolved forms require filtering prior to determination.
METALS-020	Determination of various metals by ICP-OES.
METALS-021	Determination of Mercury by Cold Vapour AAS.
METALS-022	Determination of various metals by ICP-MS. Please note for Bromine and Iodine, any forms of these elements that are present are included together in the one result reported for each of these two elements.
MICRO-001B	E. coli/Thermotolerant coliforms: Microbial Water Analysis - in accordance with MICRO-001 (AS4276.5-latest edition). Recommended maximums based on NHMRC Australian Drinking Water Guidelines. Please note that results for this test derived from counts outside of the range 10-100 are considered approximate as per AS4276.1.

Certificate of Analysis PEK1352

Result Definitions

Identifier	Description
NR	Not reported
NEPM	National Environment Protection Measure
NS	Not specified
LCS	Laboratory Control Sample
RPD	Relative Percent Difference
>	Greater than
<	Less than
PQL	Practical Quantitation Limit
INS	Insufficient sample for this test
NA	Test not required
NT	Not tested
DOL	Samples rejected due to particulate overload (air filters only)
RFD	Samples rejected due to filter damage (air filters only)
RUD	Samples rejected due to uneven deposition (air filters only)
##	Indicates a laboratory acceptance criteria outlier, for further details, see Result Comments and/or QC Comments

Quality Control Definitions

Blank

This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, and is determined by processing solvents and reagents in exactly the same manner as for samples.

Surrogate Spike

Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

LCS (Laboratory Control Sample)

This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.

Matrix Spike

A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.

Duplicate

This is the complete duplicate analysis of a sample from the process batch. The sample selected should be one where the analyte concentration is easily measurable.

Certificate of Analysis PEK1352

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria. Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction. Spikes for Physical and Aggregate Tests are not applicable. For VOCs in water samples, three vials are required for duplicate or spike analysis.

General Acceptance Criteria (GAC) - Analyte specific criteria applies for some analytes and is reflected in QC recovery tables.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% - see ELN-P05 QAQC tables for details (available on request); <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase. Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was typically insufficient in order to satisfy laboratory QA/QC protocols.

Miscellaneous Information

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached. We have taken the sampling date as being the date received at the laboratory.

Two significant figures are reported for the majority of tests and with a high degree of confidence, for results <10*PQL, the second significant figure may be in doubt i.e. has a relatively high degree of uncertainty and is provided for information only.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS where sediment/solids are included by default.

Urine Analysis - The BEI values listed are taken from the 2022 edition of *TLVs and BEIs Threshold Limits by ACGIH.*

Air volume measurements are not covered by Envirolab's NATA accreditation.

Data Quality Assessment Summary PEK1352

Client Details

Client	Hyd2O
Your Reference	H21064 - East Wanneroo Monitoring
Date Issued	24/11/2023

Recommended Holding Time Compliance

Recommended holding time exceedances exist - See detailed list below

Quality Control and QC Frequency

QC Type	Compliant	Details
Blank	Yes	No Outliers
LCS	Yes	No Outliers
Duplicates	No	Duplicate Outliers Exist - See detailed list below
Matrix Spike	No	Matrix Spike Outliers Exist - See detailed list below
Surrogates / Extracted Internal Standards	Yes	No Outliers
QC Frequency	Yes	No Outliers

Surrogates/Extracted Internal Standards, Duplicates and/or Matrix Spikes are not always relevant/applicable to certain analyses and matrices. Therefore, said QC measures are deemed compliant in these situations by default. See Laboratory Acceptance Criteria for more information

Data Quality Assessment Summary PEK1352

Recommended Holding Time Compliance

Analysis	Sample Number(s)	Date Sampled	Date Extracted	Date Analysed	Compliant
Total Phosphorus | Water	1-4	17/11/2023	20/11/2023	23/11/2023	Yes
Dissolved Metals (LL) | Water	1-4	17/11/2023	20/11/2023	22/11/2023	Yes
Dissolved Metals (LL)-Hg | Water	1-4	17/11/2023	21/11/2023	22/11/2023	Yes
Chloride | Water	1-4	17/11/2023	20/11/2023	21/11/2023	Yes
Sulfate | Water	1-4	17/11/2023	20/11/2023	21/11/2023	Yes
Nitrogen - Ammonia | Water	1-4	17/11/2023	21/11/2023	21/11/2023	Yes
Nitrogen - Nitrate | Water	1-4	17/11/2023	21/11/2023	21/11/2023	Yes
Nitrogen - Nitrite | Water	1-4	17/11/2023	21/11/2023	21/11/2023	No
Nitrogen - NOx | Water	1-4	17/11/2023	21/11/2023	21/11/2023	Yes
Nitrogen - Total N | Water	1-4	17/11/2023	20/11/2023	21/11/2023	Yes
Phosphate as P | Water	1-4	17/11/2023	21/11/2023	21/11/2023	No
TKN as N calc | Water	1-4	17/11/2023	20/11/2023	23/11/2023	Yes
E. coli & T.T.coli | Water	1-4	17/11/2023	17/11/2023	17/11/2023	Yes

Outliers: Duplicates

METALS-022|Dissolved Low Level Metals (Water)| Batch BEK2324

Sample ID	Duplicate ID	Analyte	% Limits	RPD
BEK2324-DUP2#	DUP2	Zinc	20.00	200[2]

Outliers: Matrix Spike

METALS-022|Dissolved Low Level Metals (Water)| Batch BEK2324

Sample ID	Analyte	% Limits	% Recovery
BEK2324-MS1#	Aluminium	70 - 130	##[1]

Quality Control PEK1352

METALS-020 | Acid Extractable Metals (Water) | Batch BEK2253

Analyte	Units	PQL	Blank	DUP1 BEK2253-DUP1# Samp | QC | RPD %	DUP2 BEK2253-DUP2# Samp | QC | RPD %	LCS %	Spike % BEK2253-MS1#
Phosphorus	mg/L	0.050	<0.050	<0.050 | <0.050 | [NA]	0.574 | 0.572 | 0.283	104	102

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-022 | Dissolved Low Level Metals (Water) | Batch BEK2324

Analyte	Units	PQL	Blank	DUP1 BEK2324-DUP1# Samp | QC | RPD %	DUP2 BEK2324-DUP2# Samp | QC | RPD %	LCS %	Spike % BEK2324-MS1#
Aluminium	µg/L	10	<10	232 | 241 | 3.69	<10 | <10 | [NA]	116	##[1]
Arsenic	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	112	104
Cadmium	µg/L	0.10	<0.10	<0.10 | <0.10 | [NA]	<0.10 | <0.10 | [NA]	113	105
Chromium	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	111	103
Copper	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	109	103
Iron	µg/L	10	<10	68.1 | 69.0 | 1.31	<10 | <10 | [NA]	114	98.7
Lead	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	109	104
Nickel	µg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	<1.0 | <1.0 | [NA]	108	99.7
Zinc	µg/L	1.0	<1.0	5.17 | 5.42 | 4.74	1.02 | <1.0 | 200 [2]	107	102

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

METALS-021 | Dissolved Low Level Metals (Water) | Batch BEK2404

Analyte	Units	PQL	Blank	DUP1 PEK1352-01 Samp | QC | RPD %	DUP2 BEK2404-DUP2# Samp | QC | RPD %	LCS %	Spike % PEK1352-02
Mercury	µg/L	0.050	<0.050	<0.050 | <0.050 | [NA]	<0.050 | <0.050 | [NA]	96.8	96.4

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-081 | Inorganics - Ionic Balance and Indexes (Water) | Batch BEK2175

Analyte	Units	PQL	Blank	DUP1 BEK2175-DUP1# Samp | QC | RPD %	DUP2 BEK2175-DUP2# Samp | QC | RPD %	LCS %	Spike % BEK2175-MS1#
Chloride	mg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	33.9 | 33.9 | 0.0280	91.8	118
Sulfate	mg/L	1.0	<1.0	<1.0 | <1.0 | [NA]	1.02 | 1.03 | 0.788	96.7	112

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

INORG-127 | Inorganics - Nutrients (Water) | Batch BEK2264

Analyte	Units	PQL	Blank	DUP1 PEK1352-01 Samp | QC | RPD %	LCS %	Spike % PEK1352-02
Total Nitrogen	mg/L	0.10	<0.10	0.501 | 0.459 | 8.77	108	103

Quality Control PEK1352

INORG-057 | Inorganics - Nutrients (Water) | Batch BEK2447

Analyte	Units	PQL	Blank	DUP1 BEK2447-DUP1# Samp | QC | RPD %	DUP2 BEK2447-DUP2# Samp | QC | RPD %	LCS %	Spike % BEK2447-MS1#
Ammonia as N	mg/L	0.0050	<0.0050	0.141 | 0.146 | 3.80	<0.0050 | <0.0050 | [NA]	93.4	101
Nitrate as N	mg/L	0.0050	<0.0050	3.18 | 3.17 | 0.516	2.23 | 2.25 | 1.18	115	119
Nitrate as NO3 by calculation	mg/L	0.020	<0.020			[NA]	[NA]
Nitrite as N	mg/L	0.0050	<0.0050	<0.0050 | <0.0050 | [NA]	<0.0050 | <0.0050 | [NA]	[NA]	[NA]
Nitrite as NO2 by calculation	mg/L	0.020	<0.020			[NA]	[NA]
NOx as N	mg/L	0.0050	<0.0050	3.18 | 3.17 | 0.515	2.23 | 2.26 | 1.18	115	119
Phosphate as P	mg/L	0.0050	<0.0050	0.0334 | 0.0336 | 0.702	0.0468 | 0.0478 | 2.20	100	104

Analyte	Units	PQL	Blank	LCS %	Spike % BEK2447-MS2#
Nitrite as N	mg/L	0.005		91.7	129

The QC reported was not specifically part of this workorder but formed part of the QC process batch.

MICRO-001B | Microbiological Suite (Water) | Batch BEK2150

Analyte	Units	PQL	Blank	DUP1 BEK2150-DUP1# Samp | QC | RPD %	DUP2 BEK2150-DUP2# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1	<1	<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1	<1	<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP3 BEK2150-DUP3# Samp | QC | RPD %	DUP4 BEK2150-DUP4# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP5 BEK2150-DUP5# Samp | QC | RPD %	DUP6 BEK2150-DUP6# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

Analyte	Units	PQL	Blank	DUP7 BEK2150-DUP7# Samp | QC | RPD %	DUP8 BEK2150-DUP8# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	15.0 | 16.0 | 6.45	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	7.00 | 13.0 | 60.0	[NA]

Analyte	Units	PQL	Blank	DUP9 BEK2150-DUP9# Samp | QC | RPD %	DUPA BEK2150-DUPA# Samp | QC | RPD %	LCS %
Thermotolerant Coliforms	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]
E.coli	cfu/100mL	1		<1 | <1 | [NA]	<1 | <1 | [NA]	[NA]

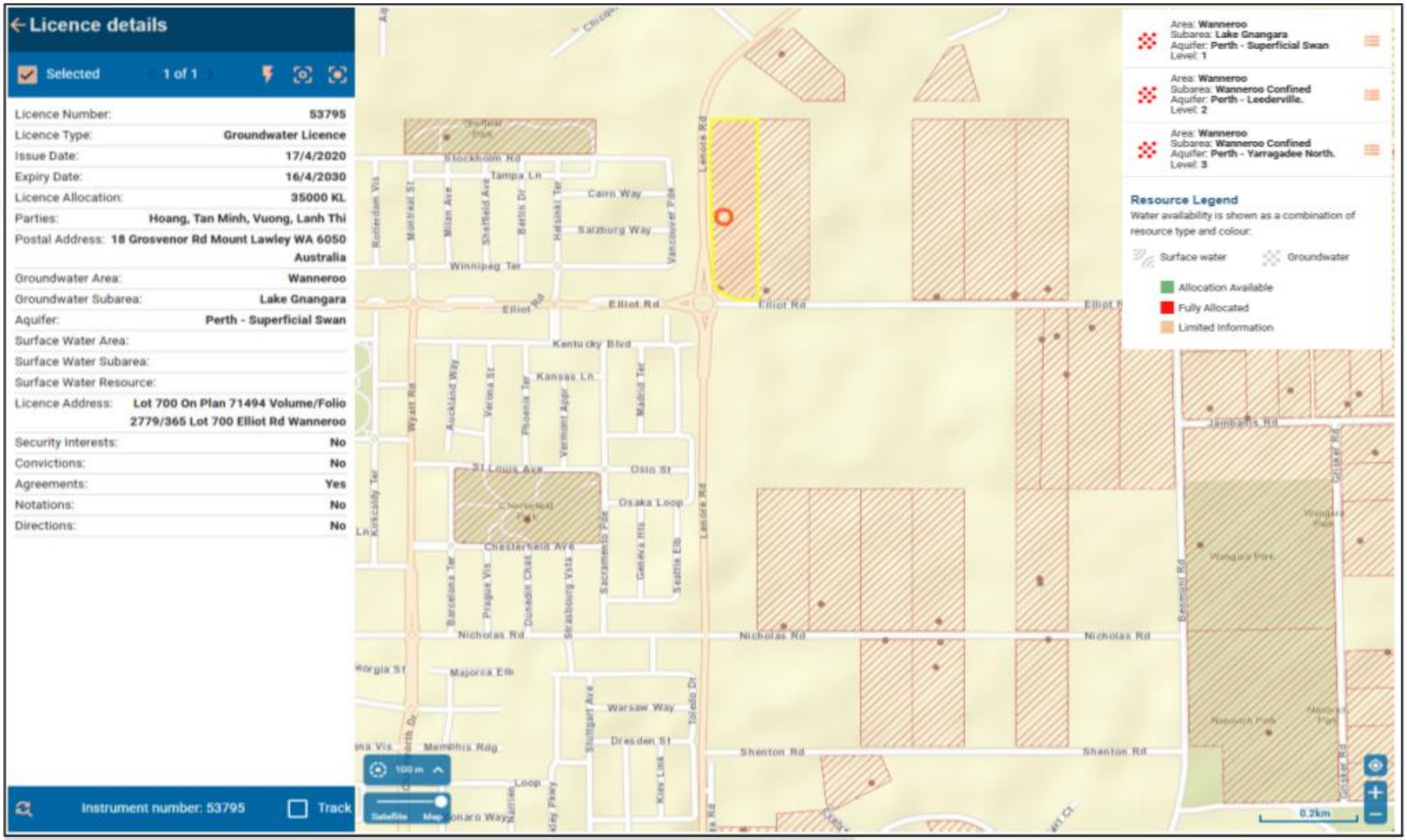
The QC reported was not specifically part of this workorder but formed part of the QC process batch.

QC Comments

Identifier	Description
[1]	Spike recovery is not applicable due to the relatively high analyte background in the sample (>3* spike level). However, the LCS recovery is within acceptance criteria.
[2]	Duplicate %RPD may be flagged as an outlier to routine laboratory acceptance, however, where one or both results are <10*PQL, the RPD acceptance criteria increases exponentially.

APPENDIX H
Water Register Extracts

Date : : 09/01/2025 Job No H24054



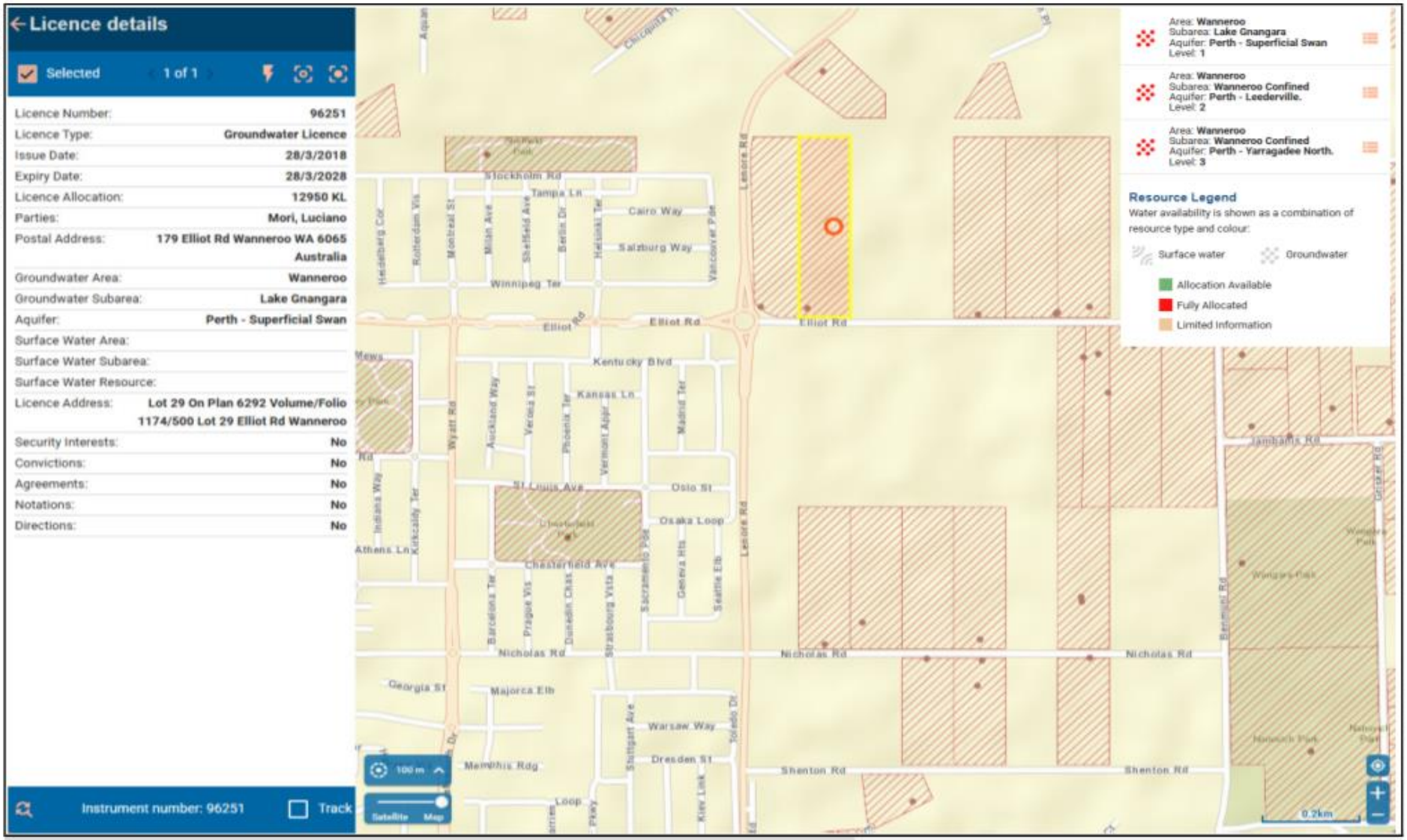
hyd2o

East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H1

Date : : 09/01/2025 Job No H24054



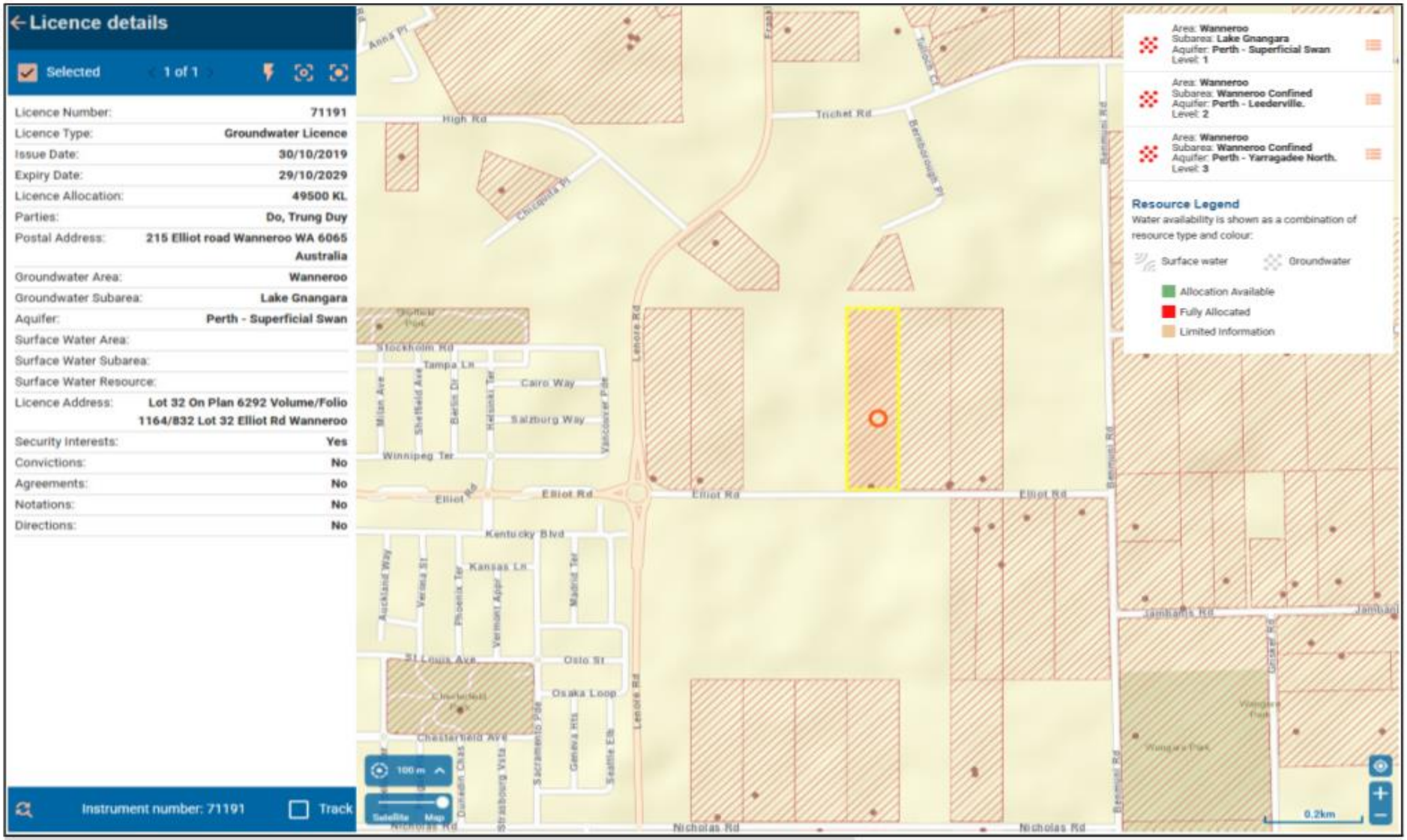
hyd2o

East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H2

Date : : 09/01/2025 Job No H24054



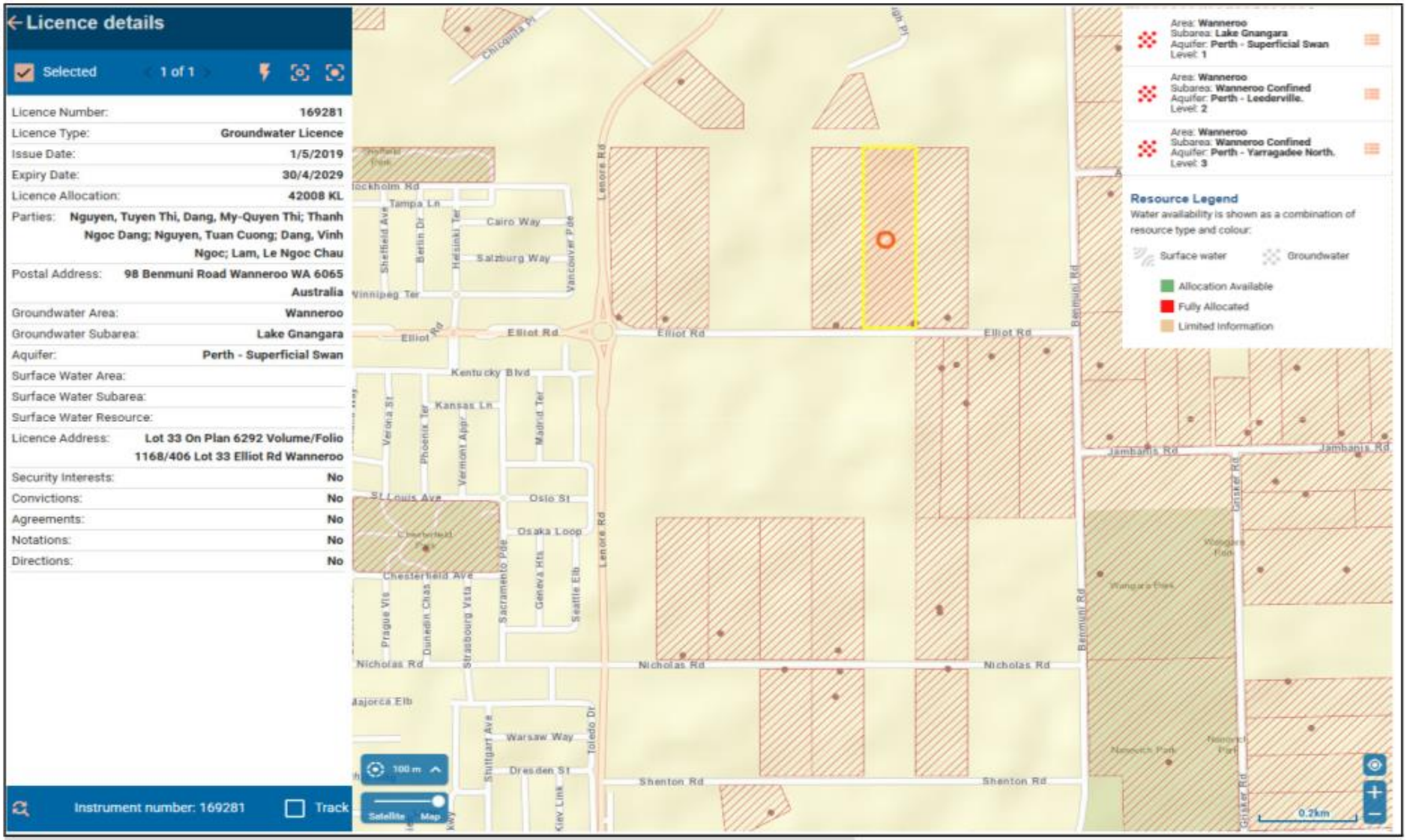
hyd2o

East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H3

Date : : 09/01/2025 Job No H24054



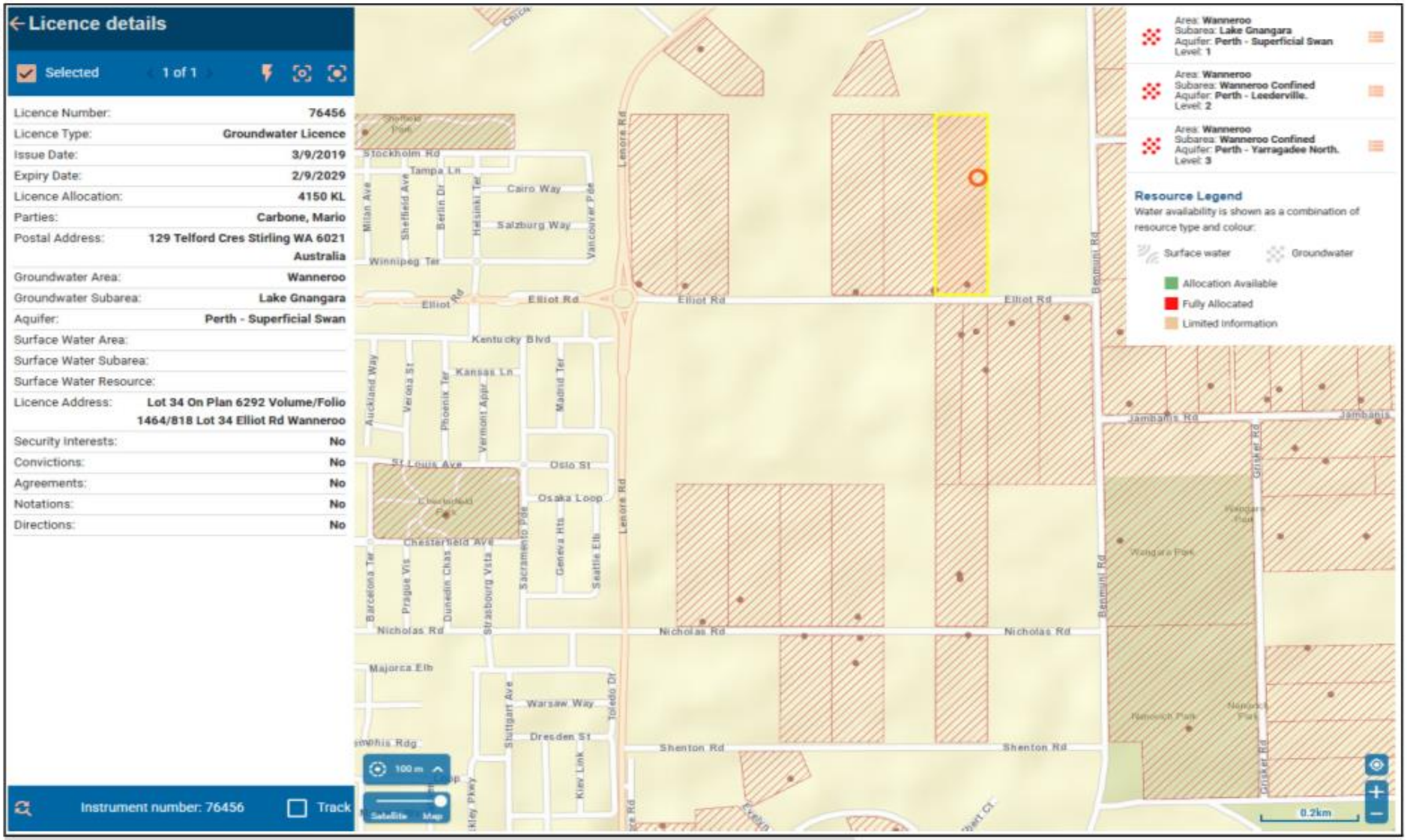
hyd2o

East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H4

Date : : 09/01/2025 Job No H24054



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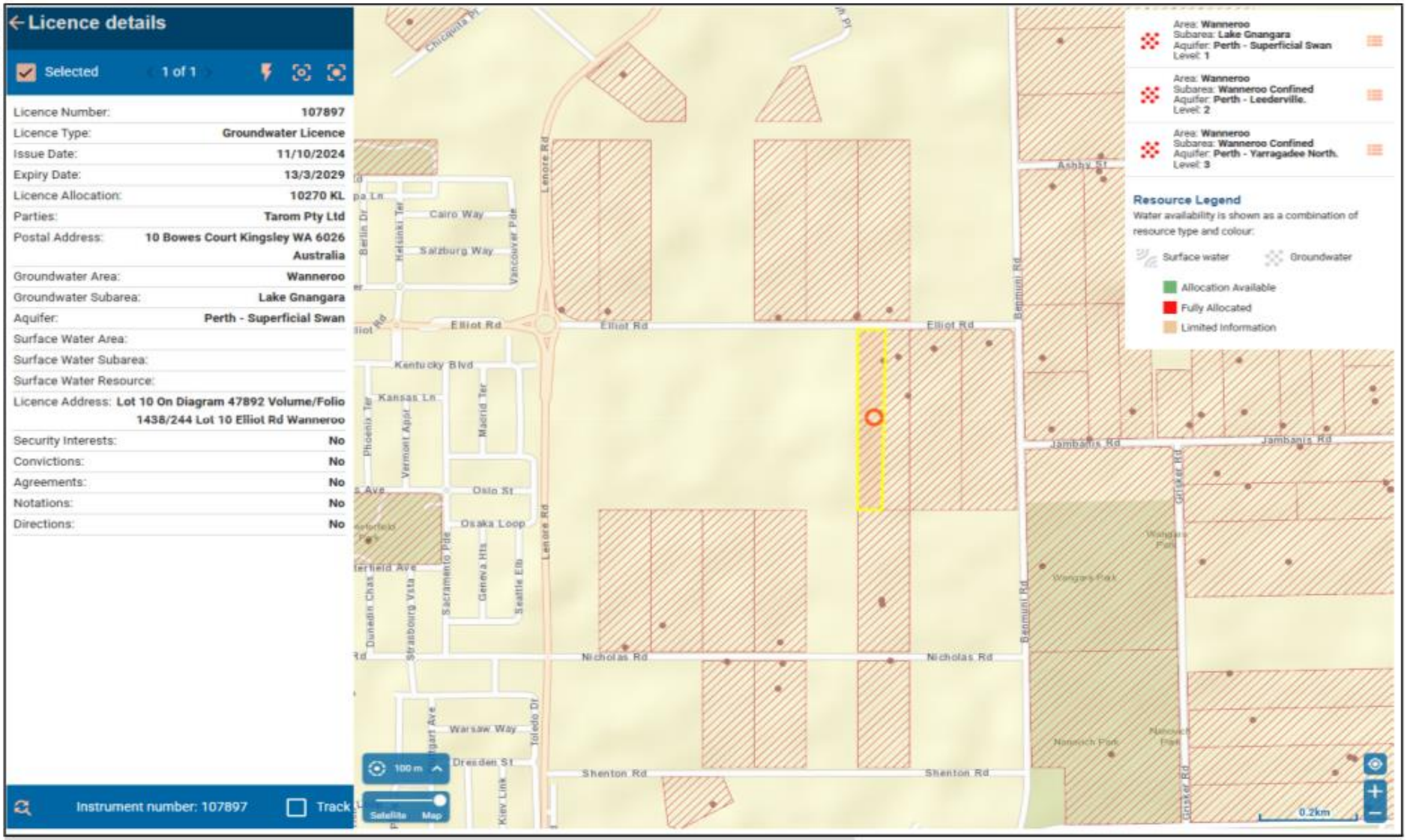
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H5

Date : : 09/01/2025 Job No H24054



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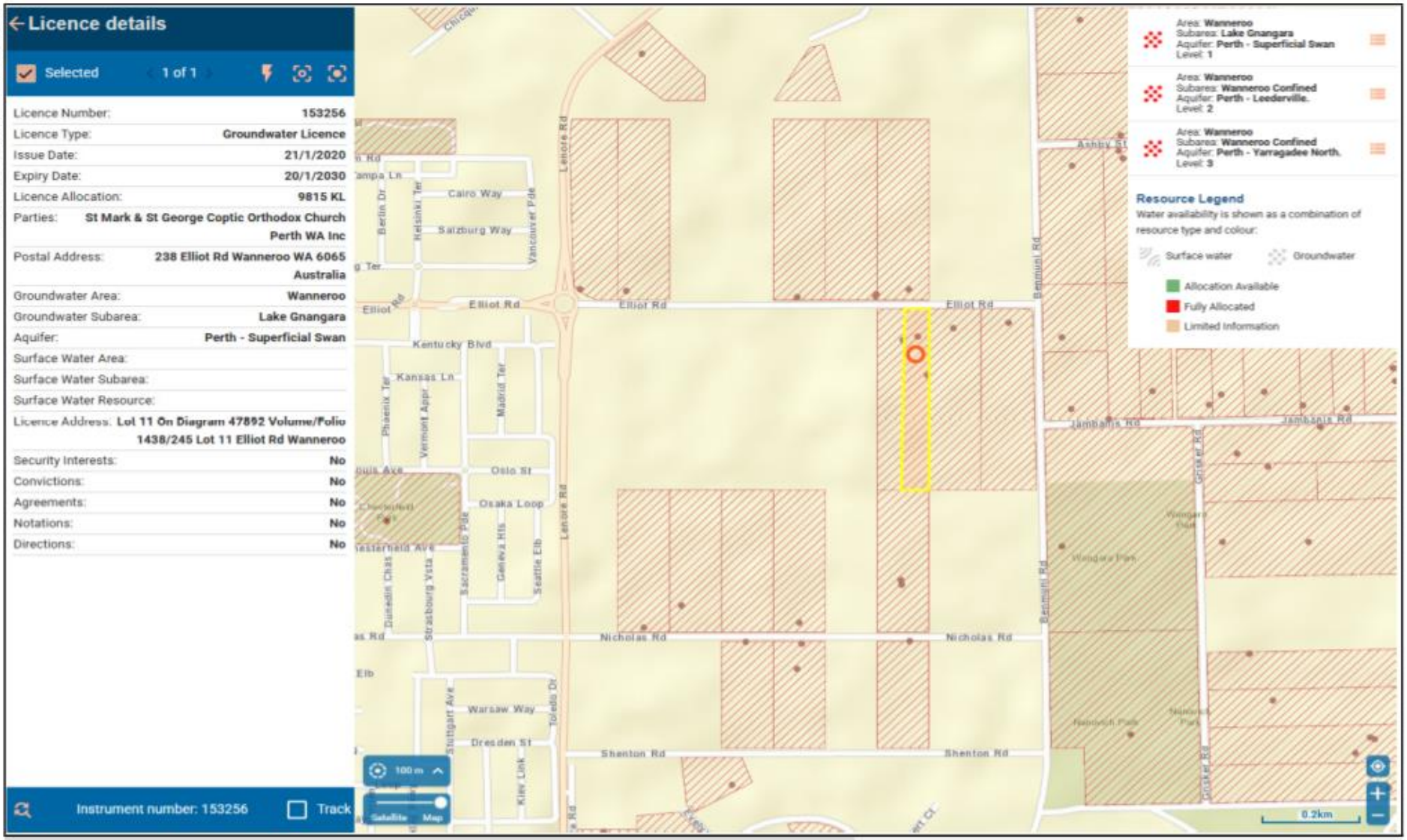
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H6

Date : : 09/01/2025 Job No H24054



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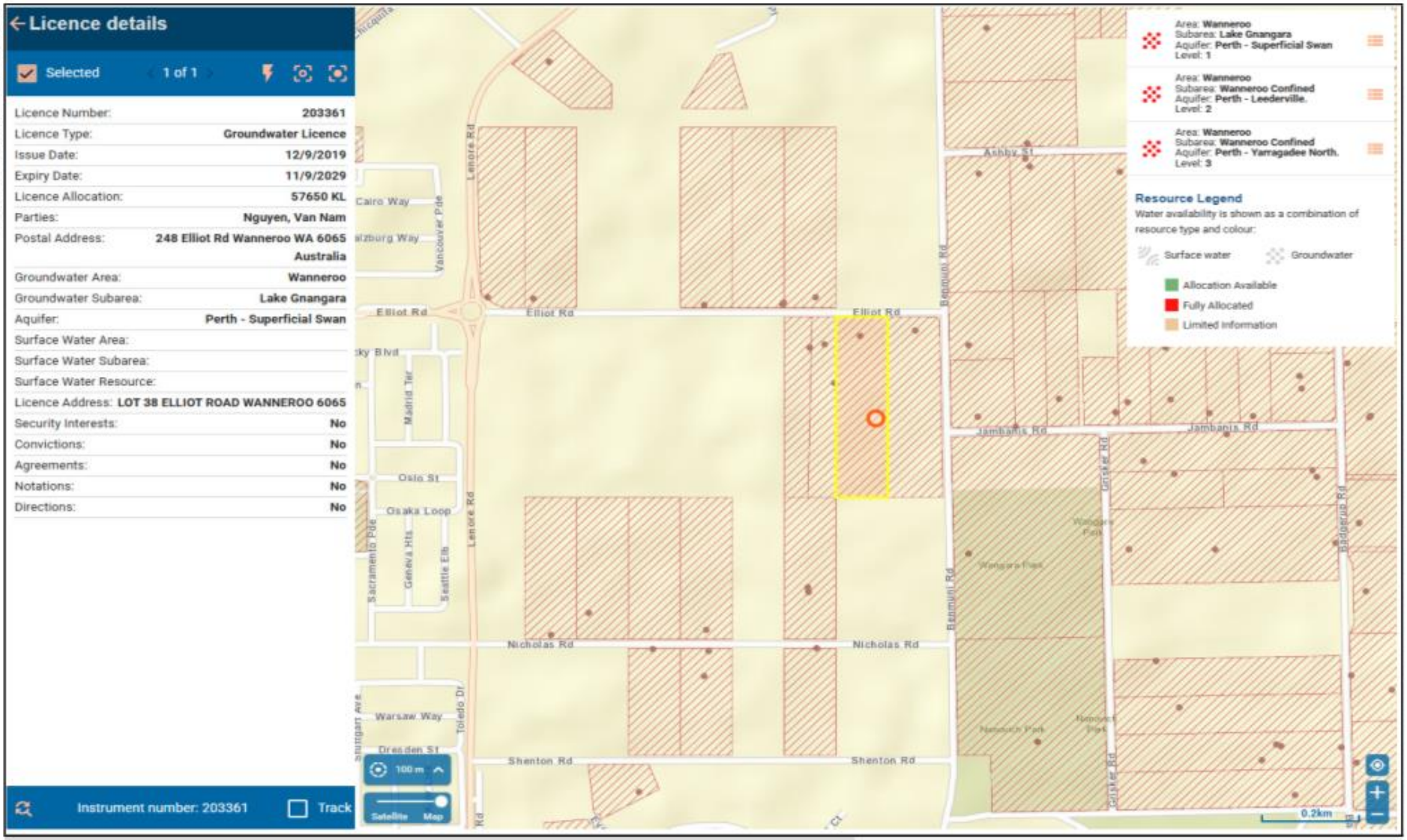
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H7

Date : : 09/01/2025 Job No H24054



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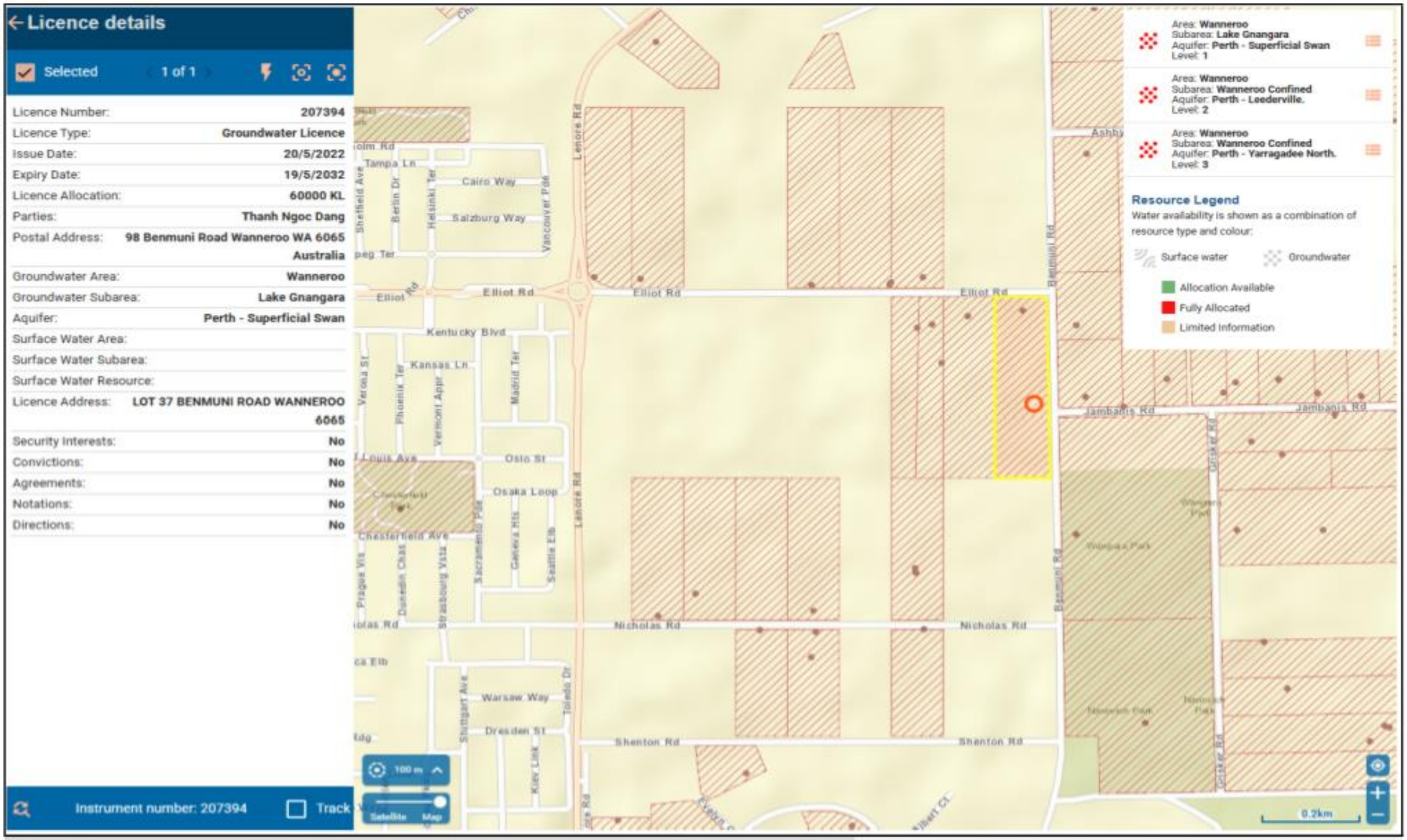
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H8

Date : : 09/01/2025 Job No H24054



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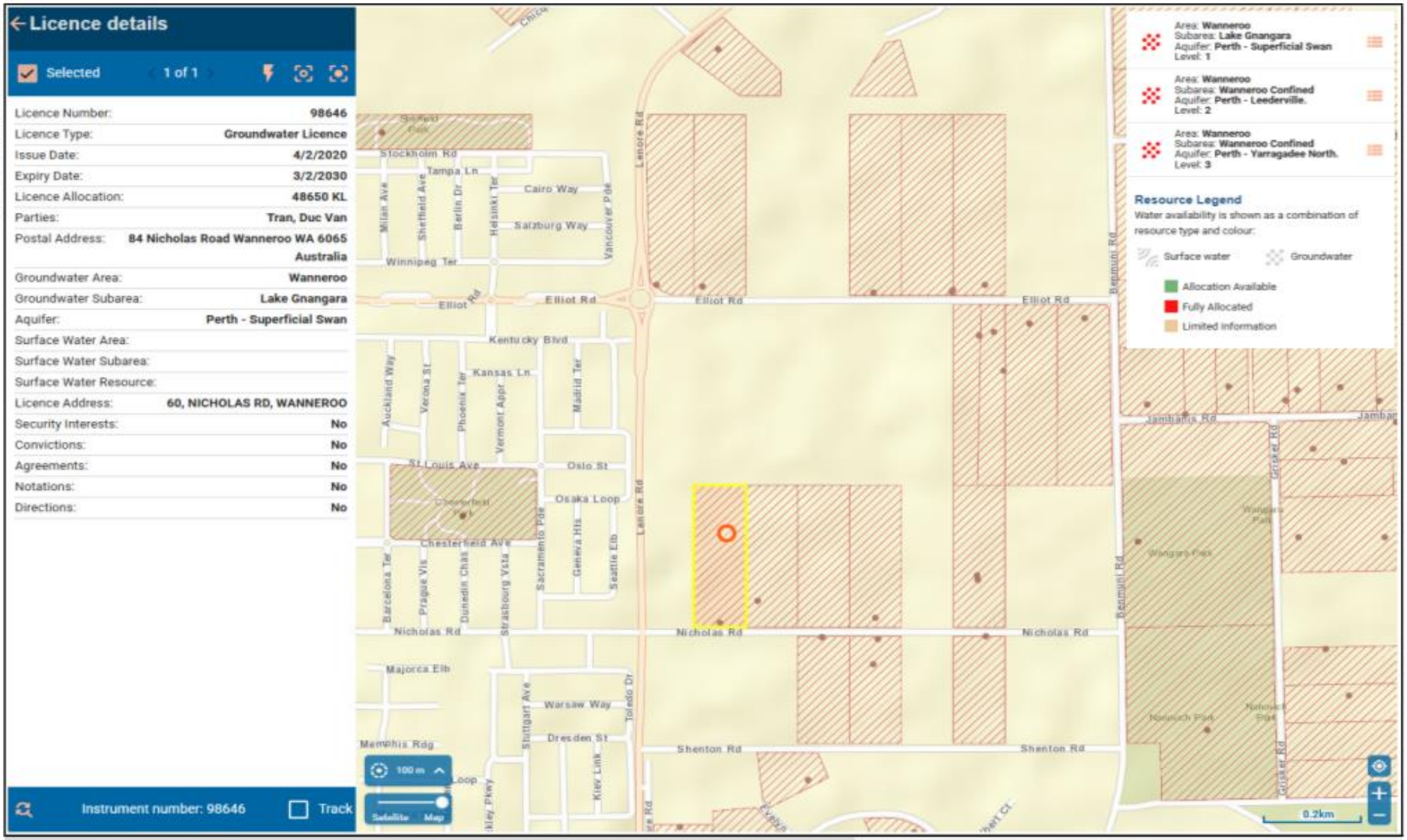
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H9

Date : : 09/01/2025 Job No H24054



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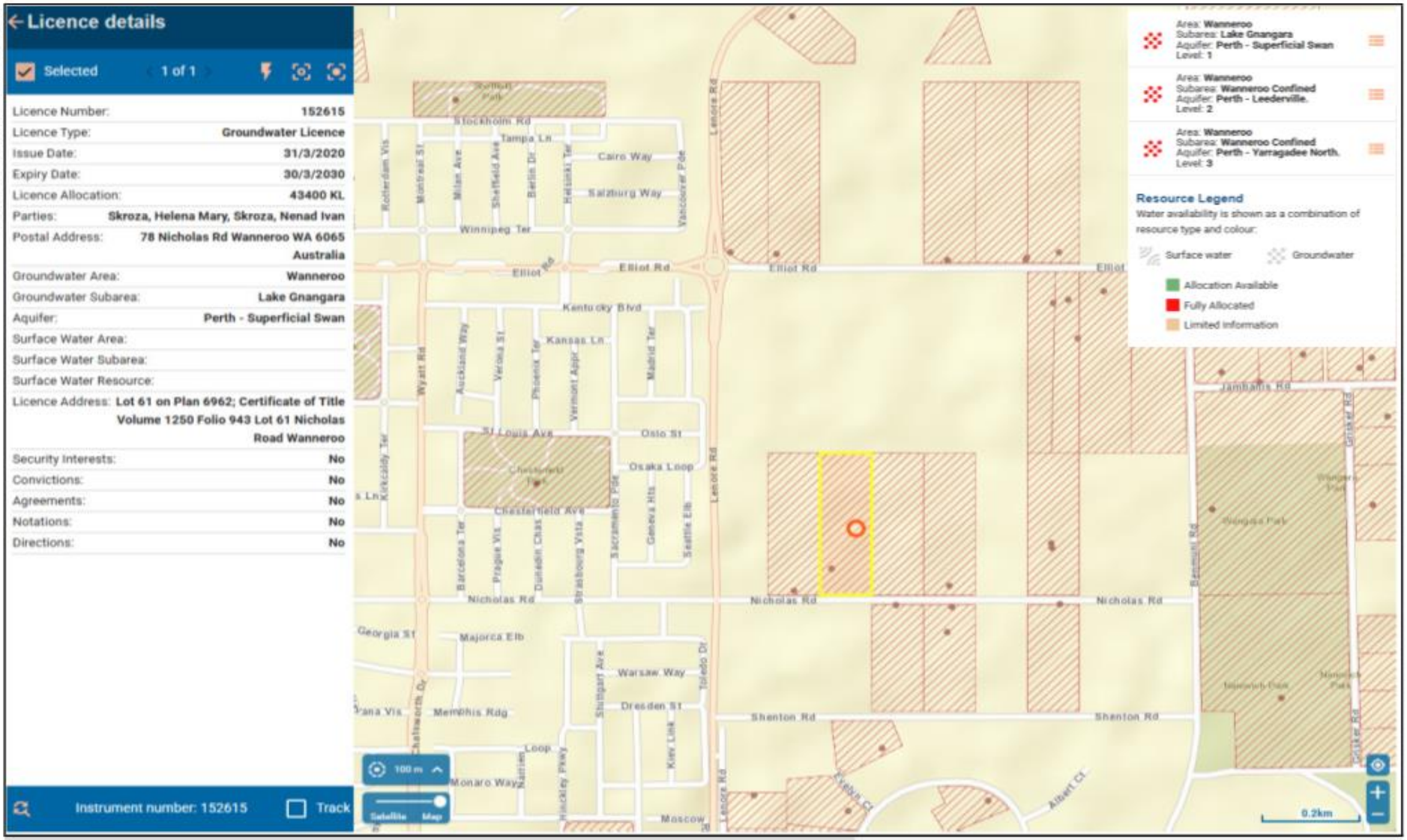
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H10

Date : : 09/01/2025 Job No H24054



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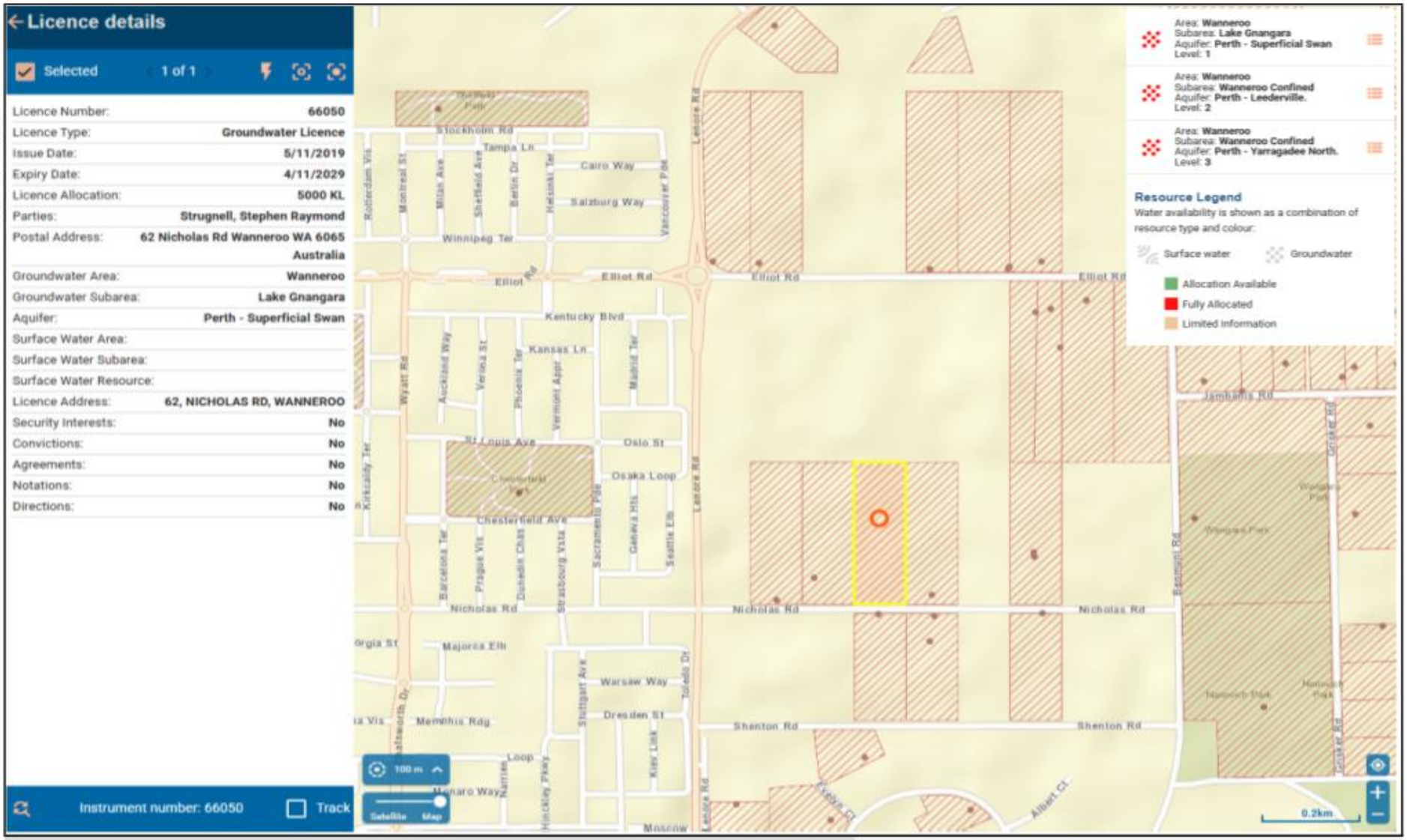
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H12

Date : : 09/01/2025 Job No H24054



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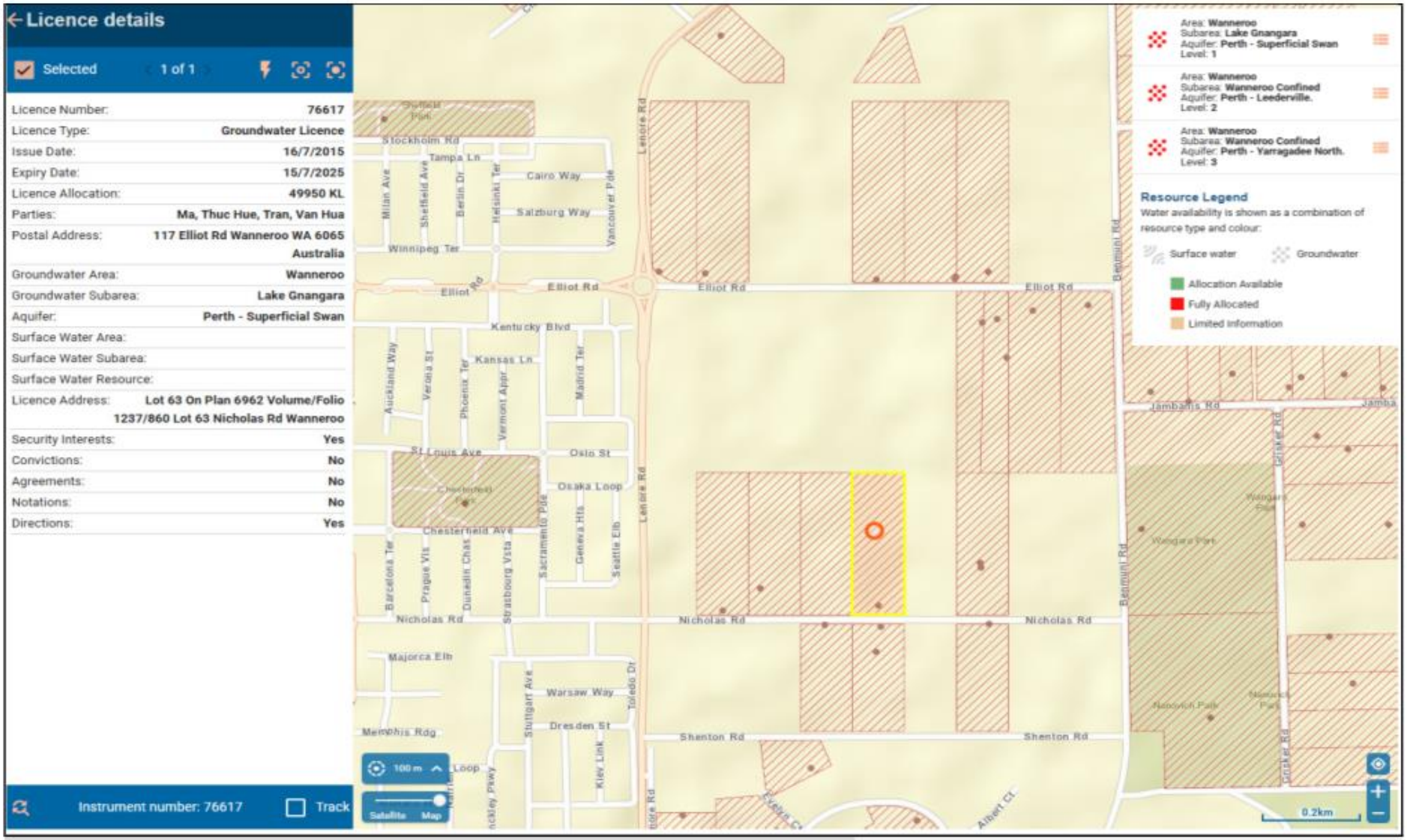
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H13

Date : : 09/01/2025 Job No H24054



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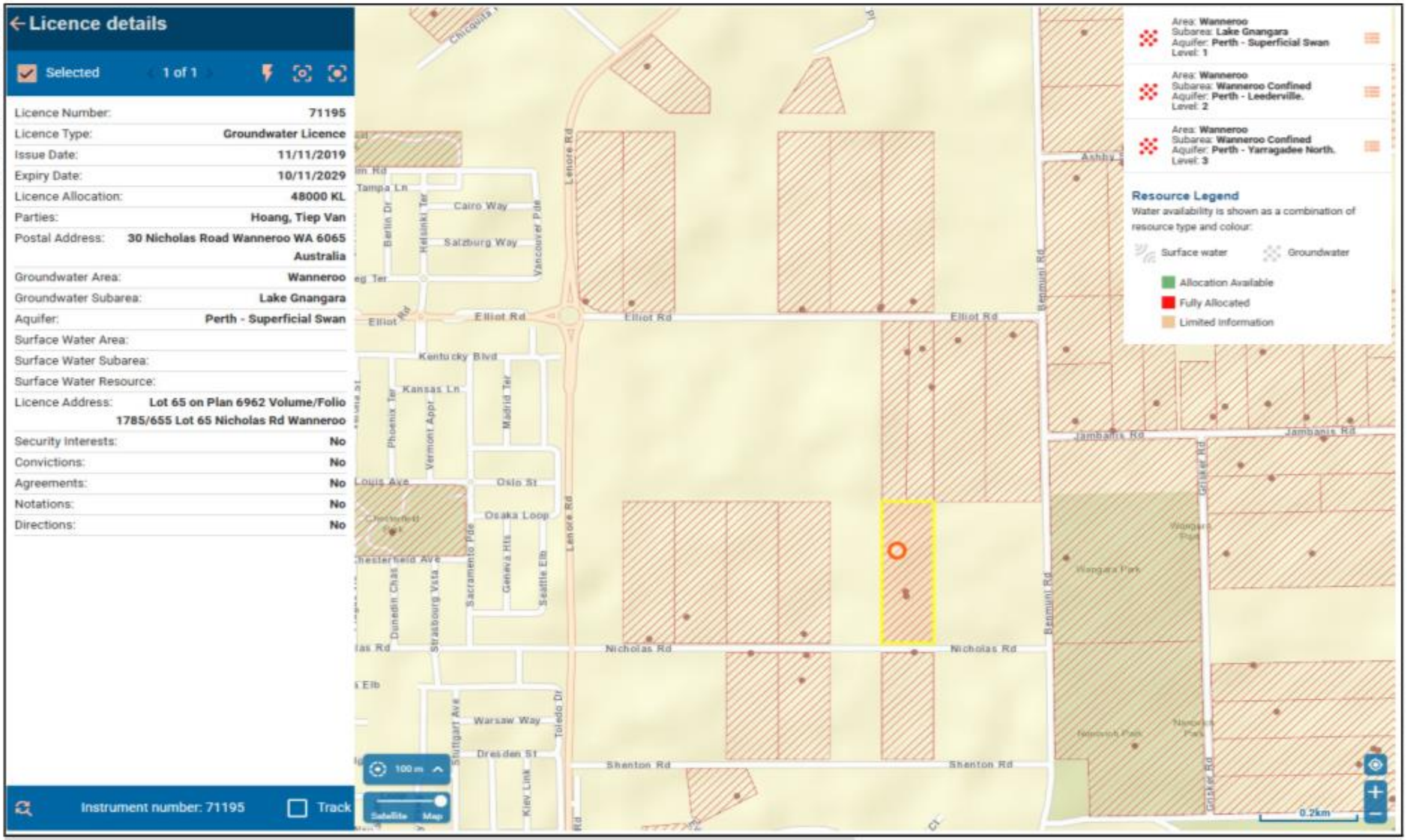
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H14

Date : : 09/01/2025 Job No H24054



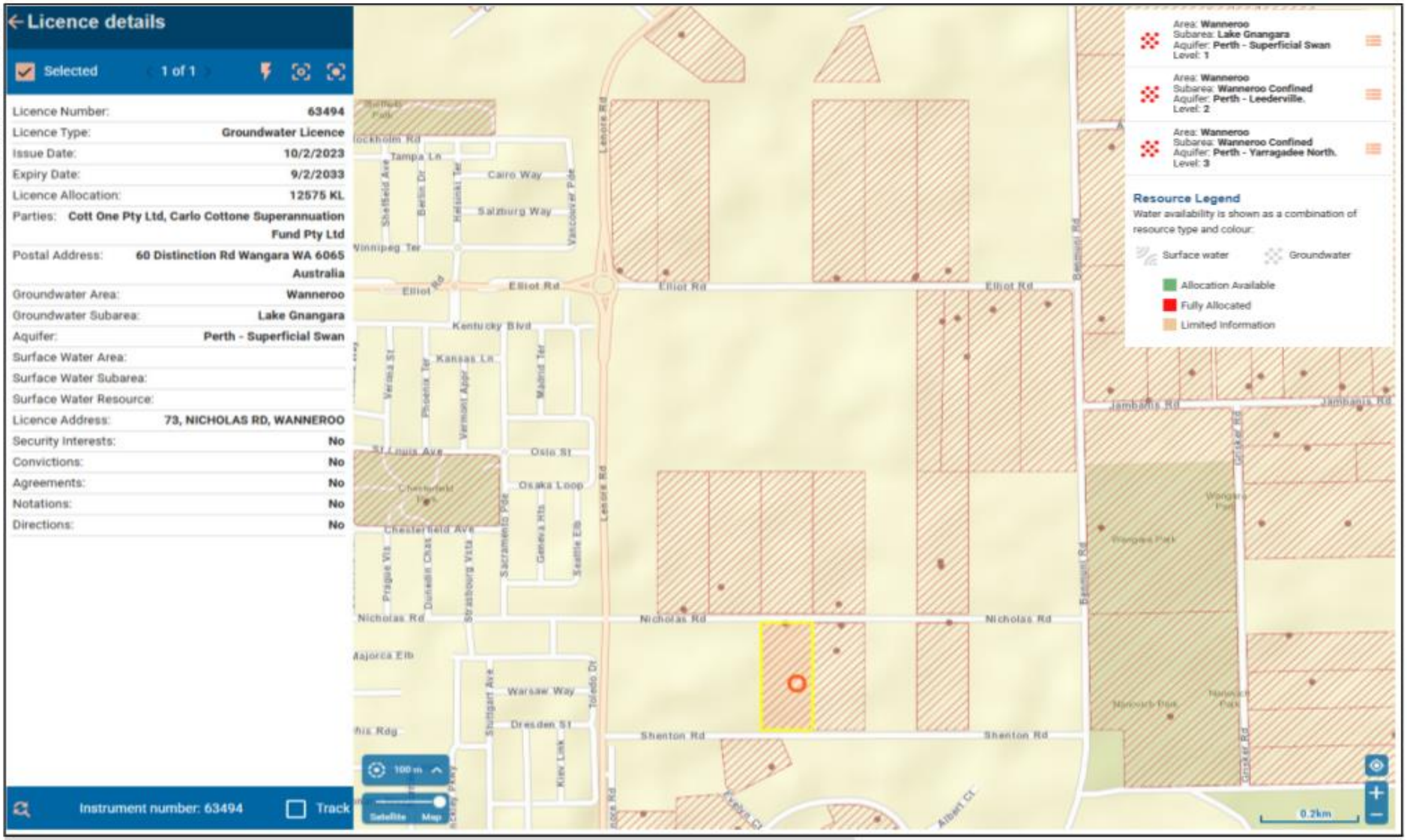
hyd2o

East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H15

Date : : 09/01/2025 Job No H24054



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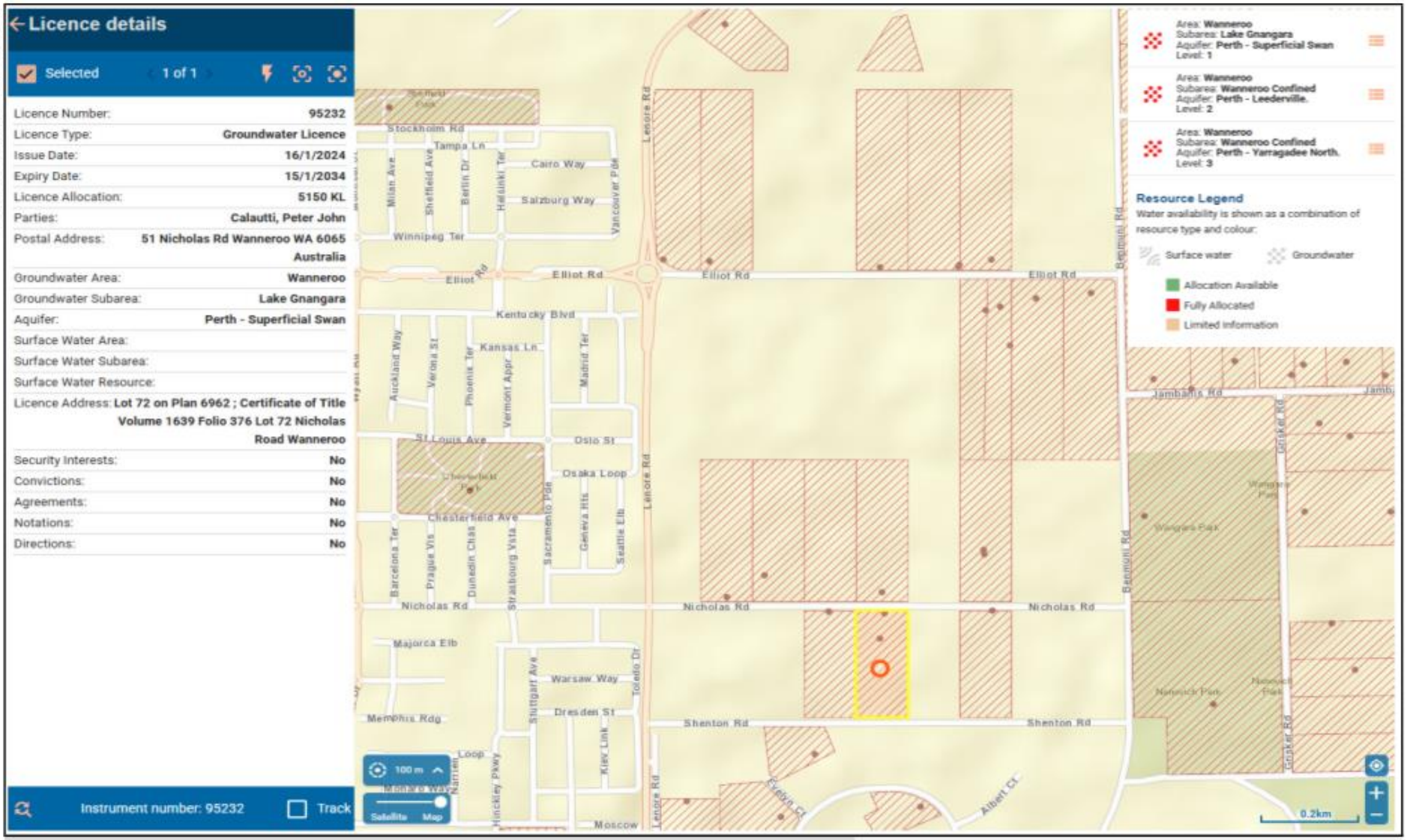
East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H16

Date : : 09/01/2025 Job No H24054



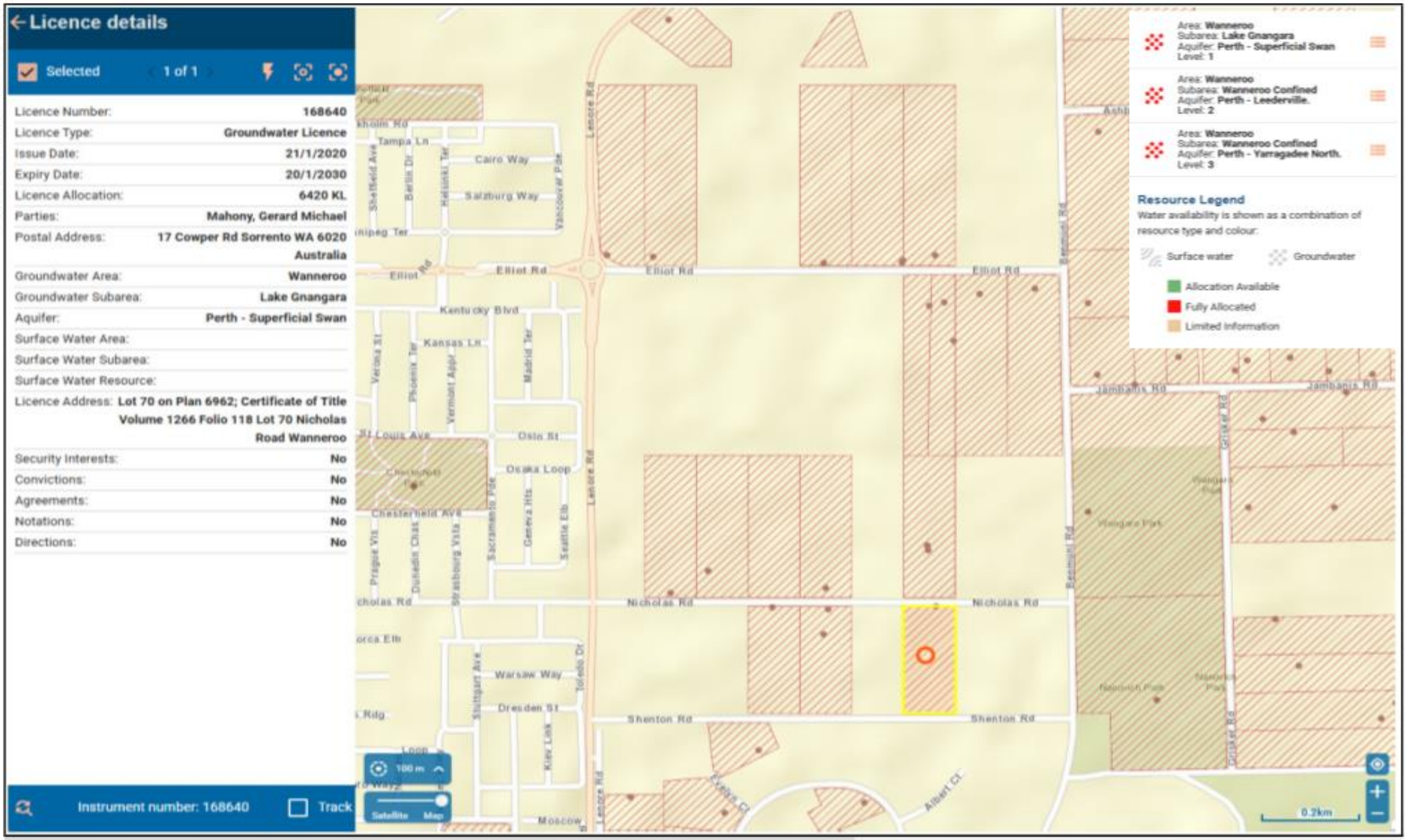
hyd2o

East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H17

Date : : 09/01/2025 Job No H24054



hyd2o

East Wanneroo Precinct 3 LWMS

DWER Water Register Extracts : Existing Licences

Appendix H18

APPENDIX I
Landscape Concept Plan

POS SPATIAL ACTIVITY PLAN

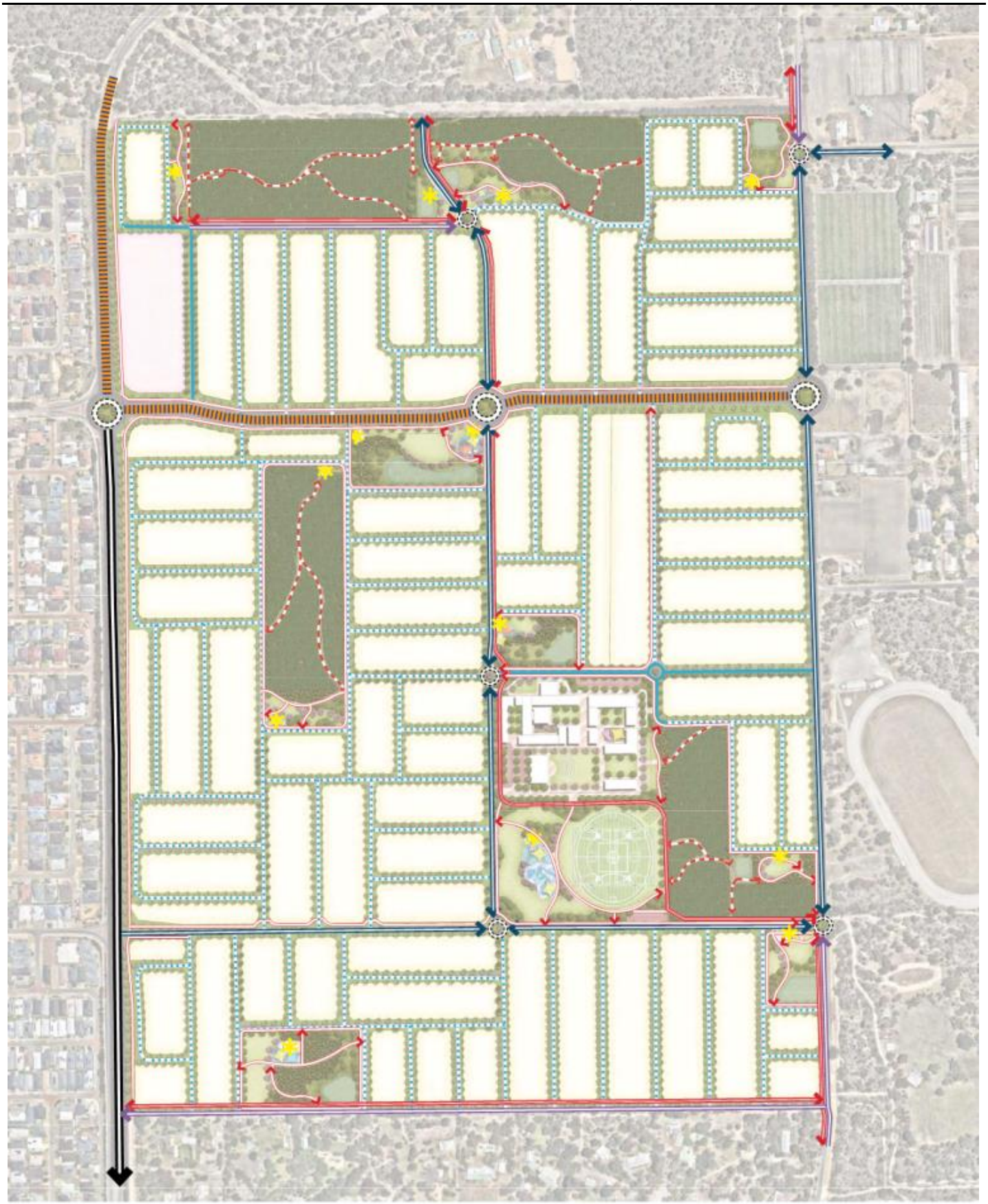
LEGEND

- EXTENT OF WORK
- EXISTING TREES
- OPEN TURF
- BASIN & SWALES
- BENCH SEAT
- PLAYING FIELD
- DUAL USE PATH
- BIN
- PLAYGROUND
- PARK SHELTER
- BBQ
- PICNIC SETTING
- PARK SIGN
- BIKE RACK
- DRINK FOUNTAIN

EAST WANNEROO PRECINCT 3

DWG EW01-1
REV C
DATE APRIL 2025
SCALE 1:2500 @ A1

emerge



CIRCULATION PLAN

LEGEND

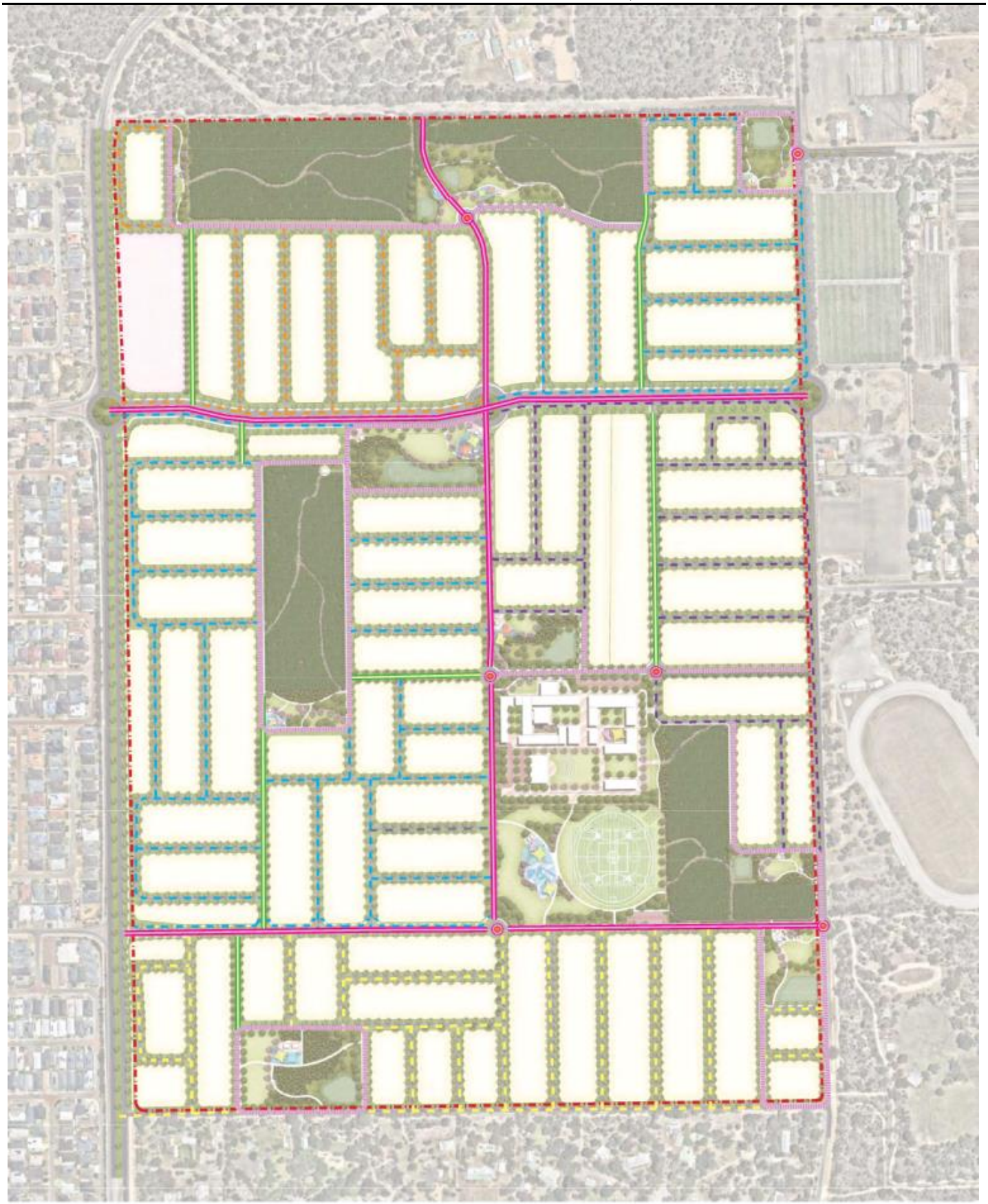
- TRANSPORT CORRIDOR (45M)
- INTEGRATOR A (35M)
- NEIGHBOURHOOD CONNECTOR A (25M)
- NEIGHBOURHOOD CONNECTOR B (20M)
- ACCESS STREET B (17.9M)
- ACCESS STREET D (15.4M)
- DUAL USE PATH
- CONCRETE FOOTPATH CONNECTION
- CRUSHED LIMESTONE TRACK TO EXISTING CLEARING
- PROPOSED ROUNDABOUT
- SHADE STRUCTURE

EAST WANNEROO PRECINCT 3

DWG EW01-2
REV C
DATE APRIL 2025

SCALE 1:2500 @ A1

emerge



STREET TREE PLAN

TRANSPORT CORRIDOR

Olea europaea
Swan Hill (Fruitless Olive)

NEIGHBOURHOOD CONNECTOR

Lagerstroemia indica
Crape myrtle

Jacaranda mimosifolia
Jacaranda

ACCESS STREET

Callistemon 'KPC'
Kings Park Special

Capparaspis arnevandalus
Tuckeroo

Agonis flexuosa
WA Peppermint

Callistemon viminalis
Weeping Bottlebrush

GREEN STREET

Eucalyptus marginata
Jarrah

EAST WANNEROO PRECINCT 3

DWG EW01-3
REV C
DATE APRIL 2025

SCALE 1 : 2500 @ A1

emerge

POS 1, 2 & 3

POS 1 TYPOLOGY
- Pocket POS

SIZE
- 0.2382 ha excl Parkland Reserve

POS 2 TYPOLOGY
- Pocket POS

SIZE
- 0.2339 ha excl Parkland Reserve

POS 3 TYPOLOGY
- Pocket POS

SIZE
- 0.6817 ha excl Parkland Reserve

POS 1, 2 & 3 CONCEPT
- Footpath connections through the POS to improve connectivity and walkability
- Provide informal tracks through existing vegetation
- Picnic areas, bench seats, shade structures and play space

FUNCTIONS / MATERIALS
- Open grassed areas for passive recreation
- Shade sails to feature playground
- Shelter & picnic settings
- Bench seats to provide rest point
- Water-wise native planting and planting
- Drainage areas per LWMS

ENVIRONMENTAL CONSIDERATIONS
- Significant existing trees to be retained where possible
- Carnaby black cockatoo habitat
- Source local materials where possible to minimise transport requirements and provide local employment.
- Consider long-term maintenance requirements.
- No management or modification to Parkland Reserve vegetation except 3m wide perimeter firebreaks. Where existing, firebreak to be maintained.
- POS Landscape design to achieve low threat as per AS 3959 and will include low fuel planting, as required

LOCATION PLAN

DRAINAGE LEGEND - CATCHMENT F

FIRST 15mm EVENT

Depth(m):	0.3
Base Area(m²):	1,260
Volume(m³):	377
Slope:	1:6

1% AEP EVENT

Depth(m):	1.17
TWL Area(mAHD):	2,221
Volume(m³):	2,646
Slope:	1:6

POS 4

POS 4 TYPOLOGY
- Local POS

SIZE
- 0.6734 ha

FUNCTIONS / MATERIALS
- Footpath connection to the broader network
- Open grassed areas for passive recreation
- Shade sails to feature playground
- Shelter & picnic settings
- Bench seats to provide rest point
- Drainage areas per LWMS

POS 4 CONCEPT
- Open turf to provide passive recreation
- Picnic areas, bench seats, shade structures and play space
- Footpath connections through the POS to improve connectivity and walkability
- Shade trees to be planted along footpath connections

ENVIRONMENTAL CONSIDERATIONS
- Significant existing trees to be retained where possible
- POS Landscape design to achieve low threat as per AS 3959 and will include low fuel planting, as required
- Water-wise native planting and planting
- Source local materials where possible to minimise transport requirements and provide local employment.
- Consider long-term maintenance requirements.

DRAINAGE LEGEND - CATCHMENT C

FIRST 15mm EVENT

Depth(m):	0.3
Base Area(m²):	1,680
Volume(m³):	501
Slope:	1:6

1% AEP EVENT

Depth(m):	1.19
TWL Area(mAHD):	3,443
Volume(m³):	3,020
Slope:	1:6

LANDSCAPE MASTERPLAN

LEGEND

EXTENT OF WORK
PROPOSED LOTS
SHELTER & PICNIC AREA
PLAYGROUND
CONCRETE FOOTPATH
CRUSHED LIMESTONE TRACK
TURF
SHRUB PLANTING
PROPOSED BASINS
RETAINED VEGETATION
VERGE TREATMENT
GREEN STREET
STREET TREES
PROPOSED TREES
BIORETENTION BASIN TWL
FLOOD STORAGE AREA

EAST WANNEROO PRECINCT 3

DWG EW01-4
REV C
DATE APRIL 2025
SCALE 1:1000 @ A1

emerge

LOCATION PLAN

POS 5

POS 5 TYPOLOGY
- Neighbourhood POS

SIZE
- 1.3850 ha

POS 5 CONCEPT
- Footpath connections through the POS to improve connectivity and walkability
- Provide informal tracks through existing vegetation
- Picnic areas, bench seats, shade structures and play space
- Bike track to improve connectivity and cyclability

FUNCTIONS / MATERIALS
- Open grassed areas for passive recreation
- Shade sails to feature playground
- Shelter & picnic settings
- Bench seats to provide rest point
- Drainage areas per LWMS

ENVIRONMENTAL CONSIDERATIONS
- Significant existing trees to be retained where possible
- Carnaby black cockatoo habitat
- POS Landscape design to achieve low threat as per AS 3959 and will include low fuel planting, as required
- Water-wise native planting and planting

POS 6

POS 6 TYPOLOGY
- Local POS

SIZE
- 0.8030 ha

POS 6 CONCEPT
- Footpath connections through the POS to improve connectivity and walkability
- Provide informal tracks through existing vegetation
- Picnic areas, bench seats, shade structures and play space
- Bike track to improve connectivity and cyclability
- Ensure pedestrian and bike connections are provided to the primary school for safe and convenient access

FUNCTIONS / MATERIALS
- Open grassed areas for passive recreation
- Shade sails to feature playground
- Shelter & picnic settings
- Bench seats to provide rest point
- Drainage areas per LWMS

ENVIRONMENTAL CONSIDERATIONS
- Significant existing trees to be retained where possible
- Carnaby black cockatoo habitat
- POS Landscape design to achieve low threat as per AS 3959 and will include low fuel planting, as required
- Water-wise native planting and planting

DRAINAGE LEGEND - CATCHMENT A

FIRST 15mm EVENT

Depth(m):	0.3
Base Area(m²):	3,550
Volume(m³):	1,067
Slope:	1:6

1% AEP EVENT

Depth(m):	1.17
TWL Area(mAHD):	6,675
Volume(m³):	6,115
Slope:	1:6

DRAINAGE LEGEND - CATCHMENT B

FIRST 15mm EVENT

Depth(m):	0.3
Base Area(m²):	1,770
Volume(m³):	530
Slope:	1:6

1% AEP EVENT

Depth(m):	1.19
TWL Area(mAHD):	3,701
Volume(m³):	3,287
Slope:	1:6

LANDSCAPE MASTERPLAN

LEGEND

EXTENT OF WORK
PROPOSED LOTS
SHELTER & PICNIC AREA
PLAYGROUND
CONCRETE FOOTPATH
CRUSHED LIMESTONE TRACK
TURF
SHRUB PLANTING
PROPOSED BASINS
RETAINED VEGETATION
VERGE TREATMENT
GREEN STREET
STREET TREES
PROPOSED TREES
BIORETENTION BASIN TWL
FLOOD STORAGE AREA

EAST WANNEROO PRECINCT 3

DWG EW01-5
REV C
DATE APRIL 2025
SCALE 1:1000 @ A1

emerge

NEIGHBOURHOOD PLAYING FIELD (POS 8), POS 9 & PRIMARY SCHOOL

NEIGHBOURHOOD SPORTS POS
- Sport POS

SIZE
- 4.5003 ha excl Parkland Reserve

NEIGHBOURHOOD PLAYING FIELDS CONCEPT
- Playing field providing activity area for residents & adjacent Primary School
- Be collocated with primary school facilities
- Multi-goal half court to provide basketball hoop, hit-up wall and opportunity of murals
- Dual use path to provide cyclists and pedestrian connection
- All age playground
- Shade structures & BBQ facilities
- Bench seats to provide rest point

FUNCTIONS / MATERIALS
- Significant existing trees to be retained
- Playing fields inc 1x AFL Senior Oval & Cricket Pitches
- Open turf spaces for outdoor activity
- Connected path to open space perimeter, with connections to the broader path network
- Drainage areas per LWMS

ENVIRONMENTAL CONSIDERATIONS
- Significant existing trees to be retained where possible
- Carnaby black cockatoo habitat
- POS Landscape design to achieve low threat as per AS 3959 and will include low fuel planting, as required
- Water-wise native planting and planting
- Consider long-term maintenance requirements.
- No management or modification to Parkland Reserve vegetation except 3m wide perimeter firebreaks. Where existing, firebreak to be maintained.

POS 9 TYPOLOGY
- POCKET PARK

SIZE
- 0.4809 ha excl Parkland Reserve

POS 9 CONCEPT
- Footpath connections through the POS to improve connectivity and walkability
- Provide informal tracks through existing vegetation
- Picnic areas, bench seats, shade structures and play space

FUNCTIONS / MATERIALS
- Open grassed areas for passive recreation
- Shade sails to feature playground
- Shelter & picnic settings
- Bench seats to provide rest point
- Provide informal tracks through existing vegetation
- Drainage areas per LWMS

DRAINAGE LEGEND - CATCHMENT G

FIRST 15mm EVENT

Depth(m):	0.3
Base Area(m²):	750
Volume(m³):	225
Slope:	1:6

1% AEP EVENT

Depth(m):	1.17
TWL Area(mAHD):	1,823
Volume(m³):	1,448
Slope:	1:6

LANDSCAPE MASTERPLAN

LEGEND

EXTENT OF WORK · PROPOSED LOTS · SHELTER & PICNIC AREA · PLAYGROUND · CONCRETE FOOTPATH · CRUSHED LIMESTONE TRACK · TURF · SHRUB PLANTING · PROPOSED BASINS · RETAINED VEGETATION · VERGE TREATMENT · GREEN STREET · STREET TREES · PROPOSED TREES · BIORETENTION BASIN TWL · FLOOD STORAGE AREA

EAST WANNEROO PRECINCT 3

DWG EW01-6
REV C
DATE APRIL 2025

emerge

POS 10 & 11

POS 10 TYPOLOGY
- Neighbourhood POS

SIZE
- 1.7317 ha

FUNCTIONS / MATERIALS
- Open grassed areas for passive recreation
- Shade sails to feature playground
- Shelter & picnic settings
- Bench seats to provide rest point
- Drainage areas per LWMS

POS 10 CONCEPT
- Footpath connections through the POS to improve connectivity and walkability
- Provide informal tracks through existing vegetation
- Picnic areas, bench seats, shade structures and play space
- Bike track to improve connectivity and cyclability

LOCATION PLAN

DRAINAGE LEGEND - CATCHMENT E

FIRST 15mm EVENT

Depth(m):	0.3
Base Area(m²):	1,260
Volume(m³):	375
Slope:	1:6

1% AEP EVENT

Depth(m):	1.18
TWL Area(mAHD):	2,578
Volume(m³):	2,175
Slope:	1:6

DRAINAGE LEGEND - CATCHMENT D

FIRST 15mm EVENT

Depth(m):	0.3
Base Area(m²):	2,030
Volume(m³):	609
Slope:	1:6

1% AEP EVENT

Depth(m):	1.18
TWL Area(mAHD):	4,399
Volume(m³):	3,837
Slope:	1:6

POS 11 TYPOLOGY
- Local POS

SIZE
- 0.7101 ha excl Parkland Reserve

ENVIRONMENTAL CONSIDERATIONS
- Significant existing trees to be retained where possible
- POS Landscape design to achieve low threat as per AS 3959 and will include low fuel planting, as required
- Water-wise native planting and planting

POS 11 CONCEPT
- Footpath connections through the POS to improve connectivity and walkability
- Provide informal tracks through existing vegetation
- Picnic areas, bench seats, shade structures and play space
- Bike track to improve connectivity and cyclability

FUNCTIONS / MATERIALS
- Open grassed areas for passive recreation
- Shade sails to feature playground
- Shelter & picnic settings
- Bench seats to provide rest point
- Drainage areas per LWMS

LANDSCAPE MASTERPLAN

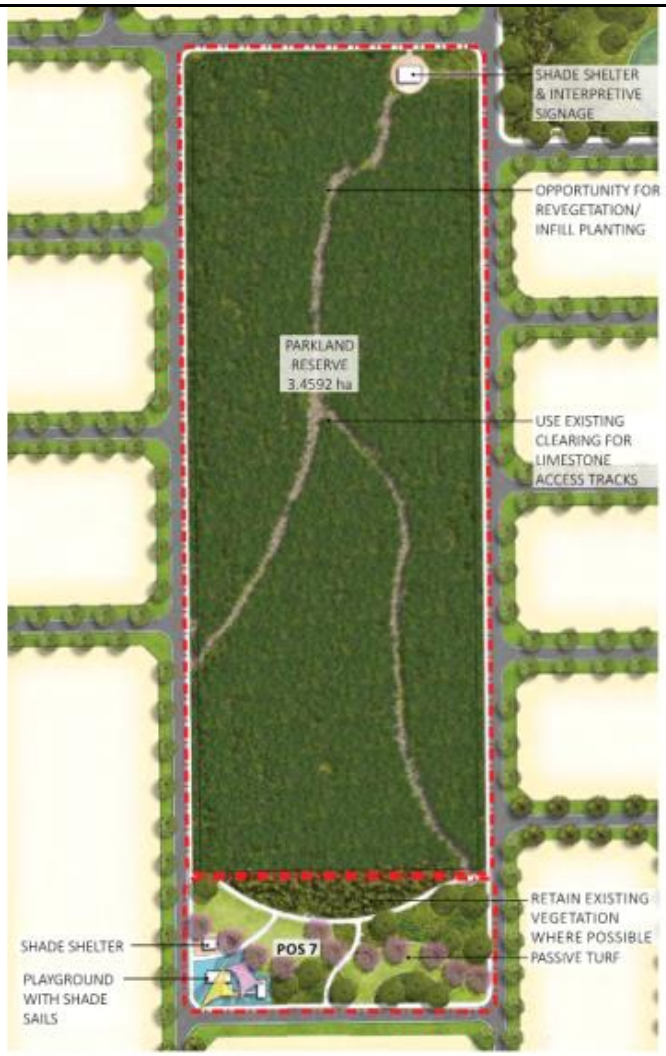
LEGEND

EXTENT OF WORK
PROPOSED LOTS
SHELTER & PICNIC AREA
PLAYGROUND
CONCRETE FOOTPATH
CRUSHED LIMESTONE TRACK
TURF
SHRUB PLANTING
PROPOSED BASINS
RETAINED VEGETATION
VERGE TREATMENT
GREEN STREET
STREET TREES
PROPOSED TREES
BIORETENTION BASIN TWL
FLOOD STORAGE AREA

EAST WANNEROO PRECINCT 3

DWG EW01-7
REV C
DATE APRIL 2025
SCALE 1:1000 @ A1

emerge



POS 7 & PARKLAND RESERVE

GREEN STREET EXAMPLES

LOCATION PLAN

GREEN STREET

GREEN STREET TYPOLOGY
- Road Reserve

GREEN STREET CONCEPT
- D.U.P through verge to provide safe & comfortable pedestrian connection throughout Estate
- Widened verges to retain existing significant trees & vegetation in streetscapes
- Provide seating & rest nodes

FUNCTIONS / MATERIALS
- Bench seats & feature hardstand areas
- Dual use path connections
- Shade trees to line pedestrian pathways

ENVIRONMENTAL CONSIDERATIONS
- Significant existing trees to be retained
- Carnaby black cockatoo habitat
- Source local materials where possible to minimise transport requirements and provide local employment.
- Consider long-term maintenance requirements.
- No management or modification to Parkland Reserve vegetation except 3m wide perimeter firebreaks. Where existing, firebreak to be maintained.
- POS & Green Street Landscape design to achieve low threat as per AS 3959 and will include low fuel planting, as required

POS 7 CONCEPT
- POS 7

SIZE
- 0.5397 ha excl Parkland Reserve

POS 7 CONCEPT
- Footpath connections through the POS to improve connectivity and walkability
- Provide access to informal tracks through existing vegetation
- Picnic areas, bench seats, shade structures and play space
- Playground on rubber softfall with shade sails

FUNCTIONS / MATERIALS
- Open grassed areas for passive recreation
- Shade sails to feature playground
- Shelter & picnic settings
- Bench seats to provide rest point
- Drainage areas per LWMS

EAST WANNEROO PRECINCT 3

DWG EW01-8 REV C DATE APRIL 2025 SCALE 1 : 1000 @ A1

emerge

POS 1 (0.2382ha)
(POCKET PARK) INCLUDES: NATURAL TRACKS THROUGH PARKLAND RESERVE. DUAL USE PATH CONNECTIONS, BENCH SEATING, OPEN TURF WITH SMALL PLAYGROUND & SHADE STRUCTURE

POS 2 (0.2339ha)
(POCKET PARK) INCLUDES: NATURAL TRACKS THROUGH PARKLAND RESERVE. DUAL USE PATH CONNECTIONS, BENCH SEATING, OPEN TURF WITH SMALL PLAYGROUND & SHADE STRUCTURE. DRAINAGE BASIN AS PER LWMS DESIGN

POS 3 (0.6817ha)
(LOCAL POS INCLUDES: NATURAL TRACKS THROUGH PARKLAND RESERVE. DUAL USE PATH CONNECTIONS, BENCH SEATING, OPEN TURF WITH SMALL PLAYGROUND & SHADE STRUCTURE. DRAINAGE BASIN AS PER LWMS DESIGN

POS 4 (0.6734ha)
(LOCAL POS) INCLUDES: PEDESTRIAN NETWORK WHICH CONNECTS INTO BROADER DEVELOPMENT. OPEN TURF AREA FOR PASSIVE RECREATION. BUFFER PLANTING BETWEEN ROAD. DRAINAGE BASIN AS PER LWMS DESIGN

POS 5 (1.3850ha)
(NEIGHBOURHOOD POS) INCLUDES: DUAL-USE PATH FOR BOTH PEDESTRIANS AND CYCLISTS, FEATURE OPEN TURF SPACE FOR ACTIVE / PASSIVE RECREATION. PARK SHELTER WITH PICNIC SETTING & BBQ FACILITIES. PLAYGROUND WITH SHADE SAILS.

POS 6 (0.8030ha)
(LOCAL POS) INCLUDES: PEDESTRIAN NETWORK WHICH CONNECTS INTO BROADER DEVELOPMENT. OPEN TURF AREA TO PROVIDE PASSIVE RECREATION. PARK SHELTER WITH PICNIC SETTING. PLAYGROUND WITH SHADE SAILS. DRAINAGE BASIN AS PER LWMS DESIGN

POS 7 (0.5397ha)
(LOCAL POS) INCLUDES: NATURE PLAYGROUND FOR KIDS, SHADE SHELTER WITH PICNIC SETTINGS, TURF AREA FOR PASSIVE RECREATION. DRAINAGE BASIN AS PER LWMS DESIGN

POS 8 NEIGHBOURHOOD SPORTS POS (4.5003ha)
(SPORT POS) INCLUDES: RED ASPHALT DUAL USE PATH AROUND SPORTING FIELD, BENCH SEATING, OPEN TURF FOR ACTIVE RECREATION, NATURAL TRACKS THROUGH PARKLAND RESERVE, FITNESS EQUIPMENT, MULTIPURPOSE SENIOR SPORTS OVAL, CAR PARKING.

POS 9 (0.4809ha)
(POCKET PARK) INCLUDES: NATURAL TRACKS THROUGH PARKLAND RESERVE. DUAL USE PATH CONNECTIONS, BENCH SEATING, OPEN TURF WITH SMALL PLAYGROUND & SHADE STRUCTURE. DRAINAGE BASIN AS PER LWMS DESIGN

POS 10 (1.7317ha)
(NEIGHBOURHOOD POS) INCLUDES: DUAL-USE PATH FOR BOTH PEDESTRIANS AND CYCLISTS, FEATURE OPEN TURF SPACE FOR ACTIVE / PASSIVE RECREATION. PARK SHELTER WITH PICNIC SETTING. PLAYGROUND WITH SHADE SAILS. DRAINAGE BASIN AS PER LWMS DESIGN

POS 11 (0.7101ha)
(LOCAL POS) INCLUDES: DUAL-USE PATH FOR BOTH PEDESTRIANS AND CYCLISTS, FEATURE OPEN TURF SPACE FOR ACTIVE / PASSIVE RECREATION. PARK SHELTER WITH PICNIC SETTING. PLAYGROUND WITH SHADE SAILS. DRAINAGE BASIN AS PER LWMS DESIGN

ESTIMATED IRRIGATION USAGE
- No irrigation to drainage basins
- 2 year establishment period
*- TURF: **6750** kl/ha/yr (Permanent)*
*-GARDEN BED: **3750** kl/ha/yr (Establishment)*

POS 1	
Permanent:	610 kl/yr
Establishment:	678 kl/yr
POS 2:	
Permanent:	600 kl/yr
Establishment:	665 kl/yr
POS 3:	
Permanent:	1,746 kl/yr
Establishment:	1,940 kl/yr
POS 4:	
Permanent:	1,725 kl/yr
Establishment:	1,916 kl/yr
POS 5:	
Permanent:	3,548 kl/yr
Establishment:	3,942 kl/yr
POS 6:	
Permanent:	1,890 kl/yr
Establishment:	2,940 kl/yr
POS 7:	
Permanent:	2,057 kl/yr
Establishment:	2,285 kl/yr
POS 8(PLAYING FIELDS):	
Permanent:	20,960 kl/yr
Establishment:	12,809 kl/yr
POS 9:	
Permanent:	1,134 kl/yr
Establishment:	1,764 kl/yr
POS 10:	
Permanent:	4,436 kl/yr
Establishment:	4,929 kl/yr
POS 11:	
Permanent:	1,819kl/yr
Establishment:	2,021kl/yr

EAST WANNEROO PRECINCT 3

DWG EW01-9
REV C
DATE APRIL 2025

emerge

POS TREES

Melaleuca leucadendron
Weeping Paperbark

Eucalyptus gomphocephala
Tuart

Lagerstroemia indica
Crepe-myrtle

Jacaranda mimosifolia
Jacaranda

Olea europea
Swan Hill (Fruitless Olive)

Callistemon 'KPS'
Kings Park Special

Eucalyptus tarquata
Coral Gum

Agonis flexuosa
WA Peppermint

Cupaniopsis anacardioides
Tuckeroo

Banksia ashbyi
Ashby Banksia

REVEGETATION PLANTING

Anigozanthos manglesii

Adenanthos cygnorum

Banksia grandis

Baumea juncea

Beaufortia squarrosa

Darwinia citriodora

Juncus pallidus

Kennedia prostrata

Verticordia densiflora

LOW FUEL PLANTING

Anigozanthos manglesii

Austrostipa compressa

Conostylis aculeata

Dampiera linearis

Juncus pallidus

Kennedia prostrata

Kunzea recurva

Melaleuca thymoides

Patersonia occidentalis

SHRUB PLANTING

Olearia axillaris

Rhagodia baccata

Darwinia citriodora

Acacia lasiocarpa

Conostylis aculeata ssp. preissii

Dianella revoluta

Dianella caerulea 'Cassa Blue'

Eremophila glabra

Lepidosperma calcicola

Dampiera linearis

Eremophila maculata

Grevillea crithmifolia

Lepidosperma gladiatum

Lomandra longifolia

Mirbeliopsis scariosa

Grevillea thelemanniana

Hemiandra pungens

Patersonia occidentalis

EAST WANNEROO PRECINCT 3

DWG EW01-10
REV C
DATE APRIL 2025

emerge

APPENDIX J
CURRV Runoff Rate Calculator

CURRV

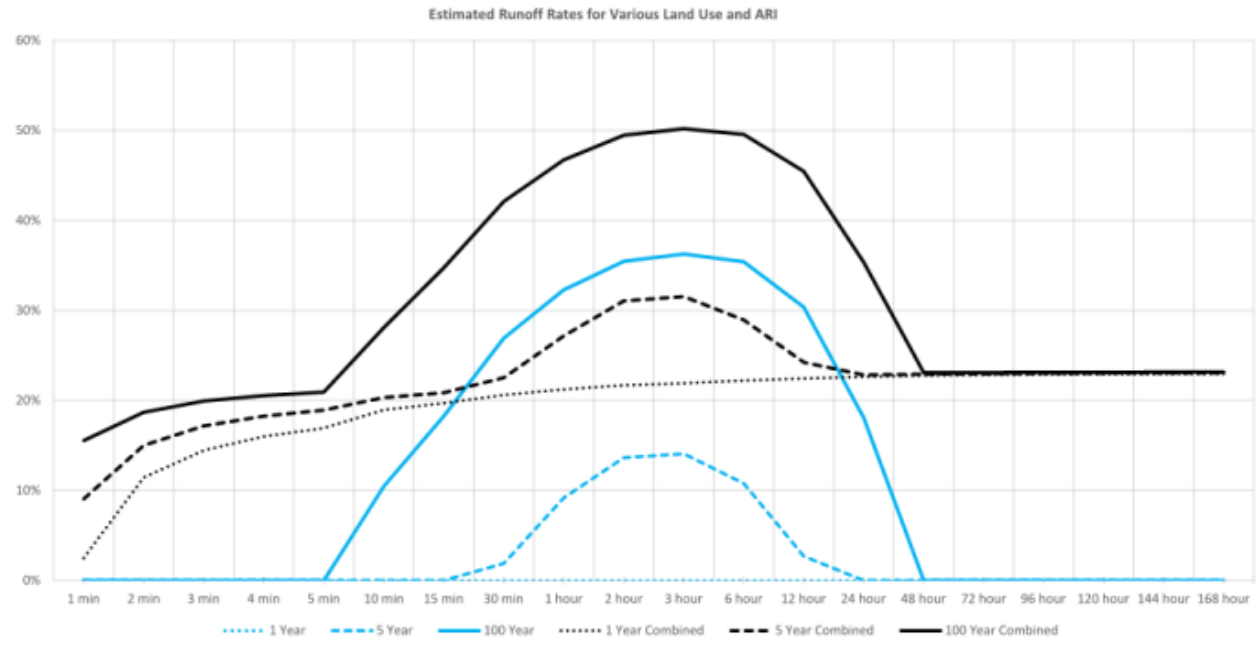
Calculator for Urban Runoff Rates & Volumes
7/04/2025

Land Use Description	Area (ha)	Use in Calc	Imperv Initial Loss mm	Perv Initial Loss mm	Perv Continue Loss mm/hr	On Site Soak (mm)	Empty (days)	AR&R EIA/TIA System Connect Ratio	Roof %	Ext Imp %	Ext Perv %	Comment
Residential Lots	65.90	Yes	1.5	20.0	4.0	15.0	0.20	60%	62	18	20	soakwells
Local Roads	38.55	Yes	1.5	20.0	4.0	0.0	0.20	100%	0	70	30	no soakwells assumed
Active POS/Playing Field	12.03	Yes	1.5	20.0	4.0	0.0	0.20	30%	0	5	95	assume similar EIA/TIA to rural residential
Vegetated POS	14.32	No	1.5	20.0	4.0		0.20	0%				retained onsite
Local Centre	2.08	No	1.5	20.0	4.0		0.20	0%				retained onsite
Church	1.96	No	1.5	20.0	4.0		0.20	0%				retained onsite
Primary School	3.52	No	1.5	20.0	4.0		0.20	0%				retained onsite
		No	1.5	20.0	4.0		0.20					
		No	1.5	20.0	4.0		0.20					
		No	0.0	20.0	4.0		0.20					

EIA : Effective Impervious Area, TIA : Total Impervious Area

Land Use Graph Selector: 1
(11 - combined total)

Residential Lots



Project: East Wanneroo Precinct 3 LWMS

Rainfall IFD Data
Annual Exceedence Probability

	Duration	63.2% 1.00	50% 1.44	20% 4.48	10% 10	5% 20	2% 50	1% 100
1	1 min	1.7	1.9	2.5	2.9	3.3	4.0	4.5
2	2 min	3.0	3.2	4.2	4.9	5.6	6.7	7.6
3	3 min	4.0	4.4	5.7	6.6	7.6	9.1	10.3
4	4 min	4.8	5.3	6.9	8.1	9.4	11.1	12.6
5	5 min	5.5	6.1	8.0	9.4	10.8	12.9	14.6
6	10 min	8.0	8.9	11.7	13.8	16.0	19.0	21.5
7	15 min	9.7	10.7	14.2	16.7	19.3	23.0	25.9
8	30 min	12.9	14.3	18.8	22.1	25.5	30.3	34.2
9	1 hour	16.8	18.5	24.2	28.4	32.8	39.2	44.4
10	2 hour	21.5	23.6	30.8	36.3	42.1	50.8	58.2
11	3 hour	24.8	27.1	35.4	41.9	48.9	59.4	68.5
12	6 hour	31.5	34.5	45.1	53.6	63.1	77.6	90.3
13	12 hour	39.9	43.7	57.2	68.1	80.1	98.8	115.0
14	24 hour	50.3	55.1	71.7	84.4	98.0	119.0	138.0
15	48 hour	63.0	69.1	88.5	102.0	115.0	137.0	154.0
16	72 hour	72.1	79.0	100.0	114.0	127.0	148.0	164.0
17	96 hour	79.7	87.3	110.0	124.0	138.0	158.0	174.0
18	120 hour	86.6	94.7	119.0	134.0	149.0	170.0	187.0
19	144 hour	93.2	102.0	128.0	145.0	161.0	184.0	202.0
20	168 hour	99.5	109.0	137.0	156.0	175.0	200.0	220.0

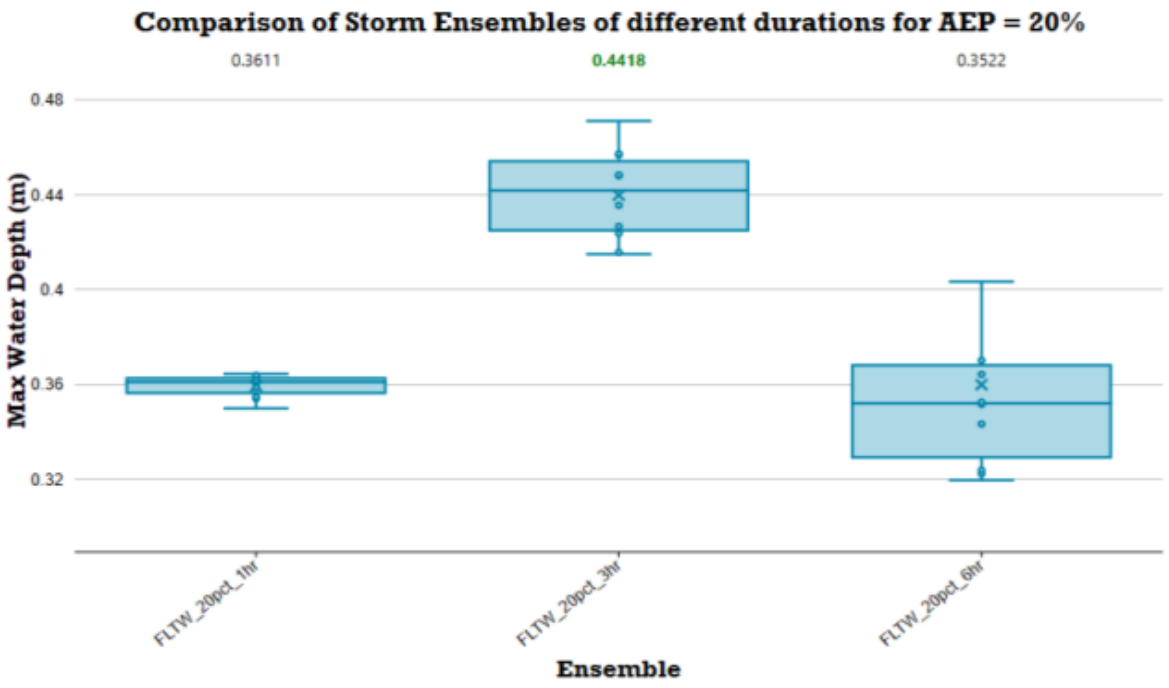
Estimated Runoff Rates
Annual Exceedence Probability

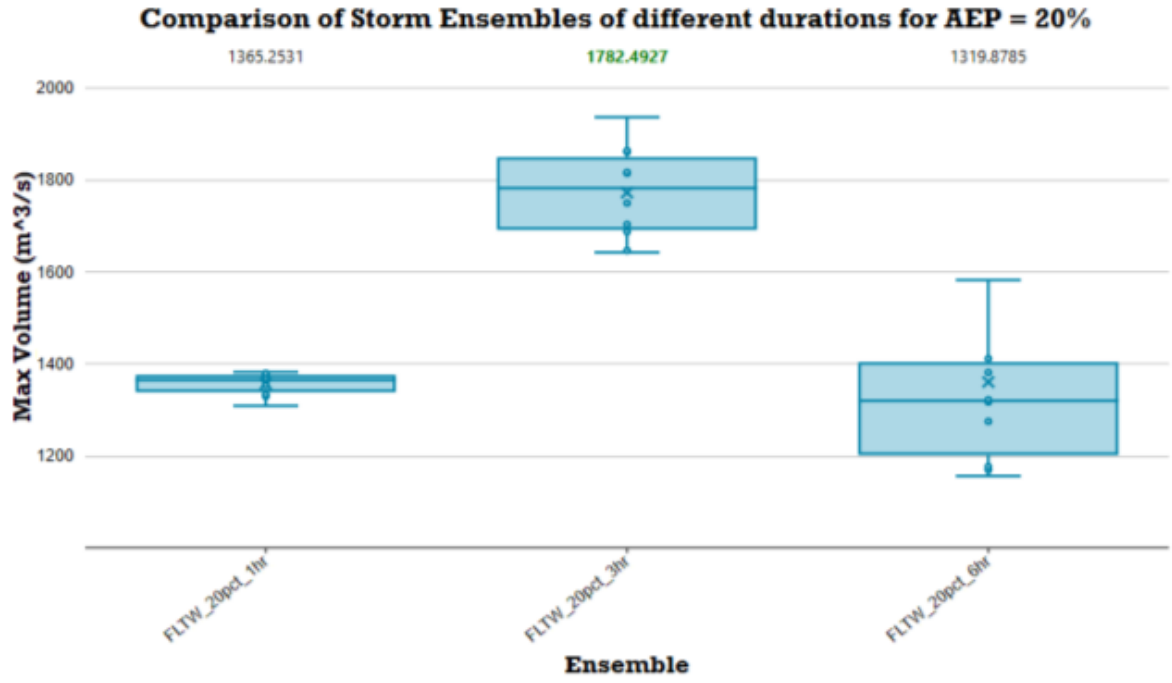
	63.2% 1.00	50% 1.44	20% 4.48	10% 10	5% 20	2% 50	1% 100
Maximum of All Events							
Residential Lots	0%	2%	14%	21%	27%	33%	36%
Local Roads	69%	69%	70%	75%	78%	82%	84%
Active POS/Playing Field	1%	1%	4%	8%	11%	15%	17%
Vegetated POS	0%	0%	0%	0%	0%	0%	0%
Local Centre	0%	0%	0%	0%	0%	0%	0%
Church	0%	0%	0%	0%	0%	0%	0%
Primary School	0%	0%	0%	0%	0%	0%	0%
0	0%	0%	0%	0%	0%	0%	0%
0	0%	0%	0%	0%	0%	0%	0%
0	0%	0%	0%	0%	0%	0%	0%
combined total	**23%**	23%	**32%**	**38%**	42%	47%	**50%**

Event Selector	9	1 hour					
Residential Lots	0%	0%	9%	17%	23%	29%	32%
Local Roads	64%	64%	66%	71%	75%	79%	81%
Active POS/Playing Field	1%	1%	2%	6%	9%	12%	15%
Vegetated POS	0%	0%	0%	0%	0%	0%	0%
Local Centre	0%	0%	0%	0%	0%	0%	0%
Church	0%	0%	0%	0%	0%	0%	0%
Primary School	0%	0%	0%	0%	0%	0%	0%
0	0%	0%	0%	0%	0%	0%	0%
0	0%	0%	0%	0%	0%	0%	0%
0	0%	0%	0%	0%	0%	0%	0%
combined total	**21%**	21%	**27%**	**34%**	38%	44%	**47%**

APPENDIX K
Stormwater Modelling Outputs

Date: 24/03/2025 Job No. H24054





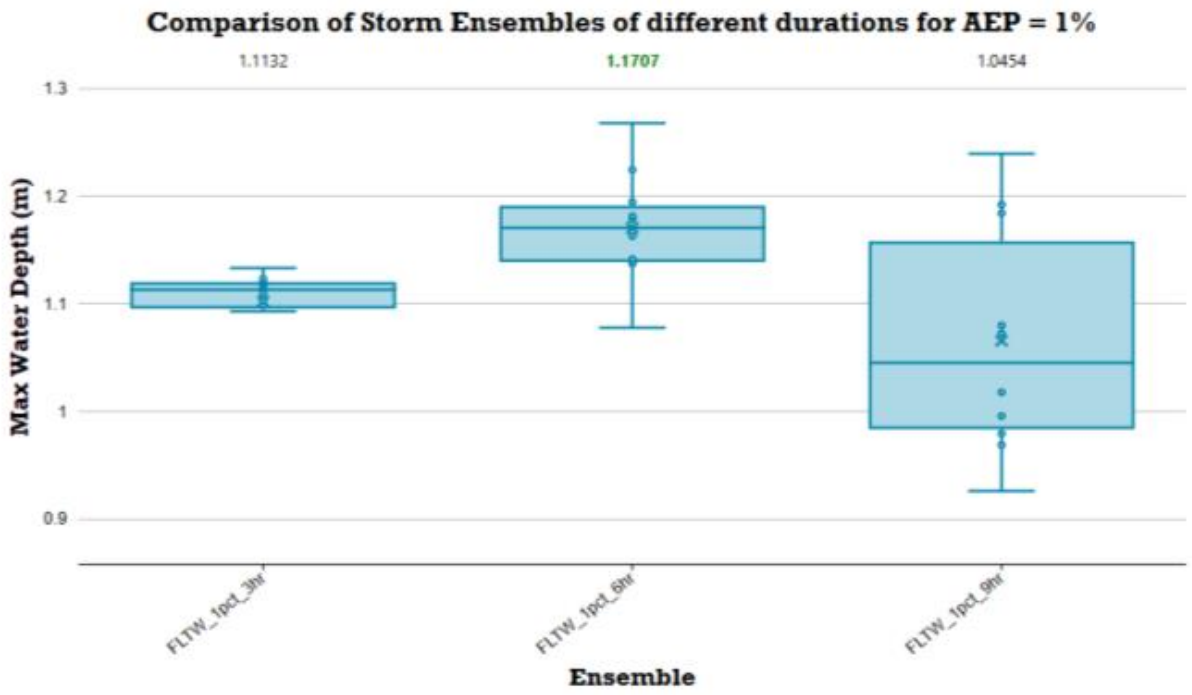
hyd$_2$o

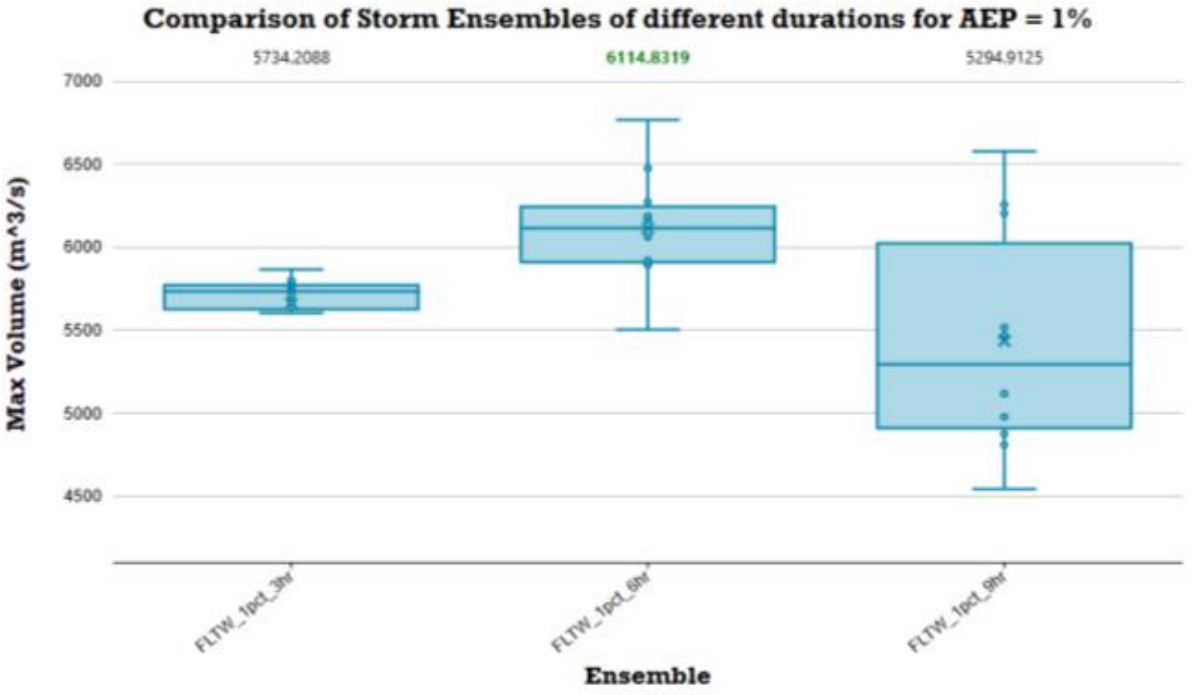
East Wanneroo Precinct 3 LWMS

20% AEP Event Catchment A Storage

Appendix K

Date: 24/03/2025 Job No. H24054





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East Wanneroo Precinct 3 LWMS

1% AEP Event Catchment A Storage

Appendix K

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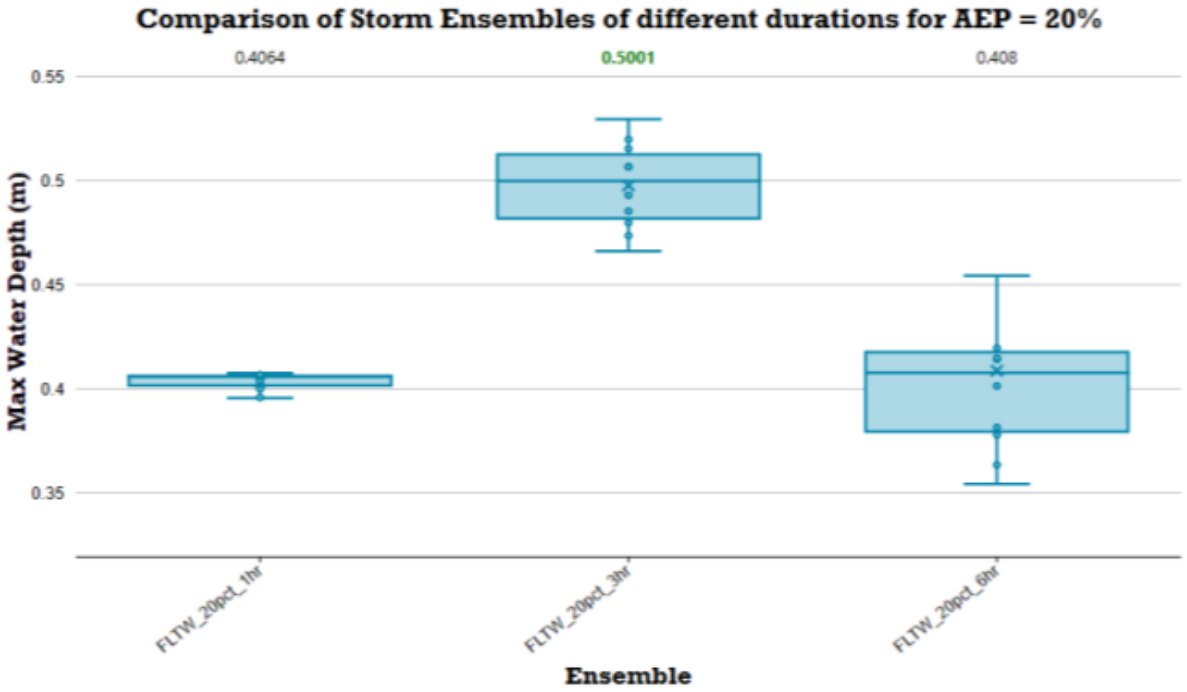
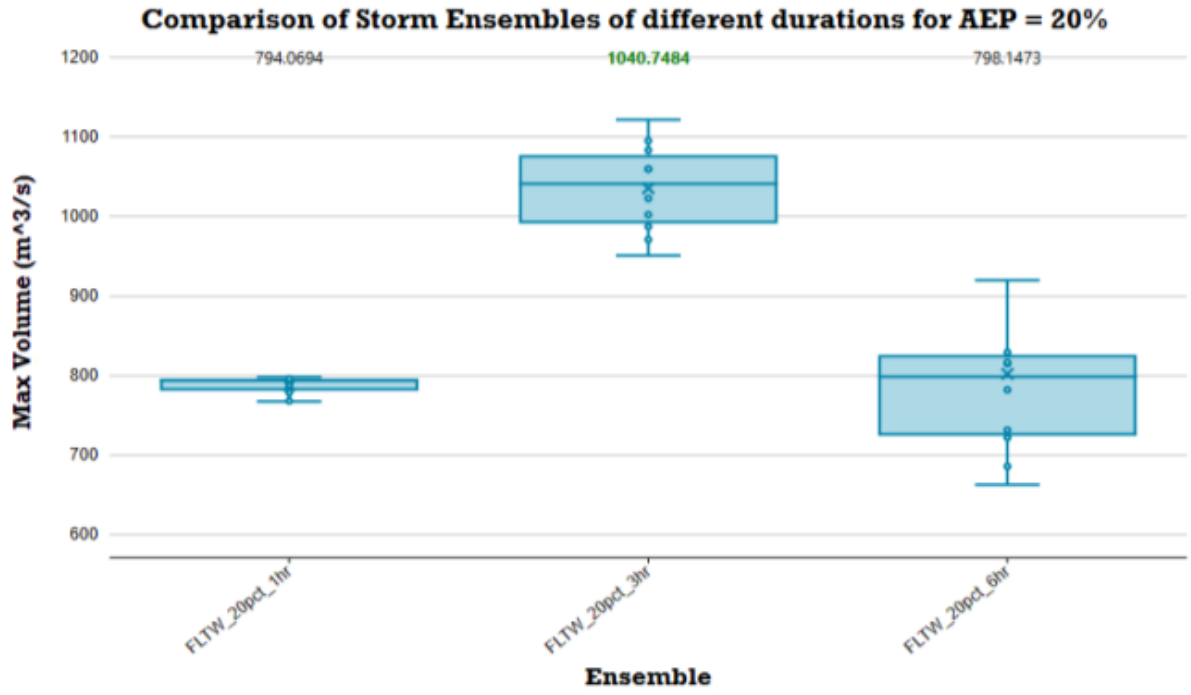


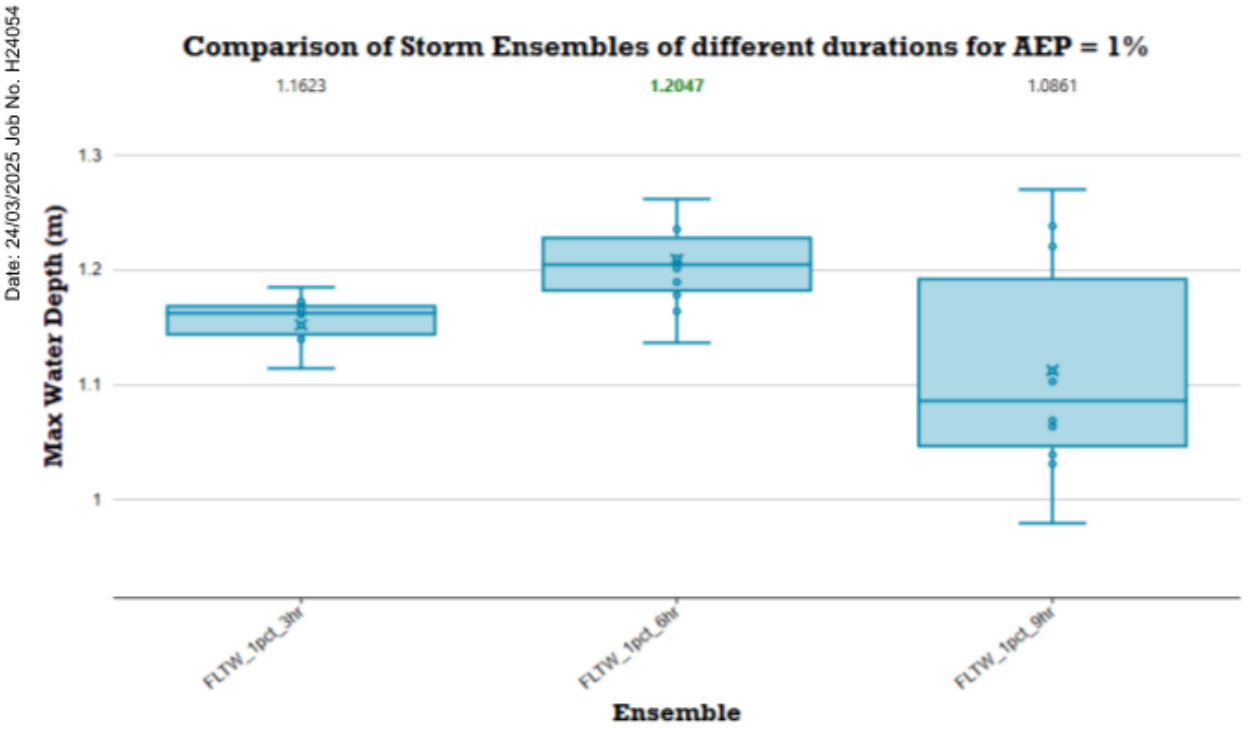


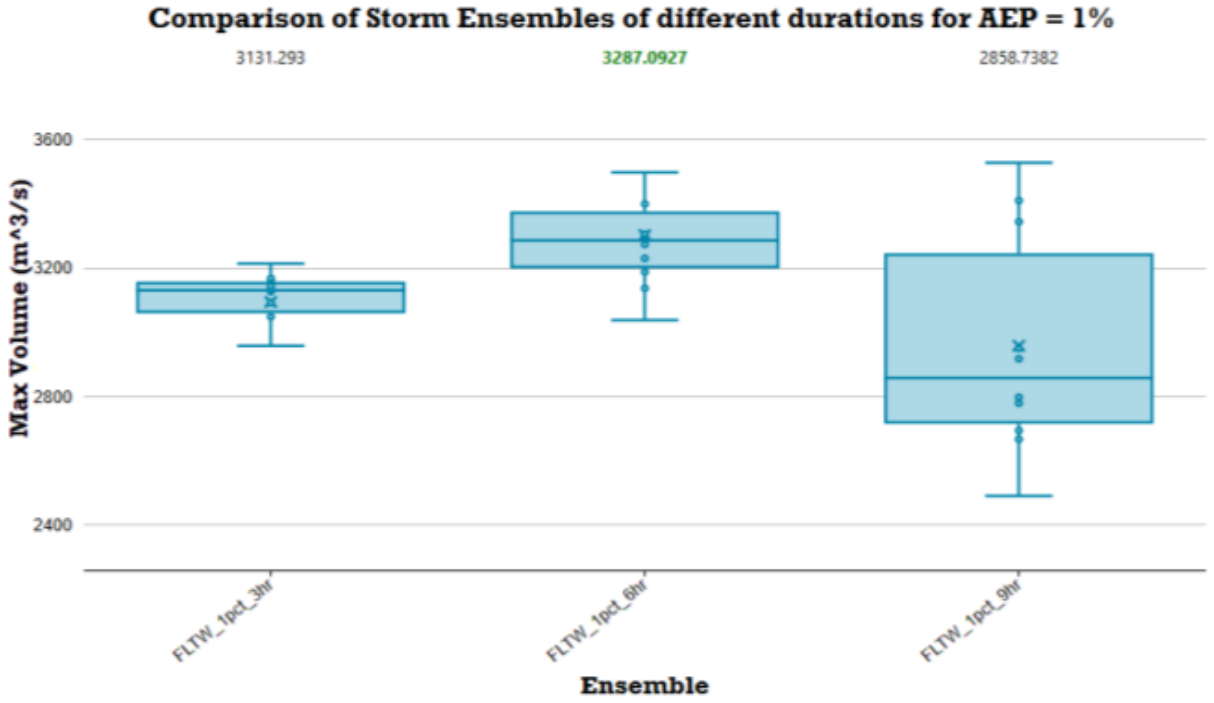
hyd2o

East Wanneroo Precinct 3 LWMS

20% AEP Event Catchment B Storage

Appendix K





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East Wanneroo Precinct 3 LWMS

1% AEP Event Catchment B Storage

Appendix K

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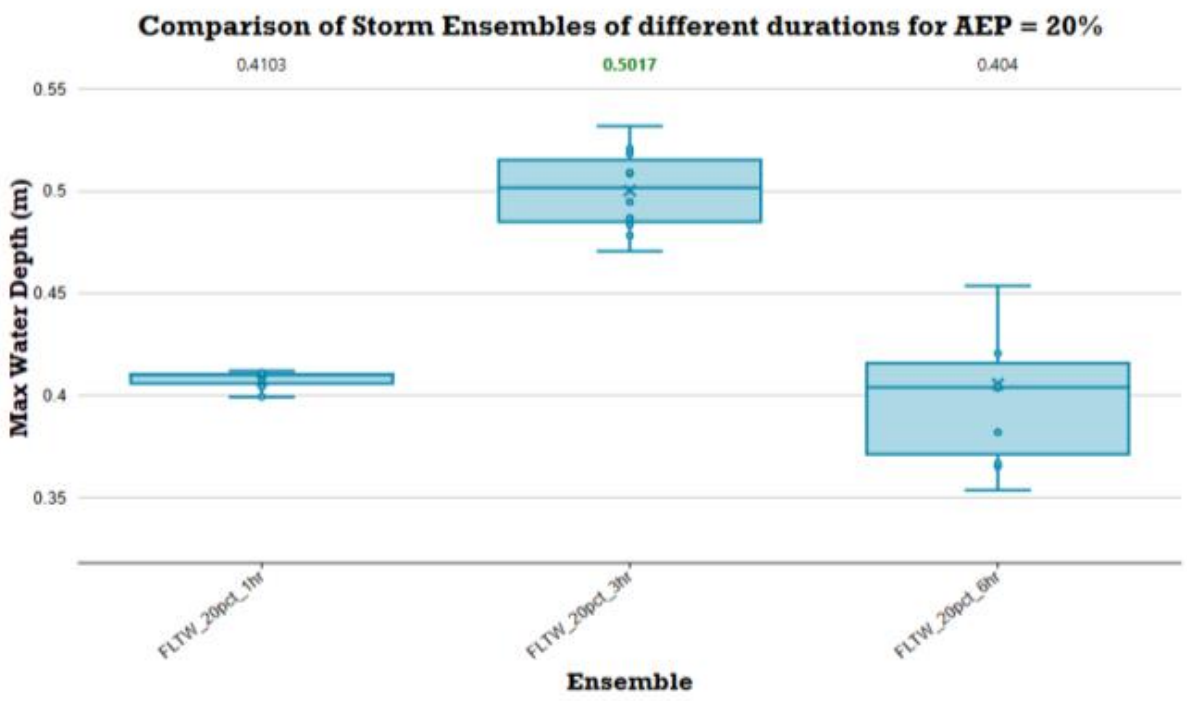

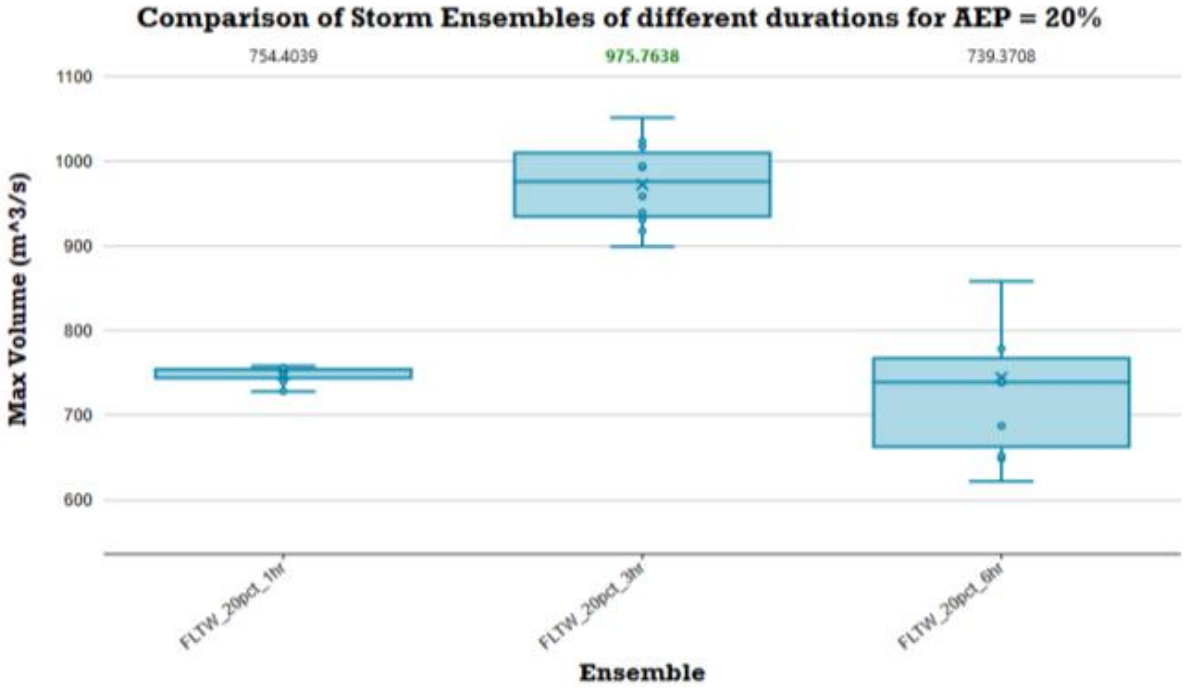

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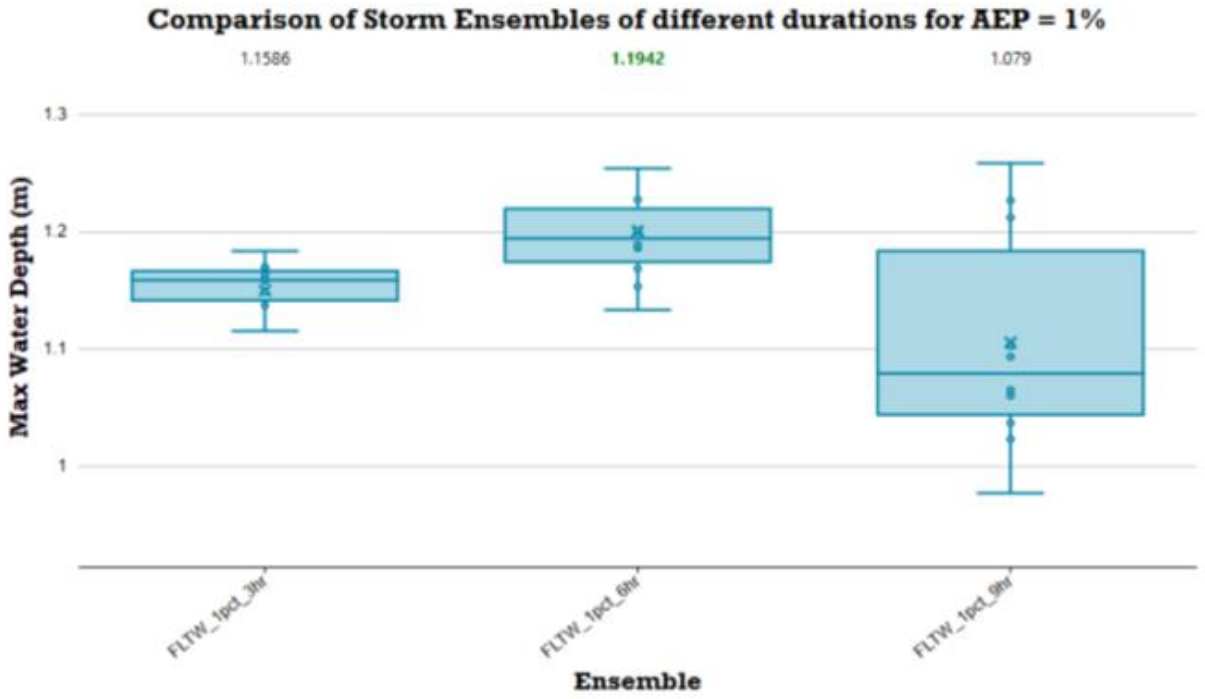
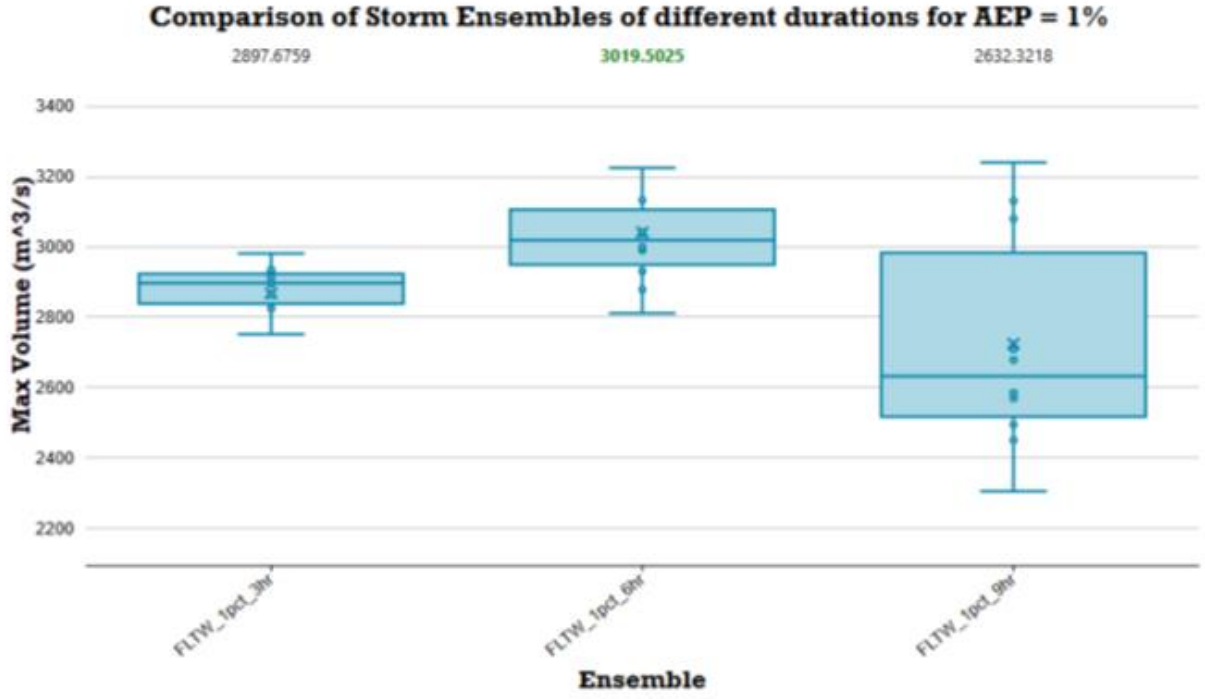
East Wanneroo Precinct 3 LWMS

20% AEP Event Catchment C Storage

Appendix K

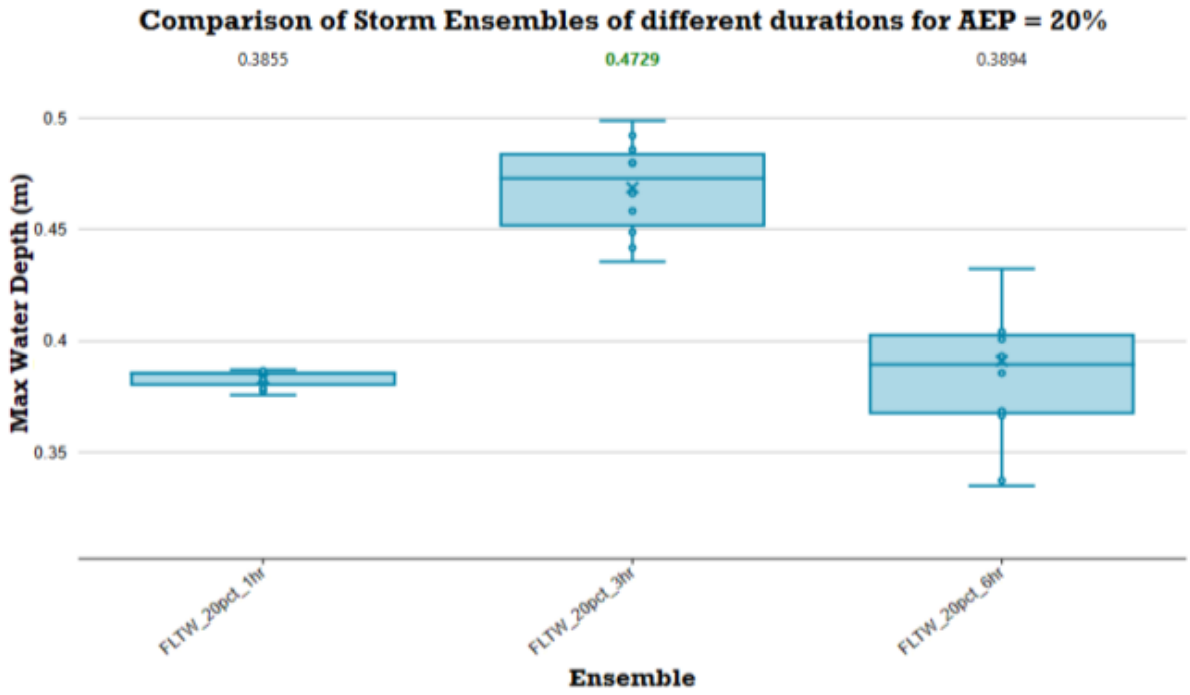
Date: 24/03/2025 Job No. H24054

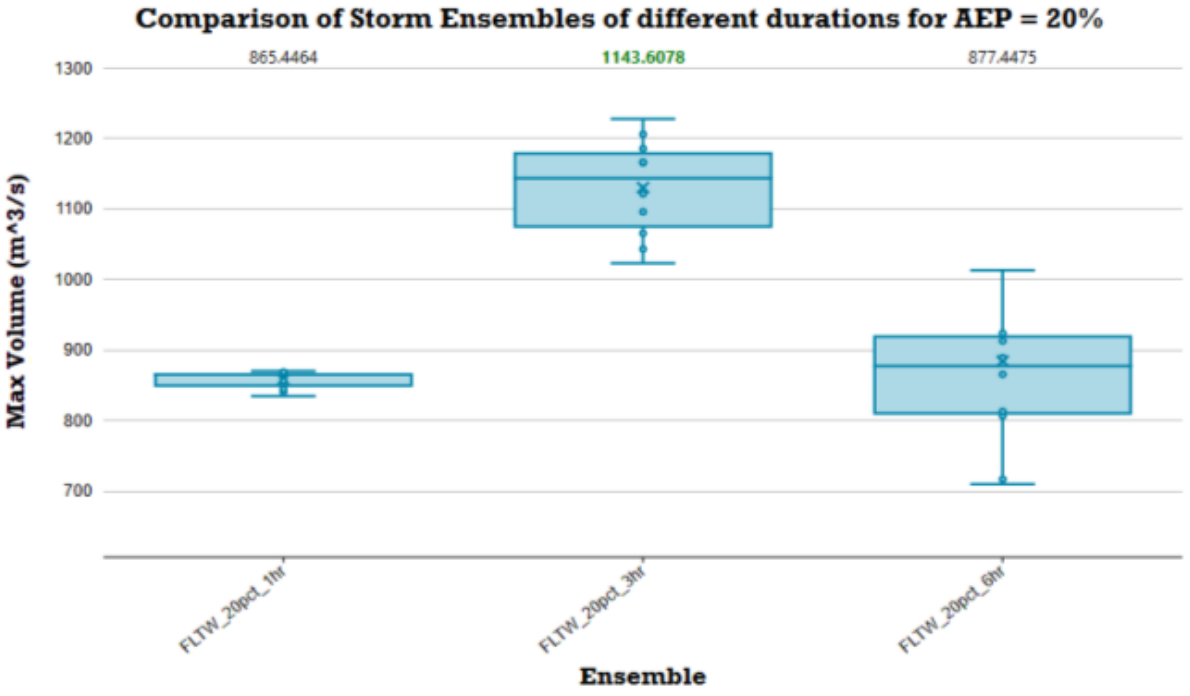




hyd2o
East Wanneroo Precinct 3 LWMS
1% AEP Event Catchment C Storage
Appendix K

Date: 24/03/2025 Job No. H24054





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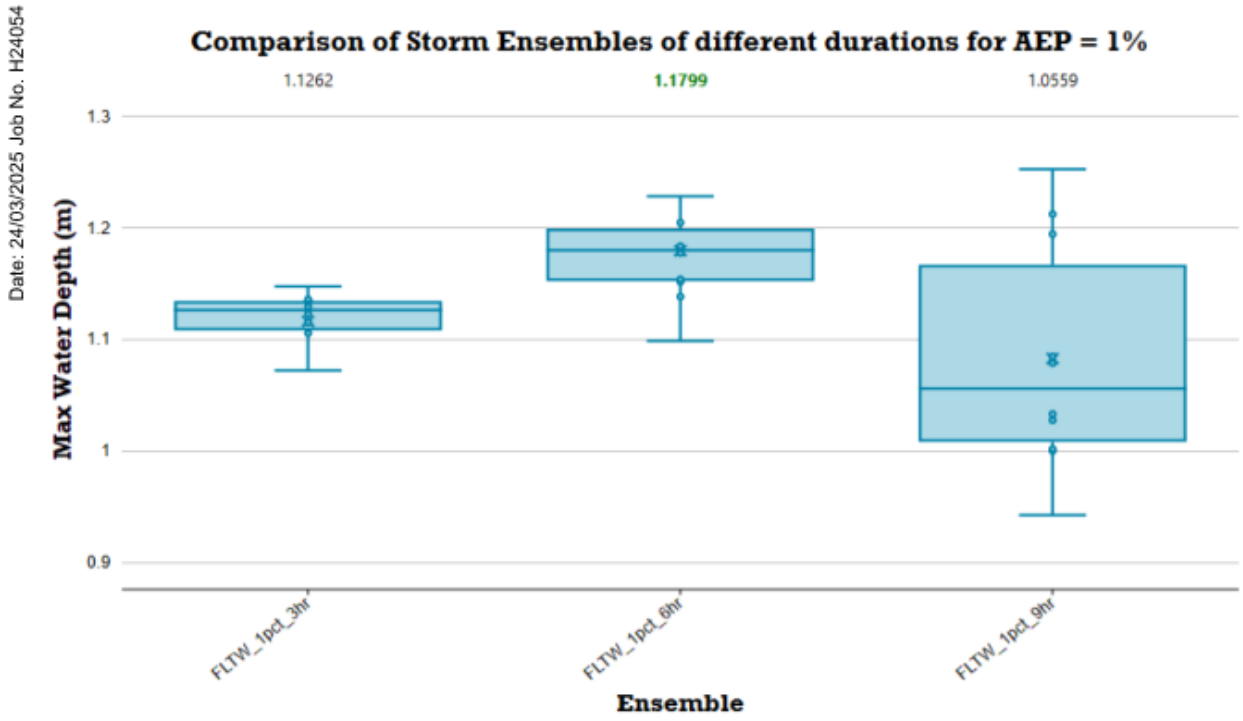
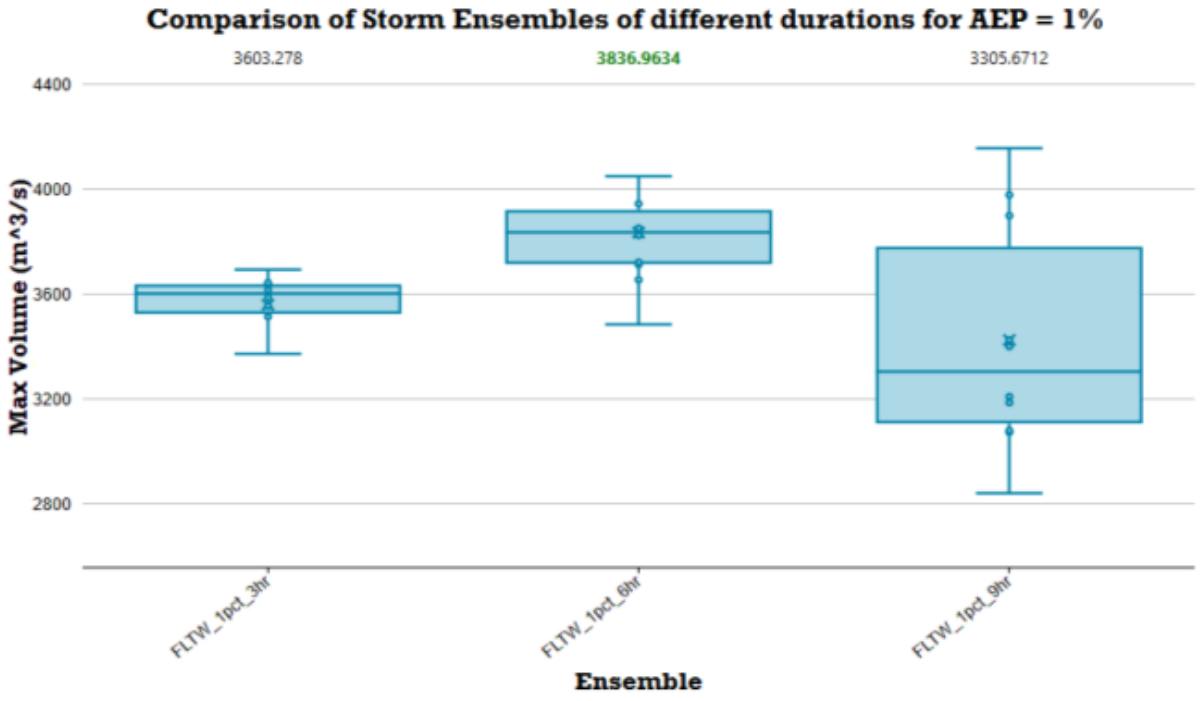
East Wanneroo Precinct 3 LWMS

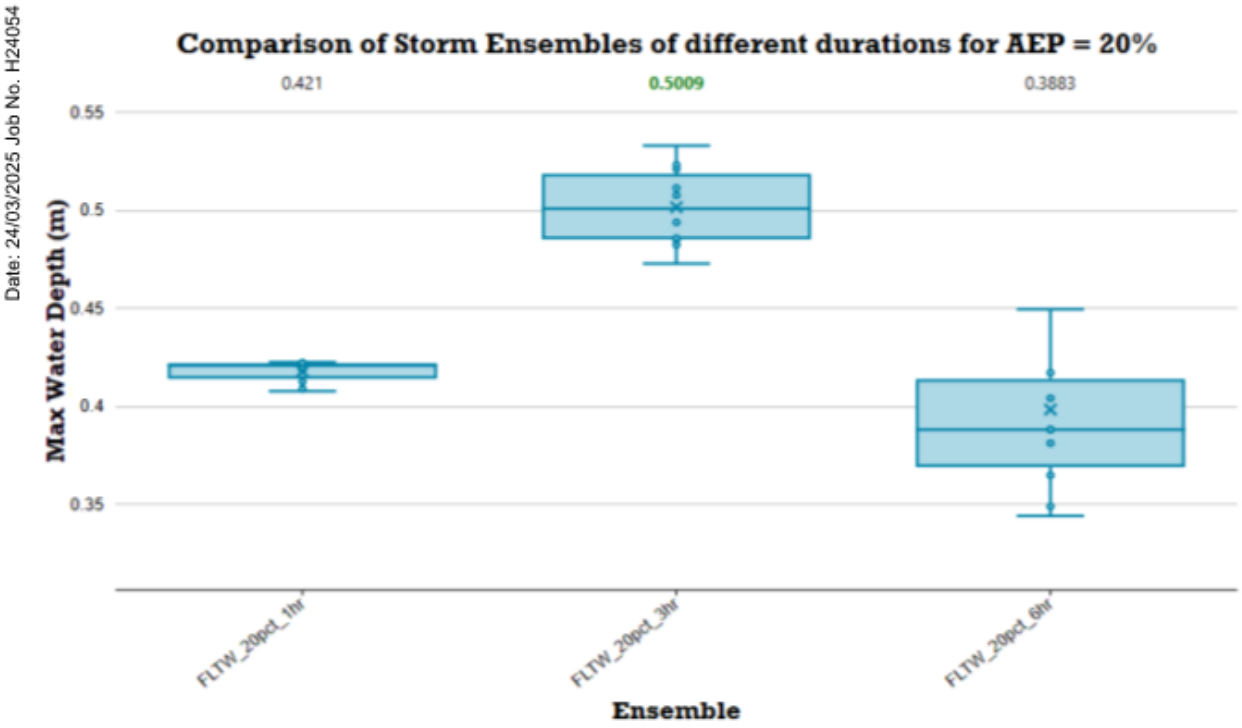
20% AEP Event Catchment D Storage

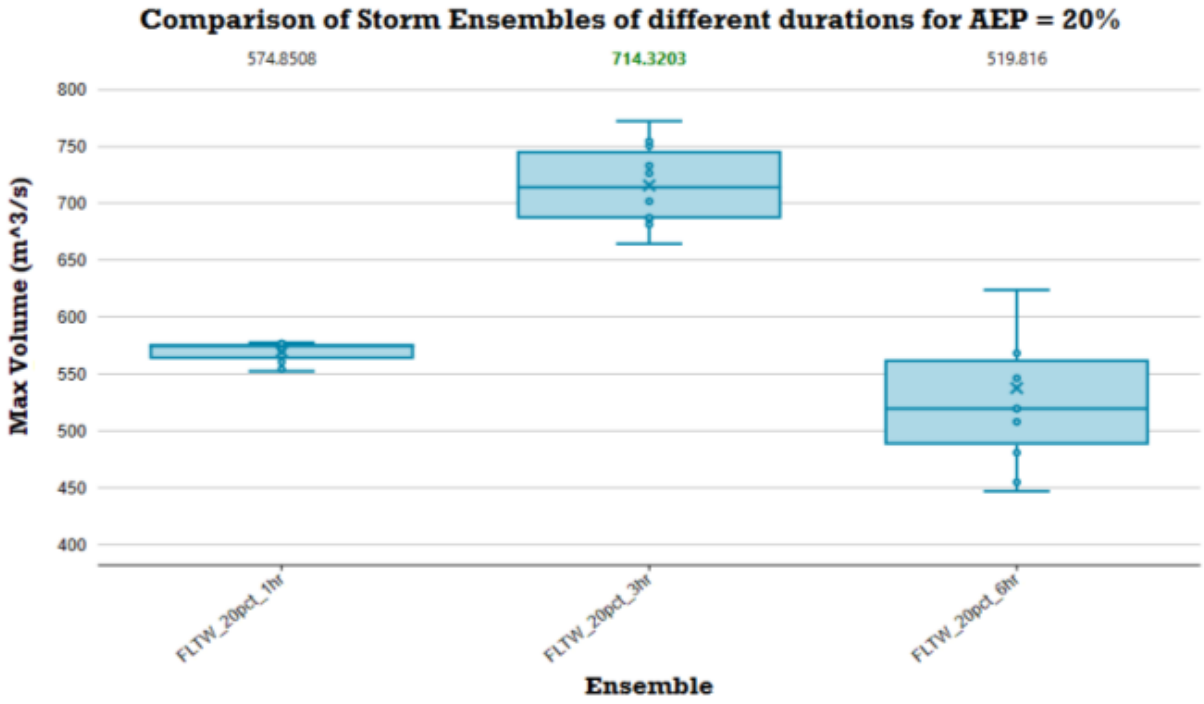
Appendix K



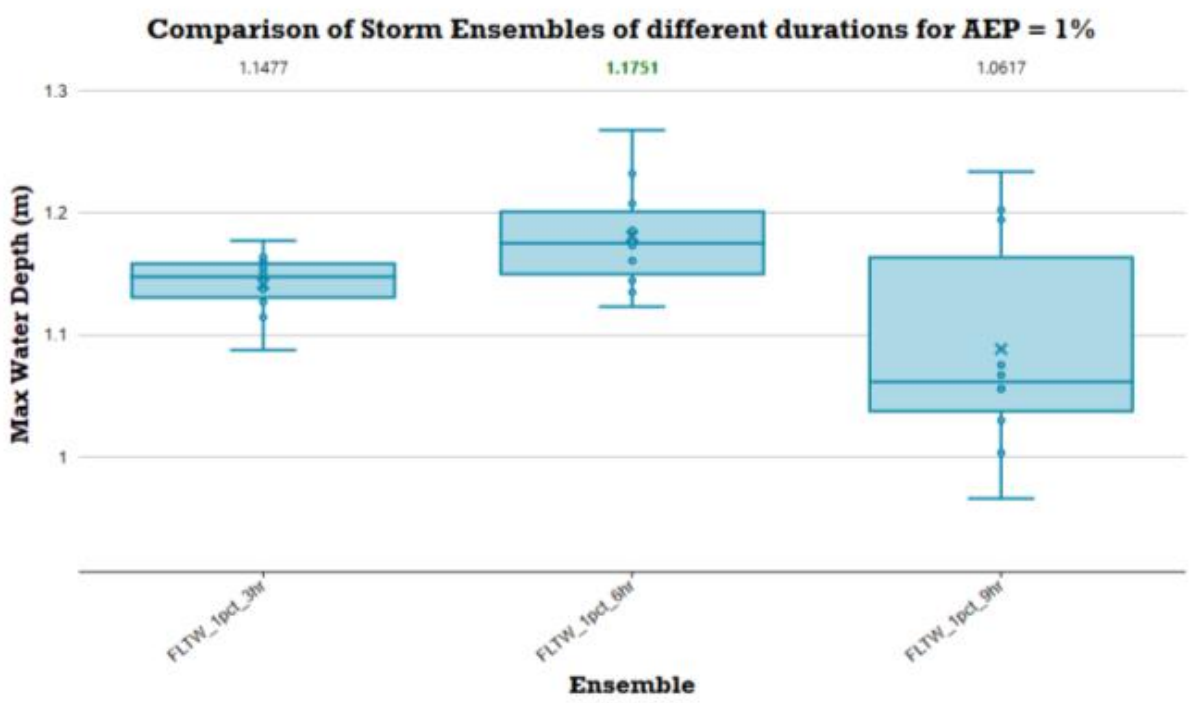


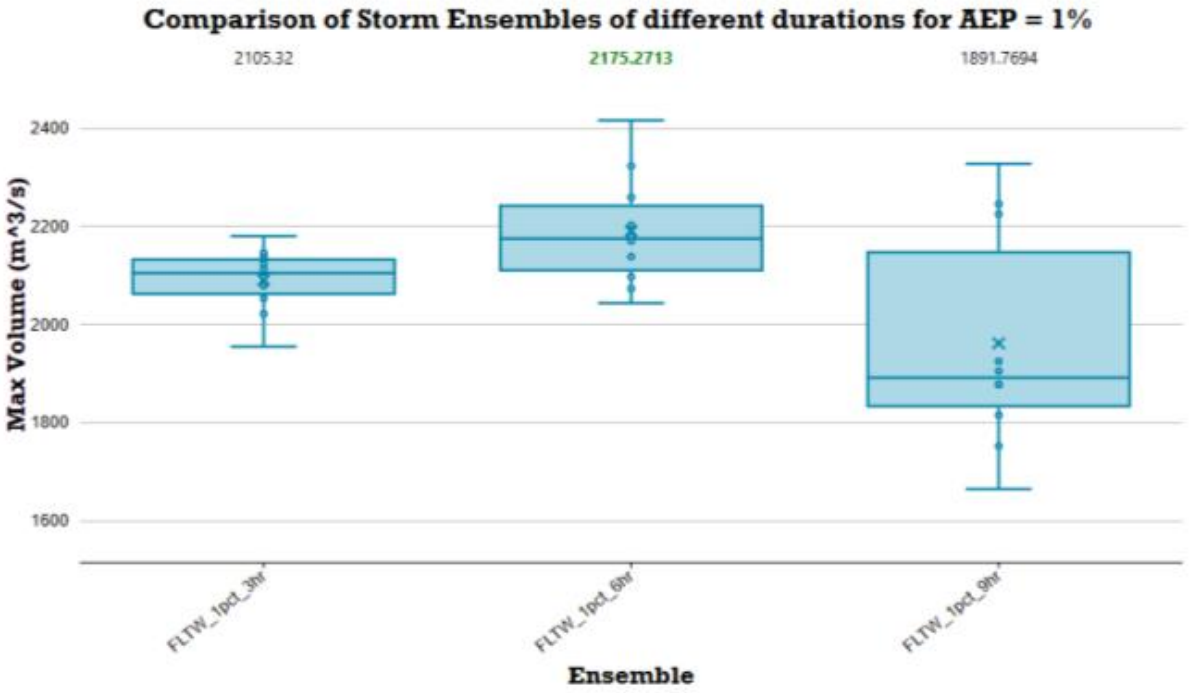
hyd2o
East Wanneroo Precinct 3 LWMS
1% AEP Event Catchment D Storage
Appendix K


Date: 24/03/2025 Job No. H24054
Comparison of Storm Ensembles of different durations for AEP = 20%
0.421
0.5009
0.3883
Max Water Depth (m)
0.55
0.5
0.45
0.4
0.35
FLTW_20pct_1hr
FLTW_20pct_3hr
FLTW_20pct_6hr
Ensemble


Comparison of Storm Ensembles of different durations for AEP = 20%
574.8508
714.3203
519.816
Max Volume (m^3/s)
800
750
700
650
600
550
500
450
400
FLTW_20pct_1hr
FLTW_20pct_3hr
FLTW_20pct_6hr
Ensemble

Date: 24/03/2025 Job No. H24054





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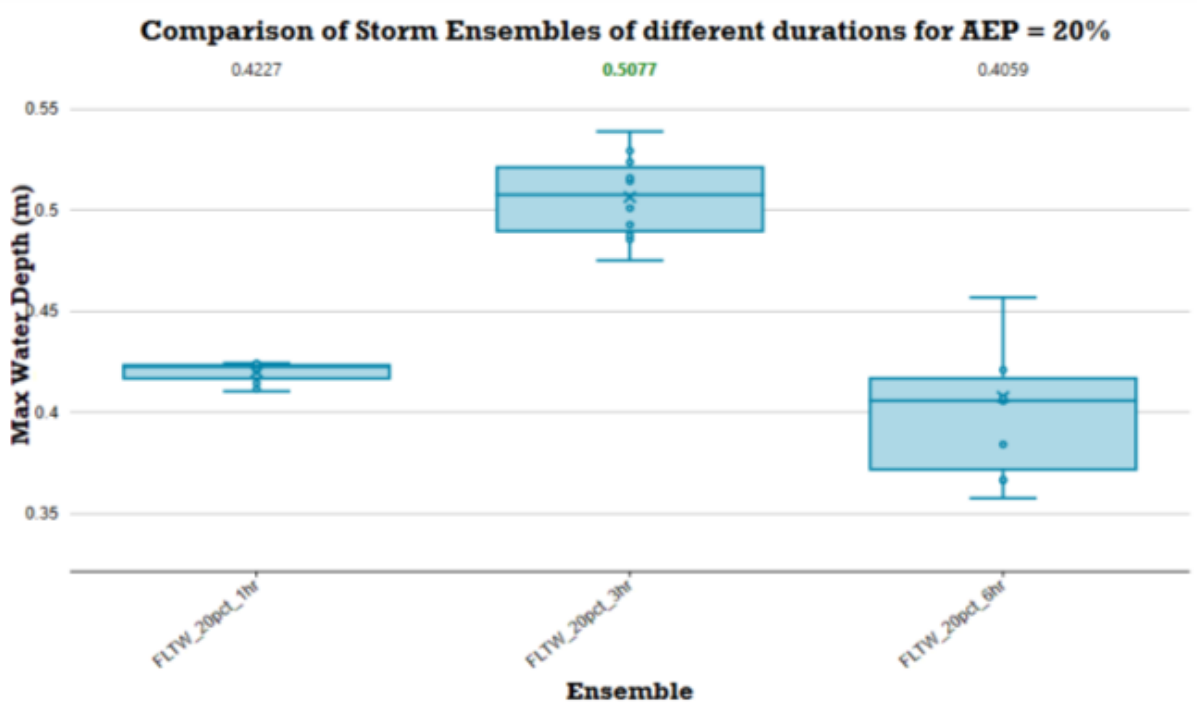
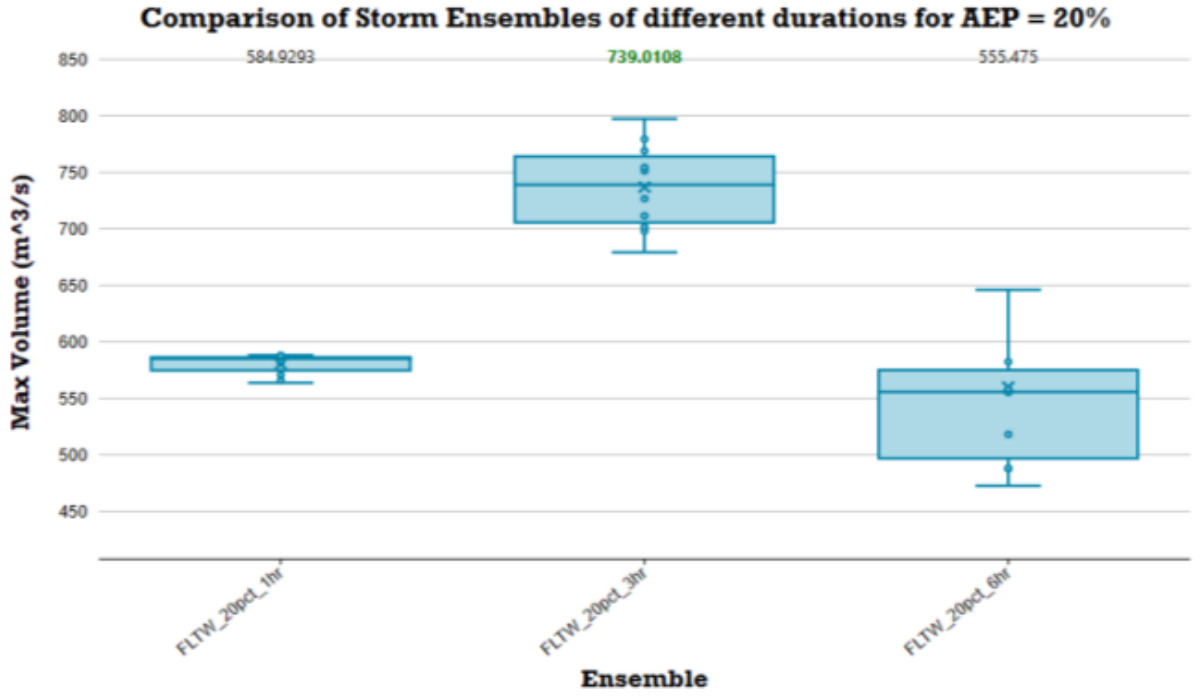
East Wanneroo Precinct 3 LWMS

1% AEP Event Catchment E Storage

Appendix K

Date: 24/03/2025 Job No. H24054





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East Wanneroo Precinct 3 LWMS

20% AEP Event Catchment F Storage

Appendix K

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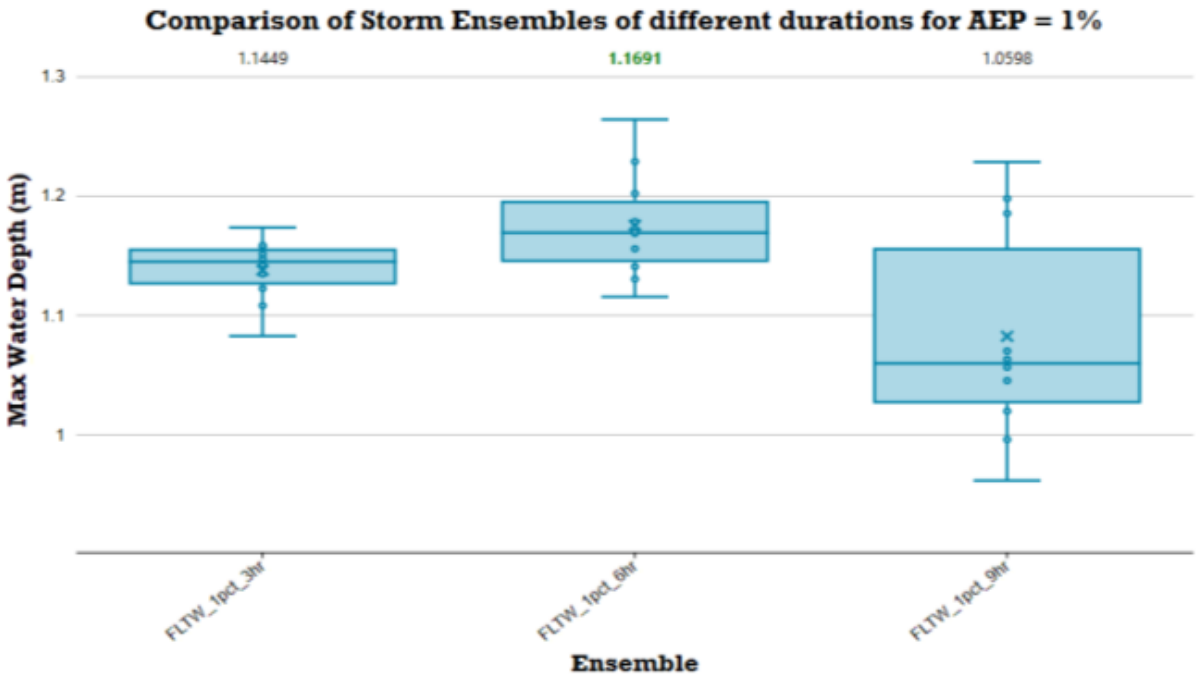

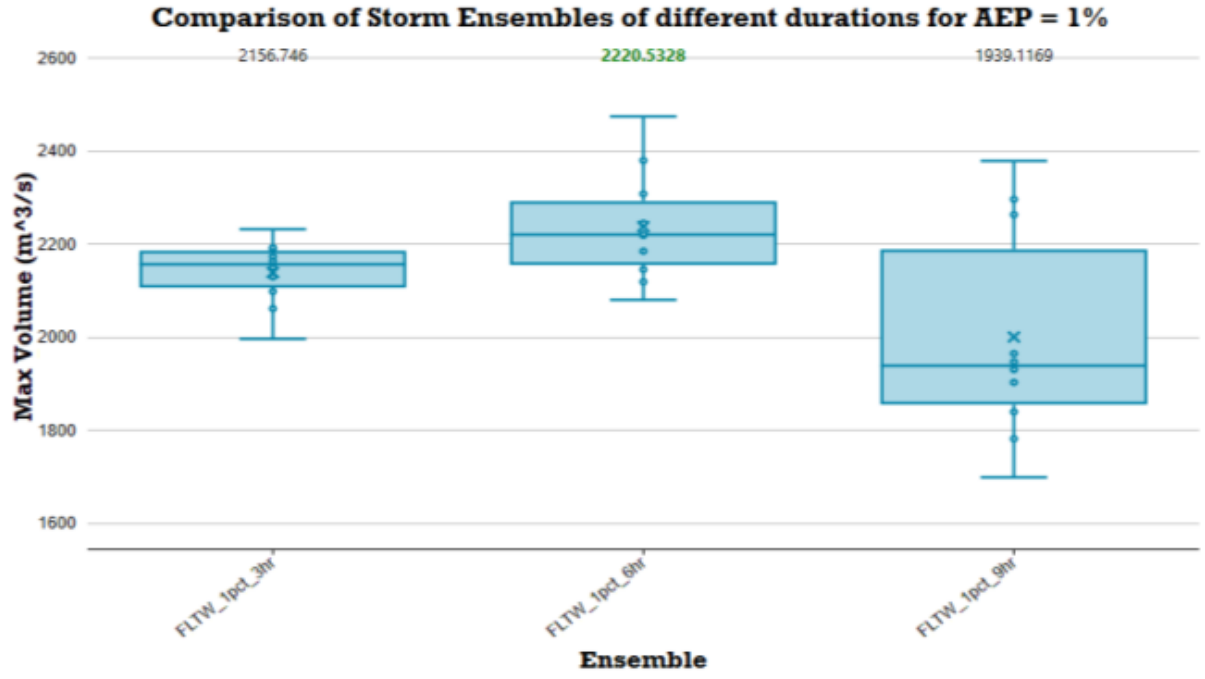

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East Wanneroo Precinct 3 LWMS

1% AEP Event Catchment F Storage

Appendix K

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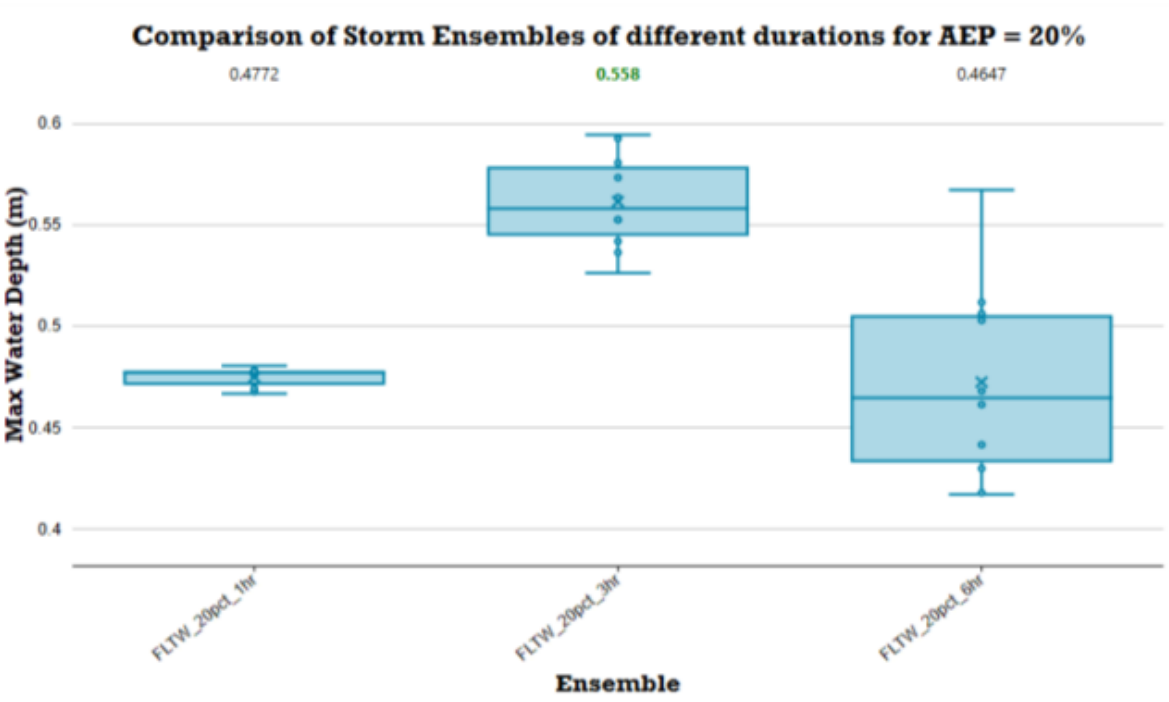

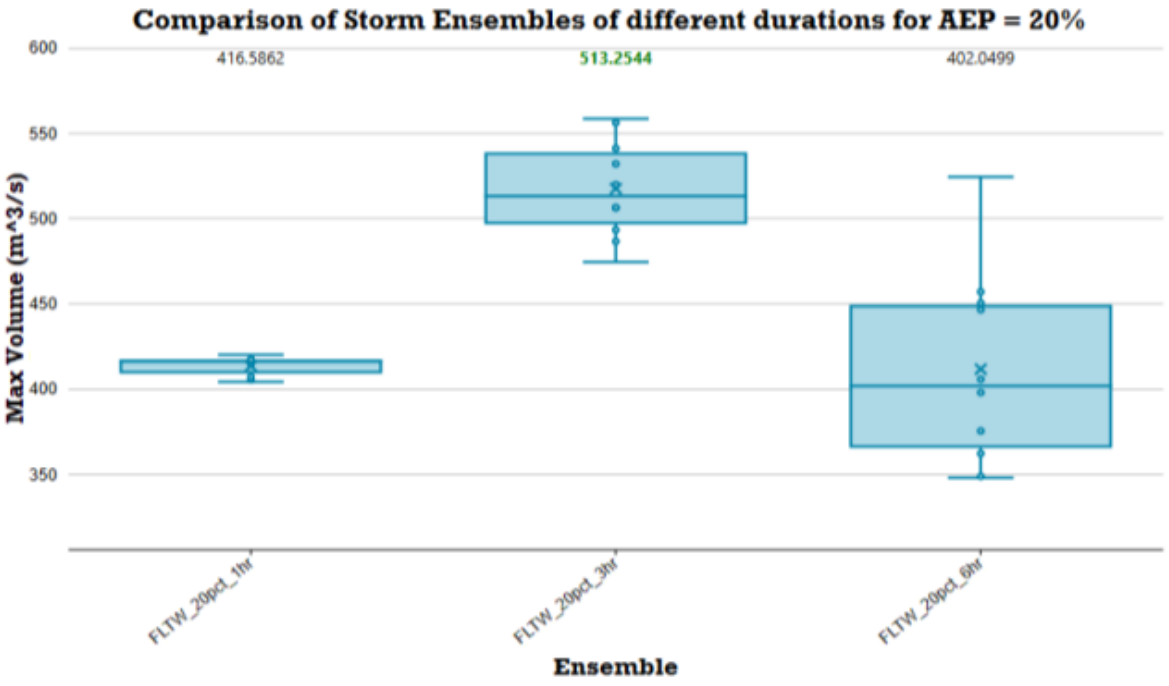

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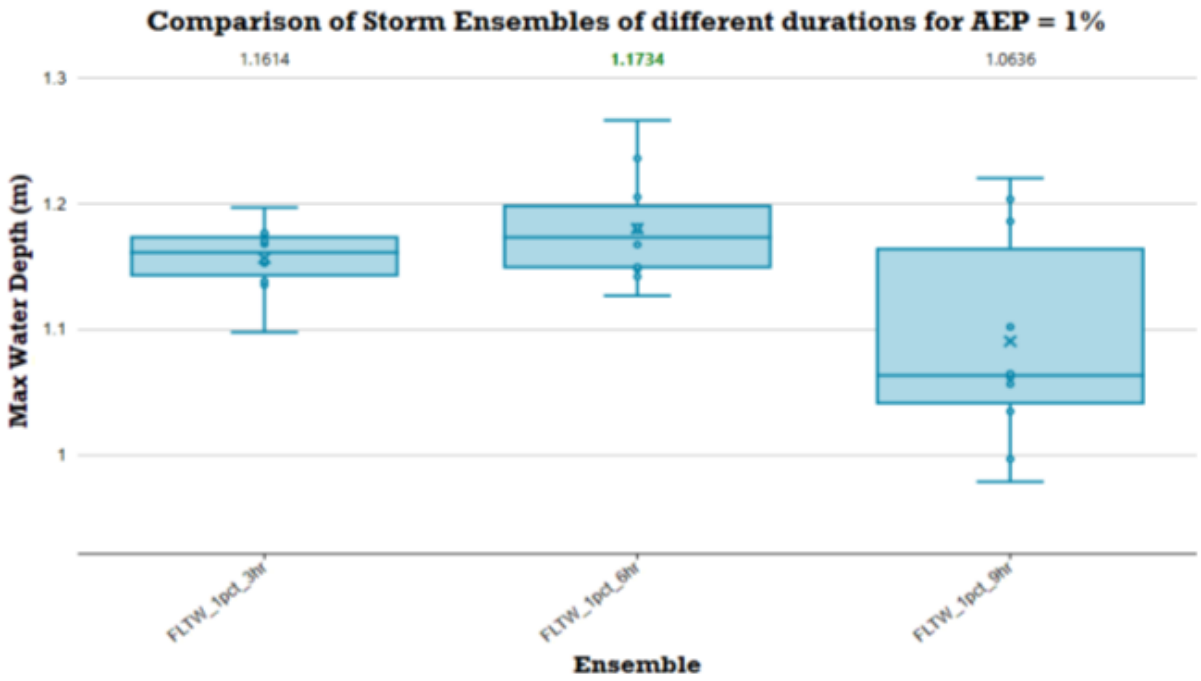
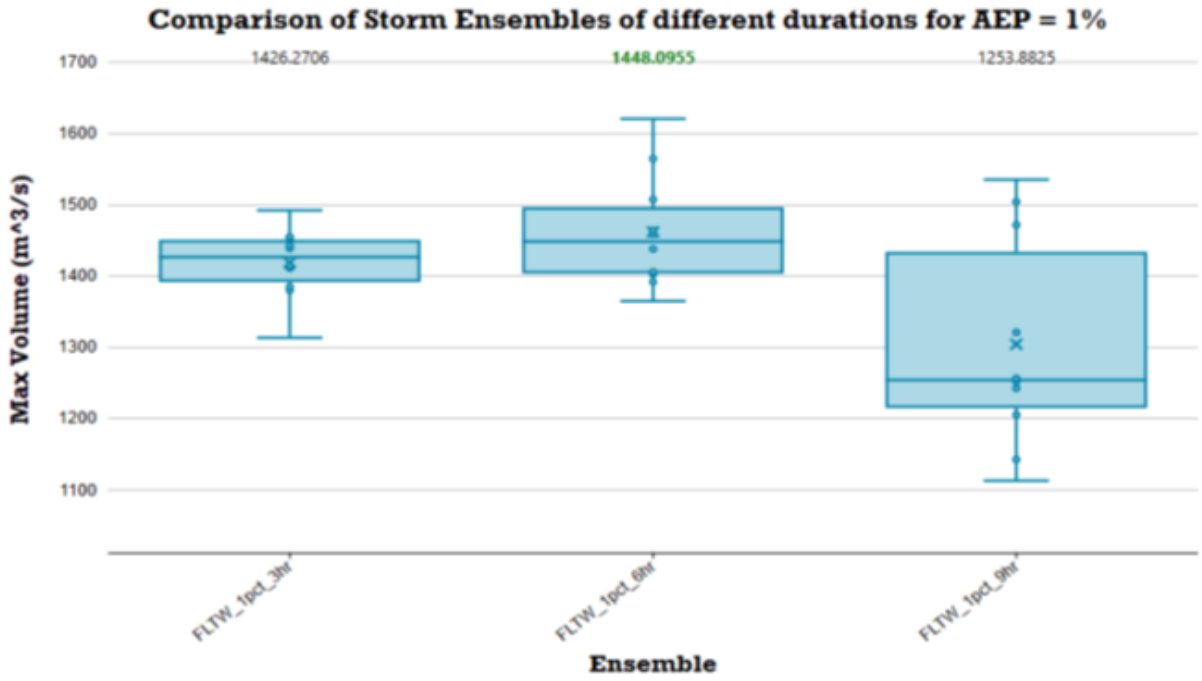
East Wanneroo Precinct 3 LWMS

20% AEP Event Catchment G Storage

Appendix K

Date: 24/03/2025 Job No. H24054





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East Wanneroo Precinct 3 LWMS

1% AEP Event Catchment G Storage

Appendix K

APPENDIX L
Engineering Servicing Report

Cossill & Webley
CONSULTING ENGINEERS

EAST WANNEROO PRECINCT 3

ENGINEERING SERVICING REPORT

March 2025

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Subiaco WA 6008.
PO Box 680 Subiaco, WA 6904

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APPENDIX A – EAST WANNEROO PRECINCT 3 LOCAL STRUCTURE PLAN

1. EXECUTIVE SUMMARY

This report has been prepared by Cossill & Webley (CW) for East Wanneroo Precinct 3. It summarises the results of a review of the engineering aspects which have informed and support the Local Structure Plan.

This report provides details on each major infrastructure type and a servicing strategy for the development of the precinct. The level of detail is preliminary, and acknowledges further work will be required as the planning for the precinct progresses and there is greater certainty on the proposed development.

The engineering review has covered siteworks, roadworks, stormwater drainage, sewerage, water supply and utility services.

The investigation has confirmed the land is capable of supporting the proposed development in accordance with the Local Structure Plan with a logical progressive extension of infrastructure and base capacity.

The existing ground conditions and past land uses will not limit the proposed development.

Road access to the development will be provided via existing roads which bound the Precinct.

Sewerage will be provided for the majority of the Precinct by constructing a permanent wastewater pump station on Elliot Road and supplemented by two temporary pump stations at low points on the eastern boundary, as development progresses.

There is adequate existing water infrastructure to service the Site.

Initial power supply can be provided by connection to the existing high voltage (HV) infrastructure in Elliot and Nicholas Roads. Western Power has advised that ultimately the East Wanneroo Precinct 3 residential development will require a new distribution feeder from the Wangara Substation, to provide the required capacity.

Telecommunications and gas are available from existing services on Lenore Road.

The investigations and preparation of this report is largely based on preliminary advice from the various service authorities. The information is current as of March 2025, and is subject to change as development progresses.

2. INTRODUCTION

This report has been prepared by Cossill & Webley Pty Ltd (CW) for the East Wanneroo Precinct 3 Local Structure Plan (LSP). It summarises the results of a review of the engineering aspects which have informed and support the Local Structure Plan and are related to the future servicing of the developed land.

The preparation of East Wanneroo Precinct 3 Local Structure Plan (LSP) has been carried out by a team of consultants, led by Burgess Design Group and covers an area of approximately 130.8 hectares. The East Wanneroo Precinct 3 LSP is presented in Appendix A for reference.

The East Wanneroo Precinct 3 area is identified by the red boundary presented below in Figure 1.

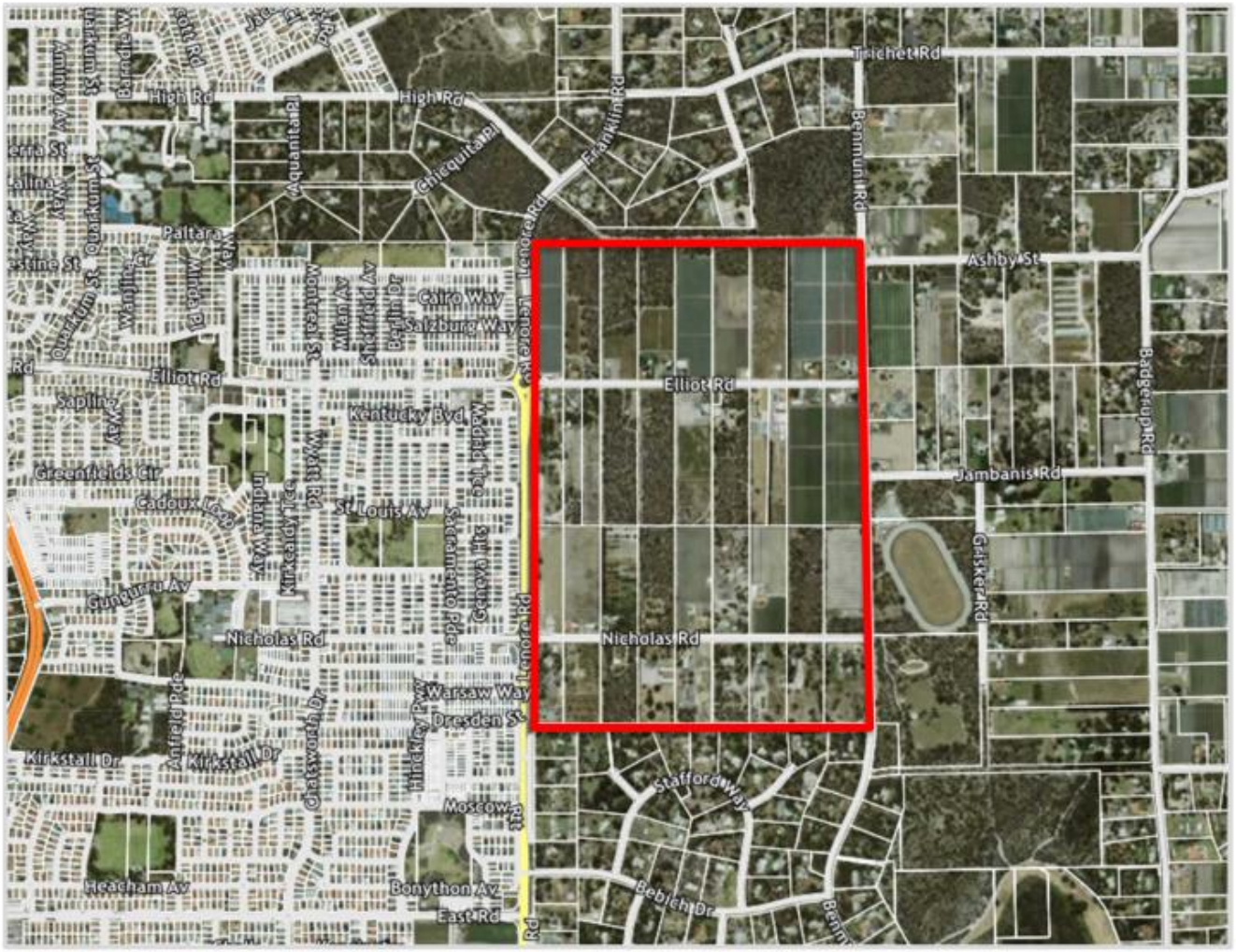


Figure 1 - Site Plan (MetroMap, December 2024)

3. SITE DESCRIPTION

East Wanneroo Precinct 3 is 130.76 hectares in area and is situated within the City of Wanneroo, approximately 25 kilometres north of the Perth city centre, and 11 kilometres east of the Joondalup city centre. The Site is bound by an undeveloped road reserve to the south, which is gazetted and to be named Shenton Road in the future, Lenore Road to the west, bushland and undeveloped access way to the north and Benmuni Road to the east.

As presented in Figure 1 above, majority of the site has been cleared historically, with portions of vegetation remaining on the Site. Approximately half the cleared area is market gardens, with the majority of the remainder being used for grazing, or laydown purposes.

3.1 Acid Sulphate Soils

A desk top review of the Department of Environment and Conservation's ASS Risk Map for the Northern Metropolitan Region for potential for Acid Sulphate Soils (ASS) indicates the entire Site has no recorded risk of ASS. There is a pocket of land north of the northeast corner of the site which shows high to moderate risk occurring within 3m of the natural soil surface (or deeper) which may impact the development of a boundary road and services and treatment may be required in that area. Treatment of ASS soil and groundwater is a well known process and does not pose a significant cost or development risk.

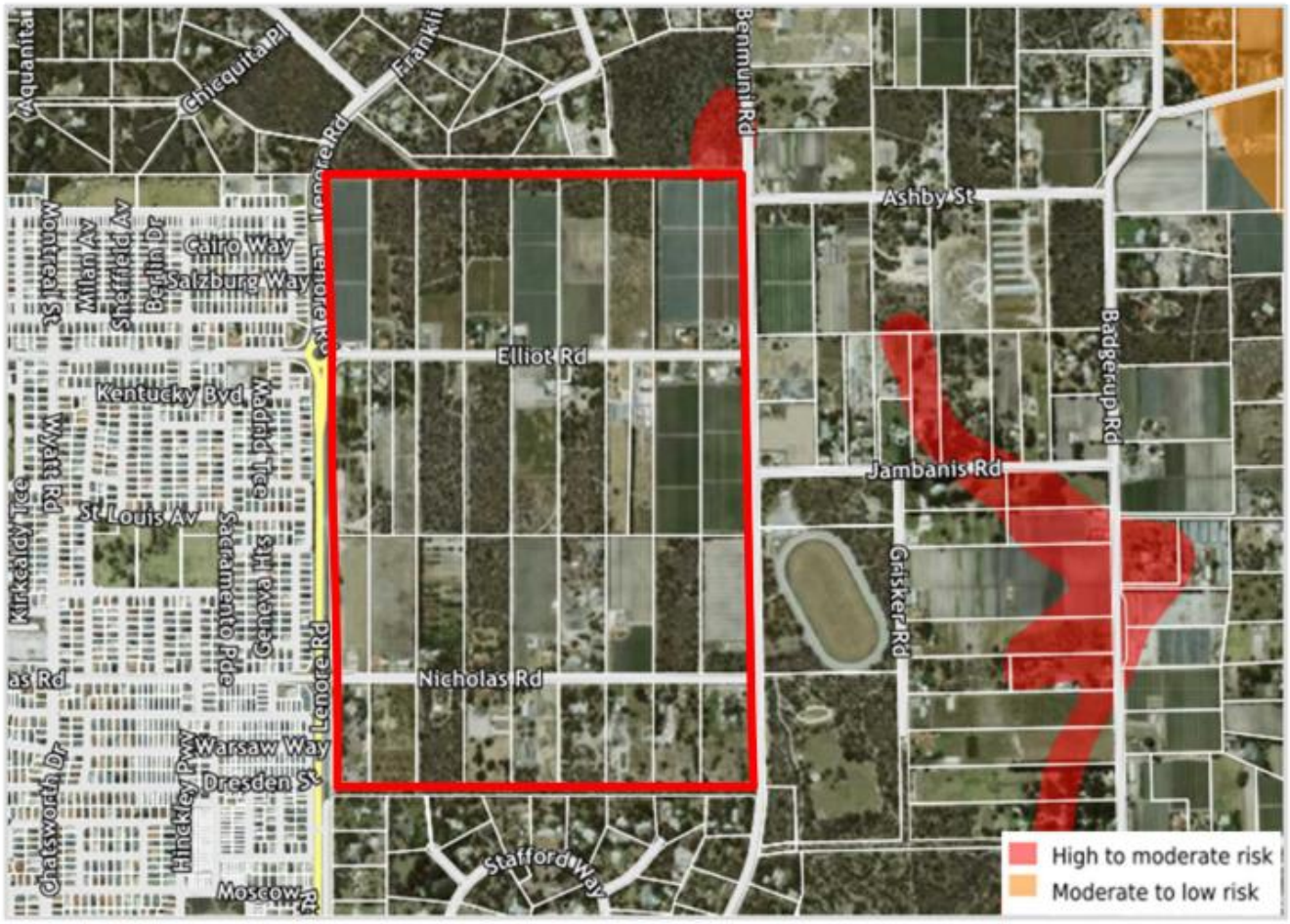


Figure 2 – Acid Sulfate Soils Risk Mapping (MNG Access, December 2024)

3.2 Existing Topography

The Site generally grades down from west to east, from RL86m AHD on the boundary in the vicinity of the intersection of Lenore Road and Nicholas Road, to RL51m AHD at the northeastern corner, and RL50m AHD at the southeastern corner of the Site. Figure 3 below shows the contours across the Site.

Figure 3 – Site Contours (MNG Maps, December 2024)

3.3 Geology and Landform

An excerpt from the Geological Survey of Western Australia Perth Metropolitan Region soils map for Perth (part 2034 III & 2134 III) is presented below in Figure 4. This indicates the site is underlain by sand (Tamala Limestone, S7) extending through the entire Site area, and is described as "pale and olive yellow, medium to coarse-grained, sub angular to sub-rounded, quartz, trace of feldspar, moderately sorted of residual origin".

Sand derived from Tamala limestone is generally free draining, with medium permeability, and well-suited to development.

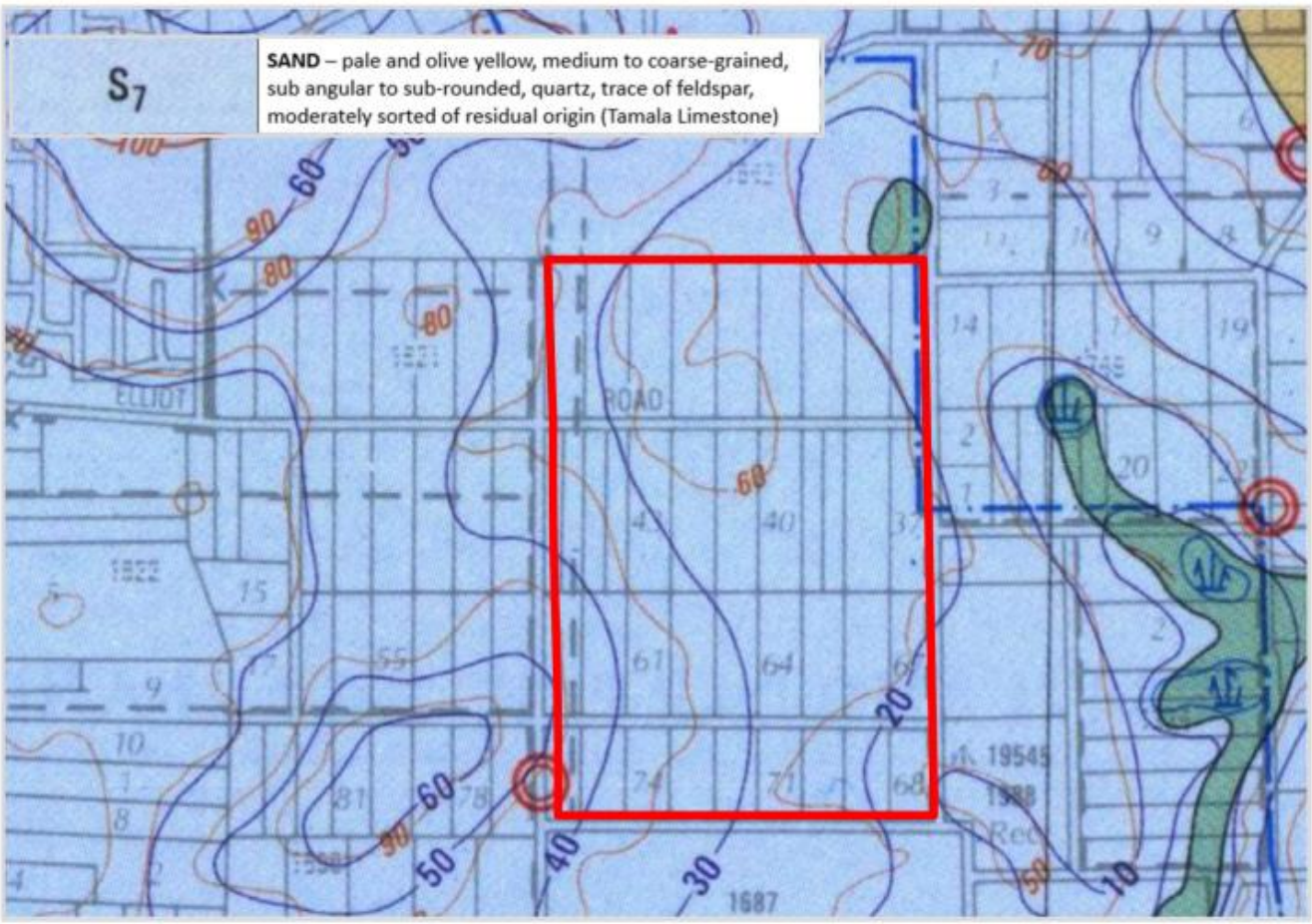


Figure 4 - Geotechnical Information (Geological Survey of WA)

Based on our experience on similar projects within the area, the Site is well suited for future development in terms of topography and geotechnical conditions and will provide a suitable foundation for roads, infrastructure and proposed development. It is anticipated an AS 2870 Classification of "Class A". A geotechnical investigation will be required to confirm the classification.

3.4 Groundwater

A review of Groundwater mapping shows that the Site has good clearance to groundwater, with the minimum clearance being at least 5m at the Site low points on the eastern boundary.

4. SITEWORKS & EARTHWORKS

Siteworks and Earthworks for the Site will need to accomodate the exisitng topogrophy, areas of vegetation identified for conservation, and several existing homesteads.

The principle of the earthworks deign is to achieve positive outcomes, which include the following:

- Reduction in total home building cost.
- Rationalisation of retaining wall layouts, consistent with the City of Wanneroo specifications.
- Terrace lots up the natural slopes to maintain natural topography.
- Grading roads to follow the existing topography where possible, while catering for proposed gravity services and meet the standards of the required approval agencies.
- Accommodating drainage swales/basins in areas of local public open space.
- Matching existing levels of existing roads and homesteads, POS, and conservation bushland in the area.

The retention of homestead lots will influence the earthworks strategy, and accommodating their existing levels may not necessarily suit the most efficient subdivision earthworks design. This also applies to tying into existing ground levels along neighbouring boundaries of properties. Level differences will require walls, and approval from neighbouring landowners is required to build on the common boundary.

Siteworks and earthworks will generally consist of the following:

- Demolish buildings and hardstands.
- Remove trees including grubbing out roots and stumps.
- Strip the topsoil, all organic material, roots and other unsuitable or deleterious material from the Site. The history of market gardening within the Site may required a deeper than average top soil strip.
- Topsoil unsuitable for re-use may be retained for use on-site as non-structural fill (eg in planted areas outside building areas and sports ovals).
- Proof compact the exposed surface to achieve the level of compaction determined by a Geotechnical Engineer. If weak areas are idenfiied during proof compaction, or the level of compaction is not achieved, further compaction or over-excavation and backfilling with compacted, approved fill of these zones will be required.
- Where fill is required to achieve the required levels, place and compact approved free draining granular fill.

5. DRAINAGE

5.1 Urban Water Management

Stormwater drainage management is a major component of an overall water strategy. Water Sensitive Urban Design (WSUD) techniques are incorporated during planning, design and construction of urban development projects to achieve the desired outcomes.

An Urban Water Management Plan will be required for the site, which will provide the following:

- Defines land area requirements for conveyance of flood flows and protection of future urban development from peak flood events.
- Proposes a drainage strategy appropriate for the local conditions, and outlines potential WSUD initiatives at the inter-allotment and POS scale. The location of areas within Public Open Space (POS) for the WWPS and drainage infrastructure will need to be considered in the subdivision design and POS calculations.
- Prescribes the design criteria for water quantity and quality for each sub-catchment.
- Outlines hydrologic and hydraulic framework parameters and develops the overall drainage network concept.
- Defines an implementation plan for the drainage design strategy.

5.2 Water Quality Management

The sandy soil on Site will allow for onsite storage and dissipation of stormwater. Recharge water quality will be improved through the adoption of 'Best Management Practices' which promote the disposal of runoff via water pollution control facilities (including vegetated swales and basins, detention storages and gross pollutant traps) and the implementation of non-structural source controls (including urban design, street sweeping, community education, low fertiliser landscaping regimes, etc)

5.3 Stormwater Collection and Disposal

Drainage from public roads and lanes would be collected via conventional pit and pipe systems. The drainage collection and conveyance system will be designed to cater for the runoff from storms with up to a 20% annual exceedance probability (AEP) event.

A series of detention basins would be designed to store runoff for the 20%, 10% and 1% AEP events. In all cases, roads and POS would be designed to cater for the surface overflow for more severe storms with building pad levels set at least 300 millimetres above the 1% AEP flood level in roadways and 500 millimetres above the 1% AEP flood level for storage detention basins.

The dispersion of stormwater disposal throughout the site (via soakwells, swales and basins) will maximise the area of recharge down through the soil profile to the shallow aquifer, thereby maximising the potential for nutrient stripping and water quality improvements. The basins will also assist nutrient removal in conjunction with other measures such as suitable vegetation planting and the use of modified soils with high phosphorous retention capacity.

Hyd2o has been engaged as the consulting hydrologist to prepare a Local Water Management Strategy. This includes the identification of drainage catchments and the location of proposed basins within POS areas.

6. ROADS

Lenore Road forms the western boundary of the Site and has direct connection to the Regional Road, Ocean Reef Road (the future Ocean Reef Upper Swan Highway) to the south. Lenore Road is a paved two-lane bidirectional road which is currently being upgraded to four lanes. It has been upgraded to an urban standard from the southern boundary of the Site to the Lenore Road/Elliot Road round-a-bout with kerbs, footpaths, drainage and line markings.

North of the round-a-bout, Lenore Road is constructed to a lower standard, with line markings, but without kerbs, footpaths or drainage.

It is expected that the existing roundabout at the Lenore Road/Elliot Road intersection will ultimately need to be upgraded to accommodate the wider road reserve on Elliot Road.

At the time of writing this report, the intersection of Lenore Road and Nicholas Road is being upgraded.

Benmuni Road on the eastern boundary is a paved two-lane bidirectional road constructed to a rural standard, and is currently classified as a 'Local Distributor'. Benmuni Road will need to be upgraded to a 'Neighbourhood Connector Type A' boulevard road, with a median strip, kerbs, footpaths, drainage and line markings. Round-a-bouts are expected to be required at the Benmuni Road, Ashley St and Nicholas Road intersections.

6.1 Internal Roads and Footpaths

The LSP comprises a network of development roads including neighbourhood connectors and local access roads.

The main internal road within East Wanneroo Precinct 3 will be Elliot Road, which bisects the Site, east to west connecting Lenore and Benmuni Roads. Elliott Road will need to be upgraded to a 45m wide road reserve to accommodate future traffic and public transport needs. There are several existing homesteads abutting Elliott Road, which impact the road layout, creating a slight meandering of the road. The specific cross section of the road reserve will be resolved as the planning process progresses. Elliot Road is expected to be funded as a District DCP item.

Nicholas Road, which crosses Site from east to west, will provide a secondary entrance, and will need to be upgraded to a 'Neighbourhood Connector Road Type B'. The tee intersection with Lenore Road is currently being constructed and will facilitate full movement, with the exception of the western leg which is left-in-left-out only.

A north-south Neighbourhood Connector road will connect Elliott Road to Nicholas Road through the centre of the development.

Lower order roads will connect to the main east-west roads to provide access to land uses.

In all cases the road cross-sections will be designed to cater for utility services on standard verge alignments, street trees, parking embayments where appropriate, off-street and on-street cycling lanes in accordance with the overall pedestrian and cycling network.

The engineering design of roads will be carried out to comply with the Department of Planning's Liveable Neighbourhoods recommendations for design speeds and sight distances and with the requirements of the City of Wanneroo. We anticipate roadworks will generally consist of kerbed and asphalted pavements.

Footpaths will be provided in accordance with Liveable Neighbourhoods and the City of Wanneroo standards.

6.2 Public Transport

The Site is immediately east of Lenore Road Transit Link, which is anticipated to have exclusive bus lanes constructed within the road reserve in the future, as East Wanneroo is developed. An existing bus route on Chatsworth Drive is available, which is within 650m of Site.

7. WASTEWATER

The Water Corporation has provided advice regarding provision of Wastewater to the Site confirming a permanent wastewater pump station (WWPS) is required adjacent to Elliot Road at the low point, known as Jandabup Pump Station S. This pump station is part of the Jandabup Sewer District Plan, as shown in Figure 5. This permanent WWPS will service a significant portion of Precinct 3 and in the ultimate sense will likely discharge via a pressure main and gravity sewer to the south of Ocean Reef Road once the area is more fully developed. The area that can be served by the Jandabup Pump Station S is outlined by the light green line below, and comprises approximately half of the LSP area in the north-west.

The Water Corporation has indicated that Jandabup WWPS S can discharge into the existing DN305 sewer near the intersection of Prindiville Drive and Hartman Drive south of the development, south of Ocean Reef Road. The alignment of the pressure main is yet to be determined, and will be progressed as development occurs. CW understands the permanent Jandabup WWPS S will be funded by the Water Corporation, although it is not currently on Water Corporation's Capital Investment Program.

The remainder of the site does not fall into the catchment for Jandabup WWPS S and in the ultimate sense is reliant on downstream gravity sewer being constructed by others. The timing of this downstream infrastructure is unknown, and likely to be after development of Precinct 3 has occurred. In this scenario two temporary WWPS will be required in order to serve the balance of the LSP area. The most efficient locations for the WWPS is in the north-east and south-east corners at natural low points as noted below. The discharge for these temporary WWPS is dependent on available sewer infrastructure at the time. The temporary WWPS and pressure mains are likely to be at the Developer's cost.

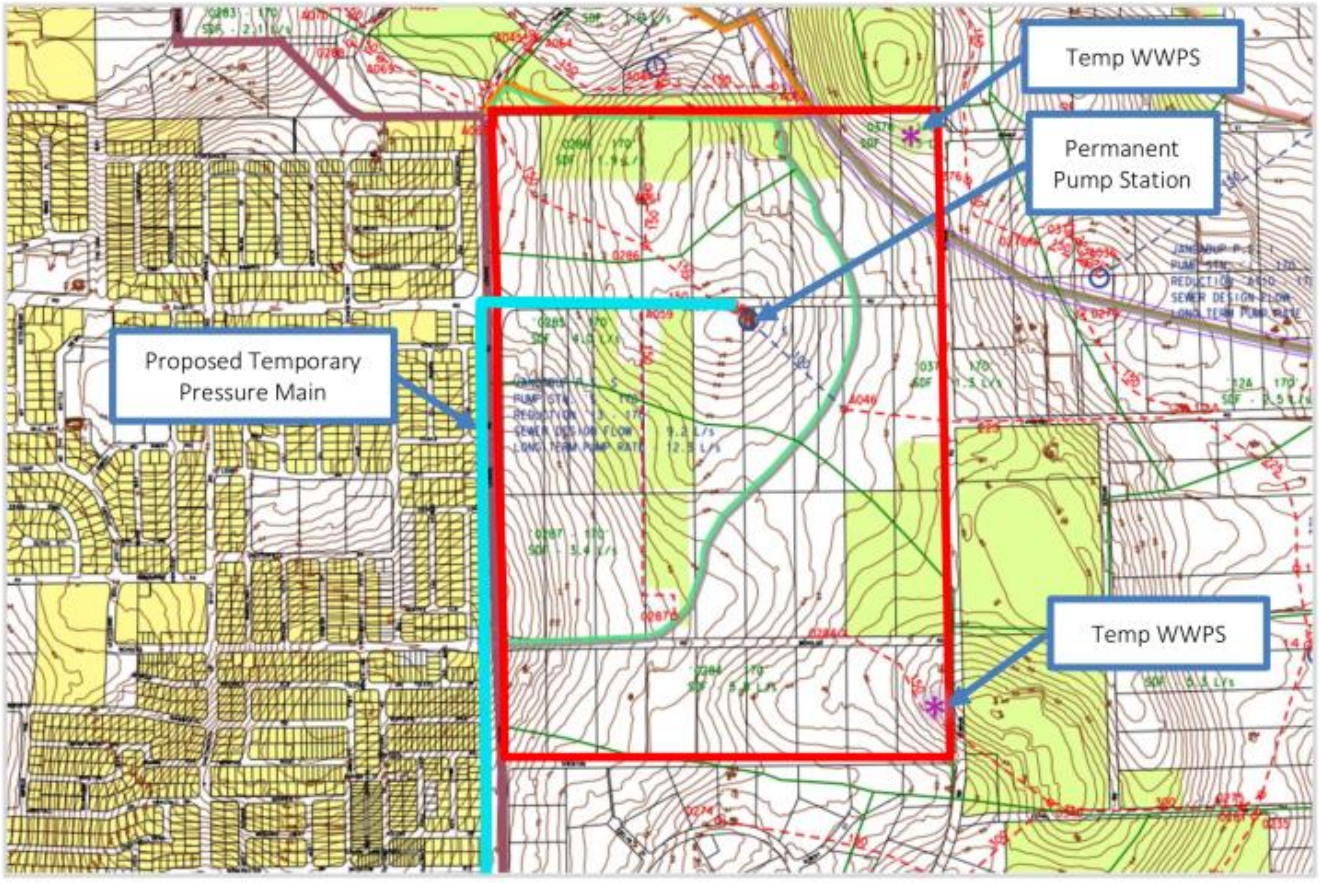


Figure 5 - Conceptual Long Term Wastewater Scheme Planning - Overview (Water Corporation, 2020)

8. WATER RETICULATION

The Site has existing water infrastructure available for connection, as depicted in Figure 6. There is a 610mm steel distribution pipe in the western verge of Lenore Road and a 300mm distribution main in Benmuni Road. In addition, there is a a 100mm main in Nicholas Road.

The Water Corporation has advised that the initial frontal stages of East Wanneroo Precinct 3 can be serviced via an extension of reticulation mains from Lenore Road. However, future areas and some areas of elevated land will need to be serviced by extension off the high-level mains. The extent of these areas is not yet confirmed, and The Water Corporation will confirm this at a later stage of the development process.

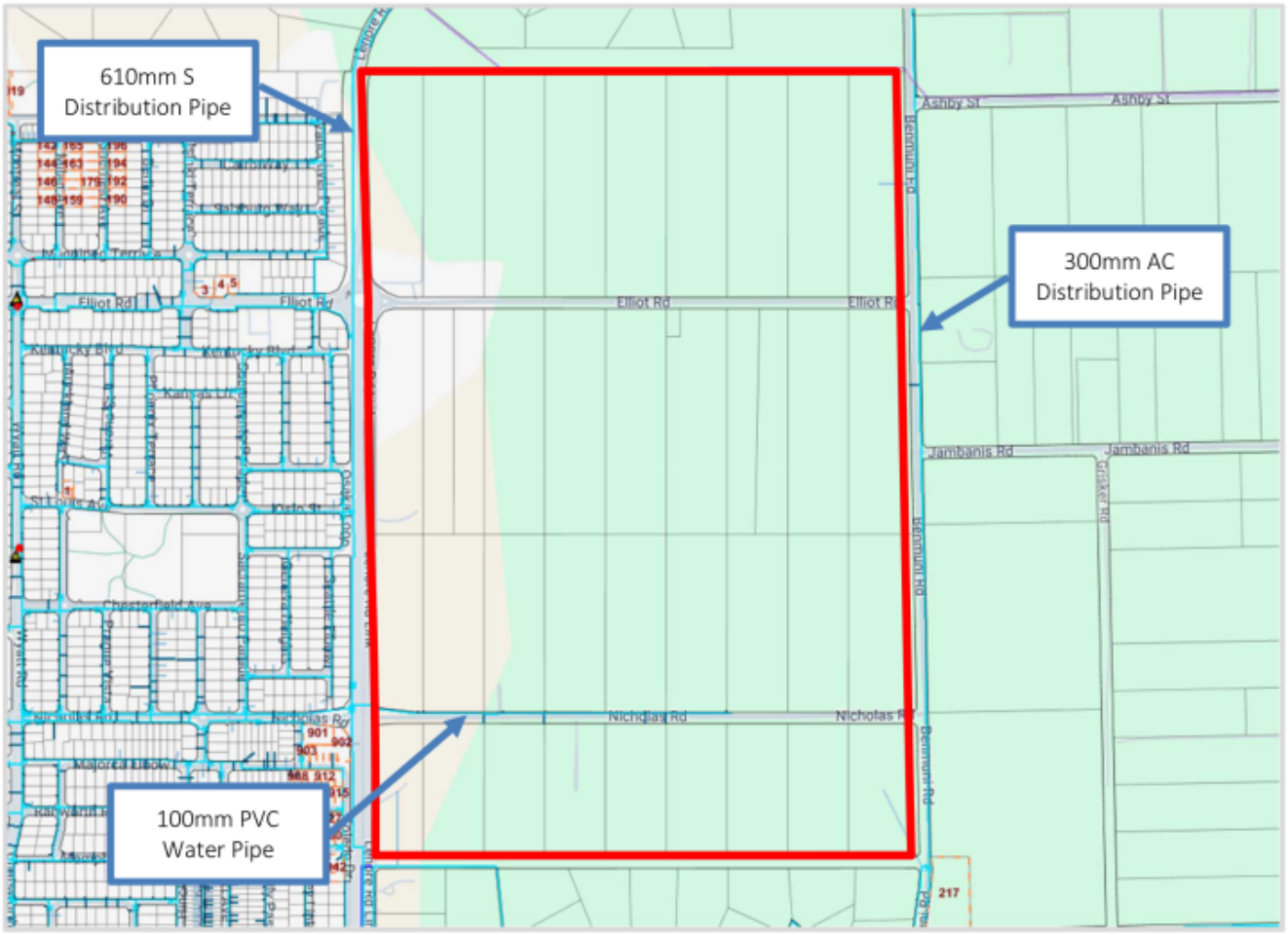


Figure 6 – Water Reticulation Infrastructure (Water Corporation Esinet, Dec 2024)

9. GAS SUPPLY

There are existing DN160, DN110 and DN63 high pressure steel gas mains located in various segments of Lenore Road adjacent to the Site. The DN160 stub at the intersection of Elliot Road and Lenore Road likely can be extended to service the development. Confirmation of gas capacity from ATCO of will be required.

10. POWER SUPPLY

Western Power's Network Mapping Tool confirms there is currently limited spare electricity capacity in the East Wanneroo corridor, and a high voltage feeder to the Wangara substation to the west will ultimately be required to increase capacity to service the Site. Based on R20-R40 zoning, the Site is expected to require approximately 7.9MVA.

There are existing high voltage overhead power lines in Elliot Road, Nicholas Road and Benmuni Road. The lines on Elliot Road and Nicholas Road have been undergrounded under Lenore Road on the western boundary. The remaining overhead lines on Elliot Road and Nicholas Road will require undergrounding. Existing power is shown in Figure 7.

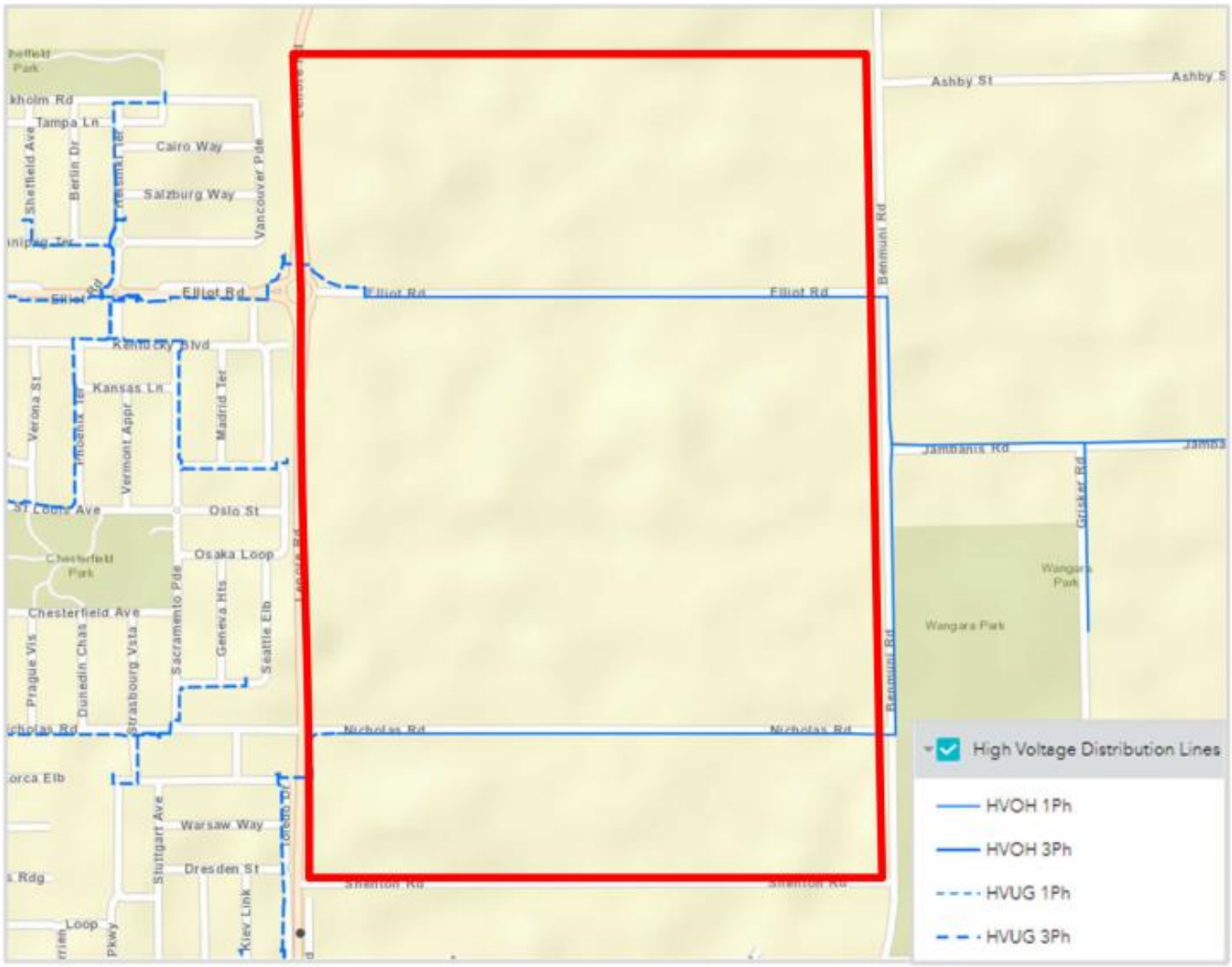


Figure 7 – Existing Power Network (Western Power, 2024)

11. TELECOMMUNICATIONS

The Site is within NBN's fixed line footprint, and can be serviced with optic fibre via a headworks extension from their existing network. There are existing NBN pit and pipe services within Lenore Road, Nicholas Road, Elliot Road, and Benmuni Road that can serve as connections. Some lot connections will require removal by NBN to allow for subdivision.

The current design practice for road reserves, pavement and verge provisions will make adequate allowance for services including broadband in accordance with the agreed Utilities Service Providers handbook. There will be some local land requirements for telecommunications equipment sites which will be accommodated at detailed subdivision stage.

12. CONCLUSION

The Site is well suited for the proposed development outlined in the Local Structure Plan.

The ground conditions are suitable for the proposed development, and will likely achieve a Class A classification.

The drainage concept is likely to be straight forward, as there is permeable soil and good clearance to groundwater.

There are known sewer and water strategies to support the development, and the Water Corporation will further progress the sewer supply strategy as the planning becomes more certain.

Power can be connected to the Site, and development can begin to the extent that power capacity is available for initial stages.

APPENDIX M

Pre and Post Development UNDO Nutrient Modelling

Government of Western Australia
Department of Water and Environmental Regulation

Project: East Wanneroo Precinct 3 Pre Development **Date: 08 April, 2025**

Subregion : East Wanneroo Precinct 3				Area : 136 ha
Landuse	**Percent (%)**	**Area (ha)**	**Nitrogen (kg)**	**Phosphorus (kg)**
Residential	0.00	0.00	0.0	0.00
Industrial, commercial & schools	0.00	0.00	0.0	0.00
Rural living	100.00	136.00	9,533.6	1,795.20
Public Open Space	0.00	0.00	0.0	0.00
Road reserve	0.00	0.00	0.0	0.00

10,244.9 (kg/yr) Nitrogen input	1,815.60 (kg/yr) Phosphorus input	809.7 (kg/yr) Nitrogen export	12.14 (kg/yr) Phosphorus export

Rural living

Landuse	Percent (%)	Area (ha)
Unrestricted	100.00	136.00
No livestock	0.00	0.00
No clearing apart from the housing pad	0.00	0.00

Note: Commercial horticulture is not permitted in the rural living zone, due to spray drift buffers.

Nitrogen input(kg/yr)	9,533.6

Phosphorus input(kg/yr)	1,795.20

Soil and drainage information

Type of drainage	**Infiltration**
Soil type	**Bassendean**
Depth to groundwater	**9**
Groundwater slope (%)	**0.15**
Soil PRI	**5**

Does it contain imported fill? **No**

Does subregion contain onsite sewage disposal system? **Yes**

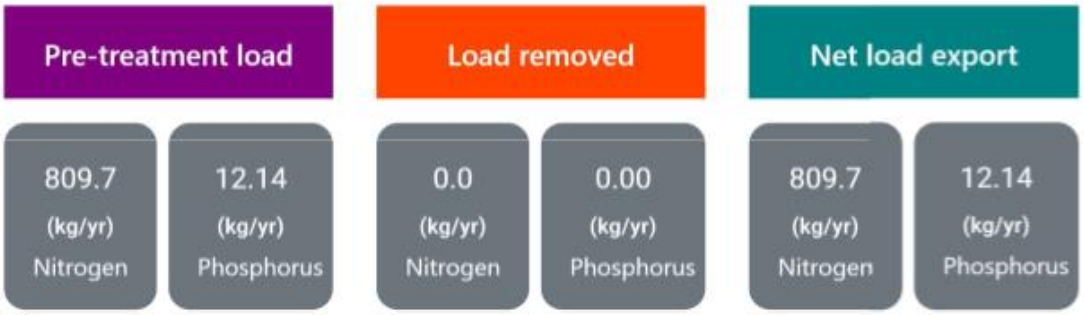
Type of system installed	**Septic tank**
No. of units installed	**38**

Summary : Nutrient stripping devices

Treatment	Name	Size (m2)	Treated area (ha)	Treating	N removed (kg/ha/yr)	P removed (kg/ha/yr)
Load removed (kg/yr)					0.0	0.00
Net export (kg/yr)					809.7	12.14

Summary : Nutrient load exports

Region	Area (ha)	N export (kg/yr)	P export (kg/yr)
East Wanneroo Precinct 3	136	809.7	12.14



Treatment Diagram

Government of Western Australia
Department of Water and Environmental Regulation

Project: East Wanneroo Precinct 3 Post Development **Date: 08 April, 2025**

Subregion : Lots & POS				Area : 99.80569 ha
Landuse	**Percent (%)**	**Area (ha)**	**Nitrogen (kg)**	**Phosphorus (kg)**
Residential	67.99	67.86	2,022.9	567.58
Industrial, commercial & schools	5.61	5.60	410.5	84.08
Rural living	0.00	0.00	0.0	0.00
Public Open Space	26.40	26.35	565.6	20.44
Road reserve	0.00	0.00	0.0	0.00

3,521.0 (kg/yr) Nitrogen input	687.08 (kg/yr) Phosphorus input	265.5 (kg/yr) Nitrogen export	4.59 (kg/yr) Phosphorus export

Residential

Size (m^2)	**Percent (%)**	**Area (ha)**	**Nitrogen (kg)**	**Phosphorus (kg)**
<400 m^2	85.00	57.68	1,355.1	396.98
400-500 m^2	15.00	10.18	667.8	170.60
501-600 m^2	0.00	0.00	0.0	0.00
601-730 m^2	0.00	0.00	0.0	0.00
>730 m^2	0.00	0.00	0.0	0.00
Multiple dwellings	0.00	0.00	0.0	0.00

Nitrogen input(kg/yr)	2,022.9

Phosphorus input(kg/yr)	567.58

Commercial, Industry and Schools

Landuse	Percent (%)	Area (ha)
Light Industrial	0.00	0.00
Heavy Industrial	0.00	0.00
Commercial / Offices	37.10	2.08
Schools	62.90	3.52
Public buildings	0.00	0.00

Nitrogen input(kg/yr)	410.5

Phosphorus input(kg/yr)	84.08

Public Open Space (POS)

Landuse	Percent (%)	Area (ha)
Native gardens	14.65	3.86
Non-native gardens	0.00	0.00
Not fertilised	0.00	0.00
Nature	58.10	15.31
Sport	5.05	1.33
Recreation	17.05	4.49
Goilf course	0.00	0.00
Bowling green	0.00	0.00
Impervious	5.15	1.36
Water body	0.00	0.00

Nitrogen input(kg/yr)	565.6

Phosphorus input(kg/yr)	20.44

Soil and drainage information

Type of drainage	**Infiltration**
Soil type	**Bassendean**
Depth to groundwater	**9**
Groundwater slope (%)	**0.15**
Soil PRI	**5**

Does it contain imported fill? **No**

Does subregion contain onsite sewage disposal system? **No**

Subregion : Roads			Area : 38.544309999999996 ha	
Landuse	**Percent (%)**	**Area (ha)**	**Nitrogen (kg)**	**Phosphorus (kg)**
Residential	0.00	0.00	0.0	0.00
Industrial, commercial & schools	0.00	0.00	0.0	0.00
Rural living	0.00	0.00	0.0	0.00
Public Open Space	0.00	0.00	0.0	0.00
Road reserve	100.00	38.54	366.9	46.95

568.5 (kg/yr) Nitrogen input	52.73 (kg/yr) Phosphorus input	34.3 (kg/yr) Nitrogen export	2.47 (kg/yr) Phosphorus export

Road reserve

Landuse	Percent (%)	Area (ha)
Roads	40.00	15.42
Road reserve - impervious	30.00	11.56
Road reserve - native garden	5.00	1.93
Road reserve - non-native garden	0.00	0.00
Road reserve - turf	20.00	7.71
Road reserve - not fertilised	5.00	1.93

Nitrogen input(kg/yr)	366.9

Phosphorus input(kg/yr)	46.95

Soil and drainage information

Type of drainage	**Piped drainage**
Soil type	**Bassendean**
Depth to groundwater	**9**
Groundwater slope (%)	**0.15**
Soil PRI	**5**

Does it contain imported fill? **No**

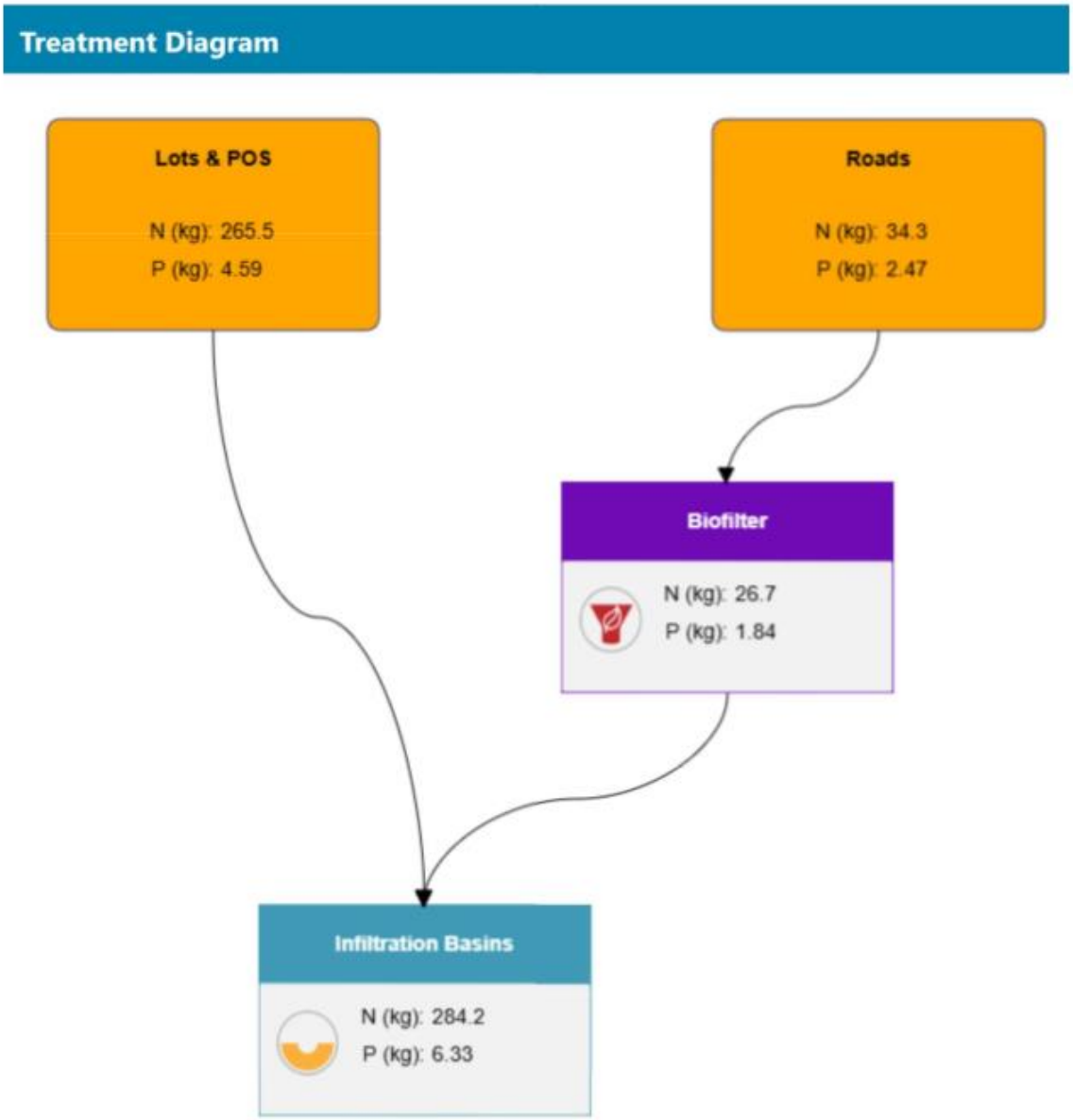
Does subregion contain onsite sewage disposal system? **No**

Summary : Nutrient stripping devices

Treatment	Name	Size (m2)	Treated area (ha)	Treating	N removed (kg/ha/yr)	P removed (kg/ha/yr)
Biofilter	Biofilter	12300	38.54	Sandy soils - Runoff only (infiltration on lots)	7.6	0.63
Detention infiltration basin	Infiltration Basins	25265	138.35	Sandy soils - Runoff only (infiltration on lots)	8.0	0.10
Load removed (kg/yr)					**15.6**	**0.73**
Net export (kg/yr)					**284.2**	**6.33**

Summary : Nutrient load exports

Region	Area (ha)	N export (kg/yr)	P export (kg/yr)
Lots & POS	99.80569	265.5	4.59
Roads	38.544309999999996	34.3	2.47


Treatment Diagram
Lots & POS
N (kg): 265.5
P (kg): 4.59
Roads
N (kg): 34.3
P (kg): 2.47
Biofilter
N (kg): 26.7
P (kg): 1.84
Infiltration Basins
N (kg): 284.2
P (kg): 6.33

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PAPERBARK TECHNOLOGIES
Arboricultural Consultants

Arboricultural Report Wanneroo Recreation Centre

January 15, 2025
Total Tree Count: 47

Brief

This consultant has been commissioned by City of Wanneroo to inspect and submit a report in respect of 47 selected trees located around the Wanneroo Recreation Centre, due to plans for a new development on the southern side of the existing building and a possible upgrade of the existing premises.

The objective of the audit was to identify and tag the trees at this location, assess the trees' current health and structural condition and provide advice on any problems or works they may require.
The survey scope requires:

- The identification of tree species and tagging 1 - 47.
- Measurement of the height & canopy spread of the trees.
- Measurement of trunk diameters.
- Tree age.
- Current health and structural condition of the trees.
- Problems identified and itemised.
- Retention Value (Low, Medium, High).
- ULE (Useful Life Expectancy).
- Tree Protection Zone Radius (TPZ).
- Structural Root Zone Radius (SRZ).
- Recommended remedial pruning or other works that may be required.

All trees are digitally mapped, and this consultant confirms that the site inspection was carried out on the 9th, 10th and 15th of January 2025 with a total of 47 trees audited and tagged.

Scope of works

This consultant was provided with a draft concept plan for the site and a site meeting was held with the Senior Project Manager – Mark Little of City of Wanneroo to determine the trees to be audited and the requirements of the audit. It is recommended that all works are maintained as far away from the TPZ radius of retained trees as possible to ensure damage is reduced. If works are to come inside the TPZ radius of any trees it is recommended to confirm the works with a qualified arborist from Paperbark Technologies prior to works being carried out. Selective trees may require further investigation to confirm how to proceed.

The TPZ and SRZ radius details for each tree provided in the report are based upon AS 4970-2009 *Protection of trees on development sites* and provide a guide to assist with the care and protection of trees to be retained.

Summary & Recommendations

The 47 trees inspected were found to be predominantly in good & fair health and predominantly sound structural condition at this time. Tree number 31 – *Eucalyptus nicholii* (Narrow leafed Peppermint) has recently died.

Tree numbers 22/23/24/25 fall within the new building floor plan and would require removal. These are young *Agonis flexuosa* (WA Peppermints) and the majority are poorly formed.

In the proposed new car park area on Scenic Drive the existing mature tree should be retained, ensuring in the design the TPZ can be accommodated. There are extensive surface roots in the area around trees 38/39/40/41/42/43/44 and these must be protected.

Excavation in proximity of trees to be retained is to be carried out by small, tracked machinery fitted with a flat bladed bucket with an Arborist Spotter wherever practicable. The initial use of smaller machinery adjacent trees to be retained is likely to limit root damage by allowing roots to be exposed and cleanly cut prior to larger machinery working the area, thereby preventing splitting and tearing of roots that may extend back to the base of the tree.

Where works are proposed inside the TPZ of the trees, an Arborist Spotter would be required on site to oversee tree roots which may be found. If roots are located, then the Arborist can assess the roots for pruning. Roots are to be cleanly cut using a hand saw or secateurs. Roots above 30mm diameter are not to be cut without authorisation from a qualified Arborist.

The removal of live canopy and major limbs may significantly damage the trees. Therefore, work methods and equipment must be suitable to the scale of works and operating space to ensure accidental canopy and structural damage are prevented.

It is also recommended that all trees are protected by temporary fencing to delineate tree protection areas consistent with AS4970-2009 (refer to below 'Appendix - Tree Protection Fencing') and that it is installed prior to works commencing. It is to be an area of tree and root protection with no digging and no storage of equipment or tools. No filling, trenching or other earthworks shall be carried out unless there is written arborist approval. Soil is not to be lowered or raised within this zone and no washing of tools or cement/paint or chemicals is to be deposited in this zone.

Where temporary fencing cannot be achieved due to the restricted amount of practicable space within the site during the development works, it is recommended to provide at least trunk/branch and ground protection to avoid mechanical injuries from small and large machinery.

Supplementary watering of the retained trees closest to the works is required to minimise stress on the trees associated with site disruption and root loss. It is generally recommended to water once per week with a minimum of 600 litres per tree, however this may vary. Water is to be applied in a manner that minimises runoff and it is recommended that the initial watering incorporates a wetting agent to assist water infiltration. Storage of tools and equipment and the storage of materials are recommended to be located within an open area, preferably not within 6m of trees to be retained. The parking of vehicles should be accommodated in the existing carpark.

The future management, maintenance and condition of the trees have a considerable bearing on their location, with safety to property and persons the main priority. Therefore, each tree retained is recommended to be re-inspected annually to ensure that the trees remain healthy and in a structurally sound condition with a level of risk that is acceptable.

Zana Sheary - Arboricultural Consultant
Diploma of Arboriculture, ISA Certified Arborist AU-0039A & Quantified Tree Risk Assessor Lic 1082.
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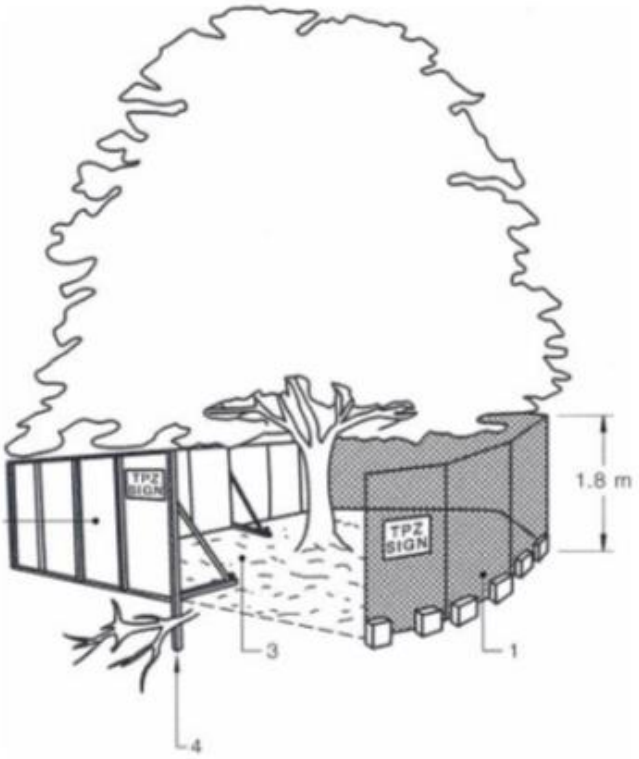
Limitation of liability
Trees can be managed, but they cannot be controlled. To live or work near a tree involves a degree of risk.
This report only covers identifiable defects present at the time of inspection. Paperbark Technologies accepts no responsibility and cannot be held liable for any structural defect or unforeseen event/situation or adverse weather conditions that may occur after the time of inspection. Paperbark Technologies cannot guarantee that the tree/s contained within this report will be structurally sound under all circumstances, and is not able to detect every condition that may possibly lead to the structural failure of a tree. Paperbark Technologies cannot guarantee that the recommendations made will categorically result in the tree being made safe.
Unless specifically mentioned this report will only be concerned with above ground inspections, as such all observations have been visually assessed from ground level. Trees are living organisms and as such cannot be classified as safe under any circumstances. Trees fail in ways that the arboriculture industry does not fully understand.
The recommendations are made on the basis of what can be reasonably identified at the time of inspection therefore Paperbark Technologies accepts no liability for any recommendations made. All care has been taken to obtain information from reliable sources, however Paperbark Technologies can neither guarantee nor be responsible for the accuracy of information provided by others. In the event that reinspection of the tree/s is recommended it is the client's responsibility to make arrangements with Paperbark Technologies.

Appendix - Tree Protection Fencing

(AS4970- 2009 *Protection of trees on development sites*)



LEGEND:
1 Chain wire mesh panels with shade cloth (if required) attached, held in place with concrete feet.
2 Alternative plywood or wooden paling fence panels. This fencing material also prevents building materials or soil entering the TPZ.
3 Mulch installation across surface of TPZ (at the discretion of the project arborist). No excavation, construction activity, grade changes, surface treatment or storage of materials of any kind is permitted within the TPZ.
4 Bracing is permissible within the TPZ. Installation of supports should avoid damaging roots.

Map of trees at Wanneroo Recreation Centre
Common Name
Bauhinia climber
Chinese Banyan tree (4)
English Oak
False cypress
Flooded Gum
Horsetail Sheok (5)
Illawarra Flame Tree (6)
kings park special (3)
Lemon Scented Gum
Narrow-leaved Peppermint (2)
River Red Gum (2)
Silky Oak (2)
Sugar Gum (4)
Swamp Mahogany (8)
Tuart
WA Weeping Peppermint (4)
Yellow Gum

Map of TPZ radius of trees at Wanneroo Recreation Centre
Common Name
Bauhinia climber
Chinese Banyan tree (4)
English Oak
False cypress
Flooded Gum
Horsetail Sheok (5)
Illawarra Flame Tree (6)
kings park special (3)
Lemon Scented Gum
Narrow-leaved Peppermint (2)
River Red Gum (2)
Silky Oak (2)
Sugar Gum (4)
Swamp Mahogany (8)
Tuart
WA Weeping Peppermint (4)
Yellow Gum

Map of SRZ radius of trees at Wanneroo Recreation Centre
Common Name
Bauhinia climber
Chinese Banyan tree (4)
English Oak
False cypress
Flooded Gum
Horsetail Sheok (3)
Illawarra Flame Tree (6)
kings park special (3)
Lemon Scented Gum
Narrow-leaved Peppermint (2)
River Red Gum (2)
Silky Oak (2)
Sugar Gum (4)
Swamp Mahogany (8)
Tuart
WA Weeping Peppermint (4)
Yellow Gum

False cypress Tree ID #1

275 Scenic Drive

Tree Details

Latin Name:	Chamaecyparis lawsoniana
Latitude:	-31.753520707353
Longitude:	115.79520437495
Tree Height (Estimated) [m]:	14
Canopy Spread [m]:	11
DBH [cm]:	73
Health:	Good
Structure:	Good
Problems:	Deadwood minor <50, Trunk Decay, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	8.76
Structural Root Zone (SRZ) [m]:	3.53
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

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09/01/2025

kings park special Tree ID #2

275 Scenic Drive

Tree Details

Latin Name:	Callistemon Kings Park Special
Latitude:	-31.753548076177
Longitude:	115.79512524979
Tree Height (Estimated) [m]:	8
Canopy Spread [m]:	7
DBH [cm]:	35.36
Health:	Good
Structure:	Fair
Problems:	Codominant Stem, Deadwood minor <50, Included bark, Leaning, Surface roots
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	4.24
Structural Root Zone (SRZ) [m]:	2.83
Useful Life Expectancy:	6-10 years
Retention Value:	Medium
Risk of Harm Number:	Not applicable

Photos Street View Map View

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09/01/2025

Chinese Banyan tree Tree ID #3

275 Scenic Drive

Tree Details

Latin Name:	Ficus microcarpa
Latitude:	-31.753581146828
Longitude:	115.79505551235
Tree Height (Estimated) [m]:	8
Canopy Spread [m]:	3
DBH [cm]:	18.87
Health:	Good
Structure:	Fair
Problems:	Codominant Stem
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2.26
Structural Root Zone (SRZ) [m]:	1.94
Useful Life Expectancy: 6-10 years	
Retention Value:	Medium
Risk of Harm Number:	Not applicable

Photos Street View Map View

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09/01/2025

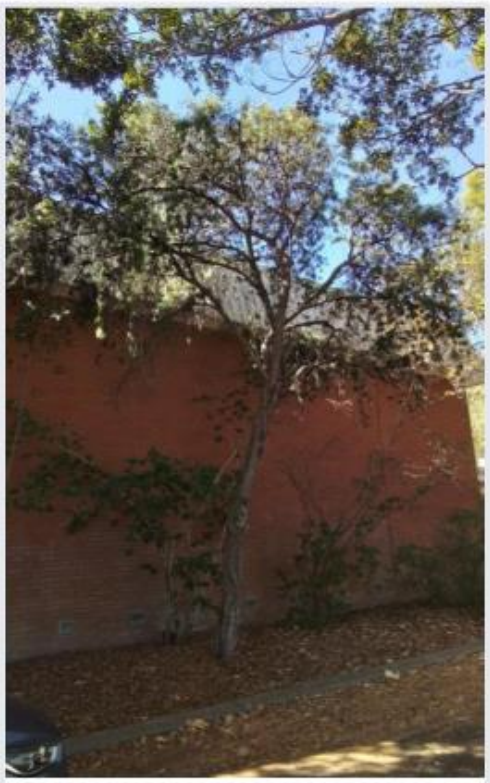
kings park special Tree ID #4

275 Scenic Drive

Tree Details

Latin Name:	Callistemon Kings Park Special
Latitude:	-31.753610796368
Longitude:	115.79499650376
Tree Height (Estimated) [m]:	8
Canopy Spread [m]:	5
DBH [cm]:	29
Health:	Good
Structure:	Good
Problems:	Codominant Stem, Included bark, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	3.48
Structural Root Zone (SRZ) [m]:	2.28
Useful Life Expectancy:	6-10 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View



1736382946290894280545912528993.jpg
09/01/2025

Bauhinia climber Tree ID #5

275 Scenic Drive

Tree Details

Latin Name:	Bauhinia galpinii
Latitude:	-31.753639305532
Longitude:	115.7949509062
Tree Height (Estimated) [m]:	8
Canopy Spread [m]:	4
DBH [cm]:	29
Health:	Good
Structure:	Good
Problems:	Deadwood minor <50
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	3.48
Structural Root Zone (SRZ) [m]:	2.02
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736383317275229509777317251052.jpg
09/01/2025

Lemon Scented Gum Tree ID #6

275 Scenic Drive

Tree Details

Latin Name:	Corymbia citriodora
Latitude:	-31.753657551392
Longitude:	115.79489994423
Tree Height (Estimated) [m]:	16
Canopy Spread [m]:	12
DBH [cm]:	47
Health:	Good
Structure:	Fair
Problems:	Other, Deadwood minor <50, Leaning, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	Recent branch failure over roof
Tree Protection Zone (TPZ) [m]:	5.64
Structural Root Zone (SRZ) [m]:	2.47
Useful Life Expectancy:	20-40 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736895410425422237039117289370 8.jpg
14/01/2025

River Red Gum Tree ID #7

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus camaldulensis var.camaldulensis
Latitude:	-31.753753342099
Longitude:	115.79481545465
Tree Height (Estimated) [m]:	21
Canopy Spread [m]:	20
DBH [cm]:	80
Health:	Good
Structure:	Good
Problems:	Codominant Stem, Root Girdling, Deadwood minor <50, Included bark, Surface roots
Notes:	Trim branch back from roof
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	Branch touching roof
Tree Protection Zone (TPZ) [m]:	9.6
Structural Root Zone (SRZ) [m]:	3.18
Useful Life Expectancy:	20-40 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736384532164171059753396556800 1.jpg
09/01/2025

Yellow Gum Tree ID #8

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus leucoxylon
Latitude:	-31.753840009796
Longitude:	115.79483557122
Tree Height (Estimated) [m]:	9
Canopy Spread [m]:	11
DBH [cm]:	47
Health:	Good
Structure:	Good
Problems:	Root Girdling, Deadwood minor <50, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	5.64
Structural Root Zone (SRZ) [m]:	2.74
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736385245641100782834616926995 2.jpg
09/01/2025

Chinese Banyan tree Tree ID #9

275 Scenic Drive

Tree Details

Latin Name:	Ficus microcarpa
Latitude:	-31.753932379226
Longitude:	115.79487848656
Tree Height (Estimated) [m]:	18
Canopy Spread [m]:	20
DBH [cm]:	83
Health:	Good
Structure:	Fair
Problems:	Hollow, Included bark, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	9.96
Structural Root Zone (SRZ) [m]:	3.62
Useful Life Expectancy:	40+ years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736385843669234705769503487193 7.jpg
09/01/2025

Swamp Mahogany Tree ID #10

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus robusta
Latitude:	-31.754027029287
Longitude:	115.79510513322
Tree Height (Estimated) [m]:	21
Canopy Spread [m]:	10
DBH [cm]:	55
Health:	Good
Structure:	Fair
Problems:	Deadwood major >50, Leaning, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch, Canopy lift, Remove major deadwood
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	6.6
Structural Root Zone (SRZ) [m]:	2.74
Useful Life Expectancy:	20-40 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736387097228321540973336343067 5.jpg
09/01/2025

Sugar Gum Tree ID #11

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus cladocalyx
Latitude:	-31.754104573843
Longitude:	115.79508233444
Tree Height (Estimated) [m]:	23
Canopy Spread [m]:	10
DBH [cm]:	104
Health:	Good
Structure:	Fair
Problems:	Root Girdling, Deadwood minor <50, Included bark, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	12.48
Structural Root Zone (SRZ) [m]:	3.52
Useful Life Expectancy:	20-40 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736387494422824653636968380264 2.jpg
09/01/2025

Sugar Gum Tree ID #12

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus cladocalyx
Latitude:	-31.754272206706
Longitude:	115.79511183874
Tree Height (Estimated) [m]:	21
Canopy Spread [m]:	8
DBH [cm]:	81
Health:	Good
Structure:	Fair
Problems:	Root Girdling, Deadwood minor <50, Leaning, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	9.72
Structural Root Zone (SRZ) [m]:	3.36
Useful Life Expectancy:	11-20 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

173638796052719511650790309283337.jpg
09/01/2025

Flooded Gum Tree ID #13

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus grandis
Latitude:	-31.754371417849
Longitude:	115.79509038107
Tree Height (Estimated) [m]:	38
Canopy Spread [m]:	25
DBH [cm]:	160
Health:	Good
Structure:	Fair
Problems:	Root Girdling, Deadwood minor <50, Included bark, Surface roots
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	15
Structural Root Zone (SRZ) [m]:	4.24
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736388590227310451092376482131.jpg
09/01/2025

Swamp Mahogany Tree ID #14

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus robusta
Latitude:	-31.754315540322
Longitude:	115.79490262644
Tree Height (Estimated) [m]:	10
Canopy Spread [m]:	7
DBH [cm]:	66
Health:	Poor
Structure:	Fair
Problems:	Deadwood major >50, Surface roots, Multi Crown leaders, Decline
Notes:	
Priority:	Low
Tree Work:	Add Mulch, Add nutrients, Remove major deadwood
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	7.92
Structural Root Zone (SRZ) [m]:	3.06
Useful Life Expectancy: 20-40 years	
Retention Value:	Medium
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736389071500900615322868668330O.jpg
09/01/2025

Swamp Mahogany Tree ID #15

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus robusta
Latitude:	-31.754452383186
Longitude:	115.7948610522
Tree Height (Estimated) [m]:	14
Canopy Spread [m]:	12
DBH [cm]:	92
Health:	Fair
Structure:	Good
Problems:	Root Girdling, Deadwood minor <50, Included bark, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	11.04
Structural Root Zone (SRZ) [m]:	3.38
Useful Life Expectancy:	20-40 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

173638936424477658880547372078 74.jpg
09/01/2025

Sugar Gum Tree ID #16

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus cladocalyx
Latitude:	-31.754049836516
Longitude:	115.79529288785
Tree Height (Estimated) [m]:	4
Canopy Spread [m]:	4
DBH [cm]:	31
Health:	Poor
Structure:	Poor
Problems:	Lopped
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	3.72
Structural Root Zone (SRZ) [m]:	2.23
Useful Life Expectancy:	1-5 years
Retention Value:	Low
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736390092012417086243082004441 5.jpg
09/01/2025

Silky Oak Tree ID #17

275 Scenic Drive

Tree Details

Latin Name:	Grevillea robusta
Latitude:	-31.75411654763
Longitude:	115.79527344183
Tree Height (Estimated) [m]:	12
Canopy Spread [m]:	6
DBH [cm]:	52
Health:	Fair
Structure:	Fair
Problems:	Deadwood minor <50, Trunk Decay, Surface roots, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	6.24
Structural Root Zone (SRZ) [m]:	2.8
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

173639037464019724987646759880 85.jpg
09/01/2025

Horsetail Sheok Tree ID #18

275 Scenic Drive

Tree Details

Latin Name:	Casuarina equisetifolia
Latitude:	-31.754097731679
Longitude:	115.795397494
Tree Height (Estimated) [m]:	12
Canopy Spread [m]:	12
DBH [cm]:	39
Health:	Fair
Structure:	Good
Problems:	Deadwood minor <50, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	4.68
Structural Root Zone (SRZ) [m]:	2.63
Useful Life Expectancy:	11-20 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736390912527537576558964546 28.jpg
09/01/2025

Horsetail Sheok Tree ID #19

275 Scenic Drive

Tree Details

Latin Name:	Casuarina equisetifolia
Latitude:	-31.754060099768
Longitude:	115.79547125475
Tree Height (Estimated) [m]:	8
Canopy Spread [m]:	4
DBH [cm]:	29
Health:	Fair
Structure:	Good
Problems:	Codominant Stem, Included bark, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	3.48
Structural Root Zone (SRZ) [m]:	2.28
Useful Life Expectancy:	11-20 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736391295485603408279416727031O.jpg
09/01/2025

Horsetail Sheok Tree ID #20

275 Scenic Drive

Tree Details

Latin Name:	Casuarina equisetifolia
Latitude:	-31.754027029287
Longitude:	115.79558658974
Tree Height (Estimated) [m]:	12
Canopy Spread [m]:	6
DBH [cm]:	31
Health:	Good
Structure:	Good
Problems:	Codominant Stem, Included bark, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	3.72
Structural Root Zone (SRZ) [m]:	2.25
Useful Life Expectancy:	11-20 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736391649604752217325803258101 1.jpg
09/01/2025

Silky Oak Tree ID #21

275 Scenic Drive

Tree Details

Latin Name:	Grevillea robusta
Latitude:	-31.753854264344
Longitude:	115.79532976822
Tree Height (Estimated) [m]:	10
Canopy Spread [m]:	7
DBH [cm]:	22
Health:	Good
Structure:	Good
Problems:	Multi Crown leaders
Notes:	Trim back from roof
Priority:	Low
Tree Work:	Other (Describe Below)
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2.64
Structural Root Zone (SRZ) [m]:	1.97
Useful Life Expectancy:	20-40 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736392828595545498112150019871 6.jpg
09/01/2025

WA Weeping Peppermint Tree ID #22

275 Scenic Drive

Tree Details

Latin Name:	Agonis flexuosa
Latitude:	-31.754397646065
Longitude:	115.79532507436
Tree Height (Estimated) [m]:	4
Canopy Spread [m]:	3
DBH [cm]:	11
Health:	Good
Structure:	Fair
Problems:	Included bark, Leaning, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2
Structural Root Zone (SRZ) [m]:	1.45
Useful Life Expectancy:	11-20 years
Retention Value:	Medium
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736393311205104504839841164125 5.jpg
09/01/2025

WA Weeping Peppermint Tree ID #23

275 Scenic Drive

Tree Details

Latin Name:	Agonis flexuosa
Latitude:	-31.754411330348
Longitude:	115.7954551615
Tree Height (Estimated) [m]:	1.5
Canopy Spread [m]:	3
DBH [cm]:	13
Health:	Poor
Structure:	Poor
Problems:	Included bark, Leaning, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2
Structural Root Zone (SRZ) [m]:	1.53
Useful Life Expectancy:	1-5 years
Retention Value:	Low
Risk of Harm Number:	Not applicable

Photos Street View Map View

173639355852438436370964858029 42.jpg
09/01/2025

WA Weeping Peppermint Tree ID #24

275 Scenic Drive

Tree Details

Latin Name:	Agonis flexuosa
Latitude:	-31.754342908911
Longitude:	115.79561207073
Tree Height (Estimated) [m]:	2
Canopy Spread [m]:	3
DBH [cm]:	16
Health:	Fair
Structure:	Poor
Problems:	Included bark, Leaning, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2
Structural Root Zone (SRZ) [m]:	1.61
Useful Life Expectancy:	1-5 years
Retention Value:	Low
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736393886850734682610057561221 8.jpg
09/01/2025

WA Weeping Peppermint Tree ID #25

275 Scenic Drive

Tree Details

Latin Name:	Agonis flexuosa
Latitude:	-31.754314399964
Longitude:	115.79571399467
Tree Height (Estimated) [m]:	4
Canopy Spread [m]:	4
DBH [cm]:	14
Health:	Good
Structure:	Good
Problems:	Included bark, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2
Structural Root Zone (SRZ) [m]:	1.61
Useful Life Expectancy:	1-5 years
Retention Value:	Medium
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736394122846234282984926112620 3.jpg
09/01/2025

Swamp Mahogany Tree ID #26

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus robusta
Latitude:	-31.754382821422
Longitude:	115.79598892109
Tree Height (Estimated) [m]:	16
Canopy Spread [m]:	15
DBH [cm]:	59
Health:	Good
Structure:	Good
Problems:	Deadwood major >50, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch, Remove major deadwood
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	7.08
Structural Root Zone (SRZ) [m]:	3.18
Useful Life Expectancy:	20-40 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736395127368101745995552659844 2.jpg
09/01/2025

Illawarra Flame Tree Tree ID #27

275 Scenic Drive

Tree Details

Latin Name:	Brachychiton acerifolius
Latitude:	-31.754318961396
Longitude:	115.79597685115
Tree Height (Estimated) [m]:	5
Canopy Spread [m]:	4
DBH [cm]:	23
Health:	Good
Structure:	Fair
Problems:	Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2.76
Structural Root Zone (SRZ) [m]:	1.85
Useful Life Expectancy:	20-40 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736395502060892115491713056668.jpg
09/01/2025

River Red Gum Tree ID #28

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus camaldulensis var.camaldulensis
Latitude:	-31.754290452442
Longitude:	115.79585212843
Tree Height (Estimated) [m]:	20
Canopy Spread [m]:	18
DBH [cm]:	65
Health:	Good
Structure:	Fair
Problems:	Deadwood minor <50, Included bark, Leaning, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	7.8
Structural Root Zone (SRZ) [m]:	2.98
Useful Life Expectancy:	11-20 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736395965734521680965870147 4392.jpg
09/01/2025

Illawarra Flame Tree Tree ID #29

275 Scenic Drive

Tree Details

Latin Name:	Brachychiton acerifolius
Latitude:	-31.754144486457
Longitude:	115.79588297384
Tree Height (Estimated) [m]:	6
Canopy Spread [m]:	4
DBH [cm]:	23
Health:	Good
Structure:	Good
Problems:	Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2.76
Structural Root Zone (SRZ) [m]:	1.88
Useful Life Expectancy:	11-20 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736396291902798222964801916660 9.jpg
09/01/2025

Horsetail Sheok Tree ID #30

275 Scenic Drive

Tree Details

Latin Name:	Casuarina equisetifolia
Latitude:	-31.754073784101
Longitude:	115.79583201186
Tree Height (Estimated) [m]:	18
Canopy Spread [m]:	16
DBH [cm]:	57
Health:	Good
Structure:	Good
Problems:	Deadwood minor <50, Included bark, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	6.84
Structural Root Zone (SRZ) [m]:	2.92
Useful Life Expectancy:	11-20 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736396568708734677720080449959 9.jpg
09/01/2025

Narrow-leaved Peppermint Tree ID #31

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus nicholii
Latitude:	-31.753991678071
Longitude:	115.79548064248
Tree Height (Estimated) [m]:	12
Canopy Spread [m]:	8
DBH [cm]:	51
Health:	Dead
Structure:	Poor
Problems:	Dieback
Notes:	
Priority:	Low
Tree Work:	Remove Tree
Observation Comments:	Tree has recently died
Tree Protection Zone (TPZ) [m]:	6.12
Structural Root Zone (SRZ) [m]:	2.85
Useful Life Expectancy: 0 years	
Retention Value:	Low
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736399131218187687449626211467 2.jpg
09/01/2025

Tuart Tree ID #32
275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus gomphocephala
Latitude:	-31.753950625029
Longitude:	115.79556915538
Tree Height (Estimated) [m]:	22
Canopy Spread [m]:	20
DBH [cm]:	96
Health:	Good
Structure:	Good
Problems:	Codominant Stem, Deadwood minor <50, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	11.52
Structural Root Zone (SRZ) [m]:	3.62
Useful Life Expectancy:	40+ years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736399425461666001776961795350.jpg
09/01/2025

Narrow-leaved Peppermint Tree ID #33

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus nicholii
Latitude:	-31.753897027974
Longitude:	115.79555037992
Tree Height (Estimated) [m]:	18
Canopy Spread [m]:	6
DBH [cm]:	47
Health:	Good
Structure:	Fair
Problems:	Deadwood minor <50, Leaning, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	5.64
Structural Root Zone (SRZ) [m]:	2.63
Useful Life Expectancy:	20-40 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736399927950527841052474877043.jpg
09/01/2025

Illawarra Flame Tree Tree ID #34

275 Scenic Drive

Tree Details

Latin Name:	Brachychiton acerifolius
Latitude:	-31.754016452723
Longitude:	115.79579780265
Tree Height (Estimated) [m]:	3
Canopy Spread [m]:	2
DBH [cm]:	14
Health:	Good
Structure:	Fair
Problems:	Included bark, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2
Structural Root Zone (SRZ) [m]:	1.68
Useful Life Expectancy:	6-10 years
Retention Value:	Medium
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736400242628373649622938212238 9.jpg
09/01/2025

Horsetail Sheok Tree ID #35

275 Scenic Drive

Tree Details

Latin Name:	Casuarina equisetifolia
Latitude:	-31.75396822286
Longitude:	115.79576933726
Tree Height (Estimated) [m]:	7
Canopy Spread [m]:	3
DBH [cm]:	19
Health:	Good
Structure:	Fair
Problems:	Included bark, Leaning, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2.28
Structural Root Zone (SRZ) [m]:	2.13
Useful Life Expectancy:	20-40 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736400495912450289807246958562 8.jpg
09/01/2025

Illawarra Flame Tree Tree ID #36

275 Scenic Drive

Tree Details

Latin Name:	Brachychiton acerifolius
Latitude:	-31.753938573435
Longitude:	115.79575324401
Tree Height (Estimated) [m]:	4
Canopy Spread [m]:	4
DBH [cm]:	15
Health:	Good
Structure:	Good
Problems:	Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2
Structural Root Zone (SRZ) [m]:	1.61
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736400771415830527891309179856 5.jpg
09/01/2025

English Oak Tree ID #37

275 Scenic Drive

Tree Details

Latin Name:	Quercus robur
Latitude:	-31.753903870153
Longitude:	115.79576763885
Tree Height (Estimated) [m]:	5
Canopy Spread [m]:	5
DBH [cm]:	17
Health:	Good
Structure:	Good
Problems:	Deadwood minor <50, Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2.04
Structural Root Zone (SRZ) [m]:	1.72
Useful Life Expectancy:	20-40 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736401066493853029027108329985 6.jpg
09/01/2025

Sugar Gum Tree ID #38

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus cladocalyx
Latitude:	-31.753795535593
Longitude:	115.7956938781
Tree Height (Estimated) [m]:	24
Canopy Spread [m]:	18
DBH [cm]:	97
Health:	Good
Structure:	Fair
Problems:	Root Girdling, Deadwood minor <50, Included bark, Surface roots, Multi Crown leaders, Decayed pruning stub
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	Tree trunk has nearby Ficus tree root girdling it
Tree Protection Zone (TPZ) [m]:	11.64
Structural Root Zone (SRZ) [m]:	3.72
Useful Life Expectancy:	20-40 years
Retention Value:	
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736401338215161884039050659852 4.jpg
09/01/2025

Chinese Banyan tree Tree ID #39

275 Scenic Drive

Tree Details

Latin Name:	Ficus microcarpa
Latitude:	-31.753713429316
Longitude:	115.79565766828
Tree Height (Estimated) [m]:	20
Canopy Spread [m]:	18
DBH [cm]:	68
Health:	Good
Structure:	Fair
Problems:	Codominant Stem, Hollow, Included bark, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	8.16
Structural Root Zone (SRZ) [m]:	3.31
Useful Life Expectancy:	20-40 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736402539695295603998058327285.jpg
09/01/2025

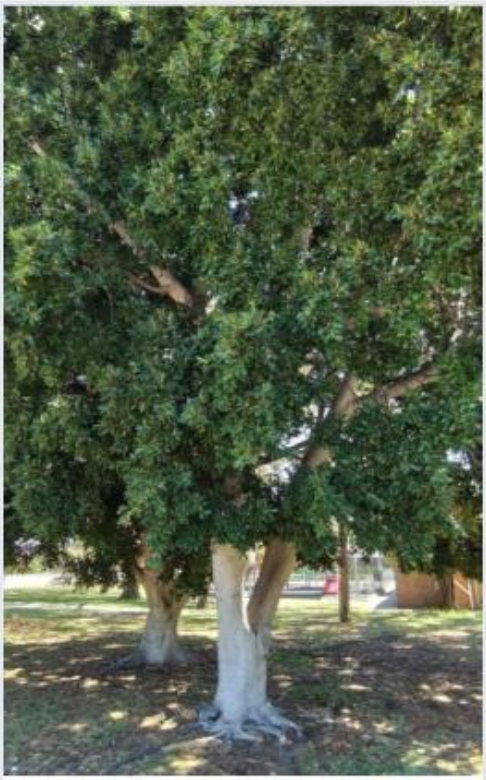
Chinese Banyan tree Tree ID #40

275 Scenic Drive

Tree Details

Latin Name:	Ficus microcarpa
Latitude:	-31.75369176237
Longitude:	115.79569656031
Tree Height (Estimated) [m]:	20
Canopy Spread [m]:	16
DBH [cm]:	62
Health:	Good
Structure:	Fair
Problems:	Codominant Stem, Hollow, Included bark, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	7.44
Structural Root Zone (SRZ) [m]:	4.38
Useful Life Expectancy:	20-40 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View



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09/01/2025

Illawarra Flame Tree Tree ID #41

275 Scenic Drive

Tree Details

Latin Name:	Brachychiton acerifolius
Latitude:	-31.753650709195
Longitude:	115.79564157502
Tree Height (Estimated) [m]:	7
Canopy Spread [m]:	4
DBH [cm]:	18
Health:	Good
Structure:	Good
Problems:	Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2.16
Structural Root Zone (SRZ) [m]:	1.75
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736403111904358452845947345899 2.jpg
09/01/2025

Swamp Mahogany Tree ID #42

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus robusta
Latitude:	-31.753821763972
Longitude:	115.79555976765
Tree Height (Estimated) [m]:	10
Canopy Spread [m]:	4
DBH [cm]:	33
Health:	Good
Structure:	Good
Problems:	Multi Crown leaders
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	3.96
Structural Root Zone (SRZ) [m]:	2.18
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

1736403432541337903398526183910 4.jpg
09/01/2025

Swamp Mahogany Tree ID #43

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus robusta
Latitude:	-31.753746499909
Longitude:	115.79549673574
Tree Height (Estimated) [m]:	14
Canopy Spread [m]:	16
DBH [cm]:	62
Health:	Good
Structure:	Good
Problems:	Deadwood major >50, Hanging branch, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Remove hanger, Remove major deadwood
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	7.44
Structural Root Zone (SRZ) [m]:	2.93
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

image.jpg
09/01/2025

Swamp Mahogany Tree ID #44

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus robusta
Latitude:	-31.753723692605
Longitude:	115.79556915538
Tree Height (Estimated) [m]:	12
Canopy Spread [m]:	8
DBH [cm]:	50
Health:	Good
Structure:	Good
Problems:	Deadwood major >50, Included bark, Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	6
Structural Root Zone (SRZ) [m]:	2.63
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

image.jpg
09/01/2025

kings park special Tree ID #45

275 Scenic Drive

Tree Details

Latin Name:	Callistemon Kings Park Special
Latitude:	-31.753618778935
Longitude:	115.7954551615
Tree Height (Estimated) [m]:	7
Canopy Spread [m]:	7
DBH [cm]:	37
Health:	Good
Structure:	Fair
Problems:	Codominant Stem, Included bark, Surface roots
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	4.44
Structural Root Zone (SRZ) [m]:	2.37
Useful Life Expectancy:	11-20 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

image.jpg
09/01/2025

Swamp Mahogany Tree ID #46

275 Scenic Drive

Tree Details

Latin Name:	Eucalyptus robusta
Latitude:	-31.753553778014
Longitude:	115.79553965108
Tree Height (Estimated) [m]:	19
Canopy Spread [m]:	13
DBH [cm]:	69
Health:	Good
Structure:	Good
Problems:	Surface roots, Multi Crown leaders
Notes:	
Priority:	Low
Tree Work:	Add Mulch
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	8.28
Structural Root Zone (SRZ) [m]:	3.2
Useful Life Expectancy:	20-40 years
Retention Value:	Very high
Risk of Harm Number:	Not applicable

Photos Street View Map View

image.jpg
09/01/2025

Illawarra Flame Tree Tree ID #47

275 Scenic Drive

Tree Details

Latin Name:	Brachychiton acerifolius
Latitude:	-31.753606234901
Longitude:	115.79566035049
Tree Height (Estimated) [m]:	5
Canopy Spread [m]:	3
DBH [cm]:	18
Health:	Good
Structure:	Good
Problems:	
Notes:	
Priority:	None
Tree Work:	No Works
Observation Comments:	
Tree Protection Zone (TPZ) [m]:	2.16
Structural Root Zone (SRZ) [m]:	1.79
Useful Life Expectancy:	20-40 years
Retention Value:	High
Risk of Harm Number:	Not applicable

Photos Street View Map View

image.jpg
09/01/2025

Bushfire Management Plan Coversheet

Site address:	Lots 39 and 40 (275) Scenic Drive Wanneroo						
Site visit:	Yes	✓	No				
Date of site visit:	Day	12	Month	December	Year	2024	
Report author or reviewer:	Mike Scott						
Not accredited		Level 1 BAL assessor		Level 2 practitioner		Level 3 practitioner	✓
BPAD accreditation number:	27795	Accreditation expiry: Month	February	Year	2026		
Bushfire management version number:	V1.0						
Bushfire management plan date:	10 February 2025						

If one or more of the following responses are yes, then these should be automatically referred to DFES.	Yes	No
Strategic planning is required to address SPP 3.7 and the Guidelines		✓
The application is a vulnerable land use	✓	

If one or more of the following responses are yes, and the decision-maker requires input from DFES, then the application can be referred.	Yes	No
The BAL rating has been calculated by a method other than Method 1 as prescribed by AS 3959		✓
An outcomes-based approach has been submitted to demonstrate compliance with the bushfire protection criteria		✓

Note: If a subdivision or development application meets all the acceptable solutions and does not otherwise trigger a referral as listed above, seeking advice from DFES on SPP 3.7 or other matters is at the discretion of the decision-maker.

The information provided within this bushfire management plan, to the best of my knowledge, is true and correct:

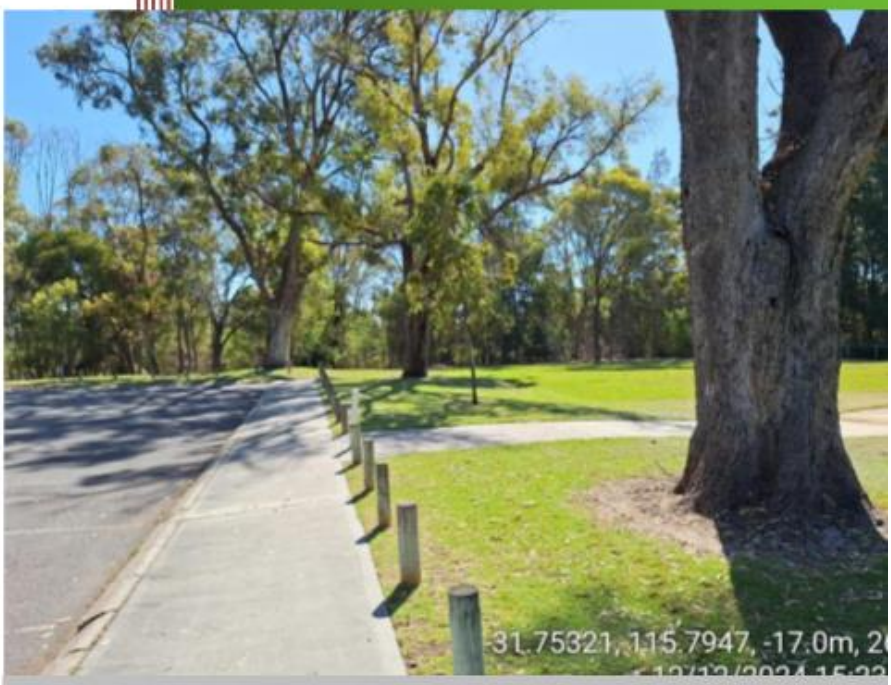
Signature of report author or reviewer:		Date	27-May-25

BUSHFIRE PRONE PLANNING

Wanneroo Recreation Centre

Bushfire Management Plan

(PREPARED FOR PLANNING APPLICATION ASSESSMENT PURPOSES)



Compiled in accordance with State Planning Policy 3.7 Bushfire and the Planning for Bushfire Guide

275 Scenic Drive,
Wanneroo
WA 6065

Shire of Wanneroo

Development Application - Vulnerable Land Uses

27 May 2025

Job Reference No: 241078

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ACN: 39 166 551 784 | ABN: 39 166 551 784

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Lee Yaw	lyaw@hcparch.com	-		☐	☐

Limitations: *The protection measures that will be implemented based on information presented in this Bushfire Management Plan are minimum requirements and they do not guarantee that buildings or infrastructure will not be damaged in a bushfire, persons injured, or fatalities occur either on the subject site or off the site while evacuating.*

This is substantially due to the unpredictable nature and behaviour of fire and fire weather conditions. Additionally, the correct implementation of the required protection measures (including bushfire resistant construction) and any other required or recommended measures, will depend upon, among other things, the ongoing actions of the landowners and/or operators over which Bushfire Prone Planning has no control.

All surveys, forecasts, projections and recommendations made in this report associated with the proposed development are made in good faith based on information available to Bushfire Prone Planning at the time. All maps included herein are indicative in nature and are not to be used for accurate calculations.

Notwithstanding anything contained therein, Bushfire Prone Planning will not, except as the law may require, be liable for any loss or other consequences whether or not due to the negligence of their consultants, their servants or agents, arising out of the services provided by their consultants.

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STATEMENT OF PURPOSE – THE 'PLANNING' BUSHFIRE MANAGEMENT PLAN

EXPLANATORY INFORMATION

SITE/USE PLANNING

This BMP is produced to present the information necessary for a planning proposal's assessment against the State's bushfire planning requirements. The developed information is to inform and assist decision-making authorities, planners, landowners/proponents and referral agencies in their implementation WA's State Planning Policy 3.7 Bushfire – and where relevant, any supplementary provisions of a local planning scheme or policy.

Policy Document Versions Applied in This BMP	State Planning Policy 3.7 Bushfire (SPP 3.7)	November 2024	Planning for Bushfire Guidelines (supporting SPP 3.7	November 2024

The Stated Intent of SPP 3.7 is to *implement effective, risk based land use planning and development which in the first instance avoids bushfire risk, but where unavoidable, manages and/or mitigates the risk to people, property and infrastructure to an acceptable level. The preservation of life and the management of bushfire impact are paramount.*

SITE OPERATIONS

This BMP is not an 'operational' BMP for property and operations management. Such a BMP would apply additional and more specific bushfire protection measures to more comprehensively reduce the level of risks associated with a bushfire event. These being the potential loss of life, injury, or destroyed or damaged assets which results in personal loss and economic loss.

However, this 'planning' BMP does establish certain responsibilities for the implementation and maintenance of the bushfire protection measures that are considered the minimum for bushfire planning decision making.

BUSHFIRE RESISTENT CONSTRUCTION

This 'planning' BMP is not required to consider the requirement to construct certain buildings, in designated bushfire prone areas, to the standard corresponding to the Bushfire Attack Level (BAL) they are subject to. This requirement is dealt with under the State Building Act 2011/Building Regulations 2012 and the referenced Building Code of Australia.

DETERMINED BUSHFIRE ATTACK LEVEL (BAL) RATINGS AND CONSTRUCTION – CAUTION!

For construction purposes a determined (not indicative) BAL rating is required to be known and a BAL Certificate produced for submission with a building application. This establishes the construction design and materials that are to be complied with in accordance with AS 3959 Construction in bushfire prone areas (as amended) and/or NS 300 NASH Standard Steel Framed Construction in Bushfire Areas (as amended).

This 'planning' BMP cannot necessarily determine a BAL rating that will apply to a future building. All variables required for that calculation may not be known at the assessed stage of planning. For example, actual location of a building footprint on a lot and/or any classified vegetation that will remain, at the time of construction, within the lot or on neighbouring lots.

This 'planning' BMP is only required to identify if a viable sized building can be located on a lot and be subject to a BAL rating not exceeding BAL-29, based on certain allowable assumptions. This is a planning requirement not a building requirement and a BAL contour map can be used to illustrate this information as an 'indicative' BAL rating.

Be aware that typically you cannot derive the determined BAL rating for a future building(s) on a specific lot from a BAL contour map (when presented in a BMP prepared for planning approval purposes). This is only possible in limited circumstances.

Planning assessment requirements are different to building assessment requirements. Refer to explanatory information above and Appendix B1 for additional information.

1 THE PLANNING PROPOSAL

1.1 Details, Plans and Maps

SUBJECT LAND AND PROPONENT (LANDOWNER)	
Address Details	275 Scenic Dr, Wanneroo WA 6065
Applicable Local Government	28 hectares
Proponent	City of Wanneroo
Entity Commissioning Production of the BMP	Hodge Collard Preston Architects

THE PLANNING PROPOSAL STAGE AND TYPE		
Strategic Planning Document	☐	N/A
Structure Plan	☐	N/A
Subdivision Application	☐	N/A
Development Application	☑	Construction of a habitable building that is subject to bushfire planning requirements.

DESCRIPTION
Proposed Sports Hub

EXPLANATORY INFORMATION

Note: A habitable building is defined in the *Planning and Development (LPS) Regulations 2015* to mean:

A permanent or temporary structure on land that:

(a) Is fully or partially enclosed; and

(b) Has at least one wall of solid material and a roof of solid material; and

(c) Is used for a purpose that involves the use of the interior of the structure by people for living, working, studying or being entertained.

The Primary Proposed Construction		
Type(s)	New Building(s)	N/A
BCA Classification	Class 9b (assembly building)	N/A

Vulnerable Land Use Determination	
Applying the definition established in SPP 3.7:	
• A land use which is designed to accommodate people who are less physically or mentally able and likely to present evacuation challenges; and/or	☐
• A land use which due to the building design or use, or the number of people accommodated, likely to present evacuation challenges; and/or	☑

• A land use which involves visitors who are unfamiliar with the surroundings.	☑
Applying the guidance established in the Guidelines, Appendix B5 in determining whether a day use is vulnerable, consideration is to be given to:	
• The location and to the number of employees and visitors on-site at any one time; and	☑
• If the decision-maker considers that the preparation of a bushfire emergency plan is warranted, then the use should be considered vulnerable.	☐
Assessment Supporting Details: The Sports Hub will have children and adults who are not familiar with the area.	

Development Type for Assessment Against the Bushfire Protection Criteria			
Development Residential	Construction of, or addition to, a habitable building, including a single house, ancillary dwelling, grouped dwelling, multiple dwelling or mixed used development. Includes an associated Class 10A building or deck (non-habitable) within 6 m of the habitable building. *[Guidelines s6]*		
Development Commercial and Industrial	Construction of or addition to, a habitable building for commercial or industrial uses. *[Guidelines s7]*		
Development Vulnerable Land Use - Commercial and Industrial	Construction, and/or use of, or additions to a habitable building for a vulnerable commercial or industrial land use. *[Guidelines s8]*		
Development Vulnerable Land Use - Certain NCC Class 9 Buildings/Uses	Construction, and/or use of, or additions to the certain NCC 2022 Class 9 buildings subject to bushfire construction provisions and considered by the Guidelines to be relevant vulnerable land uses for the purpose of bushfire planning. *[Guidelines s8]*	Class 9a health-care building	☐
		Class 9b early childhood centre and primary or secondary school	☐
		Class 9c residential care building	☐
		Class 10a building or deck within 6 m of the relevant Class 9 building.	☑
Development Vulnerable Land Use - Tourism Land Uses and Day Uses	For the construction, and/or use of, or additions to a habitable building for a vulnerable tourism land use. *[Guidelines s8]*	Tourist and visitor accommodation.	☐
		Day Uses (no overnight stay)	☑
		Outdoor Events (may include overnight camping).	☐
		Caravan Park, nature based park and/or camping ground, with or without a habitable building(s).	☐
Assessment Supporting Details: The Sports Hub is intended for day-use only.			

1 SITE PLAN - OVERALL
1 : 500

SITE PLAN OVERALL SK001 WANNEROO RECREATION SPORTS HUB
375 SCENIC DRIVE, WANNEROO WA 6065
Hodge Collard Preston ARCHITECTS

Proposed Development

Lot 39 and 40
245 and 275 Scenic Drive
Wanneroo
City of Wanneroo

------ LEGEND ------

- Subject Site
- Cadastral
- Hydrants
- 150m Assessment Area
- 100m Assessment Area

Buildings

- Existing Playground
- Existing Recreation Building
- New Sports Hub
- Driveways / Accessways

0 20 40 60 80 100

Metres

------ LOCALITY ------

AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map by: 27-05-2025

QUINNS ROCKSE BFB
PORT BFB
JOONDALUP CFRS
WANNEROO CENTRAL BFB
WANNEROO-JOONDALUP SESU
SUBJECT SITE
WANGARA CFRS
HALL RD
WANNEROO RD
NEERABUP RD
FLYNN DR
PEDERICK RD
OLD WEST RD
ZATAS RD
WANDOO RD
SKINK RD
SANDPIPER CR
NEAVES RD
KOALA RD
BARDIE RD
BULOKE RD
COOPER RD
RUSTIC GDNS
MARMION AV
CONNOLLY DR
MITCHELL FWY
JOONDALUP DR
RANCH RD
ROUSSET RD
NUMBAT RD
SILVER RD
PAYNE RD
BUSTARD RD
AMARANTE RD
ASHLEY RD
QUAIL RD
MULGA RD
KRAKE RD
CAPORN ST
FRANKLIN RD
HAWKINS RD
GALAH RD
TRICHET RD
ROSS ST
HIGH RD
EDGEWATER DR
ELLIOT RD
BADGERUP RD
GIRONDE RD
DOLLAR RD
MANUEL RD
NICHOLAS RD
STEEL RD
TRAINOR RD
KEMP ST
BUCKINGHAM DR
OCEAN REEF RD
LINDLEY RD
GNANGARA RD
COOK AV
FURNISS RD
Location Map
Lot 39 and 40
245 and 275 Scenic Drive
Wanneroo
City of Wanneroo
LEGEND
Subject Site
Cadastral
Reserves
DFES Stations (DFES-023)
Bush Fire Brigade
Career Fire Rescue Service
State Emergency Service Unit
0 1 2 km
Metres
LOCALITY
MARIGINIUP
SUBJECT SITE
WANNEROO
CRAIGIE
WANGARA
PADBURY
KINGSLEY
DARCH
AERIAL IMAGERY: Landgate/SLIP
Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map by: 06-01-2025

1.2 The Need to Apply Bushfire Planning Requirements

EXPLANATORY INFORMATION

Note: 'Development' means the development or use of any land, including (a) any demolition, erection, construction, alteration of or addition to any building or structure on the land (b) the carrying out on the land of any excavation or other works (Planning and Development Act 2005, Part1, s.4; and

'Development Site' means that part of a lot on which a building that is the subject of development stands or is to be constructed - Planning and Development (LPS) Regulations 2015, s.78A.

1.2.1 The Statutory Triggers to Lodge an Application for Planning Approval

A PLANNING APPLICATION IS TO BE SUBMITTED TO WAPC FOR DETERMINATION

The proposed development (construction and/or use) is a category for which WAPC is the decision maker rather than the local government.

Determination will be made under the Planning and Development Act 2005, its relevant subsidiary legislation and associated State Planning Policies.

As the subject site is wholly or partly within a designated bushfire prone area (Map of Bushfire Prone Areas), due regard must be given to State Planning Policy 3.7 Bushfire.

A PLANNING AND A BUILDING APPLICATION IS TO BE SUBMITTED TO THE LOCAL GOVERNMENT FOR DETERMINATION

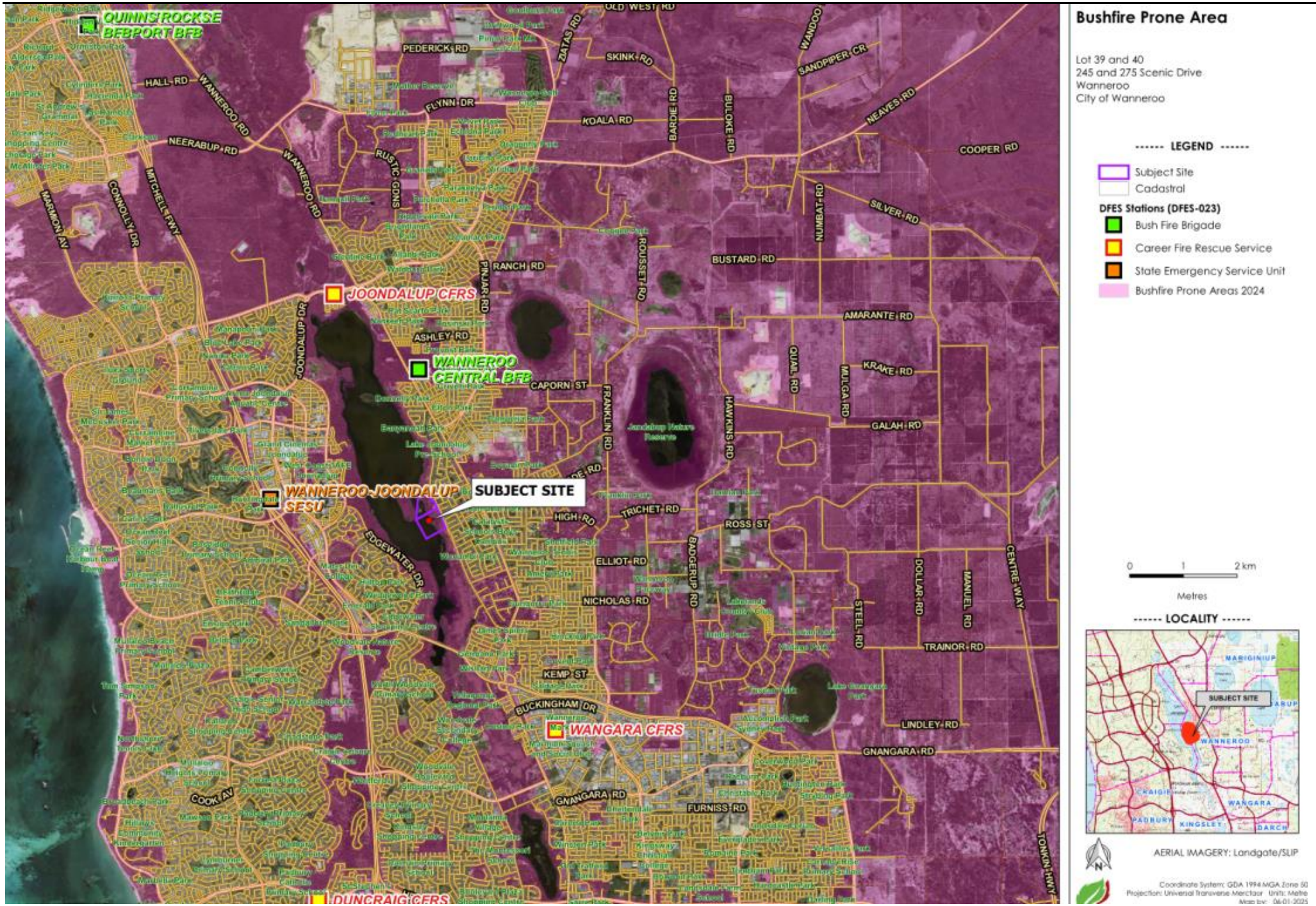
For the proposed development (construction and/or use) the local government is the decision maker. The local government determination will be made under:

- The Planning and Development Act 2005, its relevant subsidiary legislation (e.g. Regulations) and associated policies that establish the objectives and high-level guidance; and/or
- The local government's local planning scheme and associated policies that establishes objectives and guidance, specific to the jurisdiction, in addressing the requirements established by the above legislation and associated policy.

The statutory triggers to require development approval and therefore be subject to planning schemes and bushfire planning policies, are identified below.

BUILDING APPLICATION REQUIRES A BAL RATING The proposed development includes the construction of a building. It requires a building permit (under the Building Act 2011 / Building Regulations 2012) and is subject to the Building Code of Australia. A building permit application must be submitted to the local government. The proposed development is in a designated bushfire prone area (Map of Bushfire Prone Areas) and is a class of building subject to bushfire construction requirements in accordance with the Building Code of Australia (i.e. Classes 1, 2, 3 buildings and associated Class 10a, and certain Class 9 buildings). A Bushfire Attack Level (BAL) is to be calculated for the building to determine the bushfire resistant construction requirements to be applied. (and a BAL certificate provided).	-
WHERE PRE-DEVELOPMENT BUSHFIRE ATTACK LEVEL (BAL) OF RELEVANT BUILDINGS IS BAL-40 OR BAL-FZ The Deemed Provisions in Schedule 2 of the Planning and Development (Local Planning Schemes) Regulations 2015, Part 10A – Bushfire risk management, establish: 1. If the proposed development is: (a) The construction or use, or construction and use, of a single house or ancillary dwelling on a lot or lots with a total area of 1,100 m^2 or more; or (b) The construction or use, or construction and use, of	✓

(i) a habitable building other than a single house or ancillary dwelling; or (ii) a specified building; and (c) Is not the use of a dwelling as hosted or unhosted short-term rental accommodation (STRA) which is specifically excluded; and 2. The development site is wholly or partly within a designated bushfire prone area (Map of Bushfire Prone Areas), requiring the developer to have prepared a BAL assessment for the development site: then 3. Where the pre-development (before the establishment of an APZ), calculated bushfire attack level of the development site is BAL-40 or BAL-FZ, then the developer must have development approval to commence any development on the development site.	
Assessment Supporting Details: None required.	



Bushfire Prone Area

Lot 39 and 40
245 and 275 Scenic Drive
Wanneroo
City of Wanneroo

------ LEGEND ------

- Subject Site
- Cadastral

DFES Stations (DFES-023)

- Bush Fire Brigade
- Career Fire Rescue Service
- State Emergency Service Unit
- Bushfire Prone Areas 2024

0 1 2 km

Metres

------ LOCALITY ------

AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map by: 04-01-2025

1.2.2 The Need to Apply State Planning Policy 3.7 Bushfire

EXPLANATORY INFORMATION

State Planning Policy 3.7 Bushfire (SPP 3.7) provides broad objectives and high-level guidance for how planning proposals and development applications within bushfire prone areas should be considered. Implementation is supported by more detailed instructions within the *Planning for Bushfire Guidelines*.

The following table identifies the guidance that has resulted in the planning proposal being required to apply SPP 3.7.

Inconsistent Guidance: As of December 2024, there are inconsistences between the messaging within SPP 3.7, the Guidelines and the legislated 'triggers' to lodge proposals, plans and applications for planning approval (refer to the triggers identified in the previous section of this BMP).

Until amendments are progressed, the advice from WAPC/DPLH is that the decision maker should apply SPP 3.7 and the Guidelines as they deem necessary. *(Source: Explanatory Note SPP 3.7, DPLH, 25/11/24)*

Bushfire Prone Planning's Current Approach:

- To apply the guidance for requiring assessment against SPP 3.7/Guidelines in accordance with the current version (November 2024) of Planning for Bushfire Guidelines (Guidelines) in Sections 6, 7 and 8 - as it is aligned with the current version (3 Nov 2024) of the LPS Regulations 2015; unless
- It is deemed necessary by the decision maker to apply SPP 3.7/Guidelines and this is confirmed in writing to the proponent.

	SPP 3.7 AND THE GUIDELINES - ESTABLISHING THE NEED TO GIVE DUE REGARD TO SPP 3.7	APPLICABLE
1	THE LAND SUBJECT TO THE PLANNING PROPOSAL IS:	
	Designated bushfire prone and 'Area 1 (Urban)' on the Map of Bushfire Prone Areas (refer to Figure 1.4); or	No
	Designated bushfire prone and 'Area 2' on the Map of Bushfire Prone Areas (refer to Figure 1.4).	Yes
	AND	
2	THE PLANNING PROPOSAL WILL:	
	Result in the intensification of development (or land use); or	Yes
	Result in an increase of visitors, residents or employees; or	Yes
	Adversely impact or increase the bushfire risk to the subject or surrounding site(s).	No
	AND	
3	THE PLANNING PROPOSAL IS A: (Source: Guidelines s.8) This section applies to development applications in areas designated as Area 1 (Urban) or Area 2 on the Map of BPA for the construction and/or use of, or additions to: o A habitable building for: - A vulnerable commercial or industrial land use; - A vulnerable Class 9 building identified within the 2022 edition of the Building Code of Australia (BCA); or - A vulnerable tourism land use. o A caravan park, nature-based park and/or camping ground, with or without a habitable building(s).	

	Note: A development application for additions to a vulnerable land use should address the bushfire protection criteria for the entire site. It should be noted that there are no requirements under SPP 3.7 or the Guidelines to retrofit existing buildings to the appropriate bushfire construction standard, or any requirement for these existing buildings to be located within an area with a radiant heat impact not exceeding 29 kW/m^2 (BAL-29).
Assessment Supporting Details: None required.	

1.3 The Required 'Bushfire Planning' Assessments and Documents

INFORMATION PRESENTED IN THIS 'PLANNING' BMP (OR THE BEP) - PROVIDED TO ACCOMPANY THE PROPONENT'S PLANNING SUBMISSION						
The requirements are established by SPP 3.7 Part 4, Guidelines Section 1.2, 4.4, 5.5, 6.4, 7.2, and 8.3. The green highlighted column identifies the required information for the subject planning proposal.		Strategic Planning Document		Structure Plan / Subdivision Application		Development Application
Required Information	Details	Map of Bushfire Prone Areas Designation				
		Area 1 (Urban)	Area 2	Area 1 (Urban)	Area 2	Areas 1 & 2
Environment - Identification of environmental, biodiversity or conservation values on subject site(s)	Presented in the BMP. Identifies how proposal siting and design avoids and/or minimises clearing of native vegetation in applying required bushfire protection measures.	BUSHFIRE PLANNING ASSESSMENTS ARE NOT REQUIRED	✓	✓	✓	✓
BLA - Broader Landscape Assessment	Presented in the BMP. Considers subject site suitability based on exposure to bushfire hazards, potential for landscape scale bushfire, road network and suitable evacuation destinations.		✓	-	✓	-
BHL - Bushfire Hazard Level Assessment (pre-development)	Presented in the BMP. Can include detail of treatments required to achieve BHL of moderate and/or low.		✓	-	-	-
BAL - Bushfire Attack Level Assessment	Presented in the BMP in BAL contour map format as a requirement and in table format as an additional option.		-	✓	✓	-
	Presented in the BMP in table format and/or BAL contour map format – dependant on which is more efficient and effective at presenting the results (e.g. BAL contour map for multiple buildings).		-	-	-	✓
BPC - Assessment against the relevant Elements (E1 – E4) of the Bushfire Protection Criteria	Presented in the BMP. Strategic planning will necessarily focus on Element 1: Location. Can demonstrate compliance using acceptable solutions and/or an outcomes-based approach.		✓	✓ **Excluding E1**	✓	✓ **Excluding E1**
BEP - Bushfire Emergency Plan	For vulnerable land uses only. Provided as a separate document or an addition / modification to an existing BEP or site Emergency Management Plan.		-	-	-	-
LMP – Landscape Management Plan	For vulnerable land uses only. Provided as a separate document or an addendum to the BMP.					

1.4 Other Documents Relevant to Preparing the BMP

EXPLANATORY INFORMATION

This section identifies any known assessments, reports or plans that have been conducted and prepared previously, or are being prepared concurrently, and are relevant to the subject planning proposal.

They may have implications for the assessment of bushfire hazard threats and the identification and implementation of the bushfire protection measures that are established by this BMP.

RELEVANT DOCUMENTS

Document	Relevant	Exists	To Be Concurrently Developed	Copy Provided by Proponent / Developer	Title
Structure Plan	No	-	-	-	-
Bushfire Management Plan	No	-	-	-	-
Preliminary bushfire advice (may include a BAL contour map)	No	-	-	-	-
Bushfire Emergency Plan	Yes	No	-	-	-TBD
Implications for the BMP: Typically, a Bushfire Evacuation Plan (BEP) is required for a vulnerable use which, given its operational nature,could be provided at a later stage of development as required by the decision maker.					
Bushfire Risk Report	No	-	-	-	-
Environmental Asset or Vegetation Survey	No	N/A	N/A	N/A	-
Landscape Management Plan	No	-	-	-	-
The site is part of an existing management program on an established reserve. No native vegetation will be removed or planted as part of the development.					
Revegetation Plan	No	-	-	-	-

2 ENVIRONMENTAL CONSIDERATIONS – NATIVE VEGETATION

EXPLANATORY INFORMATION

Some bushfire prone areas also have high biodiversity values. SPP3.7 objective 5.4 prioritises the retention of native vegetation for biodiversity conservation, environmental protection and landscape amenity.

Clearing or modification of native vegetation for the purpose of land use or development is assessed under **State Planning Policy 2: Environment (SPP 2), State Planning Policy 2.8: Bushland policy for the Perth Metropolitan Region (SPP 2.8)** and relevant environmental legislation. A key objective of these polices is to avoid development that may result in unacceptable environmental damage.

Any 'modification' or 'clearing' of vegetation to reduce bushfire risk is considered 'clearing' under the ***Environmental Protection Act 1986*** (EP Act) and requires a clearing permit under the ***Environmental Protection (Clearing of Native Vegetation) Regulations 2004*** (Clearing Regulations) – unless for an exempt purpose.

Clearing native vegetation is an offence, unless done under a clearing permit or the clearing is for an exempt purpose. Exemptions are contained in the EP Act or are prescribed in the Clearing Regulations (note: these exemptions do not apply in environmentally sensitive areas).

The ***Department of Water and Environmental Regulation*** (DWER) is responsible for issuing 'clearing' permits and the framework for the regulation of clearing. Approvals under other legislation, from other agencies, may also be required, dependent on the type of flora or fauna present.

Local Planning Policy or Local Biodiversity Strategy: Natural areas that are not protected by the above Act and Regulation (or any other National or State Acts) may be protected by a local planning policy or local biodiversity strategy. Permission from the local government will be required for any modification or removal of native vegetation in these Local Natural Areas (LNA's). Refer to the relevant local government for detail.

For further Information refer to Native vegetation clearing permits | Western Australian Government, the Planning for Bushfire Guidelines (as amended) and the Bushfire and Vegetation Factsheet - WAPC, Dec 2021.

2.1 Biodiversity or Conservation Values Identified

EXPLANATORY INFORMATION

The required information, relevant to bushfire planning and informing the production of this BMP, is sourced and presented as indicated below.

Note that where a 'desktop' assessment has been conducted, this should not be considered a replacement for a full Environmental Impact Assessment. It is a summary of potential biodiversity or conservation values at the subject site, inferred from information contained in public available datasets and/or reports, which are only current to the date of last modification.

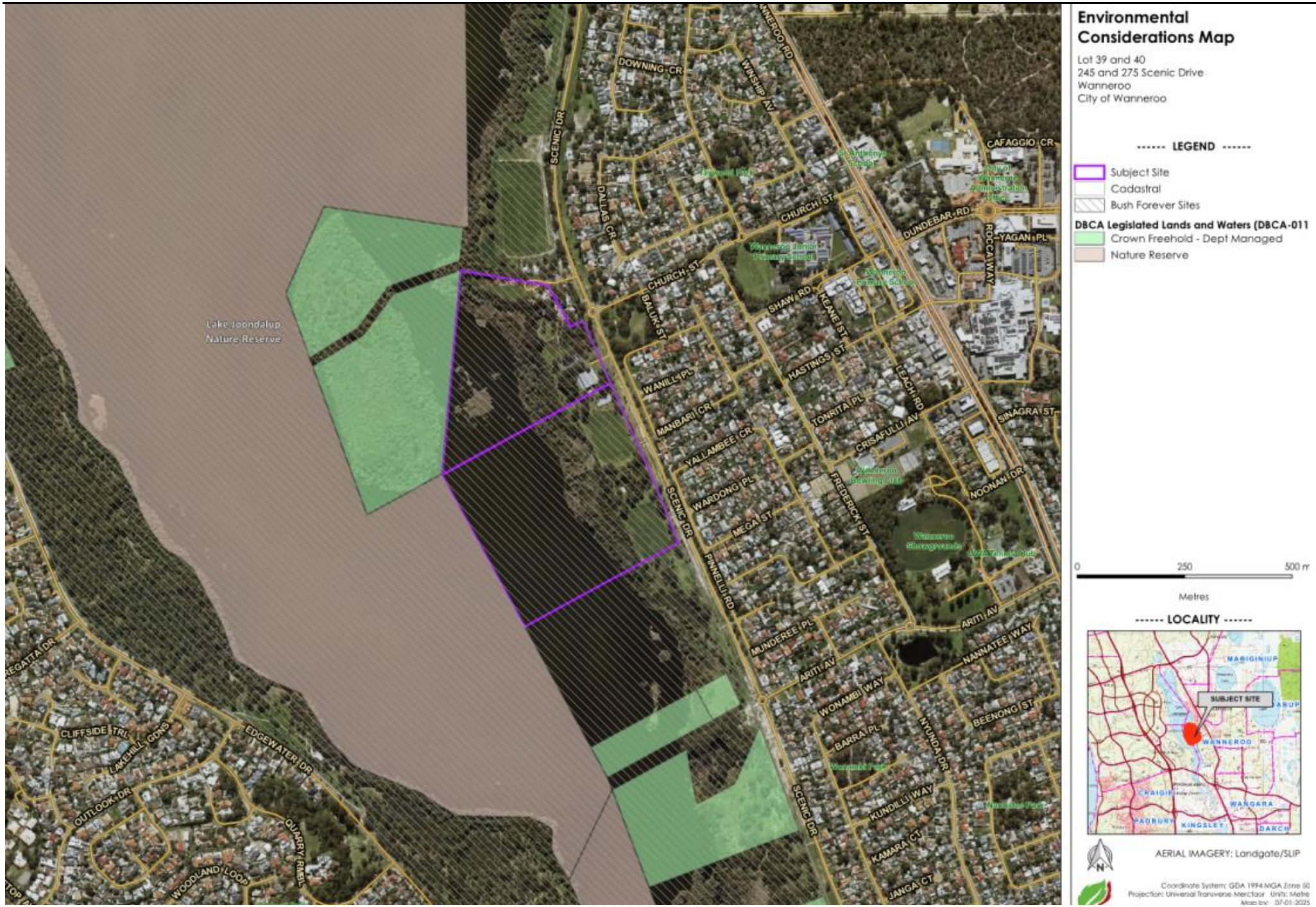
The information provided in the BMP should be considered indicative where the subject site has not previously been subject to a site-specific environmental assessment by an appropriate professional.

The required information is sourced from the environmental/planning consultant report developed for the subject site and provided to the bushfire consultant (details below when applicable). The information it contains is not repeated in this BMP as it will accompany the planning submission. The implications for the subject planning proposal and this BMP are stated below when relevant.	No Report Available / Provided
The required information is sourced by the bushfire consultant as a 'desktop' assessment from publicly available data bases and/or a local government's local biodiversity strategy or local planning strategy. When applicable, this information is presented on the following pages of this BMP.	No Report Available / Provided

IDENTIFICATION OF RELEVANT BIODIVERSITY OR CONSERVATION VALUES							
Dataset	Relevant to Subject Planning Proposal	Influence on Bushfire Threat Levels and / or Application of Bushfire Protection Measures	Information Source(s) Applied				Further Action Required by Proponent
			WA Govt. Agency Dataset (ID)		Landowner or Developer Statements	Environmental Asset or Vegetation Survey Report	
Department of Biodiversity, Conservation and Attractions (DBCA) Datasets							
Conservation Category Wetlands and Buffer (geomorphic wetlands – relevant area)	N/A	-	☒	DBCA-011	☐	☐	None
RAMSAR Sites (wetlands of international importance)	N/A	-	☒	DBCA-010	☐	☐	None
Threatened and Priority Flora	N/A	-	Restricted Scale of Data Available (security)	DBCA-036	☐	☐	None
Threatened Ecological Communities	N/A	-		DBCA-038	☐	☐	None
Legislated Lands and Waters (national/conservation parks, nature/crown reserves, state forest)	Yes	Yes - Significant	☒	DBCA-011	☐	☐	Confirm with relevant agency
Department of Planning, Lands and Heritage (DPLH) Datasets							
Bush Forever Areas 2000	Yes	Yes - Significant	☒	DPLH-019, 022 and MRS Bush Forever	☐	☐	Confirm with relevant agency
Department of Water and Environmental Resources (DWER) Datasets							
Clearing Regulations – Environmentally Sensitive Areas	N/A	-	☒	DWER-046	☐	☐	None
Swan Bioplan Regionally Significant Natural Areas 2010	N/A	-	☒	DWER-070	☐	☐	None

ADDITIONAL INFORMATION

Bushforever located on the western/riverbank boundary. It is a Class A Forest vegetation. This cannot be managed by the proponent.


Environmental Considerations Map
Lot 39 and 40
245 and 275 Scenic Drive
Wanneroo
City of Wanneroo
------ LEGEND ------
Subject Site
Cadastral
Bush Forever Sites
DBCA Legislated Lands and Waters (DBCA-011
Crown Freehold - Dept Managed
Nature Reserve
Lake Joondalup Nature Reserve
DOWNING CR
WANNEROO RD
WINSHIP AV
SCENIC DR
DALLAS CR
CHURCH ST
CAFAGGIO CR
DUNDEBAR RD
YAGAN PL
ROCCA WAY
BALUK ST
SHAW RD
KEANE ST
HASTINGS ST
WANILL PL
MANBARI CR
YALLAMBEE CR
WARDONG PL
MEGA ST
TONRITA PL
LEACH RD
CRISAFULLI AV
SINAGRA ST
NOONAN DR
FREDERICK ST
PINNELLI RD
MUNDEREE PL
ARITI AV
NANNATEE WAY
WONAMBI WAY
BARRA PL
NYUNDA DR
BEENONG ST
KUNDILLI WAY
KAMARA CT
JANGA CT
REGATTA DR
CLIFFSIDE TRL
LAKEHILL GDNS
EDGEWATER DR
OUTLOOK DR
QUARRY RMBL
WOODLAND LOOP
0 250 500 m
Metres
------ LOCALITY ------
SUBJECT SITE
MARIGINIUP
WANNEROO
CRAIGIE
WANGARA
PADBURY
KINGSLEY
DARCH
AERIAL IMAGERY: Landgate/SLIP
Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre

ADDITIONAL INFORMATION

Bush forever located on the western/riverbank boundary. It is a Class A Forest vegetation. This cannot be managed by the proponent.

2.2 Response of the Planning Proposal to Protection of Native Vegetation

The protection of native vegetation is to be prioritised by avoiding areas that would require clearing or modification of native vegetation, specifically for the purpose of bushfire mitigation (BMP Manual, November 2024 DPLH).

SOLUTIONS APPLIED TO MINIMISE NATIVE VEGETATION REMOVAL / MODIFICATION	
Clearing and/or modification of native vegetation is proposed and necessary.	Not required
Conservation Response	
The proposal reserves native vegetation for conservation, recreation or environmental protection purpose. These can include ecological linkage, local natural area, waterway, or foreshore area or wetland buffer.	Not required
Siting / Design / Construction Responses	
Reduction in the proposed intensification of land use or development potential.	Not required
Containing or clustering areas of intensification of land use to reduce clearing requirements.	Not required
Consideration of locating proposed development to have greater initial vegetation separation distances from bushfire hazards by utilising non-vegetated interfaces.	Not required
Modification or redesign of the proposed areas of intensification of land use to avoid areas with high environmental, biodiversity or conservation values.	Considered and applied
Assessment Supporting Details: Proposed buildings moved to be site in BAL-19 and avoid clearing native vegetation.	
The proposal has applied a reduction in the intensification of land use or development potential (e.g. reduced lot yield or smaller building footprints), to ensure the retention of greater areas of native vegetation while achieving the required vegetation separation distances to limit exposure to unacceptable levels of potential bushfire impact.	Not required
The proposal situates required non-vegetated elements (e.g. footpaths, paved areas, roads, parking, open drainage channels, and major services delivery installed in common corridors), between bushfire hazards and elements at risk – to effectively achieve required vegetation separation distances with less vegetation clearing and/or modification.	Not required
The proposal applies building envelopes, and these have located to minimise the requirement to clear and/or modify native vegetation.	Not required
The proposal utilises the clustering habitable buildings to reduce requirements for native vegetation clearing and/or modification.	Not required

The proposal aligns roads and pathways to work around trees and other vegetation, preserving their ecological values.	Not required
The proposal establishes requirements for the construction of building(s) to satisfy the requirements corresponding to higher BAL ratings to ensure a reduced vegetation separation distance requirement.	Not required

3 THE BUSHFIRE HAZARD – POTENTIAL IMPACT - LANDSCAPE AND VEGETATION DATA

3.1 Bushfire Attack Level (BAL) Assessment Summary (Contour Map Format)

EXPLANATORY INFORMATION

Caution! Future building works require a 'determined' BAL rating for building permit applications. When a BAL contour map is being used for planning assessment purposes, (as opposed to a building assessment purpose), the required 'determined' BAL rating typically is not able to be derived from the map (there are only limited scenarios where this is possible).

The BAL ratings identified from the map will more likely be only 'indicative' of what can be achieved – with planning compliance for this factor being achieved when BAL-29 is indicated.

Otherwise, an additional assessment of the site data for building application purposes is required, and potentially approval will need to be obtained for native vegetation modification and/or removal from the relevant authority.

Refer to Appendix B for additional information including interpretation of the BAL Contour Map.

3.1.1 BAL Determination Methodology and Location of Data and Results

LOCATION OF DATA & RESULTS					
BAL Determination Methodology		Location of the Site Assessment Data			Location of the Results
AS 3959:2018	Applied to Assessment	Classified Vegetation and Topography Map(s)	Calculation Input Variables		Assessed Bushfire Attack Levels and/or Radiant Heat Levels
			Summary Data	Detailed Data with Explanatory and Supporting Information	
Method 1 (Simplified)	Yes	Figure 3.1	Table 3.2	Appendix A1	Table 3.1 Table 3.3 / BAL Contour Map
Method 2 (Detailed)	No	N/A	N/A	N/A	

3.1.2 BAL Ratings Derived from the Contour Map

Table 3.1: Indicative and determined BAL(s) for existing and/or proposed building works.

BUSHFIRE ATTACK LEVEL FOR EXISTING/PLANNED BUILDINGS/STRUCTURE [1]		
Building/Structure Description	Indicative BAL [2]	Determined BAL [2]
Sports Hub	BAL-LOW	BAL-19

[1] The assessment data used to derive the BAL ratings is sourced from Table 3.1 and Figure 3.2 'BAL Contour Map'.

[2] Refer to the start of Section 3 for an explanation of indicative versus determined BAL ratings.

3.1.3 Site Assessment Data Applied to Construction of the BAL Contour Map(s)

RELEVANT CLASSIFIED VEGETATION	
Identification of Classified Vegetation that is Relevant to the Production of the BAL Contour Map(s)	Relevant Vegetation Map
The relevant vegetation will be all areas of classified vegetation that exist at the time of the site assessment – both within the subject site (onsite) and external to the subject site (offsite).	Figure No 3.1
The relevant vegetation for the post-development BAL contour map will be any area of classified vegetation - both within the subject site (onsite) and external to the subject site (offsite) - that will remain at the intended end state of the subject development once earthworks, any clearing and/or landscaping and re-vegetation have been completed.	Figure No 3.1
Supporting Assessment Details: None required.	

Table 3.2: Calculation inputs applied to deriving the vegetation separation distances corresponding to different levels of potential radiant heat transfer.

DATA APPLIED TO CALCULATE THE SITE SPECIFIC VEGETATION SEPARATION DISTANCES CORRESPONDING TO POTENTIAL RADIANT HEAT TRANSFER LEVELS [1]												
Applied BAL Determination Method		METHOD 1 - SIMPLIFIED PROCEDURE (AS 3959:2018 CLAUSE 2.2)										
The Calculation Input Variables - Corresponding to the Applied BAL Determination Method [2]												
Methods 1 and 2		Method 1			Method 2							
Vegetation Classification		FDI	Effective Slope		Site Slope	FFDI or GFDI	Flame Temp.	Elevation of Receiver	Flame Width	Fireline Intensity	Flame Length	Modified View Factor
			Applied Range	Measured								
Area	Class		degree range	degrees	degrees		K	metres	metres	kW/m	metres	% Reduction
1	(A) Forest	80	Downslope >0-5	d/slope 2								
3	Excluded cl 2.2.3.2(e & f)	N/A	N/A	-								

Note 1: The values used to indicate levels of potential radiant heat transfer (from fire in bushfire prone vegetation to exposed elements at risk), will be stated in subsequent tables as either as a bushfire attack level (BAL) and/or as kilowatts per square metre (kW/m2), as relevant to the application of the value and the type and use of the element at risk.

Note 2: All data and information supporting the determination of the classifications and values stated in this table is presented in Appendix A. Where the values are stated as 'default' these are either the values stated in AS 3959:2018, Table B1 or the values calculated as intermediate or final outputs through application of the equations of the AS 3959:2018 BAL determination methodology. They are not values derived by the assessor.

Table 3.3: Vegetation separation distances corresponding to the stated levels of potential radiant heat transfer.

THE CALCULATED (SITE SPECIFIC) VEGETATION SEPARATION DISTANCES CORRESPONDING TO THE STATED LEVEL OF POTENTIAL RADIANT HEAT TRANSFER (METRES) [1]									
Vegetation Classification		Maximum Radiant Heat Transfer (Flux)							
		>40 kW/m²	40 kW/m²	29 kW/m²	19 kW/m²	12.5 kW/m²	N/A [2]	10 kW/m²	2 kW/m²
		Bushfire Attack Levels							
Area	Class	BAL-FZ	BAL-40	BAL-29	BAL-19	BAL12.5	BAL-LOW		
1	(A) Forest	<20	20-<27	27-<37	37-<50	50-<100	>100		
2	Excluded cl 2.2.3.2(e & f)	N/A	N/A	N/A	N/A	N/A	N/A		

Note 1: The calculated results are illustrated in Figure 3.2 as a BAL Contour Map and/ or additional defining lines as necessary. All applied calculation input variables are presented in Table 3.2. A copy of the radiant heat calculator output for each area of classified vegetation is presented in Appendix A3.

Note 2: The BAL-LOW rating does not represent a maximum level of radiant heat transfer. The rating is applied when the separation distance is at least 100m from all classified vegetation except Grassland, for which 50m applies.

Classified Vegetation & Topography (Existing)

Lot 39 and 40
245 and 275 Scenic Drive
Wanneroo
City of Wanneroo

------ LEGEND ------

- Subject Site
- Cadastral
- Photo and Direction
- Hydrants
- Vegetation Distance (m)
- 150m Assessment Area
- 100m Assessment Area

Classified Vegetation

- Forest
- Excluded 2.2.3.2 (e and f)

Buildings

- Existing Playground
- Existing Recreation Building
- New Sports Hub

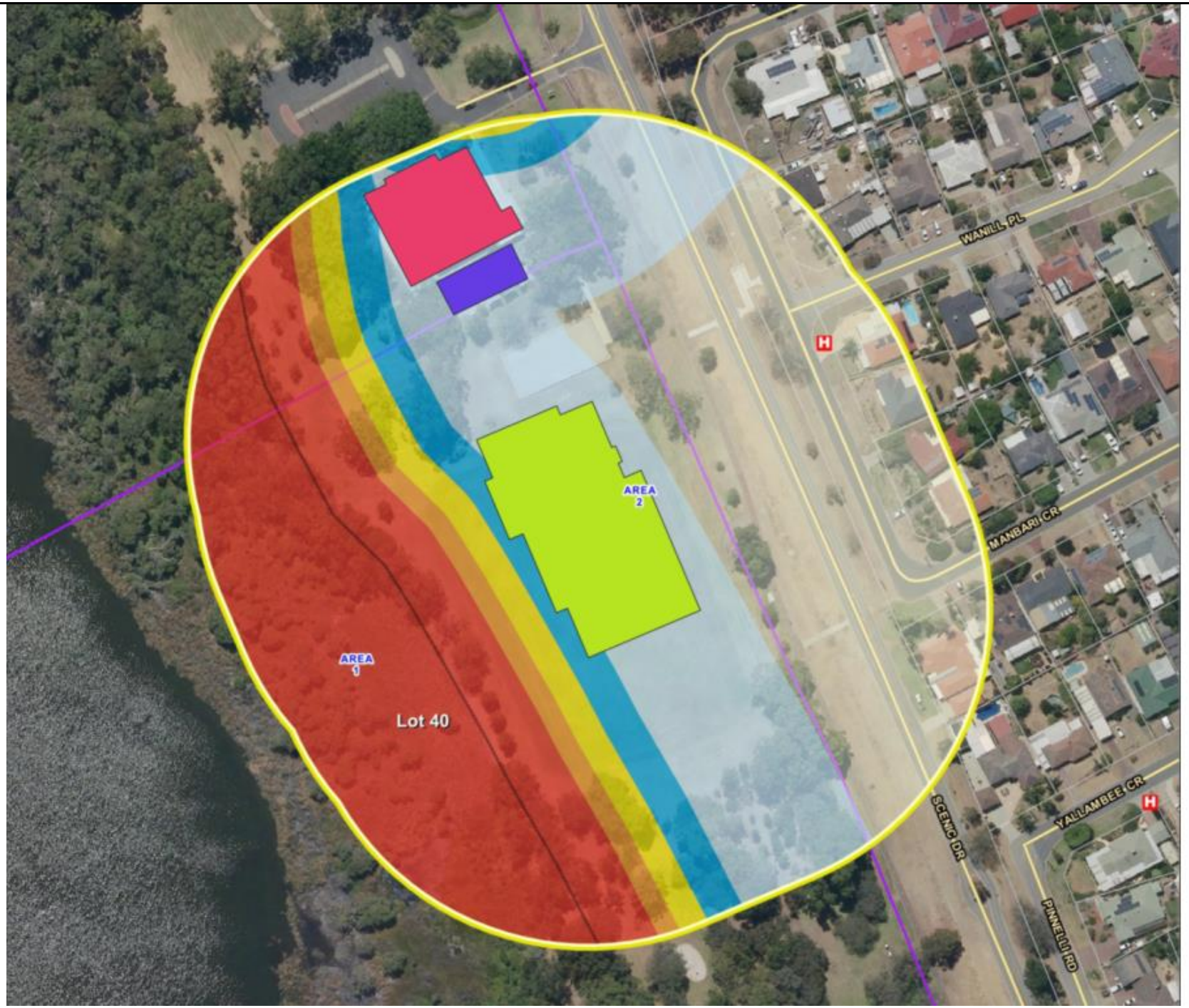
0 20 40 60 80 100

Metres

------ LOCALITY ------

AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map by: 27-05-2025



BAL Contour Map

Lot 39 and 40
245 and 275 Scenic Drive
Wanneroo
City of Wanneroo

------ LEGEND ------

- Subject Site
- Cadastral

Buildings

- Existing Playground
- Existing Recreation Building
- New Sports Hub
- Hydrants
- 100m Assessment Area

Bushfire Attack Levels

- BAL-FZ
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5
- BAL-LOW

0 10 20 30 40 50

Metres

------ LOCALITY ------

AERIAL IMAGERY: Landgate/SLIP

Coordinate System: GDA 1994 MGA Zone 50
Projection: Universal Transverse Mercator Units: Metre
Map by: 27-05-2025

4 IDENTIFICATION OF BUSHFIRE HAZARD ISSUES

The subject site is recognised as a Bushforever reserve even though there is clear distinction between areas that are currently managed to a parkland setting and unmanaged native riparian vegetation along the western/riverbank boundary, which must be classified under AS3959 as Class A Forest vegetation. This cannot be managed by the proponent. No additional revegetation of this locality is envisaged.

The site is readily accessible via Scenic Drive and the lot is reticulated therefore complying with the relevant Bushfire Prone Citeria. The building is a Class 9b assembly building and may require a Bushfire Evacuation Plan (if requested by local government).

The Broader Landscape/Environment – The Potential for Bushfire Intensification and Extreme Events	
The type of bushfire prone vegetation surrounding the proposed development. Referencing the potential levels of each bushfire threat mechanism (direct and indirect).	The western river boundary to the subject site is predominantly Class A Forest. The broader surrounding is a residential suburban which is managed.
The extent of bushfire prone vegetation surrounding the proposed development – both in area and continuity (fragmentation). Identification of conserved vegetation.	The Class A Forest within the subject site is Bush Forever. This is a continuous vegetation to the north and south.
The potential for the surrounding topography to support known dynamic fire behaviours that can lead to an extreme fire event and intensification through atmospheric interaction (pyroconvective events).	Bushfires are possible within the locality however these would only be along the Lake Joondalup edge. The broader landscape is flat or undulating terrain.
Broader Landscape Assessment - Bushfire Threat Levels Not Considered in the	
The proximity of settlements and availability of emergency services	The subject site is part of a large area of urban settlement. Wanneroo Central Bushfire Brigade is located 6 minutes from the proposed development.
BAL Assessment	
Constraints to implementing required and/or additional bushfire protection measures	None
Constraints to implementing required BPM due to Vegetation with enviro/conserve values	
Potential constraints	None

Issues to be Considered at Subsequent Planning Stages (additional assessments/documents)	
Specific land uses to be addressed	N/A
Additional assessments	N/A
Additional documents	Bushfire Evacuation Plan

5 ASSESSMENT AGAINST THE BUSHFIRE PROTECTION CRITERIA (BPC)

EXPLANATORY INFORMATION

The bushfire protection criteria (BPC) consist of five elements each focussed on a primary set of bushfire protection measures considered by the Department of Planning, Lands and Heritage / the Western Australian Planning Commission, as the most important to be considered in land use planning.

[Note: the additional primary bushfire protection measure of bushfire construction requirements that are to apply to certain classes of habitable buildings in WA (corresponding to their assessed Bushfire Attack Level) - is implemented through the process of applying the Building Code of Australia (Volumes 1 and 2 of the National Construction Code) in accordance with WA building legislation – not through any planning legislation].

The elements of the BPC are Location (applicable to strategic and structure plan/subdivision planning stages), and Siting and Design, Vehicular Access and Water Supply (applicable to all planning stages and land uses).

The BPC establish a set of acceptable solutions that are considered a 'deemed to comply' pathway to satisfying intent, objectives and outcomes of State Planning Policy 3.7 Bushfire (SPP 3.7).

When all applicable acceptable solutions cannot be met, the use of the alternative pathway of an outcomes-based approach is available. In brief, this involves the development of a merit based case, specific to the planning proposal, that potentially involves the use of innovative, alternative and or additional bushfire protection measures and addressing the level of risks associated with a bushfire event. This is then presented to the decision-maker for their discretionary decision.

The requirement to prepare a Bushfire Emergency Plan (BEP) for vulnerable land uses is an additional bushfire protection measure established by SPP 3.7. This is to be produced as a separate standalone operational document. However, some requirements identified in the BEP may necessarily incorporated into this BMP and the responsibilities it creates.

5.1 Local Government Variations to Apply

EXPLANATORY INFORMATION

1. Local governments may add to or modify the acceptable solutions contained within the Guidelines, through regional or local variations that form part of a local planning strategy and/or local planning scheme to recognise special local or regional circumstances that reinforce the SPP 3.7 objectives and outcomes (via a scheme amendment or special control area).

   This could include acceptable solutions that address topography, vegetation or climate to the satisfaction of the Western Australian Planning Commission (WAPC) that the modifications comply with the corresponding SPP 3.7 objectives and outcomes. (Planning for Bushfire Guidelines, s. 3.4, 2024).

2. Under the relevant state legislation (LPS Regulations 2015), SPP 3.7 does not apply to hosted or unhosted short-term rental accommodation. However, the local government under its Local Planning framework (i.e. Strategy / Scheme and Policy as applicable), may require that certain bushfire protection measures or variations to the measures (the bushfire protection criteria), established by SPP 3.7 and the Guidelines, are to be applied.

Endorsed regional or local variations to the acceptable solutions apply to the assessments against the Bushfire Protection Criteria for the planning proposal?	No
The proposed land use for hosted or unhosted short-term rental accommodation, and the local government requires certain bushfire protection measures, contained within the BPC, to be applied, that under the LPS Regulations 2015, would otherwise not be required?	No

5.2 Assessment Summary

HOW THE REQUIRED BUSHFIRE PLANNING OUTCOMES OF SPP 3.7 ARE ACHIEVED FOR THE PLANNING PROPOSAL		
DEVELOPMENT – VULNERABLE TOURISM LAND USES AND DAY USES		
The Bushfire Protection Criteria (BPC) Elements and Acceptable Solutions	Compliance Pathway Applied and Assessment Outcome	
	Deemed to Comply	Outcomes-Based Approach
	Requires Compliance with All Applicable Acceptable Solutions	Expert Opinion Identifies Achieving the Required SPP 3.7 Outcomes can be Demonstrated [1]
E2: SITING AND DESIGN	Fully Compliant	Not Required
A2.1a Siting and design	Fully Compliant	
A2.1b Siting in an area with a radiant heat impact exceeding 29 kW/m² (BAL-40 or BAL-FZ)	Not Applicable	
A2.2 Asset Protection Zone (APZ)	Fully Compliant	
A2.3 Clearing of native vegetation	Fully Compliant	
A2.4 Landscape management plan	Not Applicable	
A2.5 Onsite shelter (safer building) - schools	Not Applicable	
E3: VEHICULAR ACCESS	Fully Compliant	Not Required
A3.1 Public roads	Fully Compliant	
A3.2a Access routes	Fully Compliant	
A3.2b Access routes for a day use with no overnight accommodation	Fully Compliant	
A3.3a No-through roads	Not Applicable	
A3.3b No-through roads technical requirements	Not Applicable	
A3.4 Emergency access way	Not Applicable	
A3.5 Onsite shelter	Not Applicable	
A3.6 Fire service access route	Not Applicable	
A3.7 Internal vehicular access & private driveways	Fully Compliant	
A3.8 Signage	Not Applicable	
E4: WATER SUPPLY	Fully Compliant	Not Required
A4.1 Water supply	Fully Compliant	
Note 1: Assessment details addressing the criteria established by SPP 3.7 cl. 7.5, are provided in the following section when this compliance pathway is applied.		

5.3 Assessment Statements (BPC 8: Development – Vulnerable Tourism Land Uses and Day Uses)

5.3.1 Element 2: Siting and Design

ELEMENT 2: SITING AND DESIGN (DEVELOPMENT –VULNERABLE TOURISM LAND USES AND DAY USES)	
All details of acceptable solution requirements are established in the Planning for Bushfire Guidelines (Guidelines) – WA Department of Planning, Lands and Heritage (DPLH, as amended). When relevant, the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (DPLH, 2021 Rev B), is also referenced. **EXPLANATORY INFORMATION (ADDITIONAL INFORMATION IN APPENDIX B3)** The assessment against this element of the bushfire protection criteria is a 'planning assessment' being conducted for planning approval purposes. This is not an assessment conducted for building approval purposes. The acceptable solutions and required assessment are aligned with the following bushfire planning policy guidance and to which due regard must be given: *SPP 3.7 Bushfire, Policy Objectives, cl. 5.5 states – "Prioritise the retention of native vegetation for biodiversity conservation, environmental protection and landscape amenity.* *SPP 3.7 Bushfire, Policy Outcomes, cl. 6.2 - establishes that clearing of native vegetation is to be avoided or minimised in managing or mitigating bushfire risk.* *The Guidelines, Appendix B2, B.2.1 states - "clearing or modification of native vegetation to reduce the radiant heat impact below 29 kW/m² is generally not supported."* Consequently, to comply with the relevant acceptable solutions the subject planning proposal only needs to demonstrate it will be possible to install the minimum sized asset protection zone (APZ), to the required technical requirements, surrounding a habitable or specified building, while applying the APZ location constraints and allowances established by the Guidelines. The minimum sized APZ is one that will subject buildings works to BAL-29. Consequently, deriving 'determined' BAL ratings for future building works, to be used in building permit applications, is not the intended outcome of this planning assessment (although in limited situations, this outcome can also be achieved). *Note: The dimensions of the APZ that will be the responsibility of a landowner to implement and maintain around a habitable or specified building - to align the building's bushfire resistance i.e. construction, to its level of exposure to flames, radiant heat and embers - will be those corresponding to the building's 'determined' BAL rating.* *This rating will account for the building's separation distance from classified vegetation, the type of vegetation and the slope of the ground supporting that vegetation.* *The dimensions of the 'BAL-29 APZ' identified in this BMP will not necessarily be the APZ that is to be implemented and maintained by a landowner in perpetuity.*	
	State Planning Policy 3.7 Bushfire - Outcomes to be Achieved
O2	**SPP 3.7, 6.2: Ensure siting and design solutions:** • **Manage or mitigate the bushfire risk to people, property and infrastructure; and** • **Avoid, or where unavoidable, minimises the clearing of native vegetation.**
	Statement for Compliance with Element E1 – The Deemed to Comply Pathway
E2	The planning proposal is fully compliant with all applicable acceptable solutions and therefore achieves the required outcomes of this element.
	Alternative Pathway Applied to Achieve SPP 3.7 Outcomes

	N/A

ACCEPTABLE SOLUTIONS - ASSESSMENT STATEMENTS

Check Box Legend: ☑ Relevant & met ☒ Relevant & not met ⊘ Not relevant

A2.1a Siting and design	Applicable: Yes	Compliant: Yes

☐ ☐ ⊘ BPC 8 establishes A2.1a is applicable to the planning stage and land use. However, A2.1b provides an additional acceptable solution (dealing with the same protection measure), that establishes a higher level of radiant heat impact that will be considered for planning approval, if it can be satisfactorily demonstrated that the allowable constraints apply to the subject development site. For the subject planning proposal, A2.1a is not applicable as A2.1b can be satisfactorily applied.

☑ ☐ ☐ Every habitable building achieves a radiant heat impact not exceeding 29 kW/m² (BAL-29).

Assessment Supporting Details:

A2.1b Siting in an area with a radiant heat impact exceeding 29 kW/m² (BAL-40 or BAL-FZ)	Applicable: No	Compliant: -

☐ ☐ ⊘ BPC 8 establishes A2.1b is applicable to the planning stage and land use. However, A2.1a provides an additional acceptable solution that addresses the same protection measure of siting. For the subject planning proposal, A2.1b is not applicable as A2.1a can be complied with.

☐ ☐ ⊘ The habitable building(s) or structure(s) is sited with a radiant heat impact exceeding 29 kW/m² (BAL-40 or BAL-FZ) and is unable to establish an APZ in accordance with A2.2. However, meeting **all** of the following established requirements allows consideration for approval.

☐ ☐ ⊘ There are no bushfire construction standards required under the BCA; and

☑ ☐ ☐ There are demonstrated site characteristics and/or environmental values that prevent the achievement of a radiant heat impact not exceeding 29 kW/m2 (BAL-29); and

☐ ☐ ⊘ It is acknowledged within the bushfire management plan that it is understood that in the event of a bushfire it is possible the building or structure will be damaged or destroyed; and

☐ ☐ ⊘ The vegetation immediately surrounding the building(s) or structure(s) can and will be managed as defendable space in accordance with Appendix B.2, Table 9 – APZ technical requirements.

Assessment Supporting Details:

None required.

A2.2 Asset Protection Zone (APZ)	Applicable: Yes	Compliant: Yes

Where a habitable building(s) cannot be wholly within an area with a radiant heat impact not exceeding 29 kW/m² (BAL-29) in its pre-development state, an indicative APZ is to be provided and meet the following requirements for width, location and management:

☑ ☐ ☐ **APZ Width:** The APZ, when measured from the development site (or any external wall or supporting post or column), is of sufficient size to ensure the radiant heat impact of a bushfire does not exceed 29 kW/m² (BAL-29) to any part of the building, in all circumstances.

☑ ☐ ☐	**APZ Location – Option 1:** The indicative 'Planning BAL-29' APZ can be contained solely within the boundaries of the lot.
☐ ☐ ⊘	**APZ Location – Option 2:** The indicative 'Planning BAL-29' APZ cannot be contained solely within the boundaries of the lot. However, the relevant vegetation on the adjoining land / lot(s) is, and will continue to be, on an ongoing basis in perpetuity, low threat as per: • Clause 2.2.3.2 of AS 3959 (including non-vegetated land such as a sealed or unsealed road, or a water body); or • The requirements of the Guidelines Appendix B.2, Table 9 – APZ technical requirements; or • The alternative standard in the local planning scheme (when it exists).
☐ ☐ ⊘	**APZ Management:** The APZ can and will be managed in accordance with the requirements established in the Guidelines, Appendix B.2 or the alternative standard in the gazetted local planning scheme (when it exists).

Assessment Supporting Details:

All buildings will be sited in BAL-29 or lower. Onsite Bush forever cannot be managed so all proposed buildings will have appropriate separation distances.

A2.3 Clearing of native vegetation	Applicable:	Yes	Compliant:	Yes

☐ ☐ ⊘	The development avoids, or where unavoidable, minimises the clearing of native vegetation.

Assessment Supporting Details: None required.

A2.4 Landscape management plan	Applicable:	No	Compliant:	-

☑ ☐ ☐	A landscape management plan has been prepared to identify ongoing onsite vegetation management.

Assessment Supporting Details: The Wanneroo Recreation Centre is subject to it ongoing maintenance program.

A2.5 Onsite shelter (if required)	Applicable:	No	Compliant:	-

☐ ☐ ⊘	An onsite shelter is proposed. It will comply with A3.5 Onsite shelter and can and will meet all the relevant following established requirements.
☐ ☐ ⊘	An onsite shelter building(s) is proposed for which there is sufficient separation distance from the bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 10 kW/m² (applying an assumed flame temperature of 1200 K.
☐ ☐ ⊘	The building(s) identified as suitable for onsite shelter will be designed in accordance with Building Code of Australia and the ABCB Design and Construction of Community Bushfire Refuges Handbook.
☐ ☐ ⊘	An open space area is proposed to function as an onsite shelter. There is sufficient separation distance between the open space area and the bushfire prone vegetation to avoid exposure to a radiant heat flux exceeding 2 kW/m² (applying an assumed flame temperature of 1200 K).
☐ ☐ ⊘	Pedestrian paths to any onsite shelter(s) can and will be provided and clearly signposted.

Assessment Supporting Details: None required.

5.3.2 Element 3: Vehicular Access

ELEMENT 3: VEHICULAR ACCESS (DEVELOPMENT –VULNERABLE TOURISM LAND USES AND DAY USES)	
All details of acceptable solution requirements are established in the Planning for Bushfire Guidelines (Guidelines) – WA Department of Planning, Lands and Heritage (DPLH, as amended). When relevant, the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (DPLH, 2021 Rev B), is also referenced. The technical construction requirements for access types and components are established in the Guidelines Appendix B.3, Table 10 (certain information is copied and presented in Appendix C of this BMP). The local government will advise the proponent where different requirements are to apply and when any additional specifications such as those for signage and gates are to apply. These are included in the appendix if requested by the local government.	
O3	State Planning Policy 3.7 Bushfire - Outcomes to be Achieved
	SPP 3.7, 6.3: Ensure the design and capacity of vehicular access and egress provide: • **For efficient and effective evacuation to a suitable destination(s); and/or** • **As a contingency measure for vulnerable land uses, an on-site shelter, where demonstrated appropriate, as a last resort option.**
E3	Statement for Compliance with Element E1 – The Deemed to Comply Pathway
	The planning proposal is fully compliant with all applicable acceptable solutions and therefore achieves the required outcomes of this element.
	Alternative Pathway Applied to Achieve SPP 3.7 Outcomes
	N/A

ACCEPTABLE SOLUTIONS - ASSESSMENT STATEMENTS			
Check Box Legend:	☑ Relevant & met	☒ Relevant & not met	⊘ Not relevant
A3.1 Public roads	Applicable: Yes	Compliant: Yes	
☑ ☐ ☐	Public roads meet the technical requirements for minimum vertical clearance (4.5 metres) and minimum weight capacity (15 tonnes - includes bridges, culverts).		
☐ ☐ ⊘	Public roads meet the technical requirement recommended in the Guidelines in Appendix B3, B3.1 for a minimum horizontal clearance of 6 metres.		
☐ ☐ ⊘	Public road technical requirements for minimum horizontal clearance, gradients and curves should be in accordance with the class of road as specified in the Public Works Engineering Australasia (IPWEA) subdivision guidelines, Liveable Neighbourhoods, Austroads Standards, any applicable or relevant Main Roads standards, supplements, policies and any applicable or relevant local government standards or policies. The applicable class(s) of road and their technical requirements have been confirmed with the relevant local government/Main Roads WA. These can and will be complied with.		
Assessment Supporting Details: None required.			

A3.2a Access routes	Applicable:	Yes	Compliant:	Yes

☐ ☐ ⊘	BPC 8 establishes A3.2a is applicable to the planning stage and use. However, the subject planning proposal is for a day use and will not provide any overnight accommodation. Therefore, A3.2b is the applicable acceptable solution for access routes and A3.2a is not applicable.
☐ ☐ ⊘	Subject site is in Area 1 (Urban) (Map of BPA). Public road access, with all-weather surfaces, is to be provided to at least one suitable destination.
☑ ☐ ☐	Subject site is in Area 2 (Map of BPA). Public road access, with all-weather surfaces, is provided in two different directions, to at least two different suitable destinations.

Assessment Supporting Details: Wanneroo Recreation Centre is serviced by Scenic Drive which provides appropriate access and egress.

A3.2b Access routes for a day use with no overnight accommodation	Applicable:	Yes	Compliant:	Yes

☐ ☐ ⊘	BPC 8 establishes A3.2b is applicable to the planning stage. However, A3.2b is not applicable to the subject planning proposal as it will provide overnight accommodation.
☐ ☐ ⊘	Subject site is in Area 1 (Map of BPA). Public road access, with all-weather surfaces, is to be provided in one direction to a single suitable destination.
☑ ☐ ☐	Subject site is in Area 2 (Map of BPA). Public road access, with all-weather surfaces, is to be provided in two different directions, to at least two different suitable destinations.
☐ ☐ ⊘	Subject site is in Area 2 (Map of BPA). Public road access, with all-weather surfaces, is provided in one direction to a single suitable destination and can be considered an acceptable solution as the following established requirements can be met:
☐ ☐ ⊘	It is demonstrated that secondary access (including an emergency access way), cannot be provided due to site constraints; and
☑ ☐ ☐	The tourism land use / day use is within a residential built out area; or
☐ ☐ ⊘	The required Bushfire Emergency Plan (BEP) plan provides for: • Closure during days forecasted to be an extreme or catastrophic fire danger rating and a total fire ban; and • For the early evacuation of patrons and staff; or
☐ ☐ ⊘	The required Bushfire Emergency Plan (BEP) provides for non-operation during the bushfire season.

Assessment Supporting Details: Wanneroo Recreation Centre is serviced by Scenic Drive which provides appropriate access and egress.

A3.3a No-Through Roads	Applicable:	No	Compliant:	-

☐ ☐ ⊘	BPC 8 establishes A3.3a is applicable to the planning stage and land use. However, as the subject site is in Area 1 (Urban) (Map of BPA), for which there is no limitation on no-through road lengths, A3.3a is not applicable to the subject planning proposal.

☑ ☐ ☐	BPC 8 establishes A3.3a is applicable to the planning stage and land use. However, access to the subject site is via a private driveway from a public road with two-way access. Vehicular access to the site does not have a no-through road component. Therefore, A3.3a is not applicable to the subject planning proposal.
☐ ☐ ⊘	BPC 8 establishes A3.3a is applicable to the planning stage and land use. However, the subject planning proposal is for a day use with no overnight accommodation which results in A3.2b being the applicable access route acceptable solution. This dictates whether A3.3a is applicable to the subject planning proposal or not. The subject planning proposal's assessment against A3.2b has determined it is compliant with the 'exception conditions', and a single suitable destination can be considered an acceptable solution. Consequently, no limitation is being enforced on the access route length to the suitable destination and therefore A3.3a is not applicable to the subject planning proposal. *(Refer to Section 4 'Identified Bushfire Planning Issues' for additional information, to inform the decision maker, regarding the single access route and the nature of factors that will contribute to levels of risks associated with a bushfire event, to persons using the available route).*
☐ ☐ ⊘	BPC 8 establishes A3.3a is applicable to the planning stage and land use. However, the subject planning proposal is for a day use with no overnight accommodation which results in A3.2b being the applicable access route acceptable solution. This dictates whether A3.3a is applicable to the subject planning proposal or not. The subject planning proposal's assessment against A3.2b has determined it is unable to comply with the 'exception conditions', and public road access in two different directions to two suitable destinations is to be provided. Consequently, A3.3a is applicable to the subject planning proposal.
☐ ☐ ⊘	Subject site is in Area 2 (Map of BPA). Access to the subject site is via a no-through public road that does not exceed the established maximum of 200 metres in length from the subject site boundary to an intersection where two-way access is provided.
☐ ☐ ⊘	Subject site is in Area 2 (Map of BPA). Access to the subject site is via a no-through public road that exceeds the established maximum of 200 metres in length from the proposed lot(s) boundary to an intersection where two-way access is provided. The additional road length can be considered to satisfy the acceptable solution as the following established requirements can be met:
☐ ☐ ⊘	It is demonstrated that that an alternative access, including an emergency access way, cannot be provided due to site constraints; and
☐ ☐ ⊘	The no-through road travels towards a suitable destination; and
☐ ☐ ⊘	The balance of the no-through road that is greater than 200 metres from the subject site is: • Wholly within a residential built-out area; or • Wholly within an area designated Area 1 (Urban) on Map of BPA; or • Potentially subject to radiant heat levels from adjacent bushfire prone vegetation not exceeding 12.5 kW/m² / BAL-LOW (Guidelines Figure 29).

Assessment Supporting Details:

None required.

A3.3b No-through roads technical requirements	Applicable:	No	Compliant:	-

☑ ☐ ☐	BPC 8 establishes A3.3b is applicable to the planning stage and land use. However, the assessment for A3.3a has established that vehicular access to the site does not have a no-through road component. Therefore, A3.3b is not applicable to the subject planning proposal.
☐ ☐ ⊘	The no-through road meets the public road technical requirements for minimum vertical clearance (4.5 metres) and minimum weight capacity (15 tonnes - includes bridges, culverts).
☐ ☐ ⊘	The no-through road meets the public road technical requirement recommended in the Guidelines in Appendix B3, B3.1 for a minimum horizontal clearance of 6 metres.
☐ ☐ ⊘	The applicable class(s) of road and their technical requirements have been confirmed with the relevant local government/Main Roads WA. These can and will be complied with.
☐ ☐ ⊘	The turnaround area / head requirements (Guidelines, Figure 30) can and will be complied with.

Assessment Supporting Details: None required.

A3.4 Emergency access way	Applicable:	No	Compliant:	-

☑ ☐ ☐	BPC 8 establishes A3.4 is applicable to the planning stage and land use. However, the subject planning proposal has been assessed as either: • Compliant with A3.2, A3.3a and A3.3b; or • Compliant with A3.2, A3.4; or • Compliant with A3.2 and A3.3a and A3.3b are not applicable. Therefore, an emergency access way is not required and A3.4 is not applicable.
☐ ☐ ⊘	The requirements established for acceptable no-through road access to the subject site in A3.2 and A3.3 cannot be achieved. An emergency access way (EAW) is provided as the alternative access and can be considered as an acceptable solution, when the following established requirements are met:
☐ ☐ ⊘	It is demonstrated that site constraints prevent the requirements of A3.2 and A3.3 being met; and
☐ ☐ ⊘	The access way is no more than 500 metres in length, provides a through connection to a public road connecting to a public road network; and
☐ ☐ ⊘	The access way meets the technical requirements (Guidelines Appendix B3, Table 10) for minimum horizontal clearance (Map of BPA Area 1 (Urban) = 6 metres and Area 2 = 10 metres), minimum vertical clearance (4.5 metres), minimum weight capacity (15 tonnes - includes bridges, culverts) and minimum inner radius of road curves (8.5 metres); and
☐ ☐ ⊘	The access way meets the technical requirements (Guidelines Appendix B3, Table 10) for crossfalls and gradients for different surfaces and dips; and
☐ ☐ ⊘	The access way will be signposted and, if gated, gates will open for the whole carriageway width and remain unlocked; and
☑ ☐ ⊘	The proponent has obtained consent from the local government, that it will accept care, control and management responsibilities for the emergency access way.

Assessment Supporting Details: None required.

A3.5 Onsite shelter	Applicable:	No	Compliant:	-

☑ ☐ ☐ BPC 8 establishes A3.5 is applicable to the planning stage and land use. However, the subject planning proposal has been assessed as either:

- Compliant with A3.2, A3.3a and A3.3b; or
- Compliant with A3.2 and A3.4; or
- Compliant with A3.2, and where A3.3a, A3.3b and A3.4 have been assessed as not applicable.

Compliant two-way access has been provided; therefore, an onsite shelter is not required and A3.5 is not applicable.

☐ ☐ ⊘ The proposed development has a capacity of up to a maximum of 50 guests and employees at any one time and the requirement for compliant two-way access cannot be achieved. Consequently, an onsite shelter will be provided in accordance with A2.5.

☐ ☐ ⊘ The proposed development has a capacity of up to a maximum of 50 guests and employees at any one time and the requirement for compliant two-way access cannot be achieved and the bushfire practitioner considers an onsite shelter not necessary.

An outcomes-based approach may be prepared to determine the level of relevant risks to persons and property and whether adequate protection measures can be implemented to result in an acceptable or tolerable level of residual risk.

☐ ☐ ⊘ The proposed development has a capacity greater than 50 guests and employees at any one time, the requirement for compliant two-way access cannot be achieved and/or the bushfire practitioner considers an onsite shelter not necessary.

An outcomes-based approach may be prepared to determine the level of relevant risks to persons and property and whether adequate protection measures can be implemented to result in an acceptable or tolerable level of residual risk.

Assessment Supporting Details: None required.

A3.6 Fire service access route	Applicable:	No	Compliant:	-

☐ ☐ ⊘ BPC 8 establishes A3.6 is applicable to the planning stage and land use. However, the proposed lots only adjoin Class G Grassland (classified under AS 3959). Therefore, A3.6 is not applicable to the subject planning proposal.

☑ ☐ ☐ BPC 8 establishes A3.6 is applicable to the planning stage and land use. However, suitable access is currently available to all classified vegetation that is not Class G Grassland (under AS 3959). Therefore, A3.6 is not applicable to the subject planning proposal.

☐ ☐ ⊘ The proposed lots adjoin classified vegetation that is not Class G Grassland (classified under AS 3959. A fire service access route is provided for firefighter access where suitable access is not available to the classified vegetation that is not Class G Grassland. It can and will meet the following established requirements.

☐ ☐ ⊘ The access route is a through-route with no dead-ends, no further than 500 metres from a public road and will be signposted; and

☐ ☐ ⊘ The access route meets the technical requirements (Guidelines Appendix B3, Table 10) for minimum horizontal clearance (Map of BPA Area 1 (Urban) = 6 metres and Area 2 = 10 metres), minimum vertical

	clearance (4.5 metres), minimum weight capacity (15 tonnes - includes bridges, culverts) and minimum inner radius of road curves (8.5 metres); and
☐ ☐ ⊘	The access route meets the technical requirements (Guidelines Appendix B3, Table 10) for crossfalls and gradients for different surfaces and dips; and
☐ ☐ ⊘	When gated, gates will open the whole carriageway width and can be locked by the local government and/or the emergency services, when keys are provided for each gate; and
☐ ☐ ⊘	The proponent has obtained consent from the local government, that it will accept care, control and management responsibilities for the fire service access route (unless it is a Crown reserve managed by another entity).

Assessment Supporting Details:
None required.

A3.7 Internal vehicular access and private driveways	Applicable:	No	Compliant:	-

☑ ☐ ☐	BPC 8 establishes A3.7 is applicable to the planning stage and land use. However, the subject planning proposal does not contain vehicular access and private driveways longer than 70 metres. Therefore, A3.7 is not applicable.
☐ ☐ ⊘	There are internal vehicular access and private driveways longer than 70 metres and the subject site will meet all the following established requirements:
☐ ☐ ⊘	The private driveway meets the technical requirements (Guidelines Appendix B3, Table 10) for minimum horizontal clearance (6 metres) or where not required to comply with the Guidelines width, it meets the requirements of the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision; and
☐ ☐ ⊘	The private driveway meets the technical requirements (Guidelines Appendix B3, Table 10) for minimum vertical clearance (4.5 metres), minimum weight capacity (15 tonnes - includes bridges, culverts) and minimum inner radius of road curves (8.5 metres); and
☐ ☐ ⊘	The private driveway meets the technical requirements (Guidelines Appendix B3, Table 10) for the gradients of different surfaces and dips; and
☐ ☐ ⊘	Passing bays can and will be installed every 200 metres with a minimum length of 20 metres and a minimum additional carriageway width of 2 metres i.e. the combined carriageway width of the passing bay and constructed private driveway will be a minimum 6 metres; and
☐ ☐ ⊘	The turnaround area / head requirements (Guidelines, Figure 30) can and will be complied with.

Assessment Supporting Details: Proposed driveway will not be longer than 70m from two-way access.

A3.8 Signage	Applicable:	No	Compliant:	-

☐ ☐ ⊘	Signage can and will be provided within the subject site, advising of where each access route travels to and the distance and general information on what to do in the event of a bushfire.

Assessment Supporting Details: None required.

5.3.3 Element 4: Water Supply

ELEMENT 4: WATER SUPPLY (DEVELOPMENT –VULNERABLE TOURISM LAND USES AND DAY USES)					
All details of acceptable solution requirements are established in the Planning for Bushfire Guidelines (Guidelines) – WA Department of Planning, Lands and Heritage (DPLH, as amended). When relevant, the 'Bushfire Management Plan Guidance for the Dampier Peninsula' (DPLH, 2021 Rev B), is also referenced.					
O4	State Planning Policy 3.7 Bushfire - Outcomes to be Achieved				
	SPP 3.7, 6.4: Ensure that sufficient water is available and accessible for emergency services, to enable people, property and infrastructure to be defended from bushfire.				
E4	Statement for Compliance with Element E1 – The Deemed to Comply Pathway				
	The planning proposal is fully compliant with all applicable acceptable solutions and therefore achieves the required outcomes of this element.				
	Alternative Pathway Applied to Achieve SPP 3.7 Outcomes				
	N/A				
ACCEPTABLE SOLUTIONS - ASSESSMENT STATEMENTS					
Check Box Legend:	☑ Relevant & met	☒ Relevant & not met	⃠ Not relevant		
A4.1 Water supply			Applicable:	Yes	Compliant: Yes
☑ ☐ ⃠	Evidence is provided that a reticulated water supply, available for firefighting purposes, exists or can be provided. Hydrant connection(s) will be provided in accordance with the specifications established by the relevant water supply authority (refer also to hydrant location information in Appendix D of this BMP).				
☐ ☐ ⃠	The subject site will have a reticulated water supply but is in an area designated as Area 2 on the Map of BPA and/or the local government area has known issues with water supply or pressure. The proposed development will adopt the Guidelines recommendation to provide water supply tank(s) and fittings dedicated to firefighting purposes that satisfy the construction and design requirements established in the Guidelines, Appendix B4: Water Supply.				
☐ ☐ ⃠	The subject site is serviced by reticulated water. However, the distance from the public road (along which the fire hydrant is located) to the farthest part of the habitable building is greater than 70 metres, exceeding the reach of a hose reel. A water supply tank will be installed within the lot in accordance with the relevant requirements of Guidelines, Appendix B4: Water Supply.				
☐ ☐ ⃠	The provision of or the specifications of a reticulated water supply cannot be met. Evidence is provided that a sufficient, sustainable and accessible non-reticulated water supply, dedicated to firefighting purposes, can and will be provided in accordance with the specifications established in the Guidelines, Appendix B4: Water Supply.				
☐ ☐ ⃠	The planning proposal is for a vulnerable land use development (not camping ground). For each habitable building a water supply, dedicated to firefighting purposes, will be stored in tanks at 10,000 litres of water per 500 m^2 of floor area up to 50,000 litres in total.				

☐ ☐ ⊘	The planning proposal is for a 'camping ground' vulnerable land use development. The required water supply dedicated to firefighting purposes is to be determined at the discretion of the local government and this will be complied with. Evidence is provided of the determined requirements and is presented as an Addendum in this BMP.
☐ ☐ ⊘	The above ground water supply tank(s), dedicated to firefighting purposes (and tank stand(s) when applicable), will be constructed of non-combustible material and as necessary, will comply with AS/NZS 3500.1(as amended). This includes not using the same water supply for both domestic use and firefighting purposes. If a combined use tank(s) is to be used, it will separate the storage compartments in accordance with the provisions of the standard (i.e. internal installation of double partition walls).
Assessment Supporting Details: The subject site is reticulated and will the proposal will have access to an internal hydrant. [Refer to additional technical requirement information contained in Appendix D]	

6 RESPONSIBILITY CHECKLISTS

EXPLANATORY INFORMATION

This section of the BMP sets out the responsibilities of the relevant entity or person for:

- The initial implementation of the required bushfire protection measures and their timing; and
- The ongoing maintenance of the required bushfire protection measures to ensure their continued effectiveness.

6.1 Bushfire Protection Measures - Maintenance Checklists

6.1.1 Landowner Responsibilities

TABLE 6.4
LANDOWNER RESPONSIBILITIES – MAINTENANCE OF BUSHFIRE PROTECTION MEASURES

No.	MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established Under SPP 3.7 / Guidelines
1	Maintain the 'Required' Asset Protection Zone (APZ) around habitable buildings (and other structures as required) to satisfy: • The minimum required dimensions (i.e. separation distances form classified vegetation) that correspond to the determined BAL rating for the building(s) / structure(s); and • The required APZ technical requirements. Refer to Appendices B3 and B4 (of this bmp) for APZ technical requirements and dimension guidance.
2	Maintain private driveways within a lot to ensure surface conditions and horizontal and vertical clearances continue to comply with technical requirements established in the Guidelines Appendix B3: Vehicular access.
3	When the property changes ownership or occupancy, to assist with the ongoing maintenance of the implemented bushfire protection measures, ensure that the relevant person(s) is aware of the BMP, and the responsibilities it contains. Provide access to a copy of the BMP (Note: this BMP may be superseded by a subsequent BMP produced specially for development on a lot).
	MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established Under the Building Act 2011/ Building Regulations 2012/ Building Code of Australia
4	Ensure that builders engaged to construct the proposal are aware of the existence of this approved Bushfire Management Plan (BMP). The plan identifies that the development site is within a designated bushfire prone area. A BAL assessment report may be required to determine the applicable BAL rating. A BAL certificate will need to be issued to accompany building permit applications. Compliance with the Building Code of Australia (Volumes 1 and 2 of the National Construction Code), will require certain bushfire resistant construction requirements be applied to certain buildings in designated bushfire prone areas (i.e. Class 1, 2 and 3 and certain Class 9 buildings and associated Class 10a buildings and decks).

	The deemed to satisfy solutions that will meet the relevant bushfire performance requirements are found in AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended).
6	Maintain and repair buildings to ensure continuing compliance with the bushfire resistant construction requirements, corresponding to the BAL rating applied to the building, in accordance with AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended). In particular, ensure the minimisation of gaps and effectiveness of screening is maintained to prevent ember entry to internal spaces and combustible materials.

6.1.2 Local Government Responsibilities

TABLE 6.5 LOCAL GOVERNMENT RESPONSIBILITIES – MAINTENANCE OF BUSHFIRE PROTECTION MEASURES	
No.	MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established by the Bushfire Management Plan
1	To be aware of the potential consequences of any significant changes in the local government's management of land (including potential re-vegetation), of which they have vested control, that could have an adverse impact on the determined BAL ratings that apply to adjacent existing or future buildings and where: • The applicable 'determined' BAL ratings have been established by an existing BMP or a BAL Assessment; and • The BAL has been correctly determined with appropriate consideration of what could reasonably be expected to potentially change in the future with regards to the composition and structure of the vegetation on the local government controlled land and therefore its correct classification under AS 3959:2018 BAL determination methodology.

6.1.3 Dept. Biodiversity, Conservation and Attractions (DBCA) Responsibilities

TABLE 6.6 DBCA RESPONSIBILITIES – MAINTENANCE OF BUSHFIRE PROTECTION MEASURES	
No.	MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established by the Bushfire Management Plan
1	Within the BMP (refer to Sections 2.3.1 and/or 2.3.2 and the Addendum), an arrangement for the management of specified areas of vegetation has been established and is understood and accepted by the agency with written evidence provided in the BMP. The agency is responsible for the ongoing management of the vegetation, in perpetuity as agreed, to ensure: • It remains in a low bushfire threat state; and/or • It continues to satisfy the requirements to remain the same vegetation classification as was applied in the BMP.

6.2 Bushfire Protection Measures - Implementation Checklist

TABLE 6.1
PROPONENT/LANDOWNER RESPONSIBILITIES PRIOR TO SALE/OCCUPANCY/OPERATION

No.	IMPLEMENTATION OF BUSHFIRE PROTECTION MEASURES Measures Established Under SPP 3.7 / Guidelines
1	Establish the Asset Protection Zone (APZ) around habitable buildings (and other structures as required) that consists of: 1. Non-vegetated areas and low bushfire threat vegetation maintained in perpetuity in a low threat state by complying with the established APZ technical requirements (Guidelines Appendix B2); and 2. The required zone dimensions that are established by the required separation distances from any areas classified vegetation. These distances should in most situations correspond to either: • The determined BAL rating for a relevant building(s) / structure(s); or • The maximum acceptable level of radiant heat transfer that is to apply. This distances will account for the specific site conditions. This ensures the building's/structure's constructed bushfire resistance continues to align with its calculated potential exposure to flame and radiant heat. To inform the landowner regarding possible APZ dimensions, the following table is provided for the subject planning proposal. **IMPORTANT:** **1. REFER TO APPENDICES B3, B4 AND B5 (OF THIS BMP) FOR APZ TECHNICAL REQUIREMENTS AND DIMENSION GUIDANCE.** **2. IF NATIVE VEGETATION IS REQUIRED TO BE MODIFIED OR REMOVED, ENSURE THAT PRIOR APPROVAL HAS BEEN RECEIVED FROM THE RELEVANT AUTHORITY (REFER TO THE RELEVANT LOCAL GOVERNMENT FOR ADVICE).**
2	Construct the private driveways / internal vehicular access to comply with the technical requirements stated and/or referenced in Section 5.3 of the BMP at Element 3: Vehicular access A3.67 Internal vehicular access and private driveways or A3.7 Internal vehicular access and private driveways.
3	The development site's use stores quantities of hazardous, flammable and/or combustible materials in a quantity that does not trigger the requirement for a licence under the Dangerous Goods Safety Act 2004 or the Environmental Protection Act 1986. These must be stored in the designated storage area(s) that are compliant with the following:

INDICATIVE DISTANCES (SITE SPECIFIC) ESTABLISHING THE REQUIRED APZ DIMENSIONS [1]

Building	Vegetation Classification [2]		Minimum Metres Corresponding to Potential Bushfire Impact				
	Area / Class		BAL-29	BAL-19	BAL12.5	10 kW/m²	2 kW/m²
Sports Hub	1	(A) Forest	27	37	50	-	-
	2	Excluded cl 2.2.3.2(e & f)	-	-	-	-	-

Note 1: Will include the application of the radiant heat barrier when applicable to the proposal.
Note 2: Refer to the Vegetation and Topography Map (Figure 3.1).

	• Subject to a radiant heat impact not exceeding 29 kW/m² (BAL-29); • Consist of non-combustible construction that shields the materials to reduce their exposure to radiant heat from the bushfire to levels significantly lower than 29 kW/m², and prevents the entry of debris and embers; and • Construction of the storage area limits, to the degree necessary and practical, the escape of sources of ignition from the stored materials into bushfire prone vegetation.
4	A purchaser, occupier and/or operator of the site must be made aware of the existence of this approved BMP and provided with access to a copy and be informed of their ongoing responsibilities it contains.
5	The development is a 'vulnerable use', and if Bushfire Emergency Plan (BEP) has been produced for site operations. Complete all relevant actions contained within the 'Site Preparation Procedure'.
6	The development is a 'vulnerable use', and the requirement for an onsite shelter has been identified (building or area). Refer to the BMP at Element 2: Siting and design, A2.5 and ensure: • For a building, all referenced design and construction requirements are met; • The necessary separation distances from bushfire prone vegetation are met; and • Associated pedestrian paths are clearly signposted.
	IMPLEMENTATION OF BUSHFIRE PROTECTION MEASURES Measures Established by a Local Government's Section 33 Notice Under the Bush Fires Act 1954
7	Install the required firebreaks, providing emergency access within the lot, to the stated specifications established by the City of Wanneroo Firebreak Notice
	IMPLEMENTATION OF BUSHFIRE PROTECTION MEASURES Measures Established by the Building Code of Australia (Vol. 1 and 2 of the National Construction Code)
8	Inform builders engaged to construct dwellings/additions and/or other relevant structures on the lot of the existence of this approved Bushfire Management Plan (BMP). The BMP identifies that the development site is within a designated bushfire prone area and states the indicative (or determined) BAL rating(s) that may (or will) be applied to buildings/structures. A BAL assessment report may be required to confirm determined ratings and will be required when stated ratings are only indicative. BAL certificates will need to be produced to accompany building applications. The BMP may also establish, as a 'Required Additional Bushfire Protection Measure', that bushfire construction requirements to be applied must be those corresponding to a specified higher BAL rating. Compliance with the current Building Code of Australia (Volumes 1 and 2 of the National Construction Code), will require certain bushfire resistant construction requirements be applied to residential buildings in bushfire prone areas (i.e., Class 1, 2 and 3 and associated Class 10a buildings and decks) and certain Class 9 buildings. Other classes of buildings may also be required to comply with these construction when established by the relevant authority or if identified as a 'Required Additional Bushfire Protection Measure' bushfire protection measure within the BMP. The deemed to satisfy solutions that will meet the relevant bushfire performance requirements are found in AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended).

6.3 Bushfire Protection Measures - Maintenance Checklist

TABLE 6.2 LANDOWNER/OCCUPIER – MAINTENANCE OF BUSHFIRE PROTECTION MEASURES	
No.	MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established Under SPP 3.7 / Guidelines
1	Annually review and enact the following maintenance responsibilities established in this approved BMP for the development site prior to the bushfire season.
2	The site's use is a 'vulnerable use', and if a Bushfire Emergency Plan (BEP) should be produced for site operations. Once prepared, the landowner representative should complete all relevant actions contained within the 'Site Preparation Procedure' annually prior to the bushfire season.
3	Maintain the Asset Protection Zone (APZ) around habitable buildings (and other structures as required) that consists of: 1. Non-vegetated areas and low bushfire threat vegetation maintained in perpetuity in a low threat state by complying with the established APZ technical requirements (Guidelines Appendix B2); and 2. The required zone dimensions that are established by the required separation distances from any areas classified vegetation. These distances should in most situations correspond to either: • The determined BAL rating for a relevant building(s) / structure(s); or • The maximum acceptable level of radiant heat transfer that is to apply. This distances will account for the specific site conditions. This ensures the building's/structure's constructed bushfire resistance continues to align with its calculated potential exposure to flame and radiant heat. **IMPORTANT:** **1. REFER TO THE APPLICABLE APZ DIMENSIONS IN TABLE 6.1.** **2. REFER TO APPENDICES B3, B4 AND B5 FOR APZ TECHNICAL REQUIREMENTS AND DIMENSION GUIDANCE.**
4	Maintain the private driveways / internal vehicular access to comply with the technical requirements stated and/or referenced in Section 5.3 of the BMP at Element 3: Vehicular access, A3.1 Private driveways or A3.6 Internal vehicular access and private driveways or A3.7 Internal vehicular access and private driveways.
5	When the property changes ownership or occupancy, to assist with the ongoing maintenance of the implemented bushfire protection measures, ensure that the relevant person(s) is aware of the BMP, and the responsibilities it contains. Provide access to a copy of the BMP and the Bushfire Emergency Plan (BEP).
MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established by a Local Government's Section 33 Notice Under the Bush Fires Act 1954	
6	Maintain the required firebreaks, providing emergency access within the lot, to the stated specifications established by the City of Wanneroo Firebreak Notice.

MAINTENANCE OF BUSHFIRE PROTECTION MEASURES Measures Established by the Building Code of Australia (Vol. 1 and 2 of the National Construction Code)	
7	Prior to any future building work, inform the builder of the existence of this approved Bushfire Management Plan (BMP). The BMP identifies that the development site is within a designated bushfire prone area and states the indicative (or determined) BAL rating(s) that may (or will) be applied to buildings/structures. A BAL assessment report may be required to confirm determined ratings and will be required when stated ratings are only indicative. BAL certificates will need to be produced to accompany building applications. The BMP may also establish, as a 'Required Additional Bushfire Protection Measure', that bushfire construction requirements to be applied must be those corresponding to a specified higher BAL rating. Compliance with the current Building Code of Australia (Volumes 1 and 2 of the National Construction Code), will require certain bushfire resistant construction requirements be applied to residential buildings in bushfire prone areas (i.e., Class 1, 2 and 3 and associated Class 10a buildings and decks) and certain Class 9 buildings. Other classes of buildings may also be required to comply with these construction when established by the relevant authority or if identified as a 'Required Additional Bushfire Protection Measure' bushfire protection measure within the BMP. The deemed to satisfy solutions that will meet the relevant bushfire performance requirements are found in AS 3959 – Construction of Building in Bushfire Prone Areas (as amended) and the NASH Standard - Steel Framed Construction in Bushfire Areas (as amended).

APPENDIX A: DETAILED BAL ASSESSMENT DATA AND SUPPORTING INFORMATION

A1: BAL Assessment Inputs Common to the Method 1 and Method 2 Procedures

A1.1: FIRE DANGER INDICES (FDI/FDI/GFDI)

When using Method 1 the relevant FDI value required to be applied for each state and region is established by AS 3959:2018, Table 2.1. Each FDI value applied in Tables 2.4 – 2.7 represents both the Forest Fire Danger Index (FFDI) and a deemed equivalent for the Grassland Fire Danger Index (GFDI), as per Table B2 in Appendix B. When using Method 2, the relevant FFDI and GFDI are applied.

The values may be able to be refined within a jurisdiction, where sufficient climatological data is available and in consultation with the relevant authority.

Relevant Jurisdiction:	WA	Region:	Whole State	Method 1	Applied FDI:	80
				Method 2	Applied FFDI:	N/A
					Applied GFDI:	N/A

A1.2: VEGETATION ASSESSMENT AND CLASSIFICATION

Vegetation Types and Classification

In accordance with AS 3959:2018 Clauses 2.2.3 and C2.2.3.1, all vegetation types within 100 metres of the 'site' (defined as "the part of the allotment of land on which a building stands or is to be erected"), are identified and classified. Any vegetation more than 100 metres from the site that has influenced the classification of vegetation within 100 metres of the site, is identified and noted. The maximum excess distance is established by AS 3959: 2018 Clause 2.2.3.2 and is an additional 100 metres.

Classification is also guided by the Visual Guide for Bushfire Risk Assessment in WA (WA Department of Planning February 2016) and any relevant FPA Australia practice notes.

Modified Vegetation

The vegetation types have been assessed as they will be in their natural mature states, rather than what might be observed on the day. Vegetation destroyed or damaged by a bushfire or other natural disaster has been assessed on its expected re-generated mature state. Modified areas of vegetation can be excluded from classification if they consist of low threat vegetation (refer to Appendix B) and that any required active management can be expected to continue in perpetuity, and this can be adequately justified.

The Influence of Ground Slope

Where significant variation in effective slope exists under a consistent vegetation type, these will be delineated as separate vegetation areas to account for the difference in potential bushfire behaviour, in accordance with AS 3959:2018 Clauses 2.2.5 and C2.2.5.

THE INFLUENCE OF VEGETATION GREATER THAN 100 METRES FROM THE SUBJECT SITE	
Vegetation area(s) within 100m of the site whose classification has been influenced by the existence of bushfire prone vegetation from 100m – 200m from the site:	None
Assessment Statement:	No vegetation types exist close enough, or to a sufficient extent, within the relevant area to influence classification of vegetation within 100 metres of the subject site.

VEGETATION AREA 1						
Classification	A. FOREST					
Types Identified	Open forest A-03					
Exclusion Clause	N/A					
Effective Slope	Measured	d/slope 2 degrees	Applied Range (Method 1)	Downslope >0-5 degrees		
Foliage Cover (all layers)	30-70%	Shrub/Heath Height	>2m	Tree Height	8-12m-	
Dominant & Sub-Dominant Layers	Mixed eucalyptus species as part of remnant swamp and a lakeside reserve.					
Understorey	Tall shrubs including banksia and acacia over scattered					
Justification Comments:	Not Required.					
Post Development Assumptions:	None required.					

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VEGETATION AREA 2	
Classification	**N/A**
Exclusion Clause	2.2.3.2 (e) Non-vegetated areas and (f) Low threat vegetation - minimal fuel condition.
Justification Comments:	Areas include existing managed reserve, verge, Asset Protection Zones and accessways. Note that the portion of the reserve to the southwest has been heavily modified to only include a managed lawn or no understory. All trees within the reserve are pruned up to 2m.
Post Development Assumptions:	Areas to remain managed in perpetuity.

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PHOTO ID: 7

PHOTO ID: 8

PHOTO ID: 9	PHOTO ID: 10

A1.3: EFFECTIVE SLOPE

EXPLAINING THE ASSESSMENT METHODOLOGY APPLIED BY BUSHFIRE PRONE PLANNING

DEFINITION: Effective slope is "the slope under that classified vegetation which most influences the bushfire attack" (AS 3959:2018, Clause 1.5.11).

"The effective slope under the classified vegetation is not the same as the average slope for the land surrounding the site of the proposed building. The effective slope is that slope which most significantly influences bushfire behaviour" (AS 3959:2018, Clause CB4).

The slope is described as upslope, flat or downslope when viewed from an exposed element (e.g., building) and looking towards the vegetation. It is measured in degrees.

[Note: Additional relevant guidance provided by AS 3959:2018 and NSW RFS, Planning for Bushfire Protection (2019) is incorporated into the applied assessment methodology and is presented at the end of this explanation.]

COMPOUND SLOPES UNDER VEGETATION AND DETERMINING SLOPE SIGNIFICANCE

Non-Linear Slopes: When the slope of ground under the vegetation out to the distance to be assessed (100 m or further if necessary), is not a straight line or nearly straight line slope, then it is made up of several different slopes i.e., it is a compound slope. The different slope angles and lengths must be factored into the determination of the effective slope value to be applied. Different slopes will potentially influence the bushfire rate of spread and intensity, both increasing and decreasing it.

Significant Slope: The AS 3959:2018 bushfire attack level determination methodology, with default inputs, models a fully developed bushfire. Therefore, a 'significant' slope is one that will significantly influence bushfire behaviour. To be 'significant' the length of the slope must be 'sufficient' to support a fully developed fire on that slope. The angle of a significant slope could be the determined effective slope for the area of classified vegetation if it is the one that 'most influences the bushfire attack'.

Sufficient Slope Length: Is a slope that will, as a minimum, allow the entire flame depth (flaming zone) of a fully developed fire (100m flame width) to exist on that slope.

The expected flame depth of a fully developed bushfire is a function of the length of time the flaming phase will exist on a section of the fuel bed (the 'residence time') and the bushfire's 'rate of spread'. For a given rate of spread, longer residence times result in greater flame depths. Greater flame depths are correlated with greater flame temperatures and greater flows of radiant heat.

The primary factors that will increase the residence time are:

- Heavier fine fuel loads of grass, leaf litter, twigs, bark etc less than 6mm in width and existing within the surface and near surface layers (and elevated fuel layers when contiguous with the base layers); and
- A greater percentage of larger fine fuels within the fuel load.

The primary factors that increase the rate of spread (apart from fire weather factors), include finer fuels, drier fuels, horizonal continuity of fuel and steeper upward ground slope in the direction of fire travel.

Example values:

- Residence Time: Grassfire 5 – 15 seconds, Forest fire 25 -50 seconds.
- Rate of Spread: Grassfires of a few km/hr are considered fast moving, 5-10 km/hr is common and fastest in the order of 25km/hr. Forest fire typically recorded in metres/hour with 1-1.5 km/hr being considered fast moving and fastest in the order of 3–4 km/hr.
- Flame Depth: More typically, a few metres for grasses to tens of metres for forest fires.

An Isolated Slope: For scenarios where there is a single significant slope (based on the above criteria) additional consideration would need to be given to the time and distance consumed by a bushfire still in its 'developing' phase. This will require due consideration be given to how it is potentially ignited i.e., from a single or multiple points, as this will influence the time and distance required to fully develop. For such scenarios, a normally significant slope may not be sufficiently long. It may be necessary to determine the potential bushfire impact more accurately by

justifying the application of a lesser effective slope, or a lower threat vegetation classification, or calculating a reduced head fire width (using short fire run modelling).

Determined Effective Slope: Only a 'significant' slope can potentially be the effective slope by itself. In which case, for a defined area of classified vegetation area, the worst significant slope under that vegetation is to apply.

The table below presents Bushfire Prone Planning's considerations applied to assessing short and/or compound slopes in determining the effective slope.

Slope Length (m)	Considered a Significant Slope	Considerations in Determining the Effective Slope
< 5	No	Where these short slopes exist as part of a compound slope under an area of classified vegetation, they can be ignored as they will not influence the fire behaviour in that vegetation.
5-20	No	These slopes will have a range of influence on fire behaviour from very little to a degree of influence that must be accounted for to some extent by the determined effective slope that is applied (i.e., with a greater length apply to a greater extent). But the actual slope of these shorter slopes is likely not to be applied as it is not a 'significant' length.
20-30	Maybe	The same considerations applied to the 5-20m slope lengths should be applied here. However, more justification would need to be presented to support their assessment as not being 'significant' slopes. For these slope lengths, consideration must be given more broadly to the potential level of risks associated with a bushfire event in this location. The risk level will be a function of the bushfire hazard threat levels (direct attack mechanisms) within the immediate and broader assessment area as influenced by local topography, vegetation extents and types and the exposure and vulnerability of persons and/or buildings/structures to these threats. Higer risk levels require greater precaution meaning these slopes should be considered 'significant', and vice versa. Consider the potential for a bushfire on adjoining or nearby land be a source of ignition and/or pre-heating to vegetation on the subject slope. Consider if vegetation on the slope is likely be ignited by a single ignition point or is multipoint ignition possible from bushfire an adjoining slopes or the surrounding area. Single point ignition will require a fire to travel further before being fully developed (DFES considers less than 100m fire runs may be considered a short fire run for forest, woodland and scrub vegetation classifications, RFS NSW applies 150m). Isolated slopes of this length are less likely to be considered significant as compared to when part of a compound slope.
>30	Yes	Likely to always be a significant slope unless isolated (i.e., exists alone) – in which case, justifying the application of a lesser effective slope, or a lower threat vegetation classification, or calculating a reduced head fire width, are approaches that may need to be applied.

BPP Approach - Slope Variation Within Areas of Vegetation

When multiple 'significant' slope lengths with large differences in degrees of effective slope (or different applicable slope ranges when AS 3959:2018 Method 1 is applied), exists under a single vegetation classification, these will be delineated as separate vegetation areas of classified vegetation to account for the difference in potential bushfire behaviour and impact, in accordance with AS 3959:2018 clauses 2.2.5 and C2.2.5.

Effective Slope Variation Due to Multiple Development Sites

When the effective slope, under a single area of bushfire prone vegetation, will vary significantly relative to multiple proposed development sites (exposed elements), then the effective slopes corresponding to each of the different

locations, are separately identified. The relevant (worst case) effective slope is determined in the direction corresponding to the potential directions of fire spread towards the subject building(s).

AS 3959:2018 EFFECTIVE SLOPE DETERMINATION - GUIDANCE

The Standard presents a broad set of guidance statements that indicate the intent of deriving an effective slope value for use in calculations, rather than detailing the 'in the field' determination process. These include:

- Highlighting the importance of the value by stating "The slope of the land under the classified vegetation has a direct influence on the rate of fire spread, the severity of the fire and the ultimate level of radiant heat flux" (Clause C2.2.5). [Note: A common rule of thumb is that for every 10 degrees of upslope, a fire will double its rate of spread if moving in the direction of the prevailing wind].
- It may be necessary to consider the slope under the classified vegetation for distances greater than 100 m in order to determine the effective slope for that vegetation classification.
- "Where there is more than one slope within the classified vegetation, each slope shall be individually assessed, and the worst case Bushfire Attack Level shall apply" (Clause 2.2.5).

NSW RFS 2019, PLANNING FOR BUSHFIRE PROTECTION - APPENDIX A1.5 - ADDITIONAL DETERMINATION GUIDANCE

- "In identifying the effective slope - it may be found that there are a variety of slopes covering different distances within the vegetation. The effective slope is considered to be the slope under the vegetation which will most significantly influence the bushfire behaviour for each aspect. This is usually the steepest slope. In situations where this is not the case, the proposed approach must be justified".
- "Vegetation located closest to an asset may not necessarily be located on the effective slope".

SITE ASSESSMENT DETAILS - EXPLANATION & JUSTIFICATION

The effective slopes determined from the site assessment are recorded in Table 3.2 of this Bushfire Management Plan.

Explanation and justification of their determination is presented below.

A1.4: SEPARATION DISTANCE

Measuring

The separation distance is the distance in the horizontal plane between the receiver (building/structure or area of land being considered) and the edge of the classified vegetation (AS 3959:2018, clause 2.2.4)

The relevant parts of a building/structure from which the measurement is taken is the nearest part of an external wall or where a wall does not exist, the supporting posts or columns. Certain parts of buildings are excluded including eaves and roof overhangs.

The edge of the vegetation, for forests and woodlands, will be determined by the unmanaged understorey rather than either the canopy (drip line) or the trunk (AS 3959:2018, clause C2.2.5).

Measured Separation Distance as a Calculation Input

If a separation distance can be measured because the location of the building/structure relative to the edge of the relevant classified vegetation is known, this figure can be entered into the BAL calculation. The result is a determined BAL rating.

Assumed Separation Distance as a Calculation Input

When the building/structure location within the lot is not known, an assumed building location may be applied that would establish the closest positioning of the building/structure relative to the relevant area of vegetation.

The assumed location would be based on a factor that puts a restriction on a building location such as:

- An established setback from the boundary of a lot, such as a residential design code setback or a restrictive covenant; or
- Within an established building envelope.

The resultant BAL rating would be indicative and require later confirmation (via a Compliance Report) of the building/structure actual location relative to the vegetation to establish the determined BAL rating.

Separation Distance as a Calculation Output

With the necessary site specific assessment inputs and using the AS 3959:2018 bushfire modelling equations, the range of separation distances that will correspond to each BAL rating (each of which represents a range of radiant heat flux), can be calculated. This has application for bushfire planning scenarios such as:

- When the separation distance cannot be measured because the exact location of the exposed element (i.e., the building, structure or area), relative to classified vegetation, is yet to be determined.

  In this scenario, the required information is the identification of building locations onsite that will correspond to each BAL rating. That is, indicative BAL ratings can be derived for a variety of potential building/structure locations; or

- The separation distance is known for a given building, structure or area (and a determined BAL rating can be derived), but additional information is required regarding the exposure levels (to the transfer of radiant heat from a bushfire), of buildings or persons, that will exist at different points within the subject site.

The calculated range of separation distances corresponding to each BAL rating can be presented in a table and/or illustrated as a BAL Contour Map – whichever is determined to best fit the purpose of the assessment.

For additional information refer to the information boxes in Section 3 'Bushfire Attack Levels (BAL) - Understanding the Results and Section 3.2. 'Interpretation of the BAL Contour Map'.

SITE ASSESSMENT DETAILS - EXPLANATION & JUSTIFICATION

For the subject development/use the applicable separation distances values are derived from calculations applying the assessed site data. They are an output value, not an input value and therefore are not presented or justified in this appendix.

The derived values are presented in Section 3, Table 3.1 and illustrated as a BAL contour map in Figure 3.2.

APPENDIX B: GUIDANCE – BUSHFIRE ATTACK LEVELS AND ASSET PROTECTION ZONES

B1: Bushfire Attack Level (BAL) - Understanding the Results

UNDERSTANDING A BAL RATING

The potential transfer (flux/flow) of radiant heat from a bushfire to a receiving object is measured in kW/m². The AS 3959:2018 Bushfire Attack Level (BAL) determination methodology establishes the ranges of radiant heat flux that correspond to each bushfire attack level. These are identified in increasing levels of flux as BAL-LOW, BAL-12.5, BAL-19, BAL-29, BAL-40 and BAL-FZ.

The bushfire performance requirements for certain classes of buildings are established by the Building Code of Australia (Vol. 1 & 2 of the NCC). The BAL will establish the bushfire resistant construction requirements that are to apply in accordance with AS 3959:2018 - *Construction of buildings in bushfire prone areas* and the NASH Standard – *Steel framed construction in bushfire areas (NS 300 2021)*, whose solutions are deemed to satisfy the NCC bushfire performance requirements.

DETERMINED BAL RATINGS

A BAL can only be classed as 'determined' for an existing or future building/structure when:

1. The building/structure final design and position on the lot are known and the stated separation distance from classified bushfire prone vegetation exists and can justifiably be expected to remain in perpetuity; or
2. The building/structure will always remain subject to the same BAL regardless of:
    (a) The retention of all existing classified vegetation either onsite or offsite; and
    (b) Its design or position on the lot - including, as relevant and necessary, accounting for any regulatory or enforceable building setbacks from lot boundaries (i.e. R-codes, restrictive covenants and defined building envelopes).

A BAL Certificate <u>can</u> be issued for a determined BAL. If the BMP derives determined BAL(s), the BAL Certificate(s) required for submission with building applications can be provided, using the BMP as the supporting assessment data.

INDICATIVE AND CONDITIONAL BAL RATINGS

An indicative BAL indicates the highest BAL rating that exists for the applied set of assessment parameters (which may vary resulting in the inability to be considered 'determined').

A conditional BAL establishes the BAL rating that will be considered as a 'determined' rating once the stated required conditions are approved by the relevant authority and confirmed as being met.

The possible variables of the 'conditions' include:

- The future development sites being either identified accurately or modified; and/or
- Classified vegetation being modified or removed to establish the required vegetation separation distances.

A BAL Certificate <u>cannot</u> be issued for an indicative or conditional BAL rating.

B2: BAL Contour Map Interpretation

THE BAL CONTOUR MAP

Caution! *Future building works require a 'determined' BAL rating for building permit applications. When a BAL contour map is being used for planning assessment purposes, (as opposed to a building assessment purpose), the required 'determined' BAL rating typically is not able to be derived from the map (there are only limited scenarios where this is possible).*

The BAL ratings identified from the map will more likely be only 'indicative' of what can be achieved – with planning compliance for this factor being achieved when BAL-29 is indicated.

Otherwise, an additional assessment of the site data for building application purposes is required, and potentially approval will need to be obtained for native vegetation modification and/or removal from the relevant authority.

The Bushfire Attack Level (BAL) contour map, when used, is a diagrammatic representation of the results of the bushfire attack level assessment that has been conducted. It presents different coloured contours extending out from the different areas of classified vegetation.

Each contour represents a set range of radiant heat, corresponding to the BAL rating as defined by the AS 3959:2018 BAL determination methodology. When an exposed element (building, person or other defined element), is fully or partly located within a specific contour, it is potentially subject to the corresponding level of radiant heat transfer.

The width of each coloured BAL contour is dependent on both the BAL rating it represents, and the relevant site specific calculation inputs and will vary. It represents the minimum and maximum vegetation separation distances that correspond to each BAL rating for that site.

For post development BAL contour maps, the areas of classified vegetation applied to the production of the BAL contours, are those that will remain at the intended end state of the subject development once earthworks, clearing and/or landscaping and/or re-vegetation have been completed.

B3: The Asset Protection Zone (APZ)

THE APZ – DESCRIPTION, DIMENSION AND TECHNICAL REQUIREMENTS

DESCRIPTION AND PURPOSE

An Asset Protection Zone (APZ) is an area surrounding a habitable or specified building that is not vegetated and/or supports retained or planted vegetation that can be considered to present a low bushfire threat as a result of flammability and/or moisture content characteristics and/or minimal fuel loads (either naturally or as a result of continual maintenance).

The primary objectives of establishing an APZ are to ensure:

1. A reduction in the exposure of the building/structure to bushfire direct attack mechanisms (threats) of flame contact, radiant heat transfer and ember attack, by establishing appropriate separation from each area of classified vegetation. [The required APZ dimensions will be dependent on site specific conditions and the use of the site and are measured from the nearest part of an external wall and/or supporting posts of building parts without external walls]; and
2. A reduction in the exposure of the building/structure to bushfire indirect attack mechanisms (threats) by:
    - Preventing surface fire spreading to the building/structure;
    - Minimising the potential for tree strike; and
    - Limiting the potential for consequential fire to impact the building/structure by eliminating, reducing and/or shielding consequential fire fuels. These fuels include accumulated debris, stored combustible/flammable items and constructed combustible items. Consequential fire, typically ignited by embers, is the primary cause of building loss in a bushfire event; and
3. To provide a defendable space for firefighting activities.

DIMENSIONS

Established by the Guidelines

No APZ dimensions are established by the Planning for Bushfire Guidelines, DPLH/WAPC (as amended). The Guidelines are intended to inform the application of State bushfire planning policy. For planning approval purposes, it only needs to be demonstrated that a BAL-29 dimensioned APZ can be appropriately established, surrounding a building/structure for the specific development site conditions.

For certain vulnerable land uses, evidence of the ability to implement a larger APZ may be required to inform planning decisions. These include dimensions corresponding to radiant heat impact levels of 10 kW/m^2 and/or 2 kW/m^2 and calculated using a flame temperature of 1200 K rather than 1090 K.

Established by the 'Determined' BAL Rating

The dimensions of the APZ that will be the responsibility of a landowner to implement and maintain around a habitable or specified building - to align the building's bushfire resistance construction level, to its level of exposure to flames, radiant heat and embers - will be those corresponding to the building's 'determined' BAL rating.

This rating will account for the relevant physical characteristics of a specific site and the applicable building's separation distance from classified vegetation, the type of vegetation it is exposed to and the slope of the ground supporting that vegetation.

Variations to these dimensions (i.e. vegetation separation distances) will only exist as the result of either:

- A requirement presented within an associated Bushfire Management Plan to increase the size of the APZ as part of a required additional protection measure; or
- A directive of the relevant Local Government through their annual notice, issued under s.33 of the Bushfires Act 1954 (see below), that results in a larger dimension.

Established by the Relevant Local Government

To satisfy the local governments requirements, a required APZ dimension may be stated in the notice issued annually by the relevant local government under s.33 of the Bushfires Act 1954 (e.g. Bushfire Risk Reduction Notice or Firebreak and Hazard Reduction Notice etc).

For certain vegetation/sites, based on environmental considerations, a maximum allowable dimension may be established, typically that corresponding to a BAL-29 rating for the relevant building – which will vary in response to the site specific conditions.

The existence of any such restrictions is information that would need to be sought from the relevant local government planning department.

TECHNICAL REQUIREMENTS

Established by the Guidelines

The relevant technical requirements for an APZ are established in the Planning for Bushfire Guidelines (DPLH/WAPC) (as amended), Appendix B2: Siting and design and available online at Planning WA - SPP 3.7 Bushfire

Established by the Relevant Local Government

Refer to the notice issued annually by the relevant local government under s33 of the Bushfires Act 1954 (e.g. Bushfire Risk Reduction Notice or Firebreak and Hazard Reduction Notice etc). It may state technical requirements that vary from and/or are additional to those established by the Guidelines to be complied with. Refer to the ratepayer notice and/or the local government's website for the current version.

The local government's technical requirements may be established by their gazetted local planning scheme.

B4: BAL /APZ and Planning vs Building Approval Requirements

BAL RATINGS AND APZ DIMENSIONS - PLANNING VERSUS BUILDING APPROVAL REQUIREMENTS

Statement: It is not the purpose of this 'planning' BMP to derive a 'determined' BAL rating that will apply to an existing or future habitable or specified building to establish its bushfire resistant construction requirements in accordance with the Building Code of Australia (although in limited situations this can be done – refer to Appendix B1).

Planning Applications: To be compliant, a planning proposal must demonstrate it will be possible to install the required minimum sized Asset Protection Zone (APZ), to the required technical requirements, surrounding a habitable or specified building, while applying APZ location constraints and allowances established by the Guidelines.

The Minimum Sized APZ: Is one whose dimensions ensure the potential radiant heat impact on the relevant buildings does not exceed 29 kW/m^2 from fire in any surrounding types of classified vegetation. This is the upper limit of the range of radiant heat flux corresponding to the BAL-29 rating. The dimensions of this 'BAL-29 APZ' will vary dependent on the site specific conditions.

Building Permit Applications: Require a determined BAL rating for proposed buildings works (stated on a BAL Certificate). The lower the BAL rating the greater the size of the corresponding APZ that would need to be installed and maintained in a low bushfire threat state to ensure the building's exposure to bushfire threats continues to be matched to the bushfire resistant construction applied.

APZ Dimensions: A larger APZ, potentially requiring the modification/removal of additional native vegetation, is required to subject a building to a lower BAL rating. However, bushfire planning policy does not support such an approach as evidenced by the following guidance to which due regard must be given:

> *SPP 3.7 Bushfire, Policy Objectives, cl. 5.5 states – "Prioritise the retention of native vegetation for biodiversity conservation, environmental protection and landscape amenity.*
>
> *SPP 3.7 Bushfire, Policy Outcomes, cl. 6.2 - establishes that clearing of native vegetation is to be avoided or minimised in managing or mitigating bushfire risk.*
>
> *The Guidelines, Appendix B2, B.2.1 states "clearing or modification of native vegetation to reduce the radiant heat impact below 29 kW/m^2 is generally not supported."*

Additional Assessment and Reporting: The implication of the planning policy's guidance is if developers/landowners desire to lower the BAL rating to which future building works are subjected – by modification or removal of native vegetation greater than the BAL-29 dimensioned APZ - additional site assessment and reporting would be required to be submitted to the relevant authority for approval to modify/remove that vegetation.

Consequently, the determination of a BAL rating for building permit application purposes is likely to require a separate assessment as:

- It will potentially have implications regarding the obtaining of approvals for native vegetation modification and/or removal – the retention of which is an objective of State Planning Policy 3.7 Bushfire; and/or
- The precise location of a future building/structure within a lot and relative to any bushfire hazard may not be known at the time of producing this BMP.

Dimensions of the APZ to be Installed and Maintained by the Landowner: The dimensions of the APZ that will be the responsibility of a landowner to implement and maintain around a habitable or specified building (to align the building bushfire resistance to its level of exposure to flames, radiant heat and embers), will be those corresponding to the building's 'determined' BAL rating and the site specific conditions.

The dimensions of the 'BAL-29 APZ' identified in this BMP for planning assessment purposes, will not necessarily be the APZ that is to be implemented and maintained by a landowner in perpetuity.

B5: Vegetation Excluded from Classification – Ensure Continued Low Threat Status

MAINTAINING THE LOW THREAT STATUS OF EXCLUDED VEGETATION

When applying AS 3959:2018 BAL determination methodology, vegetation adjoining or adjacent to the subject site can be excluded from classification based on being a 'low bushfire threat'. To maintain this status, certain requirements must continue to be met in accordance with the below extract from AS3959:2018. Refer to the 'Classified Vegetation and Topography Map' for the relevant low threat areas associated with the subject site.

Determination of 'low threat' vegetation is based on factors such as - proximity to the subject site / small areas of vegetation / low flammability / higher moisture content / low fuel load.

Aside from a naturally occurring low fuel load, vegetation maintained in a minimal fuel condition through active management can be excluded. The associated key requisite is that the active management can be expected to continue in perpetuity, and this can be adequately justified.

Acceptable forms of justification typically involve supportable evidence or the existence of an enforceable mechanism. Examples of enforceable mechanisms include:

- Requirements established by a Section 33 (Bush Fires Act 1954) notice issued by a local government;
- An appropriate and enforceable agreement between relevant parties (which may involve additions to land titles); and
- For public open space or crown land, written evidence that the land manager e.g. local government or a State Government department, agrees to maintain the designated area of land in a low threat state in perpetuity.

2.2.3.2 *Exclusions—Low threat vegetation and non-vegetated areas*

The following vegetation shall be excluded from a BAL assessment:

(a) Vegetation of any type that is more than 100 m from the site.

(b) Single areas of vegetation less than 1 ha in area and not within 100 m of other areas of vegetation being classified vegetation.

(c) Multiple areas of vegetation less than 0.25 ha in area and not within 20 m of the site, or each other or of other areas of vegetation being classified vegetation.

(d) Strips of vegetation less than 20 m in width (measured perpendicular to the elevation exposed to the strip of vegetation) regardless of length and not within 20 m of the site or each other, or other areas of vegetation being classified vegetation.

(e) Non-vegetated areas, that is, areas permanently cleared of vegetation, including waterways, exposed beaches, roads, footpaths, buildings and rocky outcrops.

(f) Vegetation regarded as low threat due to factors such as flammability, moisture content or fuel load. This includes grassland managed in a minimal fuel condition, mangroves and other saline wetlands, maintained lawns, golf courses (such as playing areas and fairways), maintained public reserves and parklands, sporting fields, vineyards, orchards, banana plantations, market gardens (and other non-curing crops), cultivated gardens, commercial nurseries, nature strips and windbreaks.

NOTES:

1 Minimal fuel condition means there is insufficient fuel available to significantly increase the severity of the bushfire attack (recognizable as short-cropped grass for example, to a nominal height of 100 mm).

2 A windbreak is considered a single row of trees used as a screen or to reduce the effect of wind on the leeward side of the trees.

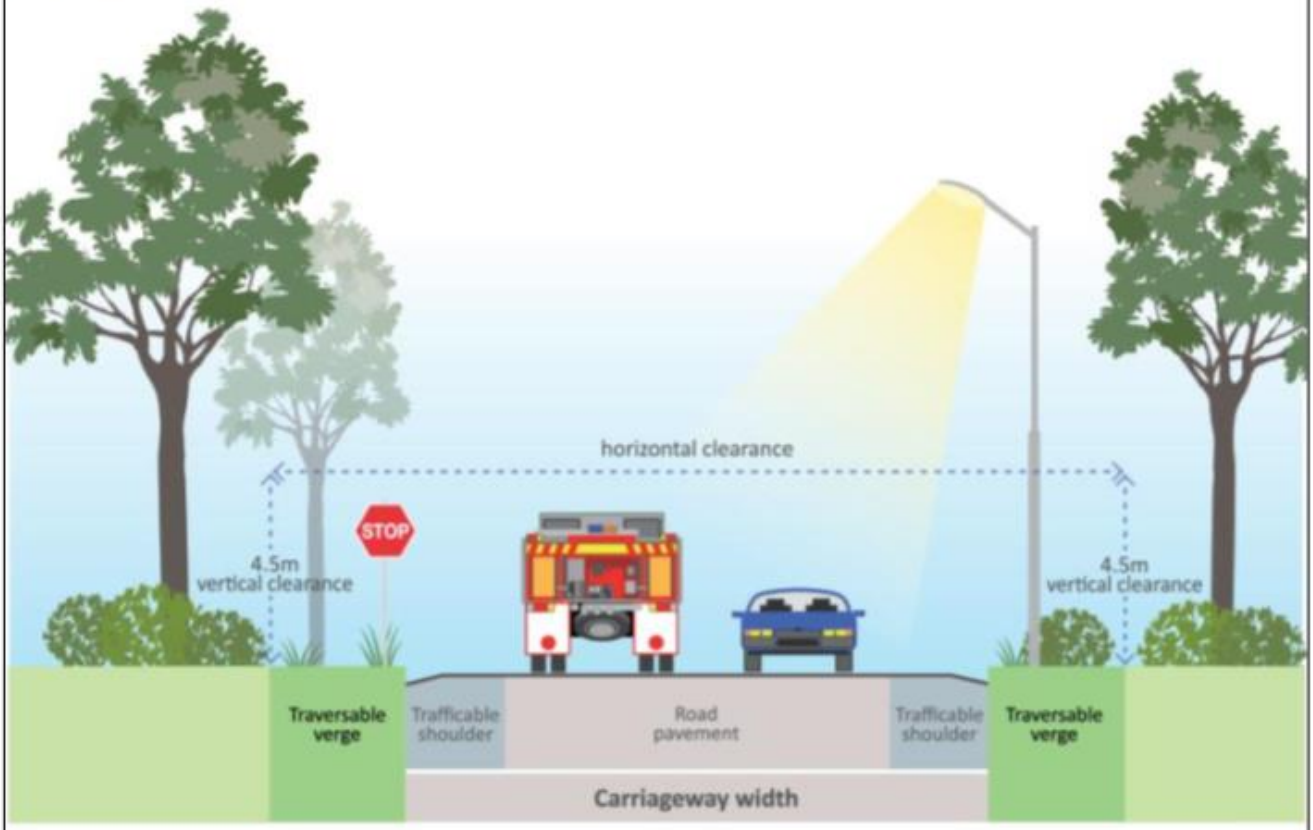
APPENDIX C: GUIDANCE - TECHNICAL REQUIREMENTS FOR VEHICULAR ACCESS

The relevant technical requirements are established in the Planning for Bushfire Guidelines (DPLH/WAPC) (as amended), Appendix B3: Vehicular access and available online at Planning WA - SPP 3.7 Bushfire

The following excerpts are presented here as a quick reference to applicable terminology and design requirements applied in the assessment against the bushfire protection criteria, Element 3: Vehicular access in this BMP.

C1: Road Component Terminology

Figure 26: Area encompassing horizontal clearance and vertical clearance



Horizontal clearance: The carriageway width (including the road pavement and trafficable shoulder) and traversable verge that provides for the movement and parking of vehicles and area required by emergency services to operate. Infrastructure and vegetation within the traversable verge should be frangible, however, non-frangible items can occur providing they do not restrict vehicular movement in the event of an emergency.

C2: Vehicular Access Technical Requirements

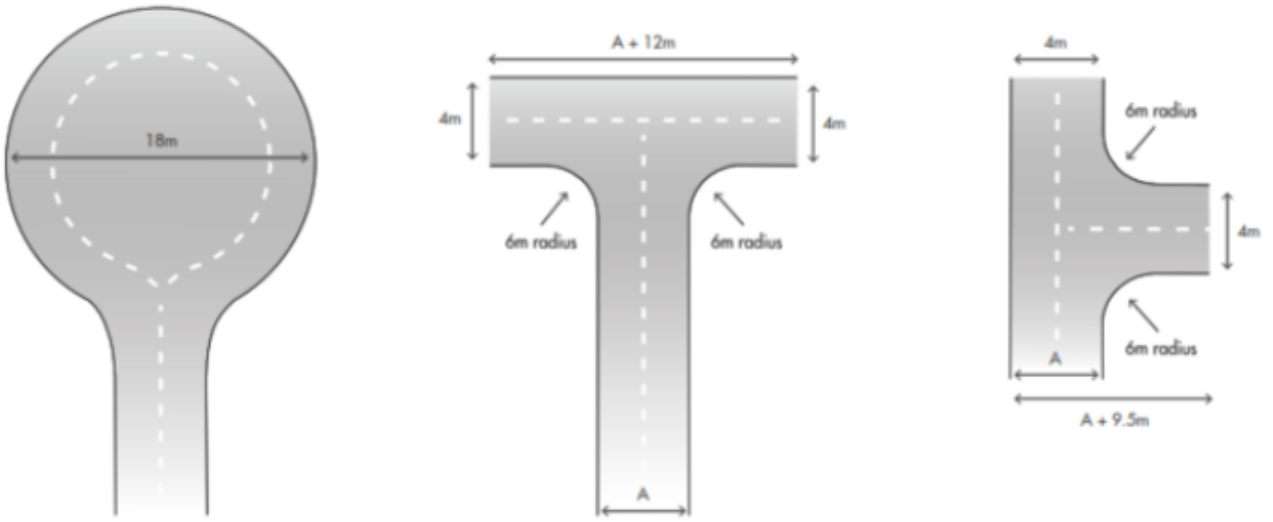
Table 10: Vehicular access technical requirements

	1		2		3		4		5	
TECHNICAL REQUIREMENTS	**PERIMETER ROADS**		**PUBLIC ROADS**		**EMERGENCY ACCESS WAY[3]**		**FIRE SERVICE ACCESS ROUTE[3]**		**BATTLE-AXE & PRIVATE DRIVEWAYS[1]**	
MAP OF BUSH FIRE PRONE AREAS DESIGNATION	**Area 2**	**Area 1**	**Area 2**	**Area 1**	**Area 2**	**Area 1**	**Area 2**	**Area 1**	**Area 2**	**Area 1**
Minimum horizontal clearance (metres)	12	8	See note 5		10	6	10	6	6	
Minimum vertical clearance (metres)	4.5									
Minimum weight capacity (tonnes)	15									
Maximum grade unsealed road[2]	See note 5		See note 5		1:10 (10% or 6°)					
Maximum grade sealed road[2,4]					1:7 (14.3% or 8°)					
Maximum average grade sealed road					1:10 (10% or 6°)					
Minimum inner radius of road curves (metres)					8.5					

Notes:

1. Driveways and battle-axe legs to comply with the Residential Design Codes and Development Control Policy 2.2 Residential Subdivision where not required to comply with the widths in this Appendix or the Guidelines.
2. Dips must have no more than a 1 in 8 (12.5% - 7.1 degrees) entry and exit angle.
3. To have crossfalls between 3 per cent and 6 per cent.
4. For sealed roads only the maximum grade of no more than 1 in 5 (20 per cent) (11.3 degrees) for no more than 50 metres is permissible, except for short constrictions to 3.5 metres for no more than 30 metres in length where an obstruction cannot be reasonably avoided or removed.
5. As outlined in the Institute of **Public Works Engineering Australasia (IPWEA) subdivision guidelines, Liveable Neighbourhoods, Austroads Standards** Main Roads standard, supplement, policy or guideline and/or any applicable or relevant local government standard or policy.

Figure 30: Design requirements for a turn-around area



urbii

Sustainable Transport. Safe Solutions

245 Scenic Drive, Wanneroo

Proposed Wanneroo Recreation Sports Hub

TRANSPORT IMPACT ASSESSMENT

Prepared for:

City of Wanneroo

November 2025

245 Scenic Drive, Wanneroo

Prepared for: City of Wanneroo
Prepared by: Paul Ghantous
Date: 16 November 2025
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1 Executive summary

This Transport Impact Assessment has been prepared for the City of Wanneroo to evaluate the transport implications of the proposed Wanneroo Recreation Sports Hub at 245 Scenic Drive, Wanneroo.

The development will expand the existing recreation precinct by delivering a modern indoor sports and community facility supported by new onsite parking, an internal bus drop-off zone, improved pedestrian links and upgraded access arrangements to Scenic Drive.

Scenic Drive operates as a low-volume Local Distributor with a posted speed limit of 50 km/h and currently accommodates around 901 vehicles per day on weekends, with peak hour traffic volumes of 116 vehicles per hour.

The corridor includes a high-quality shared path and multiple formal pedestrian refuge crossings, and crash data confirms a safe operating environment with no reported incidents over the past five years.

Traffic generation for the proposed Sports Hub has been derived from two weeks of survey data collected at the existing Wanneroo Recreation Centre, normalised against floor area to produce a locally calibrated rate of 5.1 vehicle trips per 100 m². Applying this rate to the proposed 3,706 m² facility results in an estimated peak demand of 189 vehicles per hour, increasing total precinct traffic to 264 peak-hour movements when combined with the existing centre.

Forecasting using the City's population growth rate of 2.69% indicates that future traffic volumes on Scenic Drive will remain well within the capacity of a two-lane distributor road. SIDRA modelling demonstrates that both proposed crossovers will continue to operate at Level of Service A with minimal delay or queuing under 2037 post-development conditions.

Sightline assessments confirm compliance with Austroads requirements for both pedestrian crossing and stopping sight distance, noting that five on-street bays between the crossovers should be removed to maintain clear sightlines.

Parking analysis shows that the development will provide 183 precinct parking bays, including the existing Recreation Centre supply, against a peak forecast demand of 149 bays, resulting in an efficient utilisation rate of approximately 81%, with sufficient residual capacity to accommodate natural variations associated with recreation activities and events.

The site enjoys strong walking and cycling accessibility through the regional Lake Joondalup shared-path network, and although public transport access is currently limited, the development includes a dedicated internal bus drop-off facility to support school and community group transport. Opportunities exist for future service improvements through engagement with the Public Transport Authority.

Overall, the assessment concludes that the proposed Wanneroo Recreation Sports Hub can be safely and efficiently accommodated by the existing transport network, with no requirement for external road upgrades and no adverse impacts expected on the surrounding area.

2 Introduction

This Transport Impact Assessment has been prepared by Urbii on behalf of City of Wanneroo with regards to the proposed Wanneroo Recreation Sports Hub (WRSH), located at 245 Scenic Drive, Wanneroo.

The subject site is situated on the western side of Scenic Drive, to the south of the existing Wanneroo Recreation Centre building, as shown in Figure 1. It is proposed to develop the site into a new recreation sports hub building.

The aim of this Transport Impact Assessment (TIA) is to assess the impact of the proposal on the existing and planned transport network. The TIA was prepared with reference to the WAPC *Transport Assessment Guidelines* 2016.

Figure 1: Subject site

3 Existing situation

3.1 Existing site use, access and parking

The subject site presently accommodates an open active reserve that functions as an outdoor sports field. This area forms part of the broader Scenic Park and Wanneroo Recreation Precinct, which supports a mix of structured and informal recreational activity. Immediately north of the site sits the existing Wanneroo Recreation Centre, a long-standing community facility that provides indoor activity spaces and supports a range of sporting and community programs. The active reserve and the Recreation Centre operate as an integrated precinct with shared access and circulation patterns.

Vehicle access to the precinct is provided exclusively from Scenic Drive, which accommodates a single crossover leading to the existing Recreation Centre car park (Figure 2). This crossover serves both the indoor facility and the adjacent sports fields, effectively functioning as a shared access point for all users in the precinct.

The surrounding park environment also supports a network of pedestrian and shared paths connecting the car park, Recreation Centre building, and sports fields, enabling continuous access between facilities within the precinct.

Parking for the recreation precinct is currently provided in a single surface car park located immediately north of the subject site, adjacent to the existing Recreation Centre. This car park accommodates general recreation centre patrons, sporting participants and visitors to the surrounding open space.

Figure 2: Existing site access

3.2 Surrounding road network and traffic management on roads

Information from online mapping services, Main Roads WA, Local Government, and site visits was collected to assess the existing traffic management on frontage roads.

3.2.1 Scenic Drive

Scenic Drive near the subject site is an approximately 7.5m wide, two-lane divided road. The traffic lanes are separated by a central red-asphalt flush median. This median provides a visual and physical separator between opposing traffic streams while maintaining full traffic movements to adjacent accesses. Within this median, formal pedestrian refuge islands are provided, incorporating cut-throughs and kerb ramps to enable safe crossing movements between the residential area to the east and the shared path network to the west.

The western side of Scenic Drive accommodates a high-quality red-asphalt shared path running parallel to the carriageway and directly adjacent to the subject site boundary. This path forms part of the broader active transport network serving Scenic Drive Park and Lake Joondalup, providing continuous north–south connectivity for walking and cycling.

Local walk links connect this shared path to the crossing refuge and to park access points on the western side of the road. The combination of wide traffic lanes, a flush median, a median island crossing point and adjacent shared-path infrastructure reflects the dual movement and recreational access function of Scenic Drive in this location.

Scenic Drive is classified as a *Local Distributor* road in the Main Roads WA road hierarchy (Figure 3) and operates under a speed limit of 50km/h (Figure 4). Local Distributor roads are the responsibility of Local Government and are typically for the movement of traffic within local areas and connect access roads to higher order Distributors (Figure 5).

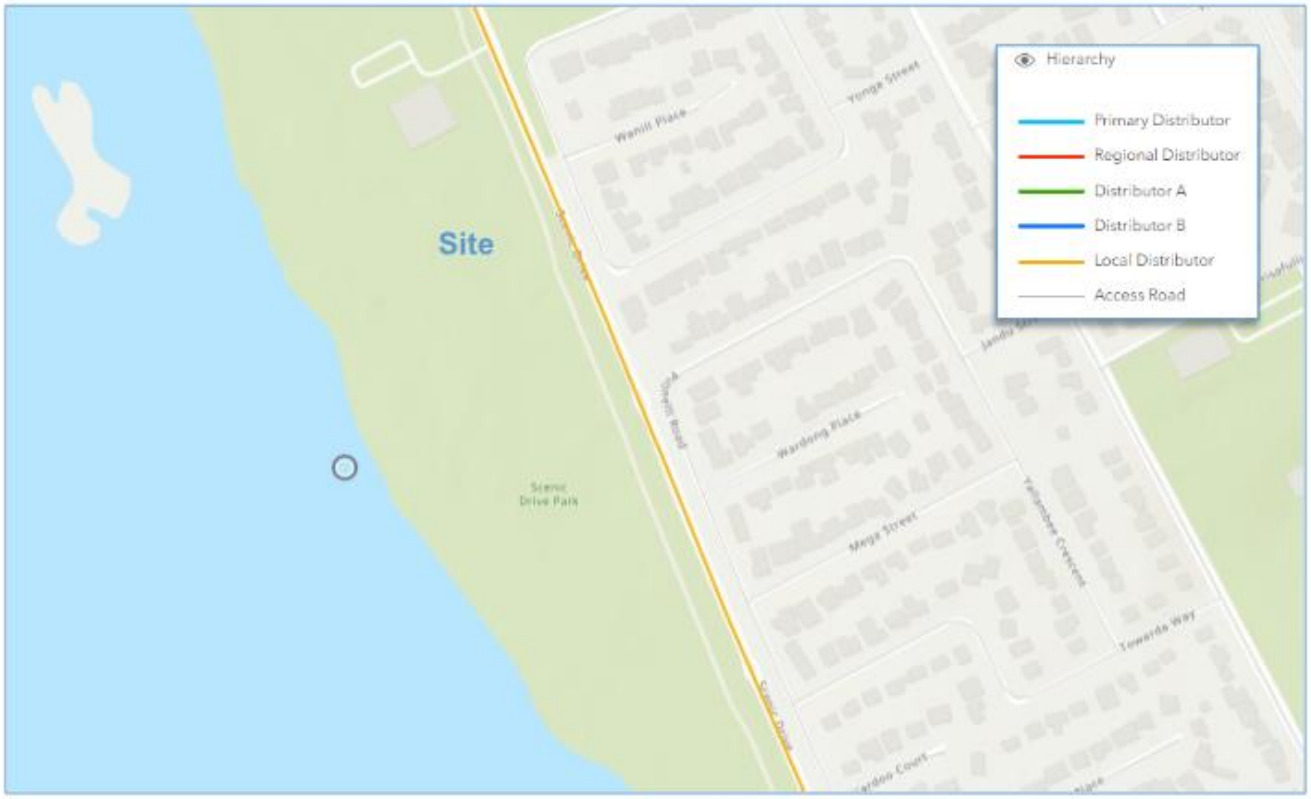


Figure 3: Main Roads WA road hierarchy plan

Source: Main Roads WA Road Information Mapping System (RIM)

Figure 4: Main Roads WA road speed zoning plan

Source: Main Roads WA Road Information Mapping System (RIM)

ROAD HIERARCHY FOR WESTERN AUSTRALIA
ROAD TYPES AND CRITERIA (see Note 1)

CRITERIA	PRIMARY DISTRIBUTOR (PD) (see Note 2)	DISTRICT DISTRIBUTOR A (DA)	DISTRICT DISTRIBUTOR B (DB)	REGIONAL DISTRIBUTOR (RD)	LOCAL DISTRIBUTOR (LD)	ACCESS ROAD (A)
Primary Criteria						
1. Location (see Note 3)	All of WA incl. BUA.	Only Built Up Area.	Only Built Up Area.	Only Non Built Up Area. (see Note 4)	All of WA incl. BUA.	All of WA incl. BUA.
2. Responsibility	Main Roads Western Australia.	Local Government.	Local Government.	Local Government.	Local Government.	Local Government.
3. Degree of Connectivity	High. Connects to other Primary and Distributor roads.	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	High. Connects to Primary and/or other Distributor roads.	Medium. Minor Network Role Connects to Distributors and Access Roads.	Low. Provides mainly for property access.
4. Predominant Purpose	Movement of inter regional and/or cross town/city traffic, e.g. freeways, highways and main roads.	High capacity traffic movements between industrial, commercial and residential areas.	Reduced capacity but high traffic volumes travelling between industrial, commercial and residential areas.	Roads linking significant destinations and designed for efficient movement of people and goods between and within regions.	Movement of traffic within local areas and connect access roads to higher order Distributors.	Provision of vehicle access to abutting properties
Secondary Criteria						
5. Indicative Traffic Volume (AADT)	In accordance with Classification Assessment Guidelines.	Above 8 000 vpd	Above 6 000 vpd.	Greater than 100 vpd	Built Up Area - Maximum desirable volume 6 000 vpd. Non Built Up Area – up to 100 vpd.	Built Up Area - Maximum desirable volume 3 000 vpd. Non Built Up Area – up to 75 vpd.
6. Recommended Operating Speed	60 – 110 km/h (depending on design characteristics).	60 – 80 km/h.	60 – 70 km/h.	50 – 110 km/h (depending on design characteristics).	Built Up Area 50 - 60 km/h (desired speed) Non Built Up Area 60 – 110 km/h (depending on design characteristics).	Built Up Area 50 km/h (desired speed). Non Built Up Area 50 – 110 km/h (depending on design characteristics).
7. Heavy Vehicles permitted	Yes.	Yes.	Yes.	Yes.	Yes, but preferably only to service properties.	Only to service properties.
8. Intersection treatments	Controlled with appropriate measures e.g. high speed traffic management, signing, line marking, grade separation.	Controlled with appropriate measures e.g. traffic signals.	Controlled with appropriate Local Area Traffic Management.	Controlled with measures such as signing and line marking of intersections.	Controlled with minor Local Area Traffic Management or measures such as signing.	Self controlling with minor measures.
9. Frontage Access	None on Controlled Access Roads. On other routes, preferably none, but limited access is acceptable to service individual properties.	Prefer not to have residential access. Limited commercial access, generally via service roads.	Residential and commercial access due to its historic status. Prefer to limit when and where possible.	Prefer not to have property access. Limited commercial access, generally via lesser roads.	Yes, for property and commercial access due to its historic status. Prefer to limit whenever possible. Side entry is preferred.	Yes.
10. Pedestrians	Preferably none. Crossing should be controlled where possible.	With positive measures for control and safety e.g. pedestrian signals.	With appropriate measures for control and safety e.g. median/islands refuges.	Measures for control and safety such as careful siteing of school bus stops and rest areas.	Yes, with minor safety measures where necessary.	Yes.
11. Buses	Yes.	Yes.	Yes.	Yes.	Yes.	If necessary (see Note 5)
12. On-Road Parking	No (emergency parking on shoulders only).	Generally no. Clearways where necessary.	Not preferred. Clearways where necessary.	No – emergency parking on shoulders – encourage parking in off road rest areas where possible.	Built Up Area – yes, where sufficient width and sight distance allow safe passing. Non Built Up Area – no. Emergency parking on shoulders.	Yes, where sufficient width and sight distance allow safe passing.
13. Signs & Linemarking	Centrelines, speed signs, guide and service signs to highway standard.	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs, guide and service signs.	Centrelines, speed signs and guide signs.	Speed and guide signs.	Urban areas – generally not applicable. Rural areas - Guide signs.
14. Rest Areas/Parking Bays	In accordance with Main Roads' *Roadside Stopping Places Policy*.	Not Applicable.	Not Applicable.	Parking Bays/Rest Areas. Desired at 60km spacing.	Not Applicable.	Not Applicable.

Figure 5: Road types and criteria for Western Australia

Source: Main Roads Western Australia D10#10992

3.3 Existing traffic volumes on roads and major intersections

Traffic data obtained from the City of Wanneroo indicates that Scenic Drive carried average weekday traffic flows of 791 vehicles per day (vpd). Weekend traffic flows were higher, with 901 vpd recorded. As demonstrated in Table 1, the peak traffic hour for Scenic Drive is recorded on the weekend at midday, with 116 vehicles per hour (vph) recorded between 1:00pm and 2:00pm on the weekend.

Table 1: Scenic Drive existing hourly traffic flows

Virtual Day Detail Table(2024)												
Time Range			Both directions				South		North	
			Weekday		Weekend		Weekday	Weekend	Weekday	Weekend
00:00	-	01:00	2	0.25%	4	0.44%	1	2	1	2
01:00	-	02:00	2	0.25%	4	0.44%	1	2	1	2
02:00	-	03:00	1	0.13%	2	0.22%	1	1	1	1
03:00	-	04:00	1	0.13%	3	0.33%	1	2	1	1
04:00	-	05:00	3	0.38%	2	0.22%	1	2	1	1
05:00	-	06:00	4	0.51%	2	0.22%	4	1	1	3
06:00	-	07:00	17	2.15%	6	0.67%	12	3	5	3
07:00	-	08:00	38	4.80%	32	3.55%	18	8	19	24
08:00	-	09:00	60	7.59%	40	4.44%	35	22	25	18
09:00	-	10:00	49	6.19%	57	6.33%	20	22	29	34
10:00	-	11:00	46	5.82%	76	8.44%	21	30	25	46
11:00	-	12:00	42	5.31%	91	10.10%	22	44	20	47
12:00	-	13:00	42	5.31%	84	9.32%	22	37	20	47
13:00	-	14:00	43	5.44%	116	12.87%	20	45	23	71
14:00	-	15:00	55	6.95%	77	8.55%	22	36	32	40
15:00	-	16:00	75	9.48%	77	8.55%	29	46	45	31
16:00	-	17:00	96	12.14%	92	10.21%	37	48	59	44
17:00	-	18:00	99	12.52%	62	6.88%	39	36	59	26
18:00	-	19:00	52	6.57%	21	2.33%	26	12	26	9
19:00	-	20:00	26	3.29%	17	1.89%	14	10	11	6
20:00	-	21:00	16	2.02%	13	1.44%	11	8	5	5
21:00	-	22:00	13	1.64%	10	1.11%	8	6	5	4
22:00	-	23:00	6	0.76%	8	0.89%	3	4	3	4
23:00	-	00:00	3	0.38%	5	0.55%	1	3	2	3

Source: City of Wanneroo – traffic data for Scenic Drive (north of Ariti Avenue), 2024

3.4 Existing operation of surrounding intersections

The operation of existing intersections is documented in Section 8.6 of this report.

3.5 Heavy vehicles

The roads near the subject site form part of RAV Network 1 which permits 19m semi-trailers to travel on these roads under general access, or “as of right” status. General access vehicles may operate state-wide provided they are:

- not a road train or b-double;
- within regulation axle mass limits;
- 19 metres or less in combination length (or a maximum 12.5 metres for rigid vehicles);
- total combination mass less than 42.5 tonnes;
- width less than 2.5 metres (excluding mirrors and lights); and
- height less than 4.3 metres.

3.6 Public transport access

Public transport access to the site is currently limited. The nearest bus stops are located along Wanneroo Road, approximately 900 metres to 1 kilometre walking distance from the proposed development.

This walk involves navigating local streets, crossing at Church Street, and continuing west toward Scenic Drive, resulting in a walking time of around 13–14 minutes. Due to the distance and indirect pedestrian connections, it is expected that only a small proportion of patrons would choose to access the proposed WRSH by public transport. The existing network therefore provides only marginal support for the development in its current form.

To address this constraint, the proposed facility has incorporated a dedicated internal bus drop-off zone positioned adjacent to the main building entry. This facility has been designed to accommodate school groups, community groups, sporting clubs and other organised visitors who typically travel by chartered coach or private bus rather than by the public bus network.

The proximity of this drop-off area to the primary pedestrian entrance ensures safe and efficient group arrival and departure, assists in managing peak-event loading, and reduces conflict with general car parking activity. The design therefore provides a practical and effective solution for catering to higher-occupancy group trips that are common for recreation and sporting venues.

Although the current public transport network is not well aligned with the site, there is an opportunity to improve accessibility over time.

It is recommended that the City of Wanneroo engage with the Public Transport Authority to examine the feasibility of diverting or extending an existing bus service to enter the site or to service new stops along Scenic Drive at the site frontage.

A minor adjustment to route alignment has the potential to materially improve public transport access, reduce reliance on private vehicles, and support broader mode-shift objectives for the precinct. Such liaison would be particularly valuable once the WRSH is operational and patronage patterns are better understood.

3.7 Pedestrian access

Information from online mapping services, Main Roads WA, Local Government, and site visits was collected to assess the pedestrian access for the proposed development.

Pedestrian accessibility to the proposed development is supported by a well-established walking network that connects the site with the surrounding recreation precinct, Scenic Park and nearby residential areas. A high-quality red-asphalt shared path runs along the western side of Scenic Drive directly adjacent to the site, forming part of the broader Lake Joondalup active transport corridor. This path provides continuous north–south access for walking and cycling and links into the Recreation Centre, and local parks. Internal walkways proposed as part of the proposed development design will connect seamlessly to this shared path, offering convenient and direct entry to the main building and activity areas.

Safe crossing opportunities across Scenic Drive are provided at multiple locations and are shown in Figure 6. Three mid-block pedestrian crossings are located along the site frontage, each incorporating a median refuge island, kerb ramps and a red-asphalt flush median treatment. These islands enable pedestrians to cross the two-lane carriageway in two stages, reducing exposure to traffic and improving safety for users of all ages and abilities. The spacing between these crossings is less than 200 metres, ensuring that pedestrians have frequent and convenient opportunities to cross the road without needing to walk long distances to reach a safe point.

A fourth pedestrian crossing point is located at the Scenic Drive/Church Street roundabout, also equipped with kerb ramps and splitter islands to facilitate safe movement across each approach. This crossing provides an important link for residents east of the site, connecting Church Street and the local street network into the shared-path system and broader recreation precinct.

Together, the shared path, refuge island crossings and roundabout crossing form a cohesive pedestrian environment that supports safe and direct movement to and from the proposed development. While longer-distance pedestrian accessibility remains limited by the lack of nearby public transport, the immediate precinct benefits from strong walking connections, legible desire-line routes and frequent safe crossing points along Scenic Drive. The proposed site design strengthens these connections by providing clear, accessible, and conveniently located pedestrian routes leading to the main building entry.

Figure 6: Existing pedestrian crossings with median refuge islands

3.8 Bicycle access

Bicycle access to the site is strong, owing to the high-quality shared-path network that runs along the western edge of Scenic Drive and forms part of the Lake Joondalup regional cycling corridor. This path is constructed in red asphalt, is fully separated from the road carriageway and provides continuous, safe and comfortable north–south connectivity for recreational riders, commuters and local residents.

It links directly into Rotary Park, the existing Wanneroo Recreation Centre, the broader Yellagonga Regional Park trail system and the extensive path network encircling Lake Joondalup, which is one of the most heavily used cycling routes in the northern suburbs.

The shared path includes multiple connecting spurs and access points, including those aligned with the pedestrian median refuges along Scenic Drive, enabling cyclists to transition safely between the off-road path and the internal circulation areas of the precinct. A high quality off-road shared path is also provided along the northern side of Church Street, to service the local residential area.

Within the subject site, the proposed development design provides direct connections from the shared path into the main entry forecourt and parking areas, ensuring convenient bicycle access and reducing the need for cyclists to travel along the vehicle driveway system.

In addition to the regional shared-path network, the surrounding residential streets provide low-speed, low-traffic cycling environments that support local access to the site. These streets feed naturally into the shared path, enabling riders from nearby residential catchments to approach the site entirely via safe cycling routes.

Overall, the site benefits from excellent cycling accessibility due to its direct interface with the Lake Joondalup shared-path corridor and its integration with local neighbourhood streets. This provides a genuine alternative to car travel for both recreational users and school or club participants arriving by bike.

Analysis of the Strava Global Heatmap indicates that Scenic Drive forms part of a well-used cycling route along the eastern side of Lake Joondalup (Figure 7). The heatmap shows strong cycling activity concentrated on the Lake Joondalup shared-path loop, which is a popular recreational and fitness cycling route in the northern suburbs.

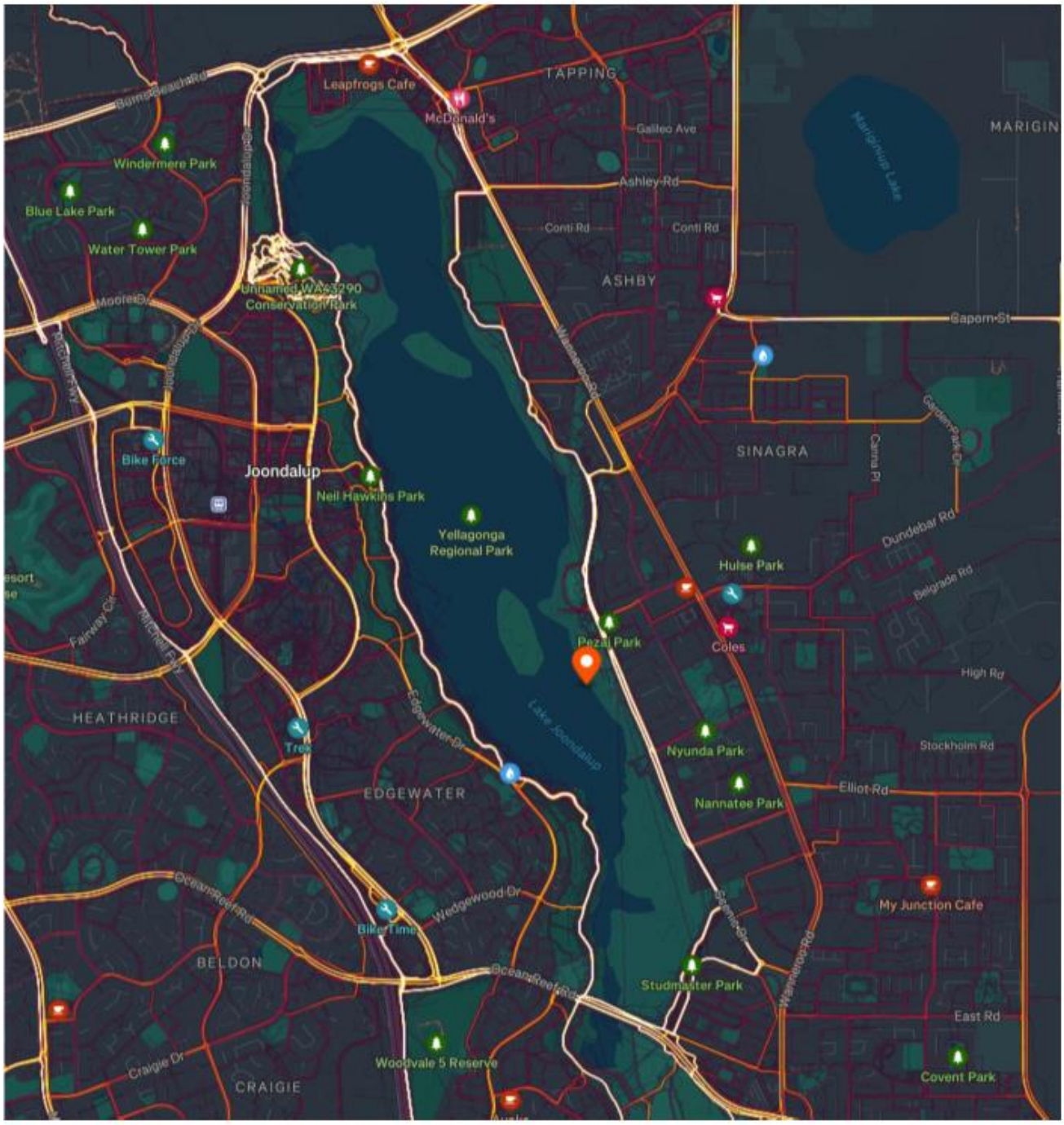


Figure 7: Strava cycling heatmap

3.9 Crash data and safety

The five-year crash history for the road network surrounding the subject site was obtained from the Main Roads WA Crash Map for the period 1 January 2020 to 31 December 2024. As illustrated in Figure 8, **no crashes were recorded along Scenic Drive within the locality over the most recent five-year period**.

The absence of reported crashes is consistent with the nature and function of Scenic Drive, which operates as a low-speed (50 km/h) local distributor carrying modest traffic volumes and serving predominantly recreational and residential trip types.

Scenic Drive benefits from several attributes that inherently reduce crash risk, including a simple two-lane road layout, clear sight lines, a red-asphalt flush median that provides separation between opposing traffic streams, and a high-quality shared path along the western side of the corridor that reduces potential conflicts with cycling.

Pedestrian safety is strongly supported by the network of formalised crossing points adjacent to the site. The presence of these facilities is a key contributing factor to the strong safety performance.

The absence of crashes over a five-year period suggests that **there are no underlying or systemic safety deficiencies** within the existing road environment that would be exacerbated by the proposed development.

Nevertheless, it is appropriate for the TIA to consider opportunities for minor safety enhancements to support the proposed development. Any such enhancements should be proportionate to the existing safety record, road function and anticipated traffic volumes.

Accordingly, the following safety considerations are identified for the City's future planning (noting that none are required to mitigate existing crash issues):

- The existing median refuge crossings already provide safe and compliant crossing opportunities. However, wayfinding signage, tactile paving upgrades or enhanced line marking could further strengthen pedestrian visibility.
- The red-asphalt flush median contributes to good visual separation. Refreshing pavement treatment or edge lines could be considered in future maintenance cycles.
- Should the City desire a stronger traffic-calming presence, low-impact measures such as speed feedback signs, entry threshold treatments at park access points, or additional pavement markings could be considered, noting that these are not required from a crash-mitigation standpoint.

In summary, the crash analysis demonstrates that Scenic Drive is operating safely and without systemic risk, supported by appropriate pedestrian crossing facilities and a well-designed shared-path corridor.

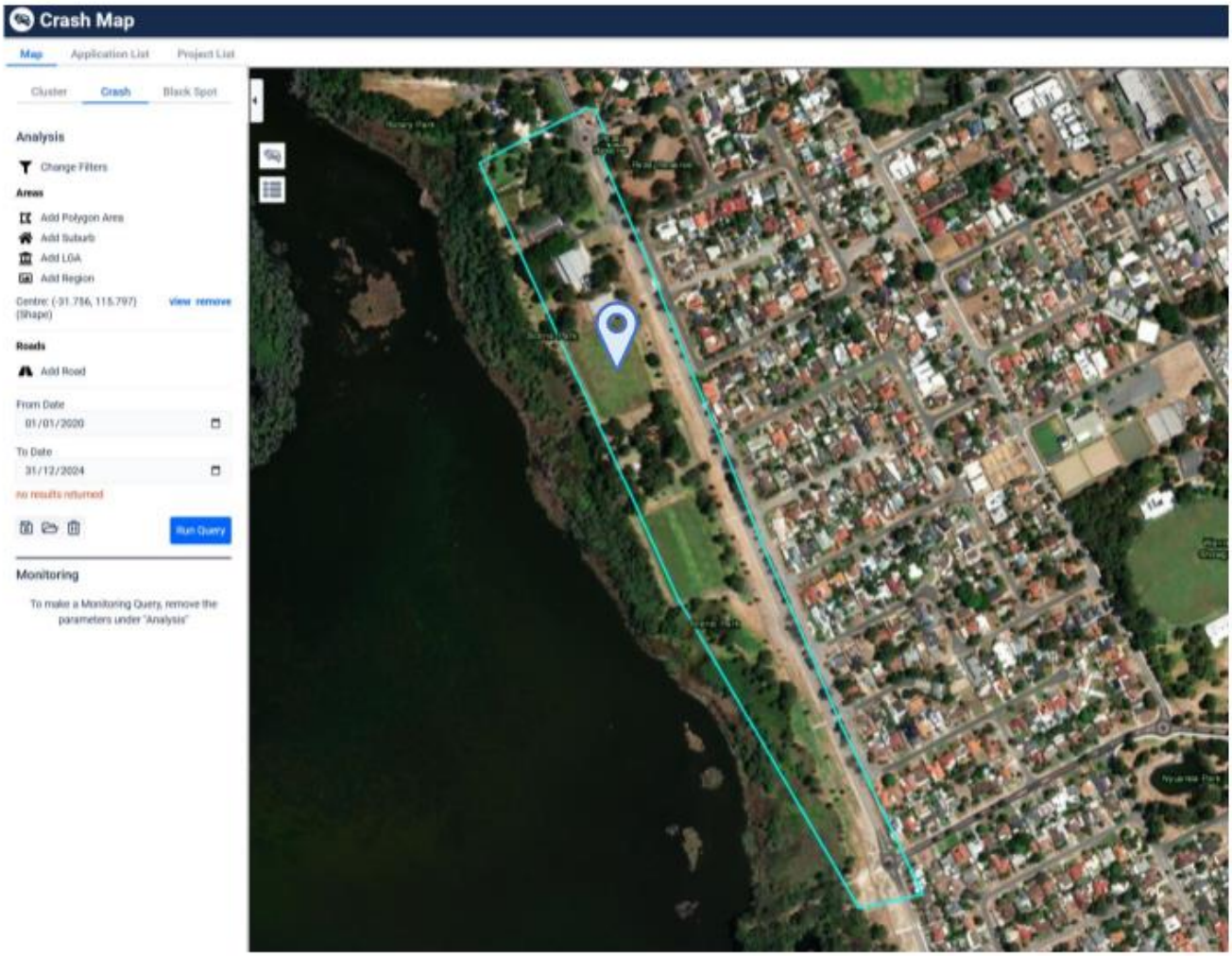


Figure 8: 5-year crash map in the locality (2020-2024)

Source: MRWA crash mapping tool

4 Development proposal

The proposal for the subject site is for a new recreation sports hub comprising:

- Indoor multi-purpose courts;
- Meeting and office rooms;
- Café, kitchen and back of house;
- Boxing and calisthenics rooms;
- Separate male and female showers, change rooms and lockers;
- New off-street car park providing 97 additional car parking bays (including 2 x ACROD bays);
- A shared bus drop-off and service, delivery and waste collection zone;
- On-street parallel parking along Scenic Drive adjacent to the site (potentially up to 24 parallel parking spaces);
- An internal footpath network with pedestrian crossings and kerb ramps within the site; and,
- Four bicycle rails which can park up to 8 bicycles (double-sided).

Vehicle access to the site is proposed via two crossovers on Scenic Drive. Waste will be collected internally within the provided service zone.

People walking and cycling will access the development from the external footpath network adjacent to the site. Site connections are proposed from the site to the shared path running along the western side of Scenic Drive.

The proposed development plans are included for reference in Appendix A.

5 Vehicle access

The proposed vehicular access arrangements have been reviewed for efficient and safe traffic circulation.

The proposed access arrangements are shown in Figure 9. Vehicle access is proposed via two crossovers on Scenic Drive. The southern crossover is entry only and the northern crossover is exit only.

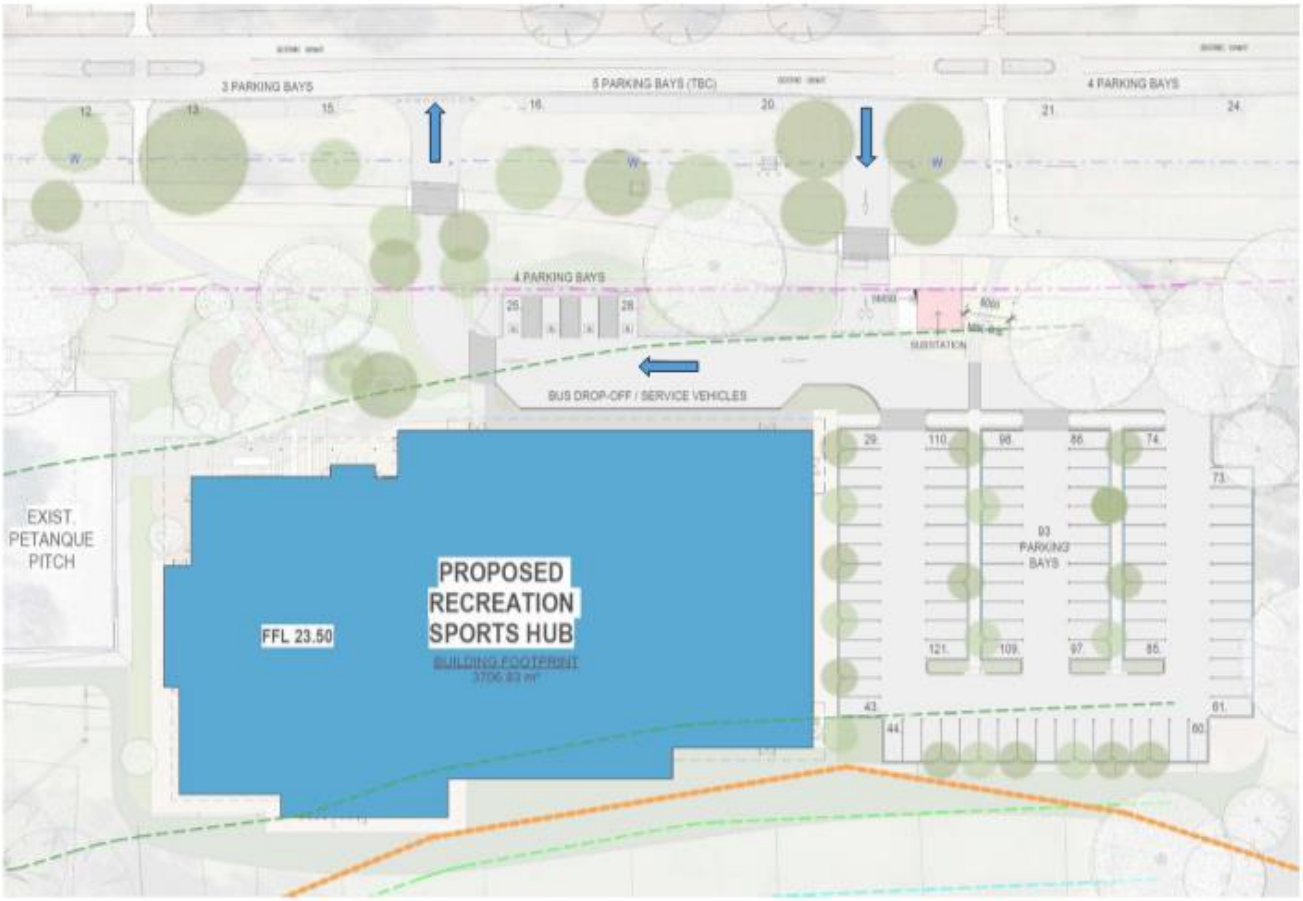


Figure 9: Proposed vehicle access

5.1 Sightline assessment checks

5.1.1 Pedestrian Crossing Sight Distance

Crossing Sight Distance (CSD) is a critical safety requirement used to ensure that pedestrians waiting to cross a roadway have sufficient visibility of approaching traffic, and that drivers also have adequate time to perceive and react to pedestrians entering the crossing. CSD represents the minimum length of clear, unobstructed sight line between a pedestrian and an approaching driver to allow the pedestrian to safely assess traffic gaps and complete the crossing movement.

According to Austroads guidance, CSD is required at any location where a pedestrian is expected to cross a carriageway, particularly where pedestrians do **not** have priority. The purpose of CSD is to ensure that pedestrians can clearly see approaching vehicles in time to judge an acceptable gap, taking into account both crossing distance and walking speed. Likewise, CSD ensures that drivers can perceive the crossing environment and slow down if a pedestrian enters the roadway.

CSD is calculated using the following equation:

$$CSD = t_c \times \frac{V}{3.6}$$

Where:

- **CSD** = required pedestrian crossing sight distance (m)
- **tc** = critical safe gap (seconds), defined as crossing distance ÷ pedestrian walking speed
- **V** = 85th percentile approach speed (km/h)

The critical safe gap accounts for the time a pedestrian requires to walk from the kerb to a position clear of the traffic lane being crossed. Austroads notes that designers should consider a range of pedestrian characteristics, including lower walking speeds for mobility-impaired users. The standard guidance assumes a typical adult walking speed of approximately 1.2 m/s; however, a more conservative value (such as 1.0 m/s) may be applied where vulnerable users are likely. CSD must also remain unobstructed by trees, street furniture, parked vehicles or other roadside objects that could impede pedestrian or driver visibility.

Application of the above calculation results in a CSD requirement of 58m, as detailed in Table 2.

Table 2: Pedestrian Crossing Sight Distance requirement

Variable	Input	Units
Crossing Distance (m)	3.5	m
Walking Speed (m/s)	1	m/s
Vehicle Speed (km/h)	60	km/h
Sight Distance (m) =	**58**	**m**

The sight distance sketch in Appendix B confirms that the proposed on-street parking does not obstruct Crossing Sight Distance.

5.1.2 Crossover Stopping Sight Distance

The crossover sight distance assessment was undertaken in accordance with the Austroads *Guide to Road Design Part 3 – Geometric Design* (AGRD03).

Stopping Sight Distance (SSD) is the distance to enable a normally alert driver, travelling at the design speed on wet pavement, to perceive, react and brake to a stop before reaching a hazard on the road ahead.

SSD is derived from two components:

1. The distance travelled during the total reaction time

2. The distance travelled during the braking time from the design speed to a stop and their relationship is shown in Equation 1.

$$SSD = \frac{R_T V}{3.6} + \frac{V^2}{254(d + 0.01a)} \quad 1$$

where

R_T = reaction time (sec)

V = operating speed (km/h)

d = coefficient of deceleration (longitudinal friction factor)

a = longitudinal grade (%, + for upgrades and – for downgrades)

A reaction time of 2.5 seconds was adopted for the analysis, which is conservative as it assumes the driver is not alert. An operating speed of 60km/h was adopted, which is 10km/h higher than the speed limit. The coefficient of deceleration is 0.36.

The calculated Stopping Sight Distance (SSD) is around 81m, as detailed in Table 3.

Table 3: Stopping Sight Distance calculation

Parameter	Value	Units
Rt	2.5	sec
V	60	km/h
d	0.36	
a	0%	
SSD	**81**	**m**

The sight distance sketch in Appendix B confirms that there are no permanent obstructions within the required sightline clearance areas.

However, it should be noted that five of the proposed on-street car parking bays are located within the sightline clearance envelopes. Cars may be parked within the sightline clearance envelopes at certain times of the day.

It is recommended that the five on-street parking bays located between the development crossovers be removed from the proposal. This will reduce the total on-street parking provision to 19 bays.

6 Changes to surrounding transport networks

Information from relevant planning documents, Main Roads WA, Department of Transport and / or information provided by the Local Government Authority, has been reviewed for planned changes to the surrounding transport network.

A review of publicly available State and Local Government planning documents indicates that no major road upgrades or realignments are proposed for Scenic Drive or the immediate frontage of the site in the short-to-medium term. Scenic Drive is expected to continue operating in its current configuration as a low-speed local distributor providing access to the Lake Joondalup recreation corridor and the surrounding residential area. The City of Wanneroo's current capital works program does not identify any widening, duplication or intersection upgrades along Scenic Drive or at the Scenic Drive–Church Street roundabout.

The most relevant recent improvement in the vicinity is the upgrade of the Church Street shared path, which now provides a high-quality 3-metre-wide red-asphalt connection between Wanneroo Road and Scenic Drive. This improvement strengthens east–west pedestrian and cyclist accessibility to the site and forms part of the City's broader Active Transport Plan, which prioritises completing missing links on the local cycling network and expanding shared-path infrastructure across key corridors. In addition, the City continues to deliver pathway upgrades within Yellagonga Regional Park through its long-term Principal Shared Path program, which will further enhance recreational cycling access along the Lake Joondalup corridor.

At a broader regional scale, major transport investment continues through the METRONET Yanchep Rail Extension and the Mitchell Freeway northern extensions, both of which will improve accessibility to the northern corridor and moderate long-term traffic growth pressures along Wanneroo Road. The City has also identified the future duplication of Dundebar Road within its district planning documents; however, this is a long-term project and is not expected to influence the operation of Scenic Drive during the assessment period.

In summary, while several strategic regional projects are underway that will enhance overall transport connectivity in the northern suburbs, there are no committed changes to the Scenic Drive corridor that would alter access arrangements or affect the operation of the proposed WRSH. As a result, the existing transport network surrounding the site can reasonably be assumed to remain materially unchanged for the purpose of this assessment.

7 Integration with surrounding area

The proposed WRSH is well positioned within an established recreational and community precinct that already attracts regular local activity and supports a range of sport, leisure and passive recreation uses. The site is directly adjacent to Scenic Drive Park and the Yellagonga Regional Park corridor, forming part of a contiguous open-space network that includes the existing Wanneroo Recreation Centre, Rotary Park, recreation facilities, picnic areas and regional shared paths. The development therefore represents a natural extension of the area's longstanding recreational function, consolidating community activity within a precinct that is already familiar to residents and widely used throughout the week.

From a transport perspective, the site integrates effectively with the existing local road network. Scenic Drive provides direct frontage access and is supported by a safe and clearly defined pedestrian and cycling environment, including a high-quality off-road shared path running along the western edge of the carriageway. Multiple refuge-island pedestrian crossings along Scenic Drive, together with a further crossing point at the Church Street roundabout, ensure that the precinct is readily accessible from the surrounding residential catchments. The recently upgraded 3-metre shared path on Church Street strengthens east–west connections between the site and the Wanneroo town centre, improving access from local schools, community facilities and bus stops on Wanneroo Road.

Overall, the proposed development integrates well with the surrounding recreational, transport and community environment. The development capitalises on existing strengths—particularly strong cycling links, safe pedestrian crossing opportunities and a long-established community recreation setting—while also introducing enhancements such as improved internal circulation and dedicated bus access. The project aligns with the broader character and function of the Scenic Drive recreation corridor and is expected to contribute positively to the area's accessibility and community value.

8 Traffic assessment

8.1 Assessment period

The critical time period considered in this traffic assessment reflects the existing peak traffic hour on Scenic Drive:

- Weekend midday peak hour (1:00pm to 2:00pm).

The analysis was undertaken for the following scenarios:

- 2037 post development (with development traffic included).

8.2 Existing traffic flows

Existing traffic flows on Scenic Drive were obtained from the City of Wanneroo, as outlined in Section 3.3 of this report. To establish a baseline trip generation rate for recreational facilities in the locality, a traffic survey was undertaken of the existing Wanneroo Recreation Centre driveway. The hourly traffic profile for each day of the week is detailed in Figure 10. The peak traffic hour for the recreation centre was recorded on Saturday between 1:00pm and 2:00pm, which coincides with the peak traffic hour recorded on Scenic Drive. A peak existing traffic generation of 75 vehicles per hour (vph) was recorded.

Road:	Wanneroo Recreation Centre Driveway								
Direction:	Combined								
Vehicles:	All Vehicles								
Week:	Week 2								
Date:	29/07/2025 - 04/08/2025								

Show Peaks | Remove Peaks | AM Peak | PM Peak | Weekly Peak

Time	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Monday - Friday	Monday - Sunday
0:00	0	0	2	1	2	1	1	1	1
1:00	0	1	2	1	0	0	1	1	1
2:00	0	1	0	1	0	2	2	1	1
3:00	0	1	0	0	0	0	0	0	0
4:00	0	0	0	0	0	0	0	0	0
5:00	0	1	0	2	0	2	0	1	1
6:00	12	12	8	6	1	1	14	10	8
7:00	3	4	8	5	2	4	4	5	4
8:00	13	8	26	8	6	0	8	13	10
9:00	21	15	26	18	29	2	5	17	17
10:00	4	15	14	20	40	5	10	13	15
11:00	21	6	23	17	7	10	10	15	13
12:00	13	16	11	21	14	7	5	13	12
13:00	5	10	5	11	75	1	12	9	17
14:00	15	5	21	14	1	4	17	14	11
15:00	21	19	11	18	8	4	10	16	13
16:00	30	25	38	15	26	13	37	29	26
17:00	35	35	34	6	10	1	37	29	23
18:00	49	22	35	3	12	10	20	26	22
19:00	27	14	21	19	2	2	6	17	13
20:00	3	1	16	1	0	0	10	6	4
21:00	6	0	1	9	12	1	8	5	5
22:00	9	0	14	13	0	0	5	8	6
23:00	1	2	2	3	1	0	0	2	1
Total	288	213	318	212	248	70	222	251	224

Figure 10: Existing traffic volumes – Wanneroo Recreation Centre

8.3 Traffic generation

Trip generation for the proposed WRSH has been calculated using a benchmarking approach based on traffic surveys undertaken at the existing Wanneroo Recreation Centre. This method is appropriate for unique or community-specific land uses where published trip rates (such as RTA or ITE rates) are not directly representative of local activity patterns. Recreation centres typically experience highly variable usage dependent on programmed activities, seasonal sports, school events and community functions. As such, locally collected data provides a more reliable indicator of realistic peak-hour traffic demands for the proposed development.

Two weeks of continuous driveway traffic counts were undertaken at the existing Wanneroo Recreation Centre between 22/07/2025–28/07/2025 (Week 1) and 29/07/2025–04/08/2025 (Week 2). The surveys recorded all entering and exiting vehicle movements on an hourly basis. Week 1 recorded a highest weekend peak of 59 vehicles per hour, whereas Week 2 recorded a higher peak of 75 vehicles per hour during the Saturday 13:00–14:00 period. To ensure a conservative and robust assessment, the higher Week 2 peak-hour volume (75 vph) was adopted as the basis for deriving the trip generation rate.

The observed peak hour was then converted into a trip rate by normalising the two-way traffic volume against the existing building's gross floor area (1,470 m²). This resulted in a locally calibrated trip rate of 5.10 vehicle trips per 100 m² GFA, which reflects actual activity levels generated by an established facility of the same land-use type, operating in the same community context.

This rate was applied to the proposed building area of 3,706 m² to estimate the likely peak-hour demand at the WRSH. Using this methodology, the proposed development is estimated to generate 189 vehicle trips in the weekend peak hour. The existing inbound/outbound distribution (55% inbound, 45% outbound), derived from the driveway survey, was retained for the proposed development on the basis that user behaviour and arrival patterns are expected to remain broadly consistent between the existing and future facilities.

The benchmarking survey approach is a well-accepted method for recreational land use and is preferred where reliable local data is available. The use of on-site observed traffic from two full survey weeks, combined with the selection of the higher recorded peak-hour demand, ensures the trip generation estimate applied in this assessment is both evidence-based and conservatively aligned with the operational characteristics expected for the proposed development.

The estimated traffic generation of the proposed development is detailed in Table 4.

Table 4: Peak hour traffic generation

Trip generation	Existing	Proposed development	Total
Site	Wanneroo Recreation Centre	Wanneroo Recreation Sports Hub	
Area (m2)	1470	3706	5176
Peak traffic generation (vph)	75	**189**	264
Trip rate trips per 100m2	5.1		
IN split	55%		
OUT split	45%		
IN traffic	41	**104**	145
OUT traffic	34	**85**	119

8.4 Trip distribution and assignment

Traffic was distributed north-south on Scenic Drive in accordance with existing directional traffic splits provided in the traffic survey data.

The assumed trip distribution and assignment are illustrated in the traffic volume diagrams provided in Appendix C.

8.5 10-year post development forecasting

Forecasting background traffic volumes for the 10-year post development scenario is a complex exercise. Transport demand forecasting is shifting from fixed forecasts to 'scenario modelling.' Scenario modelling recognises that there are multiple known and unknown disrupters to transport behaviour in the coming years, for example:

- Increased work from home activity;
- Increased popularity of micromobility devices such as e-scooters;
- Increased provision of public transport such as light rail and trackless trams;
- Electric Vehicles;
- Autonomous Vehicles; and,
- Government Net Zero emission targets.

For simplicity, this transport assessment assumes that traffic on Scenic Drive will increase at the same rate as population forecasts for the overall City of Wanneroo. As shown in Figure 11, City of Wanneroo forecasts an average annual growth rate of 2.69%.

City of Wanneroo	Forecast year					Change between 2021 and 2041	
Area	2021	2026	2031	2036	2041	Total change	Avg. annual % change
City of Wanneroo	216,435	243,874	285,372	326,532	367,775	+151,340	+2.69

Figure 11: Population forecasts for City of Wanneroo

8.6 Analysis of intersections and development access

Reference was made to Austroads guidance to determine whether SIDRA intersection modelling is warranted for the proposed development accesses. The threshold traffic volumes for further analysis are summarised in Figure 12. The anticipated traffic volumes on Scenic Drive are forecast to be below 400 vehicles per hour in 2037.

This indicates that the existing recreation centre and proposed sports hub site crossovers are expected to operate at a satisfactory level of service (LOS A). As such, detailed SIDRA analysis is not required for the development access based on Austroads criteria for intersection assessment.

Major road type[1]	Major road flow (vph)[2]	Minor road flow (vph)[3]
Two-lane	400	250
	500	200
	650	100
Four-lane	1000	100
	1500	50
	2000	25

Notes:

1. Major road is through road (i.e. has priority).
2. Major road flow includes all major road traffic with priority over minor road traffic.
3. Minor road design volumes include through and turning volumes.

Figure 12: Austroads guidance on the assessment of intersections

Nevertheless, for the purpose of robust traffic impact assessment, capacity analysis of the proposed new crossovers on Scenic Drive was undertaken using the SIDRA 10 computer software package. SIDRA 10 is an intersection modelling tool commonly used by traffic engineers for all types of intersections.

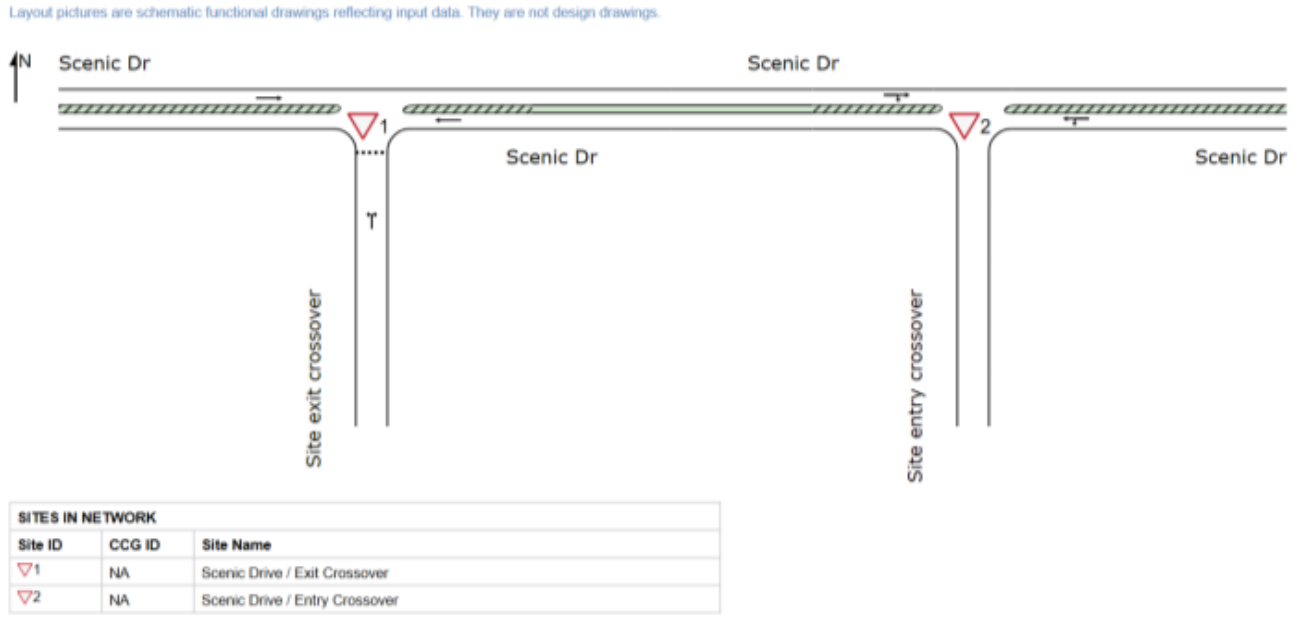
A network model was developed with multiple connected intersections as shown in Figure 13.

A blanket percentage heavy vehicle rate of 6% was conservatively adopted for all traffic movements.

Overall, the SIDRA results indicate that the proposed development will have minimal impact on the road network.

All development crossover movements are assessed to operate at a level of service 'A' with minimal delays or queues.

Detailed SIDRA outputs for each intersection are provided in Appendix D.



SITES IN NETWORK		
Site ID	**CCG ID**	**Site Name**
▽1	NA	Scenic Drive / Exit Crossover
▽2	NA	Scenic Drive / Entry Crossover

Figure 13: SIDRA network model

8.7 Impact on neighbouring areas

The traffic generated by the proposed development is not expected to significantly affect surrounding areas and the proposed land uses are in line with planning for the local area. Therefore, there is not expected to be any impact on neighbouring areas that would require any further consideration.

8.8 Traffic noise and vibration

It requires a doubling of traffic volumes on a road to produce a perceptible 3dB (A) increase in road noise. The proposed development will not increase traffic volumes or noise on surrounding roads anywhere near this level to result in any perceptible increase in noise.

9 Parking demand and supply

9.1 Parking supply

The proposed development will provide 97 onsite car parking bays, including 4 ACROD bays, accommodating universal access requirements. In addition, the site layout incorporates a dedicated bus drop-off area and designated service, delivery and waste collection zone, ensuring safe and efficient separation of vehicle types and operational activities.

The development also proposes parallel on-street parking bays along Scenic Drive adjacent to the site. The concept plan indicates 24 proposed on-street bays; however, to maintain safe driveway sightlines and comply with relevant access standards, five of these bays are recommended to be removed, resulting in a net provision of 19 on-street spaces.

As part of the broader precinct upgrade, a total of 116 new parking bays (onsite plus on-street) will be added to the sporting precinct. When combined with the 67 existing bays at the Wanneroo Recreation Centre, the precinct will have 183 car parking spaces available for shared use between the two facilities. This approach supports efficient utilisation of parking resources across the site and aligns with the integrated nature of the recreational precinct.

9.2 Parking requirements

The traffic survey data of the existing Wanneroo Recreation Centre driveway was analysed to produce an hourly parking demand profile for the two-week survey period. As detailed in Table 5, the existing facility recorded a peak parking demand generation rate of 2.86 bays per 100m^2 GFA. Assuming a similar parking demand pattern for the proposed WRSH will result in a total post-development peak parking demand of **149 bays**.

Table 5: Parking demand analysis

Land use	Day	Parking Demand Rate	Measurement	Area (m2)	Peak Parking Demand
Existing	MON-FRI	2.86	bays / 100 m2 GFA	1470	42
	SAT	1.84	bays / 100 m2 GFA	1470	27
	SUN	0.48	bays / 100 m2 GFA	1470	7
Proposed	MON-FRI	2.86	bays / 100 m2 GFA	5200	149
	SAT	1.84	bays / 100 m2 GFA	5200	96
	SUN	0.48	bays / 100 m2 GFA	5200	25

A total of 183 parking bays will be provided across the precinct, including onsite, ACROD and proposed parallel on-street bays. This supply results in a peak utilisation rate of approximately 81%, which represents efficient use of available parking while retaining adequate spare capacity to support circulating vehicles, reduce search time, and accommodate natural fluctuations in demand associated with programmed sporting activities and community events.

10 Provision for service vehicles

The site layout incorporates a dedicated bus drop-off area and designated service, delivery and waste collection zone, ensuring safe and efficient separation of vehicle types and operational activities.

Swept path analysis was undertaken for a 12.5m Heavy Rigid Vehicle (HRV) in accordance with AS2890.2.

The swept path analysis confirms that vehicles can enter and exit the site in forward gear, with satisfactory space for internal manoeuvring. Some minor amendments to the crossover geometry are required at detailed design stages, to accommodate the HRV swept path.

A selection of swept path sketches is included in Appendix E.

11 Public transport assessment

A detailed review of existing public transport accessibility is provided in Section 3.6 of this report. In summary, public transport access to the site is currently limited, with the nearest bus services operating along Wanneroo Road approximately 900 metres to 1 kilometre walking distance from the site. Due to this separation and the indirect pedestrian connection between the bus stops and Scenic Drive, public transport is expected to play only a minor role in the overall mode share for the development.

To accommodate school groups, community organisations and sporting clubs—who are more likely to travel by chartered bus than by scheduled public services—the development includes a dedicated internal bus drop-off and pick-up zone located immediately adjacent to the main building entry. This facility enables safe and efficient group arrivals and departures without affecting general car park circulation or onsite parking supply.

Although the existing public transport network does not directly serve Scenic Drive, there is potential for future improvement. As noted in Section 3.6, it is recommended that the City of Wanneroo liaise with the Public Transport Authority to examine the feasibility of diverting or extending an existing bus route to operate along Scenic Drive or to establish a new stop near the site frontage. Even a minor route modification could materially enhance accessibility and support broader mode-shift objectives over time, particularly once usage patterns at the new WRSH are better understood.

Overall, while public transport availability is presently limited, the development provides appropriate infrastructure to support group transport needs and offers a clear opportunity for long-term service improvements through coordination with the Public Transport Authority.

12 Walking assessment

Walking access to the proposed WRSH is strong and well supported by the existing pedestrian network described in Section 3.7. A continuous red-asphalt shared path runs along the western side of Scenic Drive, providing direct access to the site and forming part of the wider Lake Joondalup active-transport corridor. This path connects the site with the surrounding recreation precinct, adjacent public open spaces and nearby residential areas.

Safe and frequent crossing opportunities across Scenic Drive are available immediately adjacent to the site, including three mid-block pedestrian refuge crossings and a fourth crossing at the Scenic Drive–Church Street roundabout. All crossings are equipped with kerb ramps, splitter islands and red-asphalt flush-median treatments, enabling pedestrians of all abilities to cross the two-lane carriageway in two stages. The relatively close spacing of the crossings—each less than 200 metres apart—ensures convenient east–west pedestrian permeability along the corridor.

Internal pedestrian connections within the development will integrate seamlessly with the external shared path, providing clear, legible and direct routes between the car parking areas, bus drop-off zone and the main building entry. Taken together, the shared path network, frequent crossing points and integrated site layout establish a safe, accessible and high-quality walking environment that strongly supports active travel to and from the development.

The WAPC Transport Impact Assessment Guidelines for Developments (2016) provide warrants for installing pedestrian priority crossing facilities. This is based on the volume of traffic as the key factor determining if pedestrians can safely cross a road. The guidelines recommend pedestrian priority crossing facilities be considered once the peak hour traffic exceeds the volumes detailed in Table 6.

The traffic volumes in this table are based on a maximum delay of 45 seconds for pedestrians, equivalent to Level of Service E. Traffic volumes on the road network adjacent to the site are expected to be below the threshold for safe pedestrian crossing. Therefore, the pedestrian crossing level of service is satisfactory on the adjacent road network.

Table 6: Traffic volume thresholds for pedestrian crossings

Road cross-section	Maximum traffic volumes providing safe pedestrian gap
2-lane undivided	1,100 vehicles per hour
2-lane divided (with refuge)	2,800 vehicles per hour
4-lane undivided*	700 vehicles per hour
4-lane divided (with refuge)*	1,600 vehicles per hour

13 Cycling assessment

13.1 Bicycle parking and end of trip facilities

The development seeks to promote active transport modes. Extensive bicycle parking and end of trip facilities are provided including 4 bicycle rails which can park up to 8 bicycles (double-sided). The building also provides separate male and female showers, change rooms and lockers.

13.2 Sustainable transport catchment

As detailed in Figure 14, the subject site is well situated for staff and visitors to travel by sustainable modes of transport. A comfortable 8km or 20-25min cycle will provide the development with a large catchment of local residents.

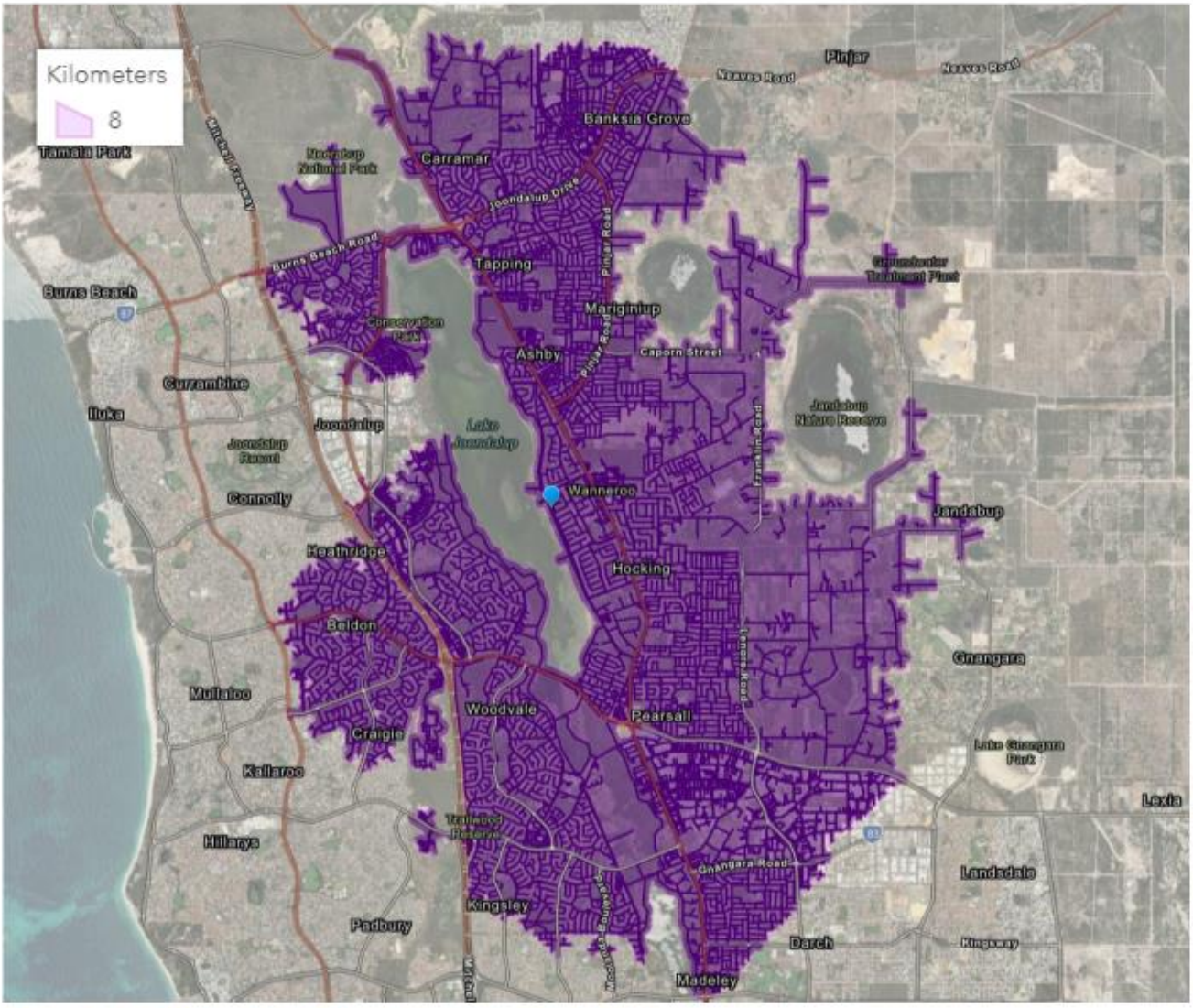


Figure 14: Cycling and micro-mobility catchment

14 Conclusion

This Transport Impact Assessment has been prepared by Urbii on behalf of City of Wanneroo with regards to the proposed Wanneroo Recreation Sports Hub (WRSH), located at 245 Scenic Drive, Wanneroo.

The subject site is situated on the western side of Scenic Drive, to the south of the existing Wanneroo Recreation Centre building. It is proposed to develop the site into a new recreation sports hub building.

Scenic Drive currently operates as a low-volume Local Distributor with a safe operating speed environment, adequate geometric standards and strong active-transport facilities, including a high-quality shared path and multiple formal pedestrian refuge crossings. Analysis of five years of crash data confirms that there are no systemic safety issues within the corridor. Existing traffic volumes are modest, with weekend movements peaking at only 116 vehicles per hour, and the corridor is expected to continue performing well under projected future conditions.

Traffic generation for the proposed Sports Hub has been conservatively estimated using two weeks of continuous survey data collected at the existing Wanneroo Recreation Centre. When applied to the proposed facility, the precinct is forecast to generate approximately 264 peak-hour vehicle movements in the weekend midday period. Even when future background growth is applied, traffic volumes along Scenic Drive remain well below thresholds requiring major intersection analysis or upgrades. SIDRA modelling undertaken for the site access points confirms that both proposed crossovers will operate at Level of Service A under 2037 post-development conditions, with minimal delays and negligible queuing.

Sightline assessments undertaken in accordance with Austroads guidance confirm that both pedestrian crossing sight distance and stopping sight distance requirements are satisfied. To maintain full compliance, five on-street parking bays located between the proposed crossovers should be removed as they fall within critical sightline envelopes.

Swept-path analysis demonstrates that service vehicles, including 12.5-metre heavy rigid vehicles, can manoeuvre safely within the site subject to minor refinements which can be incorporated into the detailed design of the crossovers.

The development provides a substantial increase in parking supply, with 183 precinct bays available when combined with the existing Recreation Centre. Peak parking demand is estimated at 149 bays, resulting in an efficient utilisation rate of approximately 81% and ensuring sufficient capacity during periods of higher recreational activity. The site also benefits from excellent walking and cycling connectivity, supported by the Lake Joondalup shared-path network, and includes a dedicated internal bus drop-off area to accommodate school and community transport.

Overall, the findings of this assessment confirm that the proposed Wanneroo Recreation Sports Hub integrates effectively with the existing transport network, provides safe and efficient access for all modes, and will not create unacceptable impacts on surrounding roads or neighbouring areas. The development is well aligned with the recreational character of the precinct and can be supported from a transport planning and traffic engineering perspective.

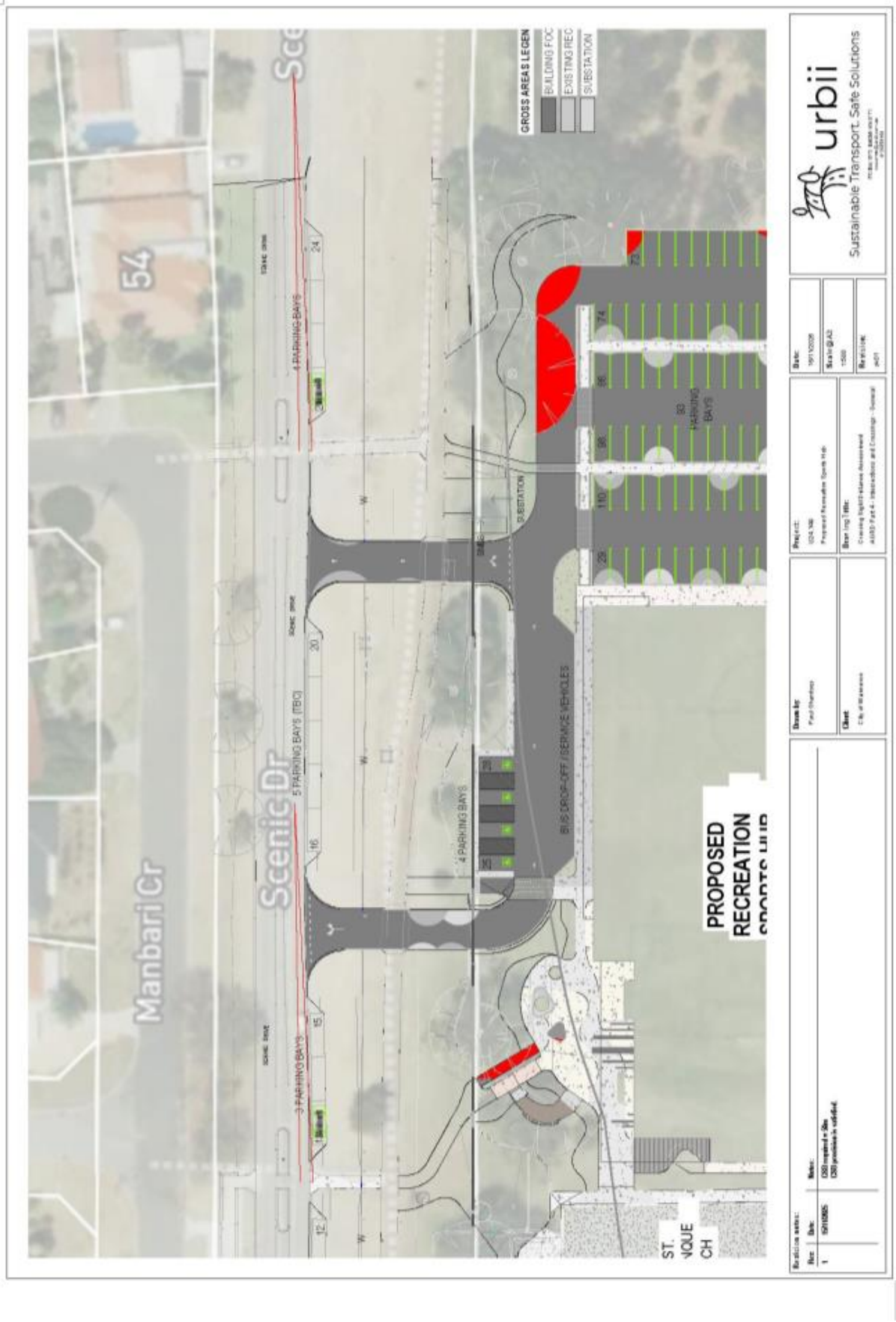
Appendices

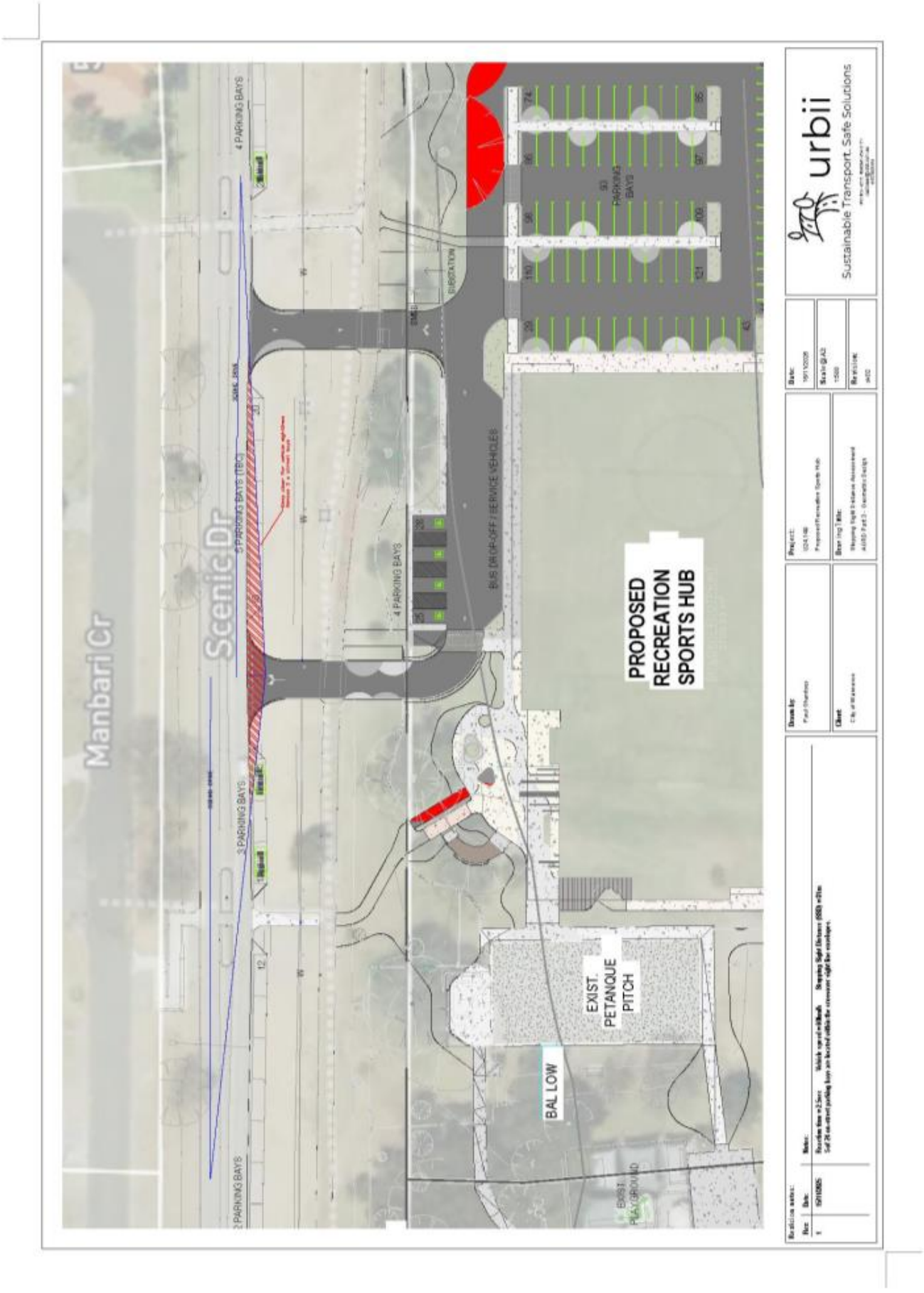
Appendix A: Proposed development plans

PROPOSED RECREATION SPORTS HUB
EXISTING RECREATION CENTRE
BOUNDARY
LAKE JOONDALUP
SITE PLAN - OVERALL
SITE PLAN OVERALL
SK001
WANNEROO RECREATION SPORTS HUB
Hodge Collard Preston
ARCHITECTS

Hodge Collard Preston
WANNEROO RECREATION SPORTS HUB
SK100
GA FLOOR PLAN
GROUND FLOOR

Appendix B: Sightline assessment sketches


Manbari Cr
Scenic Dr
54
5 PARKING BAYS (TBC)
4 PARKING BAYS
3 PARKING BAYS
4 PARKING BAYS
93 PARKING BAYS
BUS DROP-OFF / SERVICE VEHICLES
PROPOSED RECREATION
urbii
Sustainable Transport. Safe Solutions


Manbari Cr
Scenic Dr
4 PARKING BAYS
3 PARKING BAYS (TBC)
3 PARKING BAYS
2 PARKING BAYS
4 PARKING BAYS
BUS DROP-OFF / SERVICE VEHICLES
BUS STATION
93 PARKING BAYS
PROPOSED RECREATION SPORTS HUB
EXIST. PETANQUE PITCH
BAL LOW
EXIST. PLAYGROUND
urbii
Sustainable Transport. Safe Solutions

Appendix C: Traffic volume diagrams

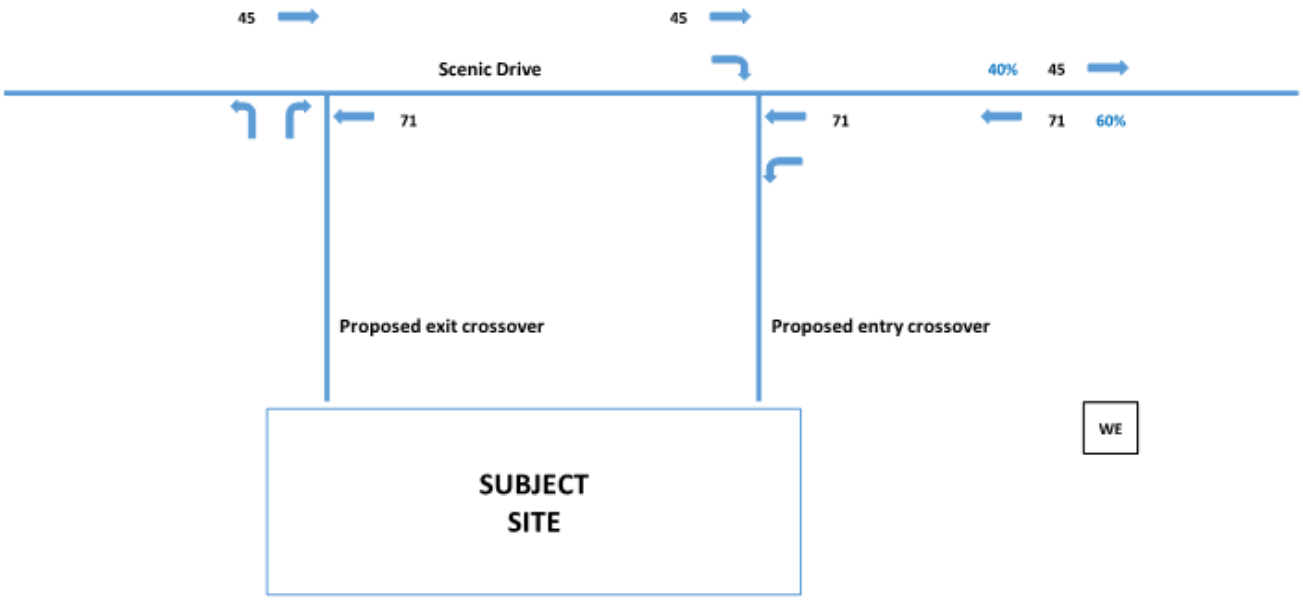


Figure 15: 2025 base – surveyed weekend peak hour traffic volumes

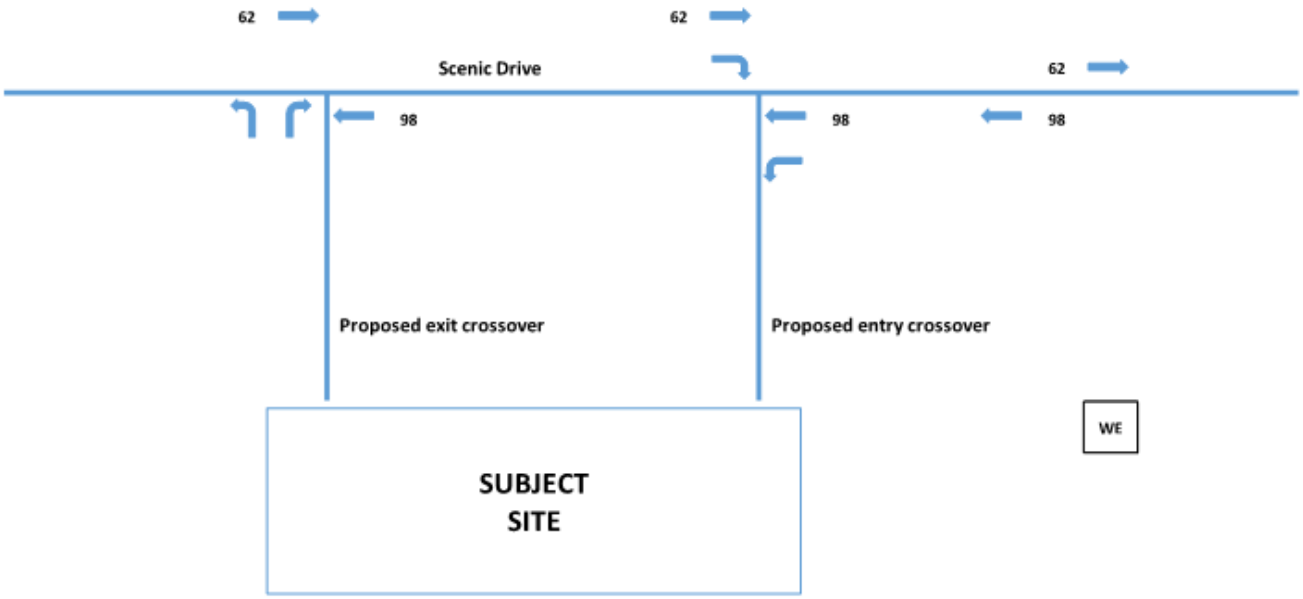


Figure 16: 2037 base – projected weekend peak hour traffic volumes

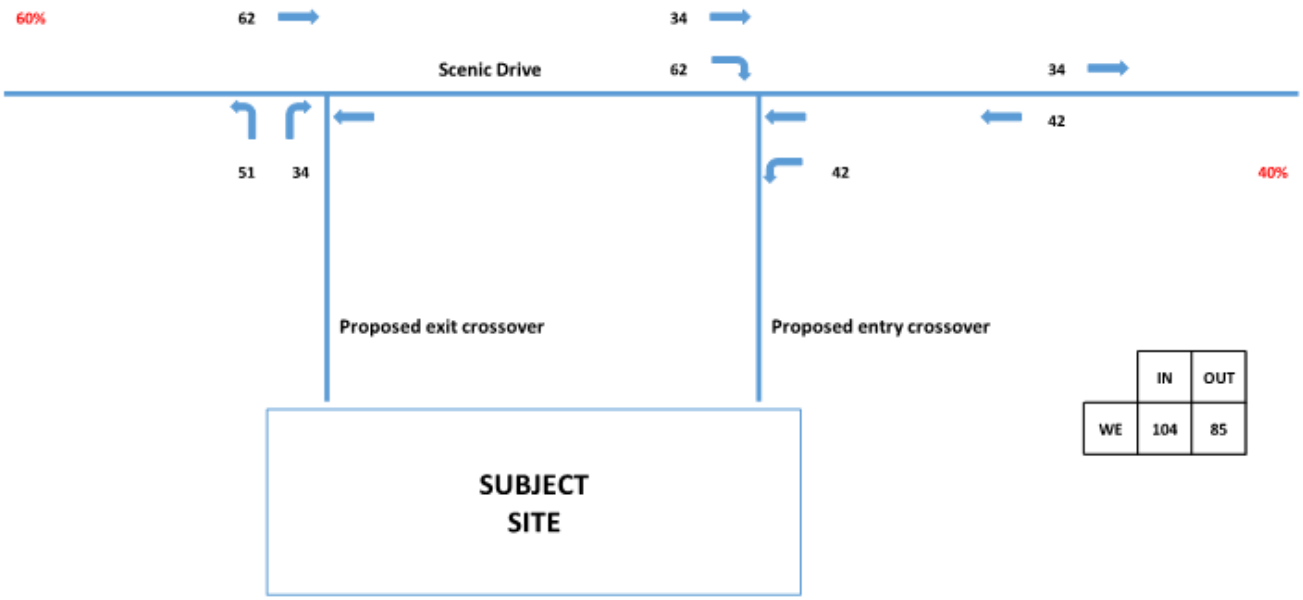


Figure 17: Proposed development – weekend peak hour traffic volumes

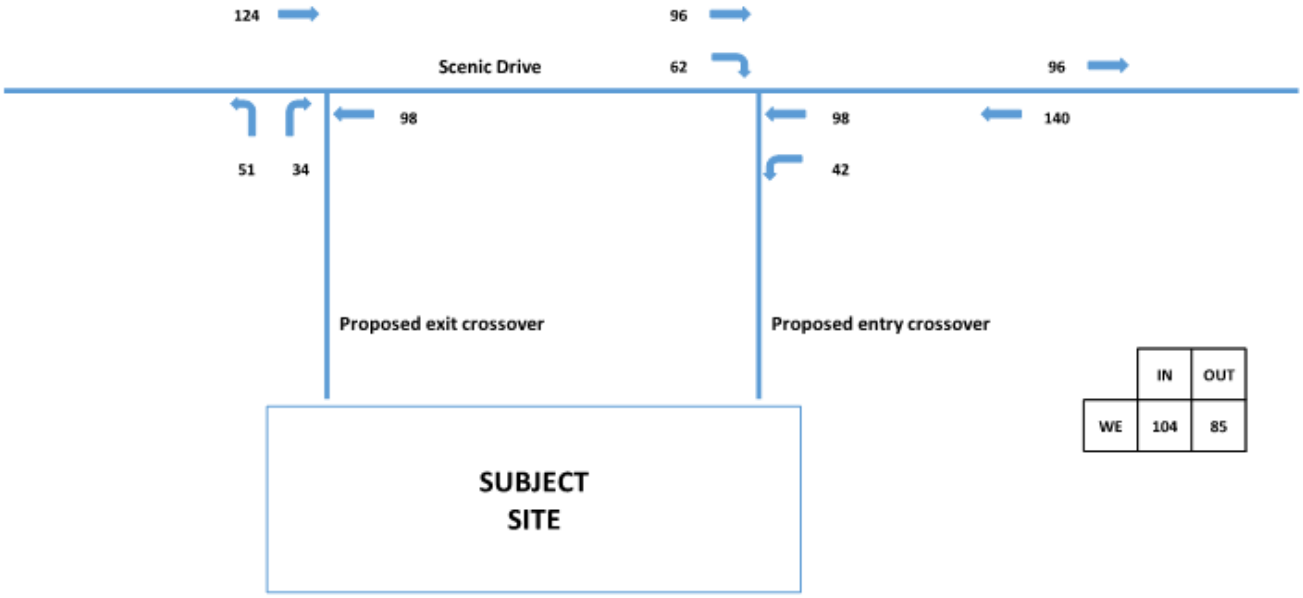


Figure 18: 2037 post development weekend peak hour traffic volumes

Appendix D: SIDRA analysis outputs

SIDRA outputs are presented in the form of Degree of Saturation, Level of Service, Average Delay and 95% Queue. These characteristics are defined as follows:

- **Degree of Saturation (DoS):** is the ratio of the arrival traffic flow to the capacity of the approach during the same period. The Degree of Saturation ranges from close to zero for varied traffic flow up to one for saturated flow or capacity.
- **Level of Service (LoS):** is the qualitative measure describing operational conditions within a traffic stream and the perception by motorists and/or passengers. In general, there are 6 levels of service, designated from A to F, with Level of Service A representing the best operating condition (i.e. free flow) and Level of Service F the worst (i.e. forced or breakdown flow).
- **Average Delay:** is the average of all travel time delays for vehicles through the intersection.
- **95% Queue:** is the queue length below which 95% of all observed queue lengths fall.

2037 weekend midday peak hour (with development traffic)

MOVEMENT SUMMARY

Site: [1] Scenic Drive / Exit Crossover (Folder1)
Network: [1] 2037 Weekend Peak Hour (Post Development) (Folder1)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

U24.149 - Wanneroo Recreation Sports Hub
2037 Post Development
Weekend peak hour - 1pm to 2pm
Site Category: (None)
Give-Way (Two-Way)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	Aver. Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
South: Site exit crossover															
1	L2	All MCs	54	6.0	54	6.0	0.073	0.3	LOS A	0.1	0.8	0.23	0.18	0.23	30.1
3	R2	All MCs	36	6.0	36	6.0	0.073	1.8	LOS A	0.1	0.8	0.23	0.18	0.23	17.3
Approach			89	6.0	89	6.0	0.073	0.9	LOS A	0.1	0.8	0.23	0.18	0.23	27.2
East: Scenic Dr															
5	T1	All MCs	103	6.0	103	6.0	0.056	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach			103	6.0	103	6.0	0.056	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
West: Scenic Dr															
11	T1	All MCs	131	6.0	131	6.0	0.071	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach			131	6.0	131	6.0	0.071	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles			323	6.0	323	6.0	0.073	0.3	NA	0.1	0.8	0.06	0.05	0.06	42.1

MOVEMENT SUMMARY

Site: [2] Scenic Drive / Entry Crossover (Folder1)
Network: [1] 2037 Weekend Peak Hour (Post Development) (Folder1)
Output produced by SIDRA INTERSECTION Version: 10.0.8.241

U24.149 - Wanneroo Recreation Sports Hub
2037 Post Development
Weekend peak hour - 1pm to 2pm
Site Category: (None)
Give-Way (Two-Way)
Network Scenario: 1 | Local Volumes **Site Scenario: 1 | Local Volumes**

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	Aver. Back Of Queue [Veh. veh	Dist] m	Prop. Qued	Eff. Stop Rate	Number of Cycles to Depart	Aver. Speed km/h
East: Scenic Dr															
4	L2	All MCs	44	6.0	44	6.0	0.081	4.7	LOS A	0.0	0.0	0.00	0.16	0.00	42.7
5	T1	All MCs	103	6.0	103	6.0	0.081	0.0	LOS A	0.0	0.0	0.00	0.16	0.00	45.8
Approach			147	6.0	147	6.0	0.081	1.4	NA	0.0	0.0	0.00	0.16	0.00	44.7
West: Scenic Dr															
11	T1	All MCs	101	6.0	101	6.0	0.099	0.3	LOS A	0.2	1.1	0.21	0.27	0.21	44.7
12	R2	All MCs	65	6.0	65	6.0	0.099	4.4	LOS A	0.2	1.1	0.21	0.27	0.21	27.1
Approach			166	6.0	166	6.0	0.099	1.9	NA	0.2	1.1	0.21	0.27	0.21	40.0
All Vehicles			314	6.0	314	6.0	0.099	1.7	NA	0.2	1.1	0.11	0.22	0.11	42.2

Appendix E: Swept path diagrams

Swept path diagrams are included in this section of the report. Different coloured lines are employed to represent the various envelopes of the vehicle swept path, as described below:

Cyan represents the wheel path of the vehicle

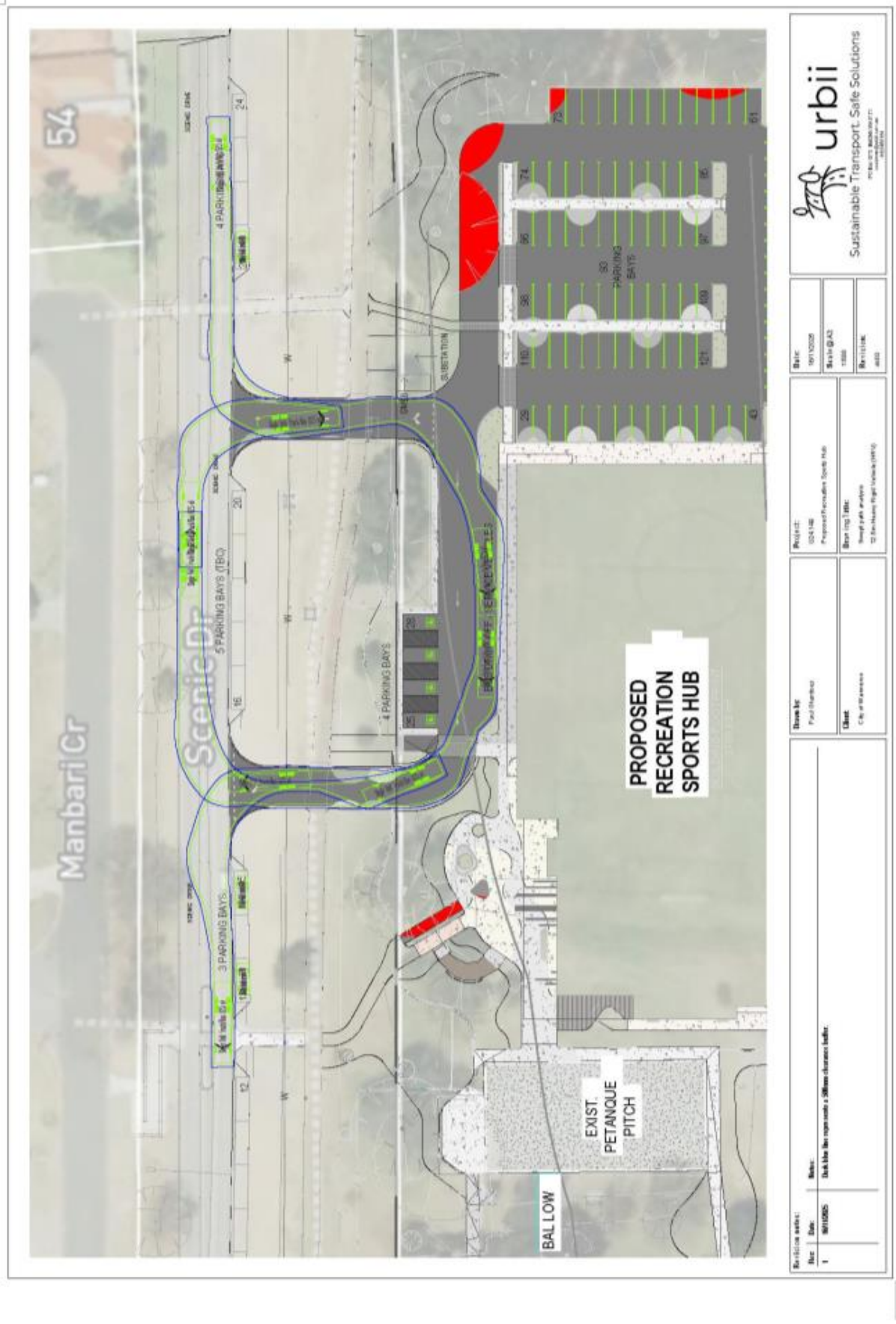
Green represents the vehicle body envelope

Blue represents a 500mm buffer line, offset from the vehicle swept path

Design vehicles tested include:

- AS2890.2: 12.5m Heavy Rigid Vehicles (HRV)

The swept path diagrams are also provided separately in high-quality, A3 PDF format.


Manbari Cr
Scenic Dr
54
PROPOSED RECREATION SPORTS HUB
EXIST. PETANQUE PITCH
BAL LOW
4 PARKING BAYS
5 PARKING BAYS (TBC)
3 PARKING BAYS
30 PARKING BAYS
urbii
Sustainable Transport. Safe Solutions

City of
Wanneroo
2024
25
ANNUAL REPORT

Alternative formats

This report is available in alternative formats and languages, including Arabic, upon request.

The City of Wanneroo is committed to building an inclusive and cohesive community that celebrates diversity by providing an environment where all people enjoy equal access to life's opportunities. This document is available in alternative formats and languages upon request. You can make a request by emailing **enquiries@wanneroo.wa.gov.au** or calling the City on **9405 5000**.

If you need to contact us in your own language you can contact us through the Translating and Interpreting Service on **13 14 50** and ask them to contact the City of Wanneroo on **08 9405 5000**. If you are deaf or have a hearing or speech impairment contact the City through the National Relay Service.

Noongar

Nidja bibool baal Noongar warayin kadak Mining noonook koodakarn bibool noonook maar koorl **enquiries@wanneroo.wa.gov.au** ka noonook waangkan ngalany **9405 5000**.

Afrikaans

Alternatiewe Formate

Die Stad Wanneroo verbind ons daartoe om 'n inklusiewe en samehorige gemeenskap te bou wat diversitiet vier. Ons verskaf dus 'n omgewing waar almal toegang tot gelyke lewensgeleenthede geniet. Op versoek is hierdie dokument in alternatiewe formate en tale beskikbaar. Om aan te vra, stuur gerus 'n e-pos aan **enquiries@wanneroo.wa.gov.au** of bel die Stad op **9405 5000**. As dit vir u nodig is om ons in u eie taal te kontak, kan u die hulp van die 'Translating and Interpreting Services' (Vertaal- en Vertolkdiens) versoek - bel **13 14 50**. Vra vir hulle om die Stad Wanneroo op **9405 5000** te bel. As u totale hoorverlies of 'n spraakof hoorgebrek het, kontak die Stad deur die National Relay-diens.

Italian

Formati alternativi

La città di Wanneroo si impegna a costruire una comunità inclusiva e unita che valorizzi la diversità e lo fa offrendo un ambiente in cui tutte le persone abbiano pari accesso alle opportunità. Questo documento è disponibile in formati e lingue alternativi su richiesta. È possibile presentare richiesta inviando un'e-mail a **enquiries@wanneroo.wa.gov.au** oppure chiamando il comune al **9405 5000**. Coloro che hanno bisogno di contattarci utilizzan do la propria lingua, possono farlo tramite il Translating and Interpreting Services al numero **13 14 50** e chiedendo all'operatore di contattare il Comune di Wanneroo al numero **9405 5000**. I non udenti o le persone con disturbi dell'udito o del linguaggio, possono contattarci attraverso il National Relay Service.

Visualizza il rapporto annuale della città di Wanneroo.

Vietnamese

Các Dạng thức Khác

Hội Đồng Thành phố Wanneroo cam kết xây dựng một đồng đồng không phân biệt, gắn bó, và tôn vinh tính đa dạng bằng cách cung cấp một môi trường mà ở đó mọi người đều có những cơ hội trong cuộc sống như nhau. Văn bản này có thể được cung cấp bằng các dạng thức và ngôn ngữ khác khi được yêu cầu. Quý vị có thể yêu cầu bằng cách gửi email về **enquiries@wanneroo.wa.gov.au** hoặc gọi cho Hội đồng qua số **9405 5000**. Nếu cần liên lạc chúng tôi bằng ngôn ngữ của quý vị, quý vị có thể liên lạc qua Dịch vụ Thông Phiên Dịch (TIS) qua số **13 14 50** và yêu cầu họ liên lạc cho Hội đồng Thành phố Wanneroo qua số **9405 5000**. Nếu bị điếc hoặc có khuyết tật thính giác hay nói hãy liên lạc Hội đồng TP qua Dịch vụ Tiếp Âm Quốc Gia.

Xem Bản Báo Cáo Thường Niên của Thành phố Wanneroo.

Macedonian

Разни форми

Општина Wanneroo се залага да гради вклучителна и сплотена заедница што ја слави разноликоста преку создавање на опкружување во кое сите луѓе уживаат еднаков пристап до животните можности. Овој документ може да се добие во разни форми и на разни јазици ако вие го побарате тоа. Барање може да доставите така што ќе пратите електронска порака на **enquiries@wanneroo.wa.gov.au** или ќе се јавите во Општината на **9405 5000**. Ако треба да стапите во контакт со нас на вашиот мајчин јазик, може да ни се јавите преку Преведувачката служба (Translating and Interpreting Services) на **13 14 50** и да ги замолите нив да се јават во Општина Wanneroo на **9405 5000**. Ако сте глуви или имате оштетен слух или говор, јавете се во Општината преку Националната служба за поврзување (National Relay Service).

Погледнете го Годишниот извештај на Општина Wanneroo.

"Welcome to the Annual Report for 2024-25"

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Introduction

Acknowledgement of Country

Kaya (*hello*) and Wandjoo (*welcome*) to Wanneroo.

The City of Wanneroo acknowledges the Traditional Custodians of the land we are working on, the Whadjuk people.

We would like to pay respect to the Elders of the Noongar nation, past, present and future, who have walked and cared for the land, and we acknowledge and respect their continuing culture, and the contributions made to the life of this City and this region.

The City is committed to honouring the Australian Aboriginal peoples' unique cultural and spiritual relationships with the land, waters and seas and their rich contribution to the community.

The area encompassed by the City has a significant Aboriginal cultural history and an active community. Welcome to Country and an Acknowledgement of Country at events recognise the unique position of Aboriginal people in Wanneroo's culture and history. They enable the wider community to share in Aboriginal culture and heritage and facilitate improved relationships between Aboriginal and non-Aboriginal people.

To show our respect for Whadjuk history, culture and our shared future, a Welcome to Country is conducted at all major City events, including:

- Celebrations of Aboriginal and Torres Strait Islander peoples and culture
- Openings of significant buildings and infrastructure
- Launches of major exhibitions and annual art awards.

"Wanneroo kaadatj Noongar moort Noongar boodja-k Wadjak boodja-k. Ngalak kaadatj Noongar nedingar wer birdiya, barn boodja-k wer kaaradj boodja-k koora koora wer yeyi. Ngalak kaadatj baalabang malayin wer nakolak baalap yang ngalany-al."

Welcome to the Annual Report

The City of Wanneroo is proud to present its Annual Report for the financial year ending 30 June 2025.

This report outlines our financial and operational performance over the past year, measured against the key projects, goals and priorities in our:

- Strategic Community Plan 2021–2031 (SCP)
- Corporate Business Plan 2024–25 to 2027-28 (CBP)
- Annual budget

In accordance with the *Local Government Act 1995* (WA), all local governments are required to produce an annual report by 31 December each year.

At the City of Wanneroo, we go beyond statutory requirements by producing a comprehensive and engaging report. It highlights the wide range of services we deliver, the achievements we're proud of, and the challenges we've faced. It also outlines our plans for the year ahead.

This report is also a valuable tool for our employees, helping them understand how their work contributes to our shared vision and what to expect in the coming year.

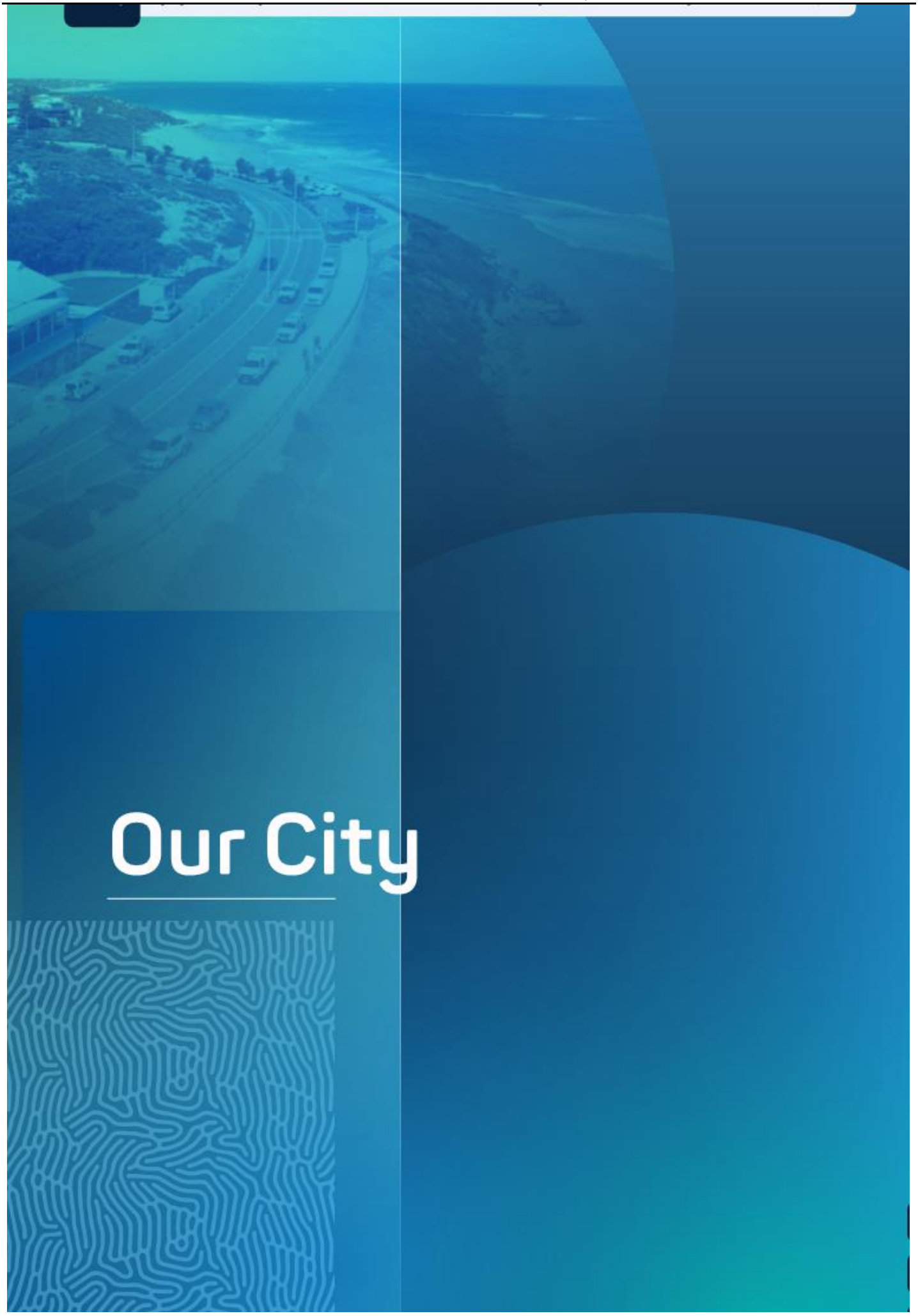
What's inside

This report is divided into the following sections:

- About the City and our strategic direction
- Performance highlights and challenges
- Council and governance overview
- Detailed results aligned to the seven goals of our Strategic Community Plan
- Organisational information
- Financial report and statements.

We hope this report helps you better understand our operations and performance. Your feedback is welcome and helps us improve future reporting.

To learn more or share your feedback, visit **wanneroo.wa.gov.au**.


Our City

Our City

The City of Wanneroo is located along the north-eastern urban corridor of the Perth metropolitan area, 12 km from the Perth CBD at its nearest point, stretching to 62km from the CBD at its furthest.

We are bordered by:

- **North:** Shire of Gingin
- **East:** Shire of Chittering and City of Swan
- **South:** Cities of Stirling and Joondalup
- **West:** the Indian Ocean and the City of Joondalup

As one of Western Australia's largest and fastest-growing local government areas, the City of Wanneroo is a popular place to live, work and do business.

Our landscape is diverse, with a mix of urban, rural and industrial areas, as well as significant natural bushland and state forest. Key natural features include:

- Yanchep National Park
- Neerabup National Park
- Yellagonga Regional Park

Urban areas are primarily residential, supported by two key commercial and industrial hubs:

- **Wangara –** a well-established industrial centre
- **Neerabup Industrial Area –** an emerging employment and service precinct.

What we offer

The City provides a wide range of services and facilities for residents and visitors, including:

Hundreds of parks and open spaces to play and explore.

A stunning stretch of coastline, including Yanchep Lagoon.

Playgrounds for children of all ages.

Four libraries, an art gallery and a regional museum.

Major recreation centres, including Aquamotion and Kingsway Indoor Stadium.

Skate parks and BMX tracks.

Courts for netball, tennis, basketball, badminton, soccer and volleyball.

Youth centres and community centres.

Two golf courses.

Lawn bowls facilities.

Our community in numbers

Population

243,013
Estimated population 2025

339,408
Population forecast 2035

41%
People born overseas

21%
People who speak a language other than English

39%
Couples with children

1.9%
Aboriginal and Torres Strait Islander population

35
Median age of residents

Infrastructure assets

638
parks and gardens, totalling 2,774.7 hectares

1,976
kilometres of road

413
recreational parks

1,499
kilometres of pathway

146
conservation reserves such as bushland and wetlands

528
hectares of foreshore

Community facilities

326
playgrounds (with 73 containing areas with nature play)

2
sports halls

4
libraries

1
aquatic facility

1
recreation centre

29
community centres

3
museums

Our History

The City of Wanneroo has a rich and diverse history, shaped by its deep Aboriginal cultural roots and waves of migration that followed European settlement.

Aboriginal cultural heritage

Wanneroo is located on Noongar Boodjar (Country), where 14 language groups are recognised. The northern part of the City is where the Country of the Whadjuk peoples and the Country of the Yued peoples meet.

The name 'Wanneroo' is derived from the Noongar word for women's digging sticks, wanna. Local Noongar women have shared that Wanneroo can be translated as 'dance of the digging sticks'.

At the time of early European settlement, the Whadjuk people were divided into resident groups, each with their own territory. These groups were described by Whadjuk leader Yagan in 1832:

- **Beeliar –** led by Midgegooroo, south of the Swan River and south-west of the Canning River
- **Beeloo –** led by Munday, south of the Swan and north-east of the Canning to the Helena River
- **Mooro –** led by Yellagonga, north of the Swan River and east to Ellen Brook
- **Mountain tribe (Noongar name unknown) –** led by Weeip, in the Darling Range.

The Wanneroo region was part of Mooro Country, led by respected Elder Yellagonga. Water was central to the lives and spiritual connection of his people, who moved across the coastal plain according to the six Noongar seasons. Their deep knowledge of the land and climate supported sustainable living through hunting, fishing and gathering.

Wanneroo's lakes, caves and coastline are part of Dreaming stories that remain significant to Noongar people today, explaining the creation of landforms and animals.

European settlement and growth

Wanneroo's first permanent European settlers were James and Mary Ann Cockman, who established a home in 1851.

By 1853, they had purchased 45 acres (18 hectares) and began farming. Their limestone home, Cockman House, still stands today and is listed on the State Heritage Register.

Like the Noongar people, early settlers relied on the natural resources of the lakes district. By 1872, a small farming community had formed, with 60 European families living near the lakes and along the north–south route that became Wanneroo Road.

The Wanneroo Road Board was established in 1902, holding its first meeting in January 1903. Migration after the First World War brought settlers from southern Europe – Italy, Macedonia and Yugoslavia – who established market gardens, vineyards and lime kilns.

After the Second World War, a larger wave of British and European migrants arrived, often sponsored by earlier settlers. Families such as Ariti, Conti, Jambanis and Villanova became part of the fabric of the community.

The area remained largely rural until the mid-20th century. In 1961, the Road Board became the Shire of Wanneroo, reflecting growing urbanisation and demand for local services.

The 1970s and 1980s saw new migrants from Vietnam, many of whom established small businesses and market gardens that continue to thrive today.

In 1985, the Shire became the City of Wanneroo. In 1998, the City was divided into the Shire of Wanneroo and the City of Joondalup. Wanneroo regained its city status on 1 July 1999, with the first Council elected in December that year.

Population growth

1902:
100 residents

1950:
1,100 residents

1970:
8,000 residents

2001:
80,000 residents

2025:
243,013 residents

Heritage sites

The City is proud of its heritage and maintains several historic sites, including:

- Buckingham House and Old Wanneroo School House
- Cockman House
- Cooper's Lime Kilns
- Fisherman's Hollow
- King Neptune statue (Two Rocks)
- Leeman's Landing
- Lime Kilns – Emerald Reserve
- Mary Lindsay Homestead
- Perry's Paddock
- Wanneroo Showgrounds
- Wanneroo War Memorial
- Yanchep National Park
- Yanchep War Memorial
- Yellagonga Regional Park

Message from the Mayor

It is my pleasure to present the City of Wanneroo Annual Report for 2024-25.

This year has been one of growth, progress and planning for the future. Our population has now exceeded 243,000 residents, and with forecasts showing growth to 339,000 by 2035, the need to plan for a safe, sustainable and connected City has never been more important.

Across the City, we are investing in projects and services that make daily life better. From maintaining parks, roads and community facilities to supporting local business, libraries, waste services and recreation programs, our work continues to touch every part of community life.

Major projects such as the Alkimos Aquatic and Recreation Centre and the Dordaak Kepup Library and Youth Innovation Hub are well underway, alongside upgrades to parks, playgrounds and pathways that bring people together and strengthen local neighbourhoods.

Our commitment to sustainability and the environment continues to guide how we plan and deliver, while our focus on safety, wellbeing and inclusivity ensures that everyone in our growing community feels supported and connected.

Through strong advocacy during the State and Federal elections, we secured funding commitments for key projects and services including vital road upgrades, emergency services and community hubs. These investments will help us meet the needs of a growing population and ensure that Wanneroo continues to thrive as a vibrant, forward-looking City.

Thank you to our residents, volunteers, community groups and local businesses for your ongoing support and contribution to the life of our City. Together, we are building a community that celebrates diversity, protects its natural assets and creates opportunities for everyone to thrive.

Linda Aitken JP
Mayor

"Thank you to our residents, volunteers, community groups and local businesses for your ongoing support and contribution to the life of our City."

Message from the CEO

As one of Western Australia's fastest-growing local governments, the City of Wanneroo continues to deliver for our community while managing growth responsibly.

Our focus remains on providing quality services, maintaining a strong financial position and building the infrastructure our residents need now and into the future.

In 2024-25, we delivered more than $48.6 million in major capital works. Key projects included:

- **$11 million** for the Dordaak Kepup Library and Youth Innovation Hub
- **$13.3 million** for the Alkimos Aquatic and Recreation Centre
- **$6 million** for the Lenore Road duplication
- **$4.2 million** for the Kingsway netball court and lighting renewal

Across the year, the City delivered more than $95 million in capital works, achieving a 94 per cent delivery rate, our highest level on record. Operating expenditure continued to support essential services such as waste management, community safety and recreation, improving local facilities and strengthening connections across our community.

Performance across the organisation remained strong with a 94 per cent Corporate Business Plan result, our best outcome in four years, and reflecting continuous improvement. We also maintained a solid financial position, recording an operating surplus and responsibly managing more than $3.7 billion in assets. A further $1.75 million in grant funding was secured for projects that protect the coastline, support young people and enhance public safety.

Sustainability continued to guide how we plan and invest. Over the past year, we planted more than 4,000 verge trees and 25,000 native tube stock, endorsed the Neerabup Resource Recovery Precinct Masterplan and transitioned 28 City sites to renewable energy. Together with the Urban Forest and Smart City strategies, these initiatives are helping create a cleaner, greener future for everyone.

Our people also remain central to everything we achieve. Staff turnover reduced to 16 per cent, the lowest level in four years, and our inaugural Culture and Engagement Survey achieved 63 per cent participation, giving us a strong benchmark for continued cultural improvement.

The dedication and capability of our staff were reflected in several major awards, including a ninth consecutive Gold Award at the Australasian Reporting Awards, three wins at the IPWEA WA Awards for Excellence, and recognition at the National Awards for Local Government.

Thank you to our Council, staff, volunteers and community partners for your ongoing collaboration and support. Together, we're delivering projects, services and spaces that make Wanneroo a more connected, sustainable and welcoming City.

Bill Parker
Chief Executive Officer

Our strategic direction

In June 2021, the City of Wanneroo adopted its third Strategic Community Plan (SCP).

The SCP 2021–2031 was developed following an extensive and unprecedented stakeholder engagement process, shaped in part by the challenges of the COVID-19 pandemic.

The SCP is the City's most important planning document. It is under the custodianship of Council and sets the direction for the City's future – defining our shared vision, purpose, goals and priorities for the next decade.

In this 2024–25 Annual Report, we provide a transparent account of our strategic and operational progress, outlining the work undertaken and the outcomes achieved.

Our shared community vision

"A welcoming community, connected through local opportunities."

This vision reflects the passionate views of our community and their hopes for the future of the City.

Our community wants Wanneroo to be a place that:

- is welcoming to all
- enables people to live and work locally
- encourages participation in community life
- builds a strong sense of belonging.

This vision gives the organisation a clear sense of purpose and direction, while fostering unity and coherence across our services and activities.

Our strategic goals

The City's seven strategic goals were developed in partnership with the community through extensive engagement.

These goals reflect the community's aspirations and provide a clear direction for the City over the life of the SCP.

Each goal is supported by a set of 33 strategic priorities that guide operational planning and resource allocation. These are detailed in the full SCP.

The City's strategic goals are:

Goal 1:
An inclusive and accessible City with places and spaces that embrace all

Goal 2:
A City with rich cultural histories, where people can visit and enjoy unique experiences

Goal 3:
A vibrant, innovative City with local opportunities for work, business and investment

Goal 4:
A sustainable City that balances the relationship between urban growth and the environment

Goal 5:
A well-planned, safe and resilient City that is easy to travel around and provides a connection between people and places

Goal 6:
A future focused City that advocates, engages and partners to progress the priorities of the community

Goal 7:
A well-governed and managed City that makes informed decisions, provides strong community leadership and valued customer-focused services

Our purpose

"To create a strong community with local opportunities to participate, be active, feel secure, contribute and belong."

Our purpose defines why we exist and what we aim to achieve. It provides a clear message about our commitment to delivering on the community's vision and helps unify our workforce around a shared direction.

Our values

Our values guide how we work, how we serve our community, and how we interact with each other.

They are the foundation of our culture and are closely linked to our vision and strategy.

Customer focused	Improvement	Accountability	Collaboration	Respect
Delivering service excellence	Finding simpler, smarter and better ways of working	Meeting commitments on time and to standard	Together we are stronger	Trusting others and being trustworthy

Our business principles

Through the development of the SCP, four key business principles were identified by stakeholders.

These principles underpin our operational planning and budgeting, ensuring we deliver services effectively and efficiently.

Principle 1 - Sustainability

We balance performance with our contribution to social, economic, environmental and governance outcomes.

Principle 2 - Value for money

We use public funds effectively, efficiently and equitably to maximise community value.

Principle 3 - Use of technology for improvement

We plan for and use modern technologies to improve service delivery and community outcomes.

Principle 4 - A diverse, engaged, safe and capable workforce

We build a high-performing and agile workforce by strengthening diversity, capability and engagement.

Our integrated planning framework

The City of Wanneroo's Integrated Planning and Reporting Framework (IPRF) guides our planning processes to ensure they align with the aspirations and priorities identified by our community.

The IPRF ensures that our strategic direction, service delivery and resource allocation are coordinated and transparent. It supports informed decision-making and helps us deliver on our long-term vision.

Risk is managed in line with the City's risk appetite, as determined by Council. To ensure effective risk management across all levels of planning and decision-making, risks are assessed at four levels:

- strategic
- corporate
- operational
- project.

The IPRF also meets the legislative requirements for local governments in Western Australia, as outlined in the *Local Government (Administration) Regulations 1996*.

Our key planning documents

The City uses three key planning levels under the IPRF to guide our strategic direction and service delivery.

Two of these levels are required under the *Local Government (Administration) Regulations 1996*.

Below is an overview of each planning level and its role within the organisation.

Level 1:
Strategic Community Plan

The Strategic Community Plan is a legislated 10-year plan – also known as the City's 'Plan for the Future'.

It is the Council's primary strategic document, capturing the community's long-term vision, goals and priorities. The plan is reviewed every four years and shaped through consultation with residents and stakeholders.

The SCP 2021–2031 can be found on our website at **wanneroo.wa.gov.au**.

Level 2:
Corporate Business Plan

The Corporate Business Plan is also a legislated document. It outlines the City's priorities, services, projects and programs over a four-year period to deliver on the goals of the SCP.

The current CBP (2024–25 to 2027–28) is supported by a suite of resourcing plans that guide implementation and provide transparency for both the organisation and the community.

The current and previous versions of the CBP can be found at **wanneroo.wa.gov.au**.

Level 3:
Annual service unit operational plans

Each year, the City develops operational plans for every service unit. These plans link day-to-day service delivery with the annual budget.

They provide detailed planning for the first year of the CBP, including services, projects, staffing and finalised budgets. These plans also support accountability and are integrated into employee performance and development reviews.

Looking ahead:
Council Plan 2025–2034

The City of Wanneroo adopted its new **Council Plan 2025–2034** in **August 2025**. While this annual report reflects performance against the current **Strategic Community Plan**, the new Council Plan will set a refreshed strategic direction for the next decade.

The draft Plan outlines a shared vision:

"Together we grow – safe, green, and connected."

It introduces five strategic goals focused on:

- safety
- liveability
- economic development
- sustainability
- good governance.

The Council Plan will guide future planning, investment and service delivery, ensuring alignment with community aspirations and long-term priorities.

City services and activities

The City of Wanneroo delivers a wide range of services and activities that support our community's needs and align with the priorities of our Strategic Community Plan.

From libraries and waste management to land use planning and community development, our services are designed to enhance quality of life and support a thriving, inclusive and sustainable City.

Goal 1:
An inclusive and accessible City with places and spaces that embrace all

- Community recreation programs and facilities
- Place management
- Community development
- Library services

Goal 2:
A City with rich cultural histories, where people can visit and enjoy unique experiences

- Museums, heritage, and arts
- Tourism promotion

Goal 3:
A vibrant, innovative City with local opportunities for work, business and investment

- Economic development

Goal 4:
A sustainable City that balances the relationship between urban growth and the environment

- Environmental management
- Parks and conservation areas
- Waste management

We also provide internal services that strengthen our ability to deliver for the community. Below is an overview of the services we provide, grouped by strategic goal:

Goal 5:
A well-planned, safe and resilient City that is easy to travel around and provides a connection between people and places

- Public health
- Community safety
- Emergency management
- Future land use planning
- Planning and building approvals
- Planning and building compliance
- Transport and drainage

Goal 6:
A future focused City that advocates, engages and partners to progress the priorities of the community

- Advocacy

Goal 7:
A well-governed and managed City that makes informed decisions, provides strong community leadership and valued customer focused services.

- Leadership, strategy and governance
- Customer and stakeholder delivery
- Results and sustainable performance

We also deliver specific operating and capital works actions. Some of these actions are key drivers of ongoing service delivery. Others are one-off actions to meet the aspirations and objectives in the SCP.

How we're a more sustainable city

As outlined in Goal 4 of our Strategic Community Plan, we are committed to leading the way in addressing climate change and reducing greenhouse gas emissions. We also encourage and support our community to act alongside us.

To reduce our environmental impact, we've adopted several key strategies, including the Climate Change Adaptation and Mitigation Strategy, Urban Forest Strategy, and Smart City Strategy.

We've also introduced practical initiatives such as:

- a three-bin waste system
- solar photovoltaic (PV) systems on City-owned buildings
- LED floodlighting upgrades
- annual tree planting programs
- transitioning to hybrid and electric vehicles.

These actions are helping us reduce our carbon footprint, embrace new technologies, and build a more sustainable future for our community.

Urban Forest Strategy

Our Urban Forest Strategy sets out a 20-year vision to protect, retain and grow our tree canopy and vegetation. We're working closely with the community and key stakeholders, including the State Government, to preserve existing greenery and increase canopy cover across the City.

This strategy helps reduce urban heat island effects and ensures our urban forest thrives for future generations.

Tree planting program

Tree planting is a cornerstone of our Urban Forest Strategy. In 2024–25, we planted:

- 4,286 verge trees as part of our annual program
- 25,000 tube stock to boost overall canopy cover.

Mature trees can absorb up to 40kg of CO_2 per year, while also improving air quality, providing shade, and creating habitats for native wildlife.

Smart City Strategy

Our Smart City Strategy guides how we use technology and data to improve services and create new opportunities. We're working with developers and partners to embed smart solutions into new developments, facilities and public spaces – helping to future-proof our City.

Solar and LED technology

We've installed solar PV systems on major City buildings, including:

- Civic Centre
- Wanneroo Aquamotion
- Kingsway Indoor Stadium
- libraries and community centres.

We're also using energy monitoring tools at two facilities to identify and implement energy-saving measures. Additionally, we've upgraded floodlights and car park lighting to energy-efficient LEDs, reducing power use and improving sustainability.

Future-ready waste infrastructure

To support long-term sustainability and circular economy outcomes, we are transforming our waste infrastructure.

In 2024–25, Council endorsed the Neerabup Resource Recovery Precinct Masterplan – a strategic blueprint for a modern, integrated waste facility that will improve recycling rates, reduce landfill dependency, and support innovative, low-emission waste technologies.

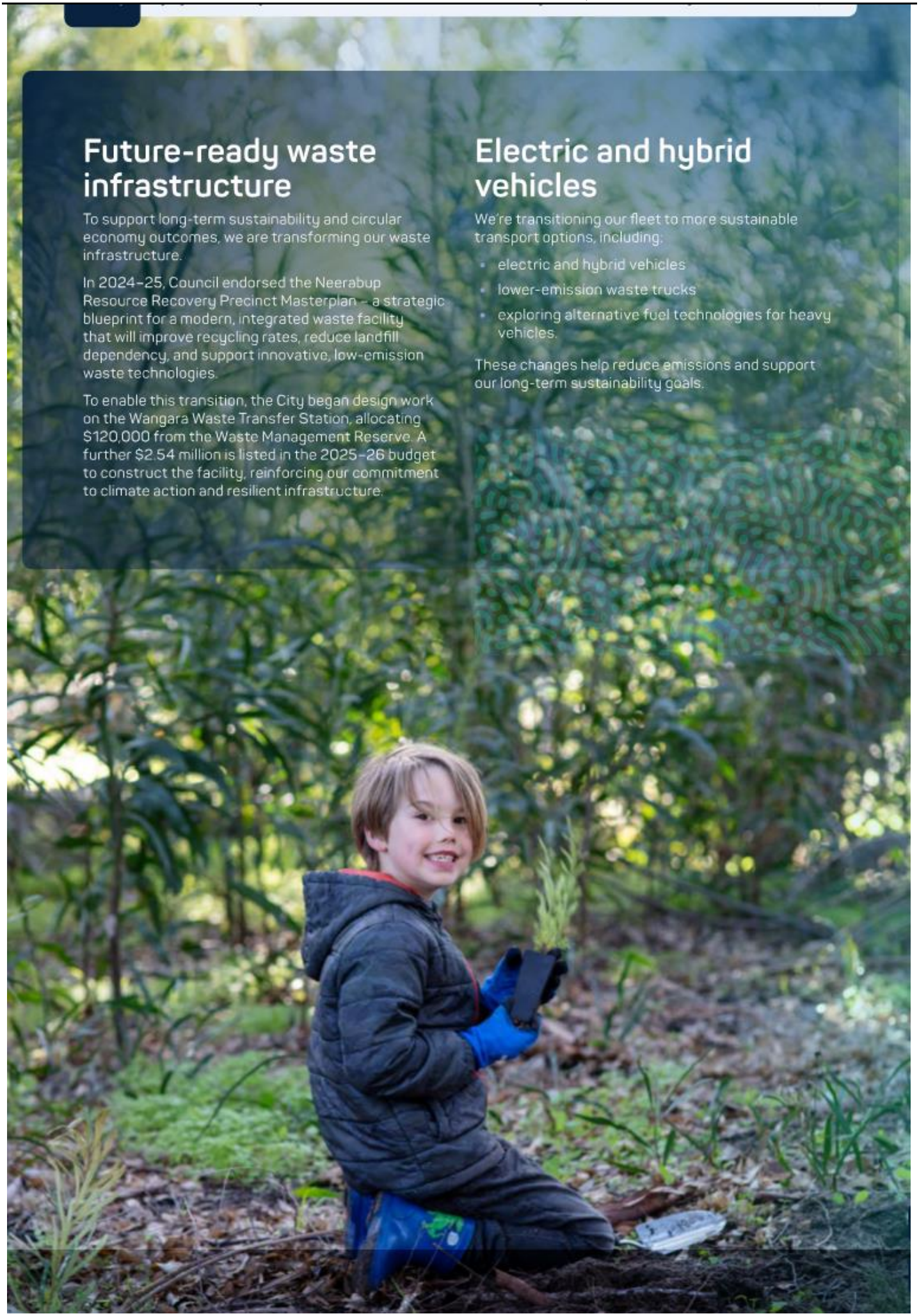
To enable this transition, the City began design work on the Wangara Waste Transfer Station, allocating $120,000 from the Waste Management Reserve. A further $2.54 million is listed in the 2025–26 budget to construct the facility, reinforcing our commitment to climate action and resilient infrastructure.

Electric and hybrid vehicles

We're transitioning our fleet to more sustainable transport options, including:

- electric and hybrid vehicles
- lower-emission waste trucks
- exploring alternative fuel technologies for heavy vehicles.

These changes help reduce emissions and support our long-term sustainability goals.



Service Locations

Customer service centres

Civic Centre

23 Dundebar Rd, Wanneroo
Ph: 9405 5000

Postal address:
Locked Bag 1, Wanneroo WA 6946

Clarkson Library

Cnr Ebb Way and Ocean Keys Blvd, Clarkson
Ph: 9407 1600

Libraries

Wanneroo

Wanneroo Library and Cultural Centre

3 Rocca Way, Wanneroo
Ph: 9405 5940

Clarkson

Cnr Ebb Way and Ocean Keys Blvd, Clarkson
Ph: 9407 1600

Girrawheen

6 Patrick Court, (off) Girrawheen Ave, Girrawheen
Ph: 9342 8844

Yanchep Two Rocks

Phil Renkin Recreation Centre

Lisford Ave, Two Rocks
Ph: 9561 1110

Major recreation centres

Wanneroo Aquamotion

19 Civic Dr, Wanneroo
Ph: 9405 5999

Kingsway Indoor Stadium

130 Kingsway, Madeley
Ph: 9405 5645

Online services

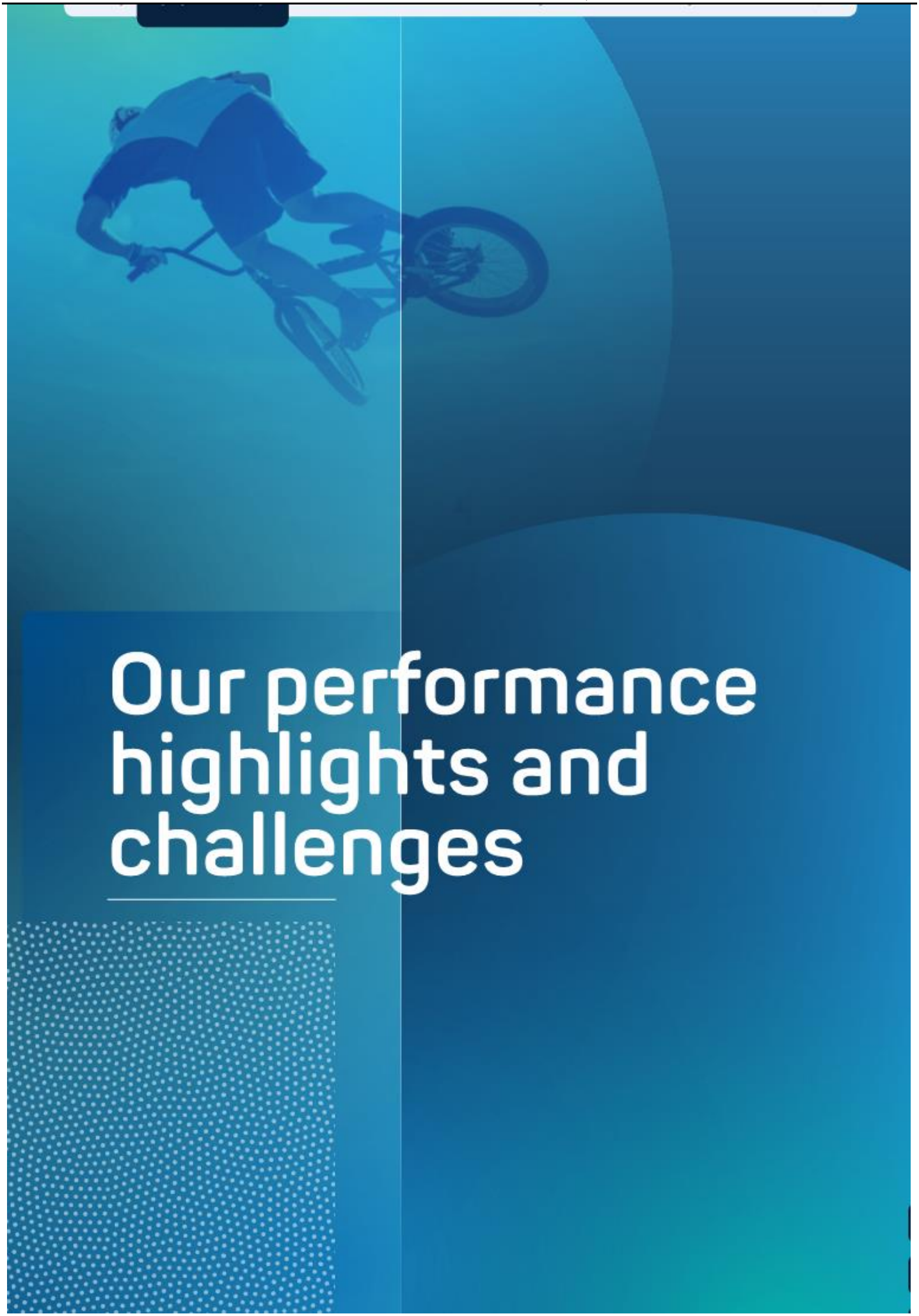
City of Wanneroo homepage:
www.wanneroo.wa.gov.au

City of Wanneroo **Facebook**

City of Wanneroo **Instagram**

City of Wanneroo **LinkedIn**

Online payments and services



Our performance highlights and challenges

Our performance highlights and challenges

This annual report explains how we're achieving the goals and priorities outlined in our Strategic Community Plan 2021–2031 (SCP), as well as our Corporate Business Plan 2024–25 to 2027–28 (CBP).

In this section we look at:

- our major achievements and challenges for this year
- the year ahead
- the awards and nominations we received
- how we are tracking with the implementation of our CBP
- what we used your rates for
- a summary of our financial performance.

Major achievements

Here are some of the major achievements delivered under the Strategic Community Plan goals during 2024-25. More detailed information can be found in our performance section.

Riverlinks Playground Clarkson: Inclusive play for all (Goal 1)

What we delivered	What changed as a result?	Why it matters to our community
Completed construction of Riverlinks Playground in Clarkson, featuring five themed play areas, inclusive equipment, a universal access toilet, and a communication board co-designed with All Abilities Australia.	Delivered a one-of-a-kind, accessible play space for children of all abilities, including non-verbal users.	Supports inclusion, physical activity, and social connection. Reflects the City's commitment to universal access and community wellbeing.

Opening doors to sport: Supporting 4,310 young athletes (Goal 1)

What we delivered	What changed as a result?	Why it matters to our community
Processed $1.16 million in KidSport vouchers to support children's access to sport.	Enabled 4,310 children to join sporting clubs who may not have had the opportunity otherwise. The City was WA's top-performing local government.	Participation in sport improves school success, social skills, and wellbeing. This funding helps build healthier, more connected communities.

Anchoring our maritime legacy (Goal 2)

What we delivered	What changed as a result?	Why it matters to our community
Wanneroo Regional Museum successfully acquired the SS Alkimos lifeboat; a rare maritime artefact linked to one of Western Australia's most iconic shipwrecks. The lifeboat will be preserved and eventually displayed as part of the museum's growing cultural heritage collections	The acquisition safeguards a significant piece of WA's maritime heritage and deepens local connection to coastal history. It enhances the museum's role as a cultural hub, offering residents and visitors meaningful opportunities to engage with the region's unique past.	Preserving and showcasing local maritime history strengthens community identity and pride. It provides educational and cultural value for current and future generations.

Discover Wanneroo: A new vision for tourism (Goal 2)

What we delivered	What changed as a result?	Why it matters to our community
The City consulted and engaged with key stakeholders to develop a new vision and strategy for the local visitor economy. In June 2025, Council endorsed the new Visitor Economy Strategy, which identifies tourism as a key strategic industry. The strategy aims to position the City of Wanneroo as a destination that visitors enjoy, highlighting its active coastline, natural environment, and memorable experiences.	The strategy provides a clear direction for growing the visitor economy and elevates the City's profile as a tourism destination.	It strengthens the City's economic resilience, supports local businesses and tourism operators, and enhances the visitor experience for residents and tourists alike.

Powering innovation through strategic partnership (Goal 3)

What we delivered	What changed as a result?	Why it matters to our community
As a foundation partner, the City entered a three-year funding agreement with CORE Innovation Hub, appointed by DevelopmentWA to operate the Australian Automation and Robotics Precinct (AARP). The common user facility officially opened in November 2024.	The funding agreement enables local businesses to access first-class facilities at the AARP and benefit from CORE's specialised programs and tailored support.	This initiative positions the City as a leader in innovation and advanced manufacturing, supporting local business growth and future-focused industry development.

WA's largest pocket forest takes root in Wanneroo (Goal 4)

What we delivered	What changed as a result?	Why it matters to our community
In partnership with Carbon Positive Australia and the Harry Butler Institute at Murdoch University, the City established the Catalina Community Pocket Forest – the largest pocket forest in WA, featuring 1,322 trees and shrubs from 35 locally native species across 470m².	Urban pocket forests like Catalina bring nature back into the City, providing a peaceful space for the community to relax, connect, and enjoy nature, while restoring native ecosystems, providing habitat for wildlife, and reducing urban heat.	These green spaces support wellbeing, strengthen community connections, and contribute to a healthier, more resilient urban environment.

Powering progress with renewable energy (Goal 4)

What we delivered	What changed as a result?	Why it matters to our community
The City signed a three-year electricity contract with Synergy, through the WALGA Sustainable Energy Project Stage 2, securing 'green' power at a fixed rate for 28 contestable sites.	Purchasing renewable energy for the City's contestable sites keeps us on track to achieve emission reduction targets and demonstrates leadership in addressing climate change – one of the community's top five priorities.	Transitioning to renewable energy reduces the City's carbon footprint, supports a sustainable future, and aligns with community values on climate action.

Lenore Road upgrade: Easing congestion, enhancing safety (Goal 5)

What we delivered	What changed as a result?	Why it matters to our community
The City completed the duplication of Lenore Road from Kemp Street to Elliot Road, including associated service installations, with a construction value of approximately $5.3 million.	Traffic congestion and commute times have been reduced in the area.	Improved road capacity enhances safety, reduces travel time, and supports efficient movement across the City.

Managing growth with efficiency and quality (Goal 5)

What we delivered	What changed as a result?	Why it matters to our community
The City processed 464 development applications and 1,550 building permits in quarter 3 of 2024-25, the highest quarterly volumes in three years.	Despite the surge, statutory compliance and service quality were maintained.	Efficient approvals support safe construction, housing supply, and economic growth across the City.

Putting community first: Coordinated advocacy across elections (Goal 6)

What we delivered	What changed as a result?	Why it matters to our community
The City launched a coordinated advocacy campaign during the 2025 State and Federal elections, empowering residents to engage directly with decision-makers. The campaign focused on priority projects and was supported by a refreshed Advocacy Plan endorsed by Council.	The campaign helped secure over $156.9 million in government commitments across key projects and services, while strengthening community engagement and political influence.	Strategic advocacy ensures community priorities are heard and funded, delivering real outcomes in infrastructure, health, environment, and local services.

Smarter payments, better service (Goal 7)

What we delivered	What changed as a result?	Why it matters to our community
A new secure, user-friendly rates payment portal was developed for launch in August 2025.	Residents will be able to manage payments flexibly with automated options and reminders.	Improved convenience and flexibility help residents stay on top of payments and reduce late fees.

Setting the course for digital transformation (Goal 7)

What we delivered	What changed as a result?	Why it matters to our community
The City developed a draft five-year digital strategy and roadmap to guide future priorities for digital technologies.	A clear direction has been set for digital transformation across City services.	Strategic investment in technology improves service delivery, efficiency, and customer experience.

Our challenges

As a local government, the City of Wanneroo plays a vital role in shaping our community and delivering essential services.

While working to achieve the goals in our Strategic Community Plan and key projects in our Corporate Business Plan, we also face a range of complex challenges.

Below is an overview of the social, economic and environmental challenges that impacted us during 2024–25 and are expected to continue in the years ahead.

Community and stakeholder relationships

The role of local government continues to evolve, and so do the expectations of our community and stakeholders. We must ensure our services and infrastructure meet current and future needs – while operating within resource constraints.

How we're responding:

We adopted a Community Engagement Policy to strengthen relationships and better understand community needs. Supported by a best-practice engagement framework, the policy ensures feedback is acknowledged, considered and used in decision-making. We actively encourage participation from people who live in, work in, visit or support the City.

Climate change and extreme weather

Climate change presents significant risks to our community, including more frequent and severe weather events. We continue to evolve our strategies, policies and services to address these risks and explore opportunities for mitigation.

How we're responding:

We are committed to climate action. A detailed overview of our sustainability initiatives is available in the section How we're becoming a more sustainable City (see page 22).

Local housing planning

Australia is facing a housing crisis, with high mortgage rates, rental prices and living costs. These pressures affect quality of life and increase the risk of homelessness.

How we're responding:

Our Local Planning Strategy guides housing development across the City. We also address housing-related impacts through our Community Development Plan, Regional Homelessness Plan, and by including community wellbeing in our advocacy agenda.

Economic growth

Limited economic development can reduce local employment opportunities and hinder our vision of a sustainable community where people can live, work and participate locally.

How we're responding:

While our influence on the broader economy is limited, we've developed the Economic Development Strategy 2022–2032 to support growth. Focus areas include business support, tourism, investment attraction, planning, advocacy, innovation and sustainability. Our Local Planning Strategy will also support economic development. In June 2025, the **Discover Wanneroo Visitor Economy Strategy 2025–2030** was formally adopted by Council, with the aim of strengthening our visitor economy by focusing on a unique mix of natural beauty, cultural heritage, and family-friendly experiences.

Labour and skills shortages

We continue to feel the after-effects of limited workforce growth during the COVID-19 pandemic. Shortages in skilled labour affect our ability to attract and retain talent.

How we're responding:

Our Workforce Strategy addresses current trends such as labour shortages, digitalisation, automation and remote work. In 2024–25, we focused on building a high-performing, agile workforce to deliver excellent outcomes for our community.

Emerging challenge: Cybersecurity and digital trust

As digital transformation accelerates, so too do risks related to data breaches, system vulnerabilities, and trust in digital service delivery.

How we're responding

We are enhancing our cyber resilience through improved protocols, staff training, and system investments. Cybersecurity is now a standing risk on our corporate risk register.

The year ahead

In July 2025 the City adopted the 2025–26 budget, investing in a range of services and facilities to keep our community connected, safe and sustainable.

The balanced budget includes a significant capital works program and investment in a range of everyday services and facilities to benefit residents. Here are some of the key projects and programs that we will deliver in 2025–26:

2025–26 budget highlights

Community recreation and facilities

Over the next 12 months, the City will spend $60.9 million on upgrades to existing sporting facilities and the construction of new facilities to ensure local families and sporting clubs can stay healthy, active and connected.

This includes $48.9 million to progress the construction of the Alkimos Aquatic and Recreation Centre.

A $1.3 million investment will progress the design of a new sports hub for the Wanneroo Recreation Centre, a further $470,000 will progress a new amenity building at Abbeville Park in Mindarie, and $230,000 is allocated for an extension to the existing Wanneroo Showgrounds Clubrooms.

Construction of the highly anticipated Dordaak Kepup library and youth innovation hub is scheduled for completion, with the $18 million Landsdale facility set to open its doors in December 2025.

$1.6 million will support upgrades to Gumblossom Community Centre in Quinns Rocks, Yanchep Community Centre, Carramar Community Centre and Butler Community Centre.

An additional $1 million will support the Girrawheen Hub Redevelopment project.

Waste management

We've allocated $4.4 million to support more sustainable and efficient waste management processes. Funding will progress the development of a recycling centre in Neerabup and waste transfer stations in Neerabup and Wangara.

Community safety

We're investing $3.7 million in community safety measures this year, including $1.6 million to start design for upgrading the Two Rocks Bush Fire Brigade.

We'll also spend $1.6 million to commence detailed design for the Wanneroo Emergency Services Precinct, to ensure the City is better prepared for bushfires and other emergencies.

Parks, playgrounds and pathways

We're committing $6.7 million towards park and playground upgrades, to ensure the community can enjoy our City's natural environment. This work will include replacing playground equipment, shade structures, picnic shelters, barbecues and drink fountains.

A $515,000 investment will provide new play spaces at Rotary Park, and $320,000 will complete the construction of new toilet facilities at Amery Park in Hocking.

We've allocated $6.7 million to new and upgraded pathways and trails across the City, including new shared paths in Alexander Heights and from Butler to Alkimos Station.

A further $815,000 will provide pathway lighting at Kingsbridge, Chesterfield, Brampton, Lighthouse and Delamere parks.

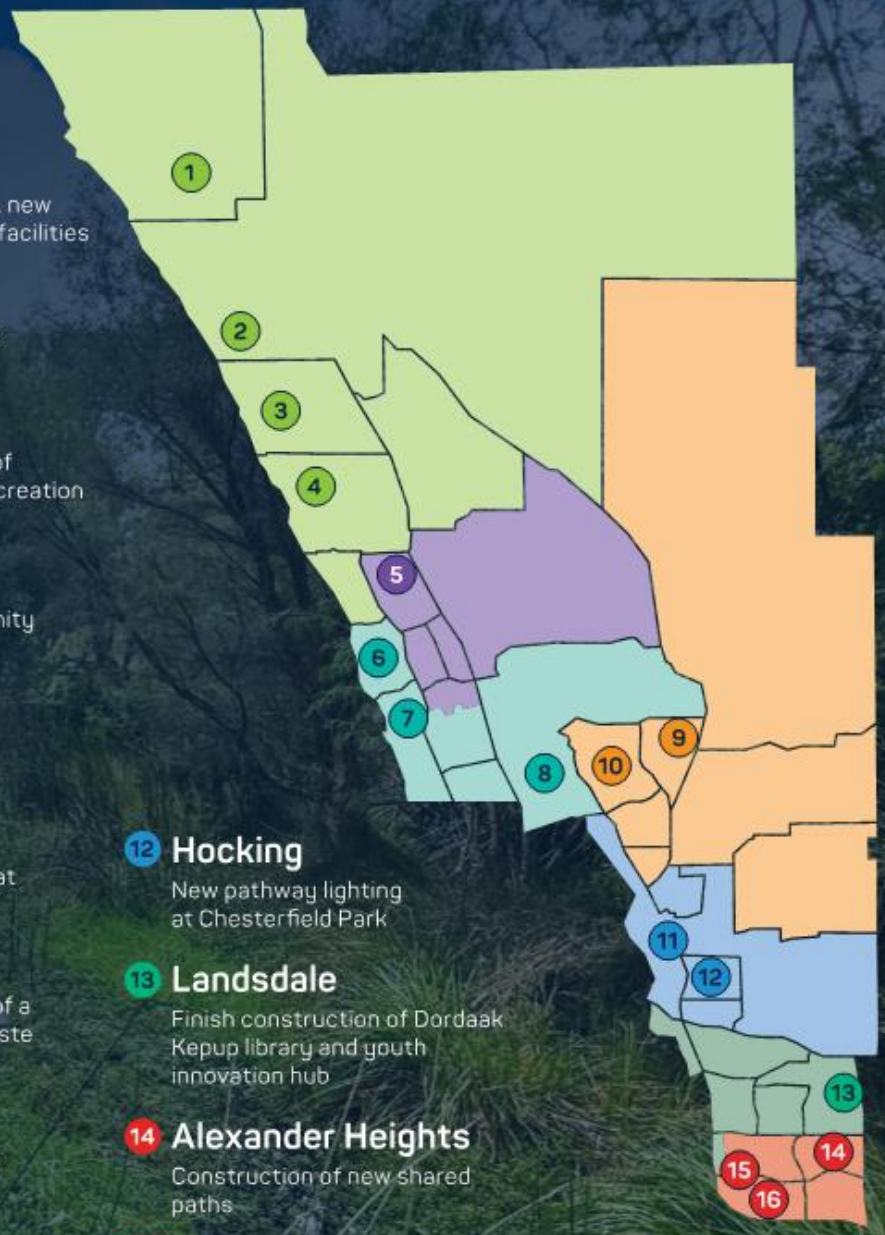
Local roads

With a focus on creating a safe and connected City, we've allocated $18.2 million this year to road upgrades and traffic treatments.

This includes $4.8 million for Flynn Drive upgrades between Mather Drive and Old Yanchep Road.

We're also spending $1.3 million on upgrades to the intersection of Marangaroo Drive and Girrawheen Avenue, and $750,000 on the construction of a dual carriageway between Marmion Avenue to Spinnaker Boulevard on Yanchep Beach Road.

Capital works program highlights 2025–26



1 Two Rocks
Upgrade Two Rocks Bush Fire Brigade

2 Yanchep
Capricorn Coastal Node, new recreation and amenity facilities

3 Eglinton
New pathway lighting at Lighthouse Park

4 Alkimos
Progress construction of Alkimos Aquatic and Recreation Centre

5 Butler
Upgrade Butler Community Centre

6 Quinns Rocks
Upgrade Gumblossom Community Centre

7 Mindarie
New amenities building at Abbeville Park

8 Neerabup
Progress development of a recycling centre and waste transfer station

9 Banksia Grove
New pathway lighting at Delamare Park

10 Carramar
Upgrade Carramar Community Centre

11 Wanneroo
Progress design of a new sports hub for the Wanneroo Recreation Centre

12 Hocking
New pathway lighting at Chesterfield Park

13 Landsdale
Finish construction of Dordaak Kepup library and youth innovation hub

14 Alexander Heights
Construction of new shared paths

15 Marangaroo / Girrawheen
Intersection upgrade

16 Girrawheen
Progress the Girrawheen Hub Precinct redevelopment

External awards and nominations

During 2024–25, we were honoured with various significant awards and nominations. This recognition highlighted our innovative efforts in important areas and showed that we're leading the way in local government.

Australasian Reporting Awards

We have been recognised for our commitment to transparency with our ninth consecutive Gold Award at the 2025 Australasian Reporting Awards (ARAs).

The ARAs provide the benchmark for government and corporate reporting, with Gold Award winners regarded as producing model reports for other organisations to follow.

The Gold Award, in which we were recognised in the Public Administration – Local category, recognises the organisation's commitment to continuous improvement and effective communication, sensitivity and responsiveness to stakeholders, attention to detail and accuracy, and dedication to achieving and improving on standards.

2025 Institute of Public Works Engineering Australasia (IPWEA) WA Awards for Excellence

The City of Wanneroo was honoured with three awards and two high commendations at the 2025 IPWEA WA Awards for Excellence, recognising outstanding public works projects that enhance community infrastructure and liveability.

The **Wangara Smart Cities CCTV project** received accolades in two categories: Best Public Works Project under $2 million and Excellence in Innovation. This initiative supports community safety by helping deter and resolve crime through strategic collaboration with local police.

The **Riverlinks Park playground** was awarded Best Public Works Project $2 million to $5 million and was a finalist in Excellence in Innovation. Featuring five themed play zones – mountain, jungle, town/country, desert, and beach – the playground offers diverse and imaginative experiences for children and families.

The **Mindarie Breakwater upgrade** earned a High Commendation in both Best Public Works Project over $5 million and Excellence in Asset Management. This critical infrastructure upgrade ensures long-term safety and functionality of the breakwater for the local community and visitors.

2025 National Awards for Local Government

The City of Wanneroo was proud to be recognised at the 2025 National Awards for Local Government, receiving two category wins and one highly commended honour. **Kirsten Thrush** and **Katie Russell** were awarded the **Women in Local Government** accolade for their leadership in disaster recovery following the Mariginiup bushfire. The City also won the **Disaster Readiness & Recovery** category for our community-first approach spanning preparedness through to recovery. In addition, the City was highly commended in the **Aboriginal and Torres Strait Islander People's Recognition** category for its efforts to create visibility and recognition of Noongar culture through language.

2024 SWIM National Innovation Award

The City of Wanneroo's Swim School was honoured with the SWIM National Innovation Award, recognising excellence in aquatic program delivery and innovation. This award highlights the City's commitment to providing high-quality, engaging, and inclusive swim education for the community.

Gold Waterwise Council

The City of Wanneroo was re-endorsed as a Gold Waterwise Council under the Waterwise Council Program, recognising its continued leadership in sustainable water management and commitment to water efficiency across operations and community initiatives.

2024 Auscontact Awards

The City of Wanneroo was nominated in six categories at the **2024 Auscontact Awards**, celebrating excellence in customer service and contact centre operations. At the awards ceremony on 2 August 2024, City employee **Pearl Bore** was honoured with the **Team Leader Award**, recognising her outstanding leadership and contribution. The City also received an award in the **Digital Transformation** category for its innovative **Building Application customer portal**, which enhances the user experience and streamlines service delivery.

Project Management Achievement Award

The City of Wanneroo was awarded a Project Management Achievement Award by the Australian Institute of Project Management for our Mindarie Breakwater Upgrade Project.

The City has managed the breakwater structure since 2005 and in recent years there have been several issues with the breakwater structure resulting in ongoing damage and public safety risks during extreme storm events.

Breakwater upgrade works were undertaken by the City's Contractor, WA Limestone, over a 12-month period and were completed in February 2024. Works involved an increase in rock armour size, increase in breakwater height and improved rock stability, along with upgrades to adjacent parking, drainage and footpath infrastructure.

What we used your rates for

We allocate funds to support a variety of essential services that contribute to our vibrant community.

This includes the management and upkeep of parks, playgrounds, sports fields, recreation centres, and community facilities.

Additionally, we prioritise community safety by offering round-the-clock safety patrols, improving our CCTV systems, and constructing safer roads and pathways.

In 2024–25 we spent:

$50.1M on local roads and street lighting

$18.6M on governance

$37.6M on waste services

$2.0M on economic development, advocacy, and tourism

$52.8M on environment and sustainability

$32.7M on customer and information services

$12.7M on planning and approval services, and public health

$8.3M on community development

$18.9M on community recreation and facilities

$9.2M on community safety and emergency management

$9.0M on libraries, arts, and culture

Community financial snapshot

This section provides a brief overview of our financial performance for 2024–25.

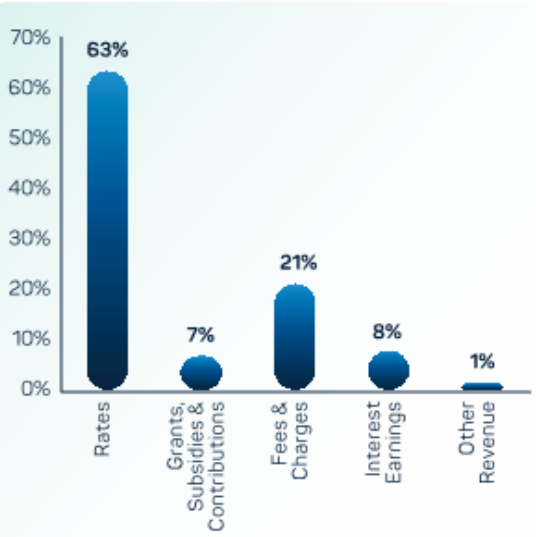
It highlights our funds were allocated and managed to support community priorities, ensuring transparency and responsible financial stewardship. Our goal is to maintain sustainable growth while meeting the needs of our residents.

Here are some key financial figures:

- We recorded an operating surplus of **$9.0 million**
- We have **$3.7 billion** in assets
- **$261.7 million** in revenue with **63%** coming from rates
- We expended **$252.7 million** in operating expenses
- We expended **$95.6 million** on capital works
- Cash and investments totalling **$42.1 million**
- Liabilities totalling **$327.3 million**
- **88,816** was the number of ratable properties

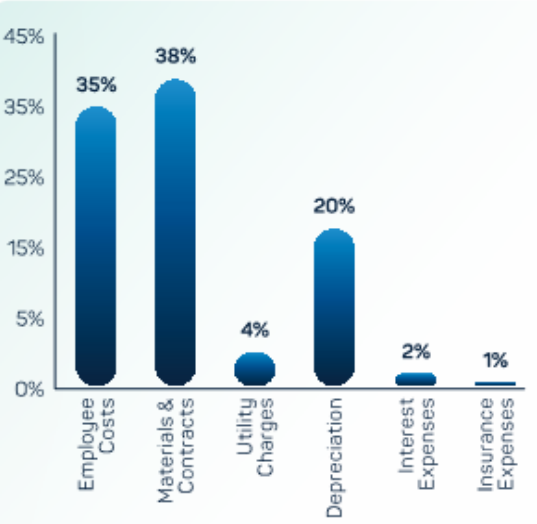
Where did our operating revenue come from?

Our revenue amounted to just over $261.7 million. Rates was our largest revenue source totalling just over $164.4 million. Here is a breakdown of where our revenue came from in 2024-25:



How did we spend our money?

Our expenditure amounted to $252.7 million, with materials and contracts ($97.0 million) and employee costs ($88.9 million) being 74% of our expenses. Here is a breakdown of how we spent our money in 2024-25:



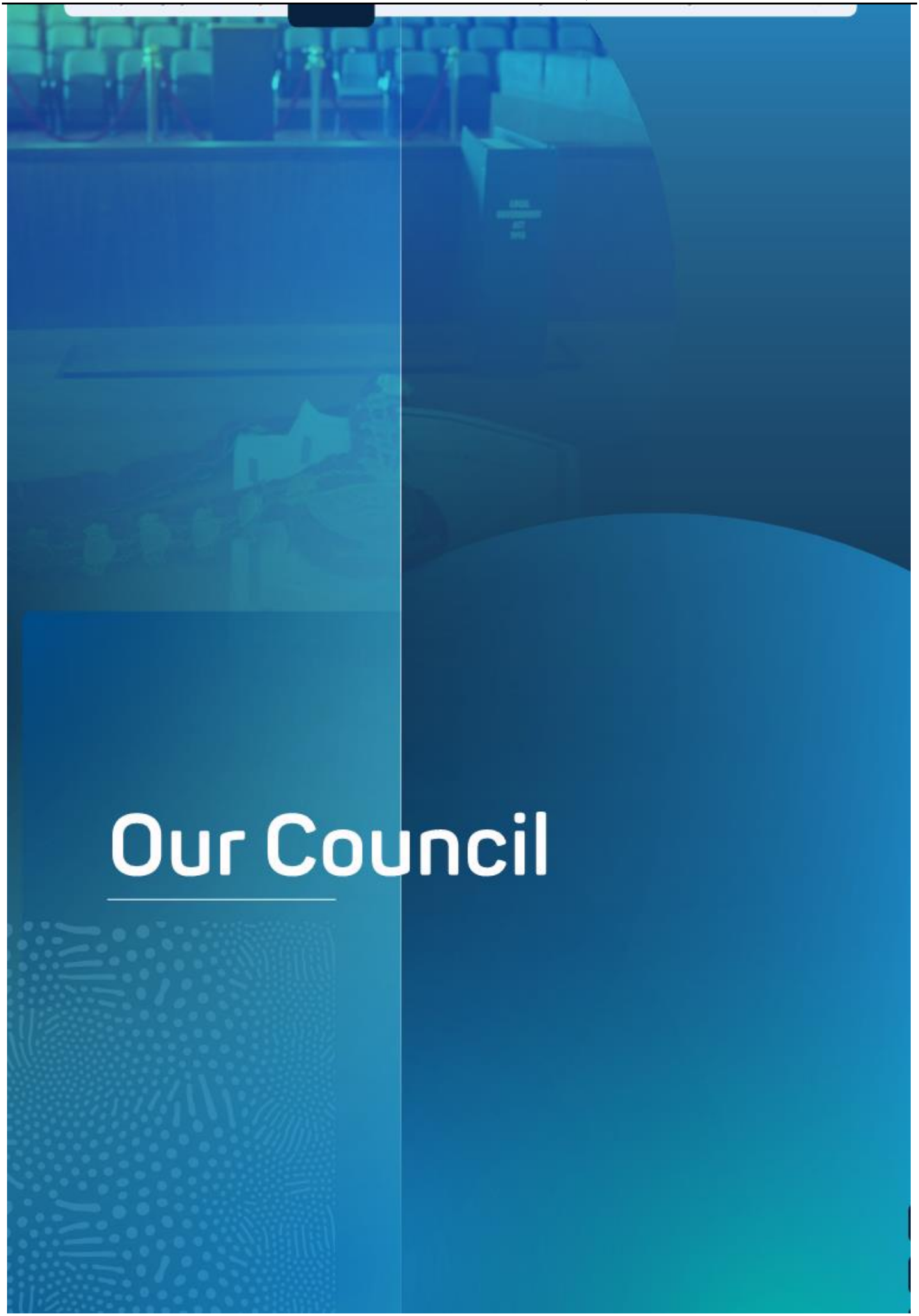
Our major projects

Each year we determine what our major capital projects for the year will be. When choosing these projects, we consider two main things – how important they are to the community and their financial value. For 2024–25, we selected 13 major projects.

These projects are closely monitored, and progress is reported to the Council and the Audit and Risk Committee on a monthly and quarterly basis. The table below shows the spending on our major projects compared to the allocated budget.

Top capital projects	Revised annual budget*	Expenditure as at 30 June 2025	Budget variance under/(over)	Work % complete
Neerabup Industrial Area (Existing Estate), Neerabup, Upgrade roads and services infrastructure	4,036,801	4,024,890	11,911	99
Halesworth Park, Butler, New sports facilities	760,530	723,200	37,330	99
Dordaak Kepup Library and Youth Innovation Hub, Landsdale, New building	11,854,468	10,969,636	884,832	71
Montrose Park, Girrawheen, Upgrade changeroom	756,041	776,222	(20,181)	97
Lenore Road, Hocking, Upgrade to dual carriageway from Kemp Street to Elliot Road	6,014,385	6,056,053	(41,668)	96
Alkimos, New Alkimos Aquatic and Recreation Centre	13,975,702	13,288,972	686,730	33
Heath Park, Eglinton, New sports amenities building	3,268,362	3,244,235	24,127	96
Wanneroo Recreation Centre, Wanneroo, New sports hub	332,081	238,218	93,863	20
Flynn Drive, Neerabup, Upgrade from Wanneroo Road to Old Yanchep Road	2,998,997	3,041,258	(42,261)	30
Riverlinks Park, Clarkson, New all abilities playground	1,449,512	1,389,384	60,128	97
Brazier Road, Yanchep, Upgrade services	157,812	39,054	118,758	72
Kingsway Regional Sporting Complex, Madeley, Renew netball court surface and floodlighting	4,239,484	4,236,708	2,776	99
Montrose Park, Girrawheen, Renew tennis courts, fencing and lighting	855,000	631,664	223,336	64
Totals	**50,699,175**	**48,659,494**	**2,039,681**	

***Revised Annual Budget:** The budget as updated during the Mid-Year Review to reflect changes in revenue, expenditure, or priorities since the original budget was adopted


Our Council

Democratic governance

Democratic governance is the process by which elected governments serve their communities.

In the local government context, it involves making decisions, exercising authority, setting strategic goals, and ensuring accountability and transparency.

Effective governance relies on clear roles and responsibilities and supports:

- improved communication
- sustainability and growth
- funding opportunities
- insurer confidence
- efficient service delivery
- enhanced reputation.

Council structure

The **City of Wanneroo Council** consists of a **popularly elected Mayor** and **14 Councillors**, representing all residents and ratepayers.

The Council sets the strategic direction, develops policy, identifies service standards and monitors organisational performance.

The City is divided into **seven wards**, each voting for **two Councillors**.

Council elections

Ordinary local government elections are held every two years on the third Saturday in October, with half of the Councillor positions contested.

The Mayoral election is held every four years. Each successful candidate serves a four-year term.

Voting is open to anyone registered on the State Electoral Roll and eligible to vote in the City. Property owners or occupiers may apply to be included on the roll as owner/occupier electors. Voting is not compulsory.

The Deputy Mayor is elected by Council at the first meeting following an ordinary election and serves a two-year term.

October 2025 Elections

The ordinary local government election took place on 18 October 2025, in line with the standard electoral cycle.

Extraordinary elections

An extraordinary election is held when a Council Member's position becomes vacant before the end of their term – such as through resignation or disqualification.

The elected replacement serves the remainder of the original term.

No extraordinary elections were held during the 2024–25 financial year.

Role of Council members

Council Members make decisions that affect the entire local government area. They work with the community, the CEO and Administration to set the City's strategic direction.

Under section 2.10 of the *Local Government Act 1995*, Council Members:

- represent the interests of electors, ratepayers and residents
- provide leadership and guidance
- facilitate communication between the community and Council
- participate in decision-making at Council and committee meetings.

Council member diversity

Council members are elected by the community and reflect its values.

In **2024–25**, Council included:

9 **Female members (60%)**

6 **Male members (40%)**

Role of the Mayor and Deputy Mayor

The Mayor:

- presides over meetings
- provides leadership and guidance
- performs civic and ceremonial duties
- speaks on behalf of the City
- liaises with the CEO on City affairs.

The Deputy Mayor:

The **Deputy Mayor** performs the Mayor's functions when authorised under **section 5.34** of the *Local Government Act 1995*.

Council members

Mayor Linda Aitken JP

Mayor since: September 2022
Councillor: 2013–2022 (when elected as Mayor)
Term expires: October 2027

M: 0497 790 960
E: linda.aitken@wanneroo.wa.gov.au

Qualifications and experience

- Bachelor of Nursing with Honours
- Justice of the Peace
- Local resident since 1979
- Local business operator 1986–2021
- Theatre Nurse 2005–current
- Partnered with government bodies in Africa to improve local healthcare services.
- Yanchep Lagoon Primary School Board Member
- Yanchep College Board Member
- East Butler Primary School Board Member
- Clarkson Primary School Board Member
- Vice Patron Surf Life Saving WA
- Patron Alkimos Surf Life Saving Club.

Special interest / focus areas

- Driving strong governance to guide clear direction and decision making
- Advocating for accessible and welcoming facilities and activities for all
- Developing a strong and diverse local economy
- Protecting and preserving natural assets and resources
- Guiding sensitive development to meet current need and future growth.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Bushfire Advisory Committee
- Business and Tourism Advisory Group
- Community Safety Working Group
- Festival, Awards and Cultural Events Advisory Group
- Multicultural Advisory Group
- Northwest District Emergency Management Committee (DEMC)
- Policy Review Committee
- Quinns Beach Coastal Management Advisory Group
- Quinns Rocks Caravan Park Re-Development Working Group
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Wanneroo / Joondalup Local Emergency Management Committee (LEMC)
- Wanneroo Town Centre Advisory Group
- Waste Management Advisory Committee
- Yanchep Coastal Management Advisory Group
- Yanchep Lagoon Community Working Group.

North Ward

CR Alex Figg

Councillor since: October 2023
Term expires: October 2027

M: 0449 704 667
E: alex.figg@wanneroo.wa.gov.au

Qualifications and experience

- Bachelor of Arts in Political Science and International Relations
- Resident of Yanchep for eleven years
- Deputy Chair of the Yanchep and Two Rocks Residents Association
- Senior Policy Advisor – Disability Services and Youth.

Special interest / focus areas

- Plan, develop and activate employment locations
- Manage and protect local biodiversity
- Develop to meet current need and future growth
- Plan for and manage land use
- Responsibly and ethically managed.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Community Safety Working Group
- Heritage Services Advisory Group
- Northwest Regional Road Subgroup (Deputy Delegate)
- Policy Review Committee
- Revenue Review Committee
- RoadWise Advisory Group
- Service Review Working Group
- Strategic Projects Working Group
- Yanchep Lagoon Coastal Management Working Group
- Yanchep Coastal Management Advisory Group
- Western Australian Local Government Association (WALGA) North Metropolitan Zone (NMZ). (Deputy Delegate)

North Ward

CR Sonet Coetzee

Councillor since: October 2017
Term expires: October 2025

M: 0414 429 936
E: sonet.coetzee@wanneroo.wa.gov.au

Qualifications and experience

- Experienced small business owner
- Former Sun City Yacht Club committee member
- Former President of the Friends of St. James' Anglican School
- Former Ladies President of the Wanneroo Golf Club
- Alkimos Surf Life Saving Club patron.

Special interest / focus areas

- Facilities and activities for all
- Plan, develop and activate employment locations
- Manage and protect local biodiversity
- People feel safe in public spaces
- Advocate in line with community priorities.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Catalina Regional Council
- Community Safety Working Group
- Festival, Awards and Cultural Events Advisory Group
- Metro Outer Development Assessment Panel (MODAP) (Deputy Delegate)
- Policy Review Committee
- Quinns Beach Coastal Management Advisory Group
- Quinns Rocks Caravan Park Re-Development Working Group
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Waste Management Advisory Committee
- Yanchep Coastal Management Advisory Group
- Yanchep Lagoon Community Working Group.

North-East Ward

CR Bronwyn Smith

Councillor since: December 2022
Term expires: October 2025

M: 0438 001 066
E: bronwyn.smith@wanneroo.wa.gov.au

Qualifications and experience

- Bachelor of Arts (Arts Management)
- Graduate Diploma in Teaching and Learning
- Bachelor of Education (Global Education).
- Local resident of 8 years
- 13 years teaching experience
- Deputy Chair of the Municipal Waste Advisory Council
- Rotary Club of Mindarie member
- Board member of Westcity Church.

Special interest / focus areas

- Arts and local creativity
- Plan for climate change
- Develop to meet current need and future growth
- Advocate in line with community priorities
- Responsibly and ethically managed.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Arts Advisory Group
- Audit and Risk Committee
- Community Safety Working Group
- Festival, Awards and Cultural Events Advisory Group
- Joondalup Health Campus Community Board of Advice Committee
- Metro Outer Development Assessment Panel (MODAP)
- Policy Review Committee
- Quinns Beach Coastal Management Advisory Group
- Quinns Rocks Caravan Park Re-Development Working Group
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Western Australian Local Government Association (WALGA) North Metropolitan Zone (NMZ)
- WALGA State Council
- Yanchep Coastal Management Advisory Group.

North-East Ward

CR Glynis Parker

Councillor since: October 2019
Term expires: October 2027

M: 0409 408 171
E: glynis.parker@wanneroo.wa.gov.au

Qualifications and experience

- Local resident for 21 years
- Small business owner 20 years
- 10 years on Council
- Extensive and broadened life experience
- Independent Board Member of Harbourside Village Mindarie.

Special interest / focus areas

- Promote the City's potential across industry and government, supporting new and existing businesses
- Prioritise community safety through planning and expanded CCTV coverage
- Protect natural assets and grow the urban canopy to support wellbeing
- Showcase tourism and unique experiences across the City
- Encourage cultural inclusion and active community participation
- Use technology to improve customer service and guide service delivery.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Community Safety Working Group
- Multicultural Advisory Group
- Policy Review Committee
- Quinns Beach Coastal Management Advisory Group
- Quinns Rocks Caravan Park Re-Development Working Group
- Revenue Review Committee
- RoadWise Advisory Group
- Service Review Working Group
- Strategic Project Working Group
- Yanchep Coastal Management Group.

Central Ward

CR Jacqueline Huntley

Councillor since: October 2019
Term expires: October 2027

M: 0433 606 536
E: jacqui.huntley@wanneroo.wa.gov.au

Qualifications and experience

- Retired Flight Lieutenant, Royal Air Force Volunteer Reserve and RSL Wanneroo member
- Bachelor of Nursing and a diploma of Midwifery
- Certificate in Child Health and Community Nursing
- Wildlife and domestic feral rehabilitator at Paws for Wildlife project
- President of the Wanneroo Historical Society
- Resident of East Wanneroo for 24 years.

Special interest / focus areas

- Valuing culture and history
- Plan, develop and activate employment locations
- Manage and protect local biodiversity and plan for climate change
- Manage natural assets and resources
- Plan for and manage land use.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Bushfire Advisory Committee
- Business and Tourism Advisory Group
- Community Safety Working Group
- Environmental Advisory Group
- Heritage Services Advisory Group
- Metro Outer Development Assessment Panel (MODAP)
- Northwest District Emergency Management Committee (DEMC) (Deputy Delegate)
- Quinns Rocks Caravan Park Re-Development Working Group
- Policy Review Committee
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Wanneroo Agricultural Society
- Wanneroo/ Joondalup Local Emergency Management Committee (LEMC) (Deputy Delegate)
- Wanneroo Town Centre Advisory Group
- Western Australian Local Government Association (WALGA) North Metropolitan Zone (NMZ)
- WALGA State Council (Deputy Delegate)
- Yanchep Lagoon Community Working Group.

Central Ward

CR Jordan Wright

Councillor since: October 2021
Term expires: October 2025

M: 0491 043 939
E: jordan.wright@wanneroo.wa.gov.au

Qualifications and experience

- Bachelor of Commerce (Tourism & Hospitality Management)
- Lifelong Hocking resident
- Director at Community Bank Kingsway
- Graduate of AICD Company Directors Course
- Diploma of Local Government (Elected Member).

Special interest / focus areas

- Tourism opportunities and visitor experiences
- Plan for climate change
- Develop to meet current need and future growth
- Advocate in line with community priorities
- Customer focused information and services.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Business and Tourism Advisory Group
- Community Safety Working Group
- Mindarie Regional Council
- Policy Review Committee
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Wanneroo Agricultural Society (**Deputy Delegate**)
- Wanneroo Town Centre Advisory Group
- Waste Management Advisory Committee
- Western Australian Local Government Association (WALGA) North Metropolitan Zone (NMZ) (**Deputy Delegate**).

Central-West Ward

CR Helen Berry

Councillor since: October 2021
Term expires: October 2025

M: 0447 821 022
E: helen.berry@wanneroo.wa.gov.au

Qualifications and experience

- Graduate Australian Institute of Company Directors
- Certified Chartered Accountant
- Fellow Institute of Community Directors of Australia
- Lived within the City of Wanneroo since moving to Australia
- Experienced professional in age care and clinical governance
- Holds positions with various age care organisations implementing the recommendations of the Royal Commission.

Special interest / focus areas

- Value the contribution of all people
- Facilities and activities for all
- Strong and diverse local economy
- Develop local jobs and skills
- Manage and protect local biodiversity.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Catalina Regional Council
- Community Safety Working Group
- Elderbloom Community Care Centre Board of Management
- Festival, Awards and Cultural Events Advisory Group
- Joondalup Health Campus Community Board of Advice Committee (**Deputy Delegate**)
- Multicultural Advisory Group
- Policy Review Committee
- Quinns Beach Coastal Management Advisory Group
- Quinns Rocks Caravan Park Redevelopment Working Group
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Yanchep Coastal Management Advisory Group.

Central-West Ward

CR Phil Bedworth

Councillor since: October 2023
Term expires: October 2027

M: 0431 961 909
E: phil.bedworth@wanneroo.wa.gov.au

Qualifications and experience

- Local resident for 18 years
- Community volunteering in multiple capacities
- Worked in public service for 30+ years
- Qualifications in Road Safety Engineering and Road Safety Auditing
- Studied Bachelor of Law (LLB)
- Special interest in road safety and traffic management.

Special interest / focus areas

- Arts and local creativity
- Develop local jobs and skills
- Plan for climate change
- People feel safe in public spaces
- Disability access and inclusivity in community
- Road safety and safe active streets.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Arts Advisory Group
- Audit and Risk Committee
- Australia Day Awards Working Group
- Catalina Regional Council
- Community Safety Working Group
- Policy Review Committee
- Quinns Beach Coastal Management Advisory Group
- Quinns Rocks Caravan Park Re-Development Working Group
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group.

Central-East Ward

CR Marizane Moore

Councillor since: October 2023
Term expires: October 2027

M: 0413 551 868
E: marizane.moore@wanneroo.wa.gov.au

Qualifications and experience

- 10+ years resident of the City of Wanneroo
- Qualified skin therapist
- Diploma of Leadership
- Small business owner experience
- Community volunteering.

Special interest / focus areas

- Bringing people together
- Strong and diverse local economy
- Develop local jobs and skills
- People feel safe in public places
- Build local partnerships and work together with others.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Catalina Regional Council (Deputy Delegate)
- Community Safety Working Group
- Policy Review Committee
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Wanneroo Town Centre Advisory Group
- Western Australian Local Government Association (WALGA) North Metropolitan Zone (NMZ).

Central-East Ward

CR Paul Miles

Councillor since: October 2017
Term expires: October 2025

M: 0416 197 363
E: paul.miles@wanneroo.wa.gov.au

Qualifications and experience

- Former state parliament Member for Wanneroo
- Former state minister.

Special interest / focus areas

- Develop to meet current need and future growth
- Plan for and manage land use
- Manage and maintain assets
- People can move around easily
- People feel safe in public places.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Bushfire Advisory Committee (Deputy Delegate)
- Community Safety Working Group
- Environmental Advisory Group
- Heritage Services Advisory Group
- Mindarie Regional Council
- Policy Review Committee
- Quinns Rocks Caravan Park Redevelopment Working Group
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Wanneroo Town Centre Advisory Group
- Waste Management Advisory Committee
- Yanchep Lagoon Community Working Group.

South Ward

CR James Rowe

Deputy Mayor: October 2023 –current
Councillor since: October 2021
Term expires: October 2025

M: 0417 709 573
E: james.rowe@wanneroo.wa.gov.au

Qualifications and experience

- Bachelor of Arts (Honours) – UWA
- Master of Law, Policy & Government – UWA
- Justice of the Peace (JP)
- Girrawheen Senior High School Board
- Marangaroo Family Centre Board
- Roseworth Primary School Board
- Girrawheen Lions Club Member
- UWA Career Mentor Volunteer
- Lifelong South Ward resident.

Special interest / focus areas

- Valuing cultures and history
- Strong and diverse local economy
- Responsibly and ethically managed
- Plan for climate change
- Build local partnerships and work together with others.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Aboriginal and Torres Strait Islander Community Reference Group - Ni Kadadjiny Koort
- Audit and Risk Committee
- Community Safety Working Group
- Festival, Awards and Cultural Events Advisory Group
- Northwest Regional Road Subgroup
- Quinns Rocks Caravan Park Re-Development Working Group
- Policy Review Committee
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Western Australian Local Government Association (WALGA) North Metropolitan Zone (NZA)
- Yellagonga Regional Park Community Advisory Committee (**Deputy Delegate**).

South Ward

CR Eman Seif

Councillor since: October 2023
Term expires: October 2027

M: 0439 885 421
E: eman.seif@wanneroo.wa.gov.au

Qualifications and experience

- Graduate Certificate of Business, Edith
- Cowan University
- 25 years private sector experience
- Business Incubator Manager at The Innovation
- Centre of WA
- State Government experience
- Federal Government experience
- Justice of the Peace.

Special interest / focus areas

- Develop to meet current need and future growth
- Facilities and activities for all
- Strong and diverse local economy
- Manage natural assets and resources
- People feel safe in public places.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Aboriginal and Torres Strait Islander Community Reference Group - Ni Kadadjiny Koort
- Audit and Risk Committee
- Bushfire Advisory Committee (Deputy Delegate)
- Business and Tourism Advisory Group
- Catalina Regional Council (Deputy Delegate)
- Community Safety Working Group
- Festival, Awards and Cultural Events Advisory Group
- Multicultural Advisory Group
- Policy Review Committee
- Revenue Review Committee
- Service Review Working Group
- Strategic Projects Working Group
- Wanneroo and Districts Historical Society
- Western Australian Local Government Association (WALGA) North Metropolitan Zone (NMZ) (Deputy Delegate)
- Yanchep Lagoon Community Working Group.

South-West Ward

CR Natalie Herridge

Councillor since: October 2021
Term expires: October 2025

M: 0403 326 828
E: natalie.herridge@wanneroo.wa.gov.au

Qualifications and experience

- Passionate local resident since 2004
- Second generation local small business owner
- Hospitality & administration background
- Tupperware Manager 5 years
- Active volunteer board member with several local groups, schools & organisations.
- Primary School P&C member of 13 years (President for 4 years)
- Graduate Diploma in Local Government (WALGA) June 2025.

Special interest / focus areas

- Valued public places and spaces
- Waste and its impacts
- People feel safe in public places
- Build local partnerships and work together with others.
- Responsibly and ethically managed.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Aboriginal and Torres Strait Islander Community Reference Group - Ni Kadadjiny Koort
- Audit and Risk Committee
- Community Safety Working Group
- Environmental Advisory Group
- Festival, Awards and Cultural Events Advisory Group
- Metro Outer Development Assessment Panel (MODAP) (**Deputy Delegate**)
- Policy Review Committee
- Quinns Rocks Caravan Park Re-Development Working Group
- Revenue Review Committee
- RoadWise Advisory Group
- Service Review Working Group
- Strategic Projects Working Group
- Wanneroo and Districts Historical Society (**Deputy Delegate**)
- Western Australian Local Government Association (WALGA) North Metropolitan Zone (NMZ)(**Deputy Delegate**)
- Yellagonga Regional Park Community Advisory Committee.

South-West Ward

CR Vinh Nguyen

Councillor since: October 2019
Term expires: October 2027

M: 0430 003 360
E: vinh.nguyen@wanneroo.wa.gov.au

Qualifications and experience

- Bachelor of Laws (UWA)
- Bachelor of Commerce (UWA)
- UWA Excellence Award recipient
- Principal lawyer and business owner of a local law firm for more than 10 years
- Kingsway Christian College committee member
- Graduate Certificate in Legal Business Management.

Council-appointed membership of committees / working groups / external committees / boards as at 30 June 2025

- Audit and Risk Committee
- Service Review Working Group
- Strategic Projects Working Group.

Special interest / focus areas

- Facilities and activities for all
- Tourism opportunities and visitor experiences
- Attract and support new and existing businesses
- People feel safe in public places
- Advocate in line with community priorities.

Council meetings

Ordinary Council Meetings are generally held the fourth Tuesday of the month at 6:00pm, in the Council Chamber at the Wanneroo Civic Centre.

The **Mayor** presides over these meetings, which are attended by **Councillors**, the **CEO**, and **City directors**. Reports are formally presented to assist Council Members in making informed decisions.

Members of the public are welcome to attend and may participate during **public question and statement time**, which allows questions on any matter for which the Council is responsible.

Public questions and a summary of responses are included in the meeting minutes. However, members of the public are not permitted to take part in Council debate.

Agenda briefing is held on the second Tuesday of the month, in the Council Chamber at the Wanneroo Civic Centre. These sessions begin at 6:00pm and are open to the public. Deputations may be presented by appointment at the start of the session.

In accordance with the *Local Government Act 1995*, minutes are kept of all Council proceedings. **Unconfirmed minutes** are published on the City's website within 14 days and presented for confirmation at the next Ordinary Council Meeting.

Committees

Under **section 5.8** of the *Local Government Act 1995*, councils may establish committees to assist with decision-making.

Committees may include Council members, employees and community members, and may operate with delegated authority or in an advisory capacity.

The Council may also form **working groups** and **advisory groups**, which do not hold delegated authority but provide feedback and advice. Each committee or group operates under a documented **terms of reference**, approved by Council.

Where community membership is included, nominations are sought through an **open expression of interest** process. Recommendations for appointment are reviewed and presented to Council.

Advisory committees provide a valuable opportunity for community input. Chairs are elected from among committee members. **Short-term groups** may be formed for specific purposes and are disbanded once their objectives are met.

Established committees
(as at 30 June 2025)

The City has five established committees:

- **Audit and Risk Committee**

  Advises Council on internal and external audit matters, enterprise risk management, and high-risk issues. All Council Members are members. A chair is elected following each ordinary election. In accordance with the local government reform, two independent members have been appointed to the Audit and Risk Committee from April 2025.

- **Bushfire Advisory Committee**

  Advises Council on bushfire mitigation and planning. Council appoints delegates and deputy delegates, including representatives from the Local Emergency Management Committee.

- **Revenue Review Committee**

  Provides advice on revenue sources and related policy. Membership includes the Mayor and nine Councillors.

- **Waste Management Advisory Committee**

  Advises Council and the City's representatives on the Mindarie Regional Council regarding waste management. Membership includes the Mayor, three direct delegates, and two Mindarie Regional Council representatives.

- **Policy Review Committee**

  Assists the Council in fulfilling its responsibility under section 2.7(2)(b) of the *Local Government Act 1995* in determining the policies of the Council. The Committee is responsible for the review and approval of repeals, reviews and changes to any existing Council and local planning policies. The Committee does not deal with any new Council policies or local planning policy proposals by Administration or Council Members.

The Policy Review Committee is the only committee of Council that holds delegated authority. This Committee has the authority to implement its recommendations without approval of Council except in the following matters which must be presented to Council for consideration:

- Policies that require an absolute majority decision of Council
- Any new Council policies or local planning policies.

The remainder of the committees do not hold delegated authority. Their recommendations have no legal standing unless formally adopted by Council. Council is not bound to accept committee recommendations.

Council Members	Audit and Risk Committee	Bushfire Advisory Committee	Revenue Review Committee	Waste Management Advisory Committee	Policy Review Committee
Mayor L Aitken	◆	◇	◆	◆	◆
Cr P Bedworth	◆		◆		◆
Cr H Berry	◆		●		◆
Cr S Coetzee	◆		◆	◆	◆
Cr A Figg	◆		◆		◆
Cr N Herridge	◆		◆		◆
Cr J Huntley	◆	■ / □	◆		◆
Cr P Miles	◆	■	◆	● / ●	◆
Cr M Moore	◆		◆		◆
Cr V Nguyen	◆				
Cr G Parker	●		◆		◆
Deputy Mayor Cr J Rowe	●		◆		●
Cr E Seif	◆	■	◆		●
Cr B Smith	◆		◆		◆
Cr J Wright	◆		●	● / ●	◆

● Chair / Presiding Member
● Deputy Chair / Presiding Member
◆ Committee Member / Delegate
■ Deputy Delegate. Deputy delegates only attend meetings when the delegate is unavailable.
◇ Delegate Representative of the Local Emergency Management Committee
□ Deputy Delegate Representative of the Local Emergency Management Committee
● Delegate Representative of Mindarie Regional Council

Council and committee attendance

The following table details the types of meetings held during 2024–25, the number of meetings held, and the attendance of each Council Member.

- A number in parentheses indicates the **maximum number of meetings** a Council Member could have attended. This may differ from the total number of meetings held if the Member joined, left, or was appointed to the committee during the year.
- A dash (-) indicates that the Council Member was **not a member or delegate** of the committee or group during the reporting period.

Council Members	Ordinary Council (11)	Special Council (3)	Electors AGM (1)	Audit and Risk (6)	Bushfire Advisory (2)	Festival and Cultural Events (disbanded June 2025) (2)	Revenue Review (2)	Policy Review Committee (2)	Waste Management Advisory (4)	Budget Workshops (4)	Concept Forum (23)	Briefing Sessions (11)
Mayor L Aitken	11	3	1	5	2	1	1	1	3	3	20	10
Cr P Bedworth	9	2	0	2	-	-	1	0	-	3	16	7
Cr H Berry*	7	2	1	1	-	2	1	1	-	4	11	3
Cr S Coetzee	9	2	1	4	-	-	2	2	3	4	20	10
Cr A Figg	10	2	1	4	-	-	1	0	-	3	16	8
Cr N Herridge	11	3	1	5	-	2	2	2	-	4	22	11
Cr J Huntley	11	3	1	4	1	-	2	2	-	4	19	10
Cr P Miles	11	2	1	4	-	-	2	2	3	3	17	10
Cr M Moore**	5	2	0	1	-	-	1	0	-	0	9	5
Cr V Nguyen	6	0	1	0	-	-	-	-	-	0	1	4
Cr G Parker	10	3	1	5	-	-	2	1	-	4	19	10
Deputy Mayor Cr J Rowe	10	3	1	6	-	1	1	1	-	4	22	10
Cr E Seif	10	3	1	2	-	-	1	2	-	4	16	9
Cr B Smith	11	3	1	6	-	2	2	2	-	4	22	9
Cr J Wright	10	2	1	6	-	-	2	2	4	4	21	11

* Cr Berry was on bereavement leave from July to November 2024

** Cr Moore was on parental leave from January to June 2025

Working groups

At the Special Council Meeting following an election, Council Members are appointed to internal working groups, advisory groups, external committees and regional councils.

Internal
Aboriginal and Torres Strait Islander Community Reference Group – Ni Kadadjiny Koort
Arts Advisory Group
Business and Tourism Advisory Group
Community Safety Working Group
Environmental Advisory Group
Festival, Awards and Cultural Events Advisory Group.
Heritage Services Advisory Group
Multicultural Advisory Group
Quinns Beach Coastal Management Advisory Group
Roadwise Advisory Group
Service Review Working Group
Strategic Projects Working Group
Wanneroo Town Centre Advisory Group
Yanchep Coastal Management Advisory Group
Yanchep Lagoon Community Working Group

External
Metro Outer Development Assessment Panel (MODAP)
Mindarie Regional Council
Catalina Regional Council
Elderbloom Community Care Centre Board of Management
Joondalup Health Campus Community Board of Advice Committee
North West Regional Road Sub-Group
North West District Emergency Management Committee
Wanneroo Agricultural Society
Wanneroo and Districts Historical Society
Wanneroo/Joondalup Local Emergency Management Committee
Western Australian Local Government Association (WALGA) North Metropolitan Zone
WALGA State Council
Yellagonga Regional Park Community Advisory Committee

Disbanded and created committees and working groups (2024–25)

Disbanded:

- Alkimos Aquatic and Recreation Centre Project Working Group
- Neerabup Industrial Area Development Working Group
- Quinns Rocks Caravan Park Redevelopment – Councillor Working Group
- Wanneroo Recreation Centre Upgrade Project Working Group
- Australia Day Awards Working Group (June 2025)
- Festival, and Cultural Events Committee

Created:

- Policy Review Committee
- Australia Day Awards Working Group (September 2024)
- Strategic Projects Working Group
- Yanchep Coastal Management Advisory Group
- Festival, Awards and Cultural Events Advisory Group.

Council decisions

The Council is committed to transparency and accountability.

All Council meetings are open to the public, except when confidential matters are considered. Recommendations are submitted by Administration and published in meeting agendas and minutes on the City's website.

In **2024–25**, Council considered **277 recommendations**. Of these:

- **273 were carried**
- **4 were deferred.**

Council made **90.6 per cent** of decisions in open session and **9.4 per cent** in confidential session. Confidential items are defined under **section 5.23(2)** of the *Local Government Act 1995*. While discussions may be held in closed session, the final resolution is always read aloud once the meeting reopens to the public.

The slight increase in confidential decisions in 2024–25 reflects the number of confidential staff and legal matters that came before Council.

Council member remuneration

The Salaries and Allowances Tribunal determines remuneration for Council Members under the *Salaries and Allowances Act 1975* (SAA).

On 5 April 2024, the tribunal determined the rates applicable for 2024–25.

The City is classified as a Band 1 local government for the purposes of the SAA. The Council has adopted a Council Members' Fees, Allowances, Reimbursements and Benefits Policy that sets out the payments available to Council Members as follows:

- annual allowance for a mayor and deputy mayor
- annual attendance fees in lieu of Council meeting, committee meeting and prescribed meeting attendance fees
- annual allowance for ICT expenses in lieu of reimbursement.

The policy makes provision for the City to pay the maximum amount within the range set by the tribunal. It also allows the City to reimburse Council Members up to a set amount in each 4-year term for corporate apparel to allow them to conduct Council-related business. In addition, the LGA allows Council Members to claim reimbursement for childcare and travel costs incurred because of attendance at meetings.

Following is a summary of the remuneration paid to Council Members.

Type and amount of value (rounded to the nearest dollar)

		Allowances and Fees			Reimbursement of Expenses			
Name	Position	Annual Attendance Fees*	ICT Allowance*	Mayor/ Deputy Mayor Allowance*	Reimbursement of Travel Expenses**	Corporate Apparel Expenses	Other Expenses Incurred*%	Total
Linda Aitken	Mayor	$51,239	$3,500	$96,787	$4,560	$816	-	$156,902
Phil Bedworth	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Helen Berry	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Sonet Coetzee	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Alex Figg	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Natalie Herridge	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Jacqueline Huntley	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Paul Miles	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Marizane Moore	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Vinh Nguyen^	Councillor	$36,954	$3,500	-	-	-	-	$40,454
Glynis Parker	Councillor	$34,162	$3,500	-	$948	$46	-	$38,656
James Rowe	Deputy Mayor	$34,162	$3,500	$24,197	-	-	-	$61,859
Eman Seif	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Bronwyn Smith	Councillor	$34,162	$3,500	-	-	-	-	$37,662
Jordan Wright	Councillor	$34,162	$3,500	-	$809	$268	-	$38,739

* In accordance with the determination set by the Salaries and Allowances Tribunal and published in the Government Gazette. Allowances are paid in arrears. This total includes allowances paid June 2024 and July 2024 through May 2025 inclusive.

** Includes reimbursements that may have been received for expense claims relating to a previous financial year. Reimbursements are paid in accordance with the Council Members Fees, Allowances, Reimbursements & Benefits Policy.

^ Underpayment of Attendance Fees totaling $2,791.69 in 2023-24 (Councillor Nguyen) identified as an error, to be rectified in the 2024-25 financial year.

% Includes other stationery in accordance with the Council Members Fees, Allowances, Reimbursements & Benefits Policy.

Training and professional development

Council Members are encouraged to attend conferences, workshops, forums and training events to develop and maintain skills relevant to their roles.

Under **Western Australian law**, Council Members must complete the **Council Member Essentials training** within 12 months of being elected, as required by **section 5.126 of the *Local Government Act 1995*** and **Regulation 35(3)** of the *Local Government (Administration) Regulations 1996*.

The following Council Members were required to undertake mandatory training during the 2024–25 financial year:

Council Member	Understanding Local Government	Serving on Council	Meeting Procedures	Conflicts of Interest	Understanding Financial Reports & Budgets
Cr Bedworth			●		●
Cr Miles	●	●	●		●

Code of conduct

The City of Wanneroo has three codes of conduct:

- one for **Council Members, committee members and candidates**
- one for **employees**
- one for **volunteers.**

These Codes set out behavioural standards to promote ethical and accountable decision-making.

The **Council Member, Committee Member and Candidate Code of Conduct** was adopted in 2021. Candidates must comply with the Code during their campaign and, if elected, continue to do so in Council and committee roles.

Complaints management

The City manages complaints under the Code of Conduct through two divisions.

Division 3
Behaviour complaints

Covers:

- personal integrity
- relationships with others
- behaviour at meetings.

Complaints must be submitted within **one month** of the alleged breach using the prescribed form available on the City's website. The **Complaints Officer** is the **Director Corporate Strategy and Performance**.

There were no complaints in the 2024–25 year.

Division 4
Rules of conduct complaints

Covers:

- misuse of resources
- securing personal advantage
- involvement in administration
- relationships with employees
- disclosure of information and interests.

Complaints must be submitted within **six months** of the alleged breach via email to **complaints@wanneroo.wa.gov.au** and using the prescribed form. In **2024–25**, no Division 4 complaints were received and no complaints were carried over from the previous year.

Under **section 5.121 of the Local Government Act 1995**, the City maintains a register of complaints resulting in action under **section 5.110(6)(b) or (c)**. No complaints in this reporting period resulted in such action.

Local laws

Council may make local laws to support good governance.

The process is outlined in **section 3.12 of the Local Government Act**, including a **six-week public consultation period**.

Under **section 3.16**, local laws must be reviewed within **fifteen years** of commencement. The City is continuing its review and update of all local laws. Current laws are available at **wanneroo.wa.gov.au**.

Delegations of authority

Delegations allow officers to carry out duties and make decisions.

Under the *Local Government Act 1995*:

- Council may delegate powers to the CEO (except those listed in **section 5.43**)
- The CEO may delegate powers to employees (excluding the power of delegation)

The CEO must maintain a **Register of Delegations** and review it annually. The register was reviewed in 2024–25 to ensure all delegations remain appropriate.

Publicly available information

The City is committed to transparency and accountability. In accordance with the *Local Government Act 1995*, all required documents – including registers, policies, meeting minutes, financial reports and other legislated materials – are publicly available on the City's website at **wanneroo.wa.gov.au**.

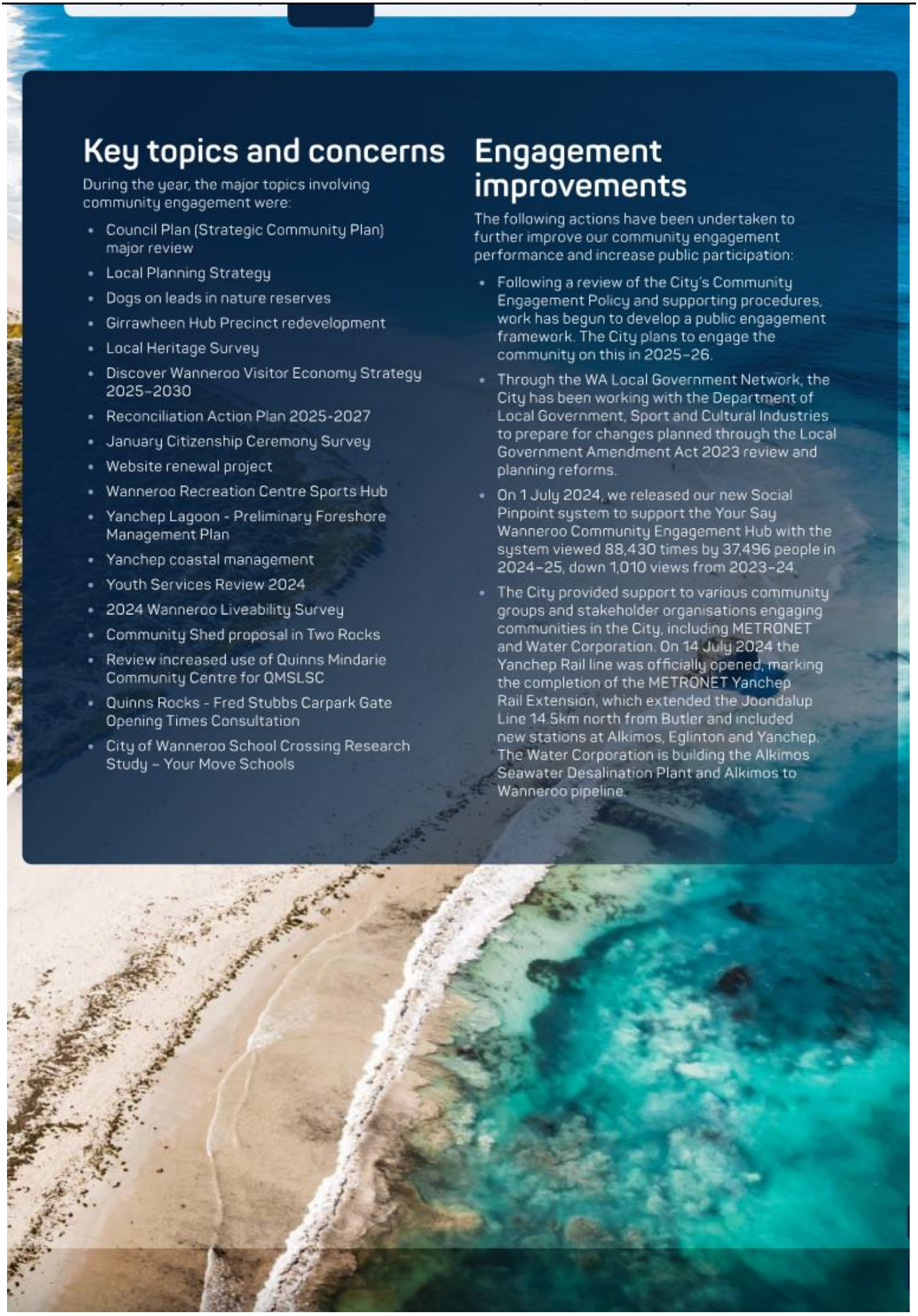
Community engagement

The City's Community Engagement Framework is based on the International Association for Public Participation (IAP2) model and its Quality Assurance Standard for Community and Stakeholder Engagement. It encourages participation from people who live in, work in, visit or support the City.

We ensure that stakeholders' comments and concerns are acknowledged, considered and made available to inform decision-making. We invite feedback on policy changes, development proposals, planning initiatives and major projects. Key stakeholders – including government regulators and community groups – are engaged on economic, environmental and social matters. We also monitor and review engagement outcomes and communicate these to participants and the broader community.

The City engages with the community and shares information through the following methods.

Engagement method	Description
Advertisements	Where relevant, engagement opportunities are advertised in local newspapers.
City's website	News, key projects and important documents are available for public viewing on the City's website.
Community events and activities	Engagement activities are incorporated into City-hosted events.
Emails	Project participants and subscribers receive updates, invitations and milestone notifications via email.
E-newsletter	The City's monthly eNews features public comment periods for key projects and reaches nearly 10,000 subscribers.
Facilitated sessions	Open houses, workshops and information sessions allow community members to interact directly with City staff, ask questions and provide feedback.
Letters	Information and feedback forms are sent to individuals likely to be directly affected by a decision, project or upgrade.
Non-facilitated sessions	Information booths, ideas boards and straw polls are set up at community facilities and events to gather informal input.
Notices	Public notices are displayed at the Civic Centre, libraries and community centres to advertise tenders and impounded vehicles.
Online mapping tool	The Social Pinpoint tool has been successfully used to gather feedback on several local projects.
Promotional posters	Posters are displayed in public spaces to promote engagement opportunities.
Signage	Roadside and park signage is used to inform the community about upcoming works and engagement opportunities.
Social media	Engagement opportunities are promoted via social media, often linking to the City's Your Say platform.
Submissions	Where surveys are not suitable, submissions are invited to capture community views. These are typically submitted via email or delivered to the Civic Centre.
Surveys	Surveys are a common method for gathering feedback and are available online via Your Say or in hard copy on request.
Your Say	Your Say is the City's online engagement hub, where community members can access project information and provide feedback through a variety of interactive tools and channels.



Key topics and concerns

During the year, the major topics involving community engagement were:

- Council Plan (Strategic Community Plan) major review
- Local Planning Strategy
- Dogs on leads in nature reserves
- Girrawheen Hub Precinct redevelopment
- Local Heritage Survey
- Discover Wanneroo Visitor Economy Strategy 2025–2030
- Reconciliation Action Plan 2025-2027
- January Citizenship Ceremony Survey
- Website renewal project
- Wanneroo Recreation Centre Sports Hub
- Yanchep Lagoon - Preliminary Foreshore Management Plan
- Yanchep coastal management
- Youth Services Review 2024
- 2024 Wanneroo Liveability Survey
- Community Shed proposal in Two Rocks
- Review increased use of Quinns Mindarie Community Centre for QMSLSC
- Quinns Rocks - Fred Stubbs Carpark Gate Opening Times Consultation
- City of Wanneroo School Crossing Research Study – Your Move Schools

Engagement improvements

The following actions have been undertaken to further improve our community engagement performance and increase public participation:

- Following a review of the City's Community Engagement Policy and supporting procedures, work has begun to develop a public engagement framework. The City plans to engage the community on this in 2025–26.
- Through the WA Local Government Network, the City has been working with the Department of Local Government, Sport and Cultural Industries to prepare for changes planned through the Local Government Amendment Act 2023 review and planning reforms.
- On 1 July 2024, we released our new Social Pinpoint system to support the Your Say Wanneroo Community Engagement Hub with the system viewed 88,430 times by 37,496 people in 2024–25, down 1,010 views from 2023–24.
- The City provided support to various community groups and stakeholder organisations engaging communities in the City, including METRONET and Water Corporation. On 14 July 2024 the Yanchep Rail line was officially opened, marking the completion of the METRONET Yanchep Rail Extension, which extended the Joondalup Line 14.5km north from Butler and included new stations at Alkimos, Eglinton and Yanchep. The Water Corporation is building the Alkimos Seawater Desalination Plant and Alkimos to Wanneroo pipeline.

Our stakeholders

A stakeholder is defined as an individual, group, organisation, business or government entity that has an interest in, concern about, or may be affected by a project or service within the City of Wanneroo or surrounding areas.

The City of Wanneroo is diverse, and we are committed to engaging with our community to deliver the leadership, services and facilities outlined in our Strategic Community Plan.

Key stakeholder groups

Our key stakeholders include:

- community members, ratepayers, residents and visitors
- special interest groups
- industry associations, peak bodies and community interest groups
- businesses within the City
- Commonwealth, state, regional and local governments (including public utilities, consultants and contractors)
- media.

Stakeholder relationships

Stakeholder group	Who they are	Why they matter to the City	Value to the stakeholder	How we engage
Community members, ratepayers, residents and visitors	Residents, ratepayers, customers and visitors	Provide funding, feedback, strategic direction and engagement	Civic leadership, representation, and access to services and facilities	Website, social media, publications, meetings, events, Your Say, surveys, mapping tools
Special interest groups	People with disabilities, culturally and linguistically diverse communities, Aboriginal and Torres Strait Islander peoples, seniors, youth and young people	Offer unique perspectives to improve inclusivity and accessibility	Access, equity and inclusion in services and representation	Same as above, with tailored approaches
Industry associations, peak bodies and community interest groups	Professional/business associations, not-for-profits, NGOs, sport associations, schools, residents' and ratepayers' groups	Provide expertise, advocacy and cultural vibrancy	Representation, resources and partnership opportunities	Website, social media, meetings, forums, working groups, Your Say
Businesses	Local businesses, business associations, developers, suppliers, contractors	Drive local economic growth and community opportunities	Support for investment, development and business growth	Economic development team, digital media, meetings, workshops, business survey, Your Say
Government	Federal/state ministers, local government leaders, departments, utilities, consultants, political influencers	Provide funding, policy direction and legislative input	Collaboration, partnerships and shared resources	Formal meetings, correspondence, reporting, advocacy, joint ventures
Media	Print, broadcast, online and community media	Promote transparency, protect reputation, raise awareness	Access to stories and data on community trends	Press releases, interviews, Council meetings, social and digital media

External partnerships

The City recognises the importance of strong partnerships in enhancing the range and quality of services available to residents and businesses, and in ensuring that policies remain current and well informed.

We collaborate with a range of national and state-based organisations to promote shared interests and advocate for key priorities. The City partners with the National Growth Areas Alliance (NGAA) and Growth Areas Perth and Peel (GAPP) – both of which represent high-growth outer metropolitan councils. These groups leverage the collective experience of their member local governments to raise awareness of the unique challenges faced by fast-growing communities and to influence decision-makers and funders.

We also work closely with the Wanneroo Business Association to ensure alignment between the City and local businesses on key issues such as building business capacity and capability.

The City is a member of the Western Australian Local Government Association (WALGA) and Local Government Professionals Australia WA, which support advocacy, professional development and sector-wide collaboration.

We continue to engage with a broad range of external industry, strategic and community stakeholders to advocate and collaborate for the benefit of our community.

Communications, brand and media

We communicate in many ways, including through our website, digital and print newsletters and advertorial and editorial content in the local community newspaper.

In 2024–25, three editions of our *What's Happening* magazine, showcasing places, people and events in the City through news articles and features, were delivered to 91,803 homes and businesses in the City.

We also launched a *What's Happening* digital offering – a mobile-friendly edition with bonus content, including video interviews and photo galleries, that delve deeper into the stories shared in the print edition and go behind the scenes of exciting City projects, events and initiatives.

Our website is another key digital communication tool, allowing us to deliver content and resources for our residents, local businesses and the general public quickly and cost effectively. In 2024–25, our website attracted 4.5 million views. A total of 94 articles were added to the News page of the website, generating 27,206 page views.

The most popular news articles published on the City's website in 2024–25 included:

- Where to pay your respects in the City this Anzac Day (3,273 views)
- Bookable verge collections coming soon (3,098 views)
- Green your verge with our free plant giveaway (1,283 views)
- Christmas has arrived in the City of Wanneroo (1,015 views)

Throughout 2024–25, the Communications and Brand team provided 140 sets of talking points to spokespeople who participated in media activities or official engagements throughout the year.

The team also delivered a combined 200 photo and video shoots to share information about City programs, services and projects with our community. This represented a 128% increase on the number of photo and video shoots the team undertook last year.

Over the financial year, Communications and Brand completed 472 graphic design projects – up 10% on the previous financial year – encompassing branding, promotional materials, digital content, event graphics, and to support campaigns and publications.

Media coverage

As a customer-focused organisation, the City is committed to open and transparent communications with our community, in line with our values of accountability and respect. We recognise that both traditional and social media channels present opportunities to inform, connect and engage with local people and the wider community.

We embrace opportunities to share news with residents, businesses and visitors and generate positive print, online and broadcast media opportunities. We regularly liaise with media outlets, issue media statements and respond to media enquiries as needed to share information about important issues, projects and events of interest to the community.

We assess and measure the City's media coverage against an industry benchmark called a media impact score (MIS), which calculates an organisation's performance based on sentiment (positive, negative, neutral), number of mentions, weighting of the media publication/outlet and story position or placement in the publication/platform.

Our 2.4 average MIS for media interactions in 2024–25 significantly outperformed the local government national average of 1.8.

Throughout 2024–25, media coverage of the City was assessed against the key strategic themes of growth, environment and sustainability, community connections, safety and security, and local work, business and investment, and had a potential audience reach of 13,389,045 over the financial year.

In 2024–25, only 14% of media coverage was negative in tone. Importantly, this negativity was directed at specific issues rather than the City itself. For example, a dog attack in Marangaroo was reported by Seven News and Sunrise News, but the City's response was widely praised. While the incident was inherently negative, the media coverage highlighted the City's strong commitment to community safety and security.

Overall, traditional media coverage of the City during 2024–25 was predominantly positive or very positive in tone.
Consistently high-performing themes included:

- The City helps connect the community
- The City invests in and supports grassroots facilities
- The City is committed to safety and security.

It's the little things campaign

In 2024, the City launched the 'It's the little things' campaign to establish a consistent brand presence, build community trust and raise awareness of the City's diverse services beyond traditional perceptions.

Phase 1 – from June to September 2024 – saw geotargeted Facebook and YouTube ads, local bus shelters ads and Google ads achieve a strong performance, with Facebook ads reaching 232,000 local people, generating 635,000 impressions and 76,000 engagements. This overall engagement rate of 11.9% significantly outperformed the government sector average of 3.4%. YouTube ads garnered 168,000 views, reflecting high levels of local engagement and resonance.

The simplicity and clarity of the campaign's messaging helped foster constructive social media discussions. This positive tone positioned the City on par with leading neighbouring councils and provided a solid foundation for future brand-building efforts.

Phase 2, launched in March 2025, aimed to expand visibility through print, outdoor and City-owned media channels, while Phase 3 in 2025–26 will introduce new campaign elements to support continued digital reach and engagement.

By focusing on 'the little things' that matter to residents, the campaign has strengthened trust in Council, enhanced the City's reputation and demonstrated the power of simple, consistent storytelling in fostering community loyalty and awareness.

Social media

In 2024–25, we maintained a strong focus on improving engagement with our community through social media, specifically Facebook, Instagram and LinkedIn, resulting in a 9% increase in Facebook followers, a 10% increase in Instagram followers and an 8% increase in LinkedIn followers. This data demonstrates the effectiveness of the City's communications strategy in delivering engaging and relevant content that resonates positively with social media users.

In 2024–25, 1,473 posts were published across the City's Facebook, Instagram and LinkedIn pages.

Posts and campaigns with the highest reach across all platforms ran the gamut of topics, from the City's light-hearted April Fools 'public notice' that played on the friendly rivalry with a neighbouring local government, claiming Lake Joondalup would be renamed Lake Wanneroo, to a 'Tree't yourself' post announcing a tree and shrub giveaway, an important reminder not to bin batteries, and Prime Minister Anthony Albanese's visit to the City to break ground the Alkimos Aquatic and Recreation Centre site.

Facebook is the City's primary social media channel. In 2024–25, the City's Facebook page achieved:

8,497,691 users
page reach

5,173,625 users
post reach

6,740,255
impressions

4.25% engagement rate
(up 19% compared to 2023–24).

For more information on the City's current and historic news, please see **wanneroo.wa.gov.au/news/archive.**

Important events

In 2024–25, the City hosted, sponsored and supported a range of events that gave residents, businesses and visitors opportunities to connect and celebrate within Wanneroo's distinctive natural and built environments.

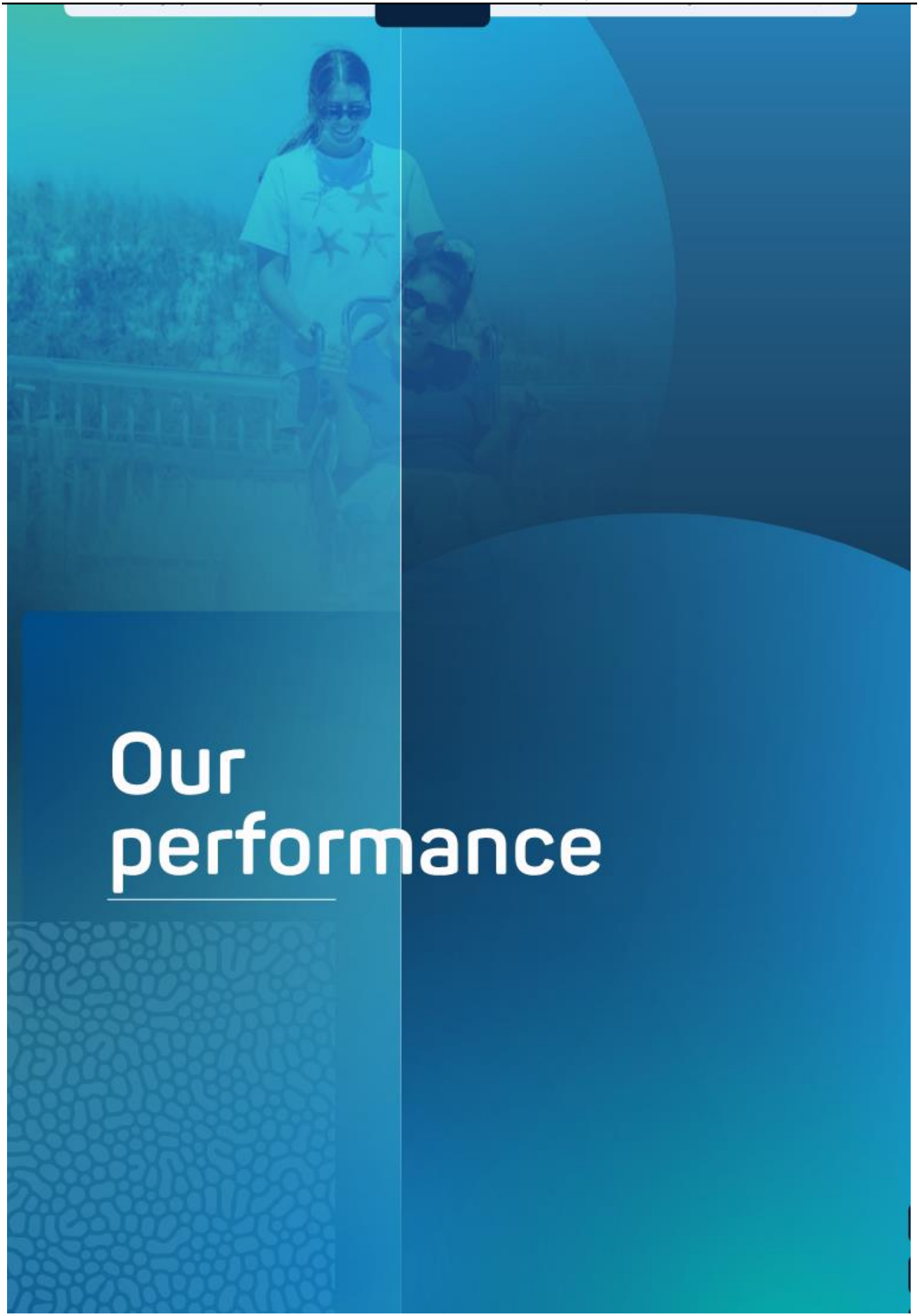
These included major community gatherings, sporting competitions, arts showcases, citizenship ceremonies and music festivals.

2024

July	August	September	October	November	December
• Pioneer lunch • 2024 Yonex Australian U15 & U19 National Championships		• Citizenship ceremonies x 6 • Heritage and Library dinner	• Banksia Grove Funfest • Car Co civic event • International Festival of Speed Perth 2024 • Wanneroo Children's Week community event	• Evening in the Park • Sunset Sounds Concert • Citizenship ceremonies x 6 • 2024 Business Awards • Wanneroo Show • Annual Fun Day, Playgroup WA • Mindarie Festival	• Aquamotion Outdoor Cinema • Christmas Fiesta • Aquamotion Funday • Magic of Christmas, Wanneroo Botanical Gardens • Mindarie NYE fireworks

2025

January	February	March	April	May	June
• Sunset Sounds concert • Australia Day citizenship ceremony • Treasures of Shorehaven 2025 • Rugby WA 7s state tournament & HSBC 7s international team training • Tet Festival, Vietnamese Society of Australia WA	• Wanneroo Festival • Symphony Under the Stars • Lunar New Year, Mindarie Marina	• Clarkson Funfest	• Community Services and Conservation dinner	• Evening in the Park • Beach to Bush Arts Festival • Ready 4 Adventure Show • Get Reel Two Rocks	• Emergency Services dinner • 2025 Bosch Power Tools Perth Super 440



Our performance

Our performance

Our CBP provides details of operational delivery specifically linked to our seven strategic goals, as defined by our SCP. Under each of the goals, we deliver several services to the community and report on them in this annual report. Additionally, the capital works program, including the City's top capital projects, underpins delivery of our services to the community.

This section of the report outlines our service performance against our strategic goals, presenting our:

- progress against our goals
- services delivered, service highlights, performance results and statistics
- progress on delivery of key projects
- proposed projects for future years.

To ensure successful implementation of our goals, we monitor the performance of key projects and service indicators set out in the CBP throughout the financial year. Performance reports and the annual report are submitted to the Audit and Risk Committee for review. In addition, the annual report is reviewed and approved by Council.

The impact of our projects and programs on the community is primarily measured through the liveability survey.

Liveability survey

Community liveability insights

The City of Wanneroo's second Liveability Survey was conducted between November and December 2024, with over 4,000 community members participating. The survey provides valuable insight into what our community values in their neighbourhoods and how they rate their lived experience. These results help us track progress against the Strategic Community Plan 2021–2031 and inform future planning and investment.

Overall liveability score

Residents rated the liveability of their neighbourhoods at 62 out of 100, based on 50 place attributes grouped under five dimensions:

- Look and function
- Sense of welcome
- Things to do
- Uniqueness
- Care.

Top-rated attributes

The highest-rated attributes in 2024 included:

There are people like me	7.5
Welcoming to all people	7.5
Ease of driving and parking	7.4
Mix or diversity of people in the area	7.4
Connectivity	7.3

Lowest-rated attributes

The lowest-rated attributes were:

Local history, historic buildings or features	4.2
Unusual or unique buildings and/or public space design	4.2
Things to do in the evening	4.2
Cultural and/or artistic community	4.7
Evidence of community activity	4.8

Liveability priorities

The survey identified attributes that are both highly valued and underperforming – these are key priorities for future investment. In 2024, these included:

- sense of neighbourhood safety
- general condition of public open space
- elements of natural environment
- sense of personal safety
- access to neighbourhood amenities.

These priorities align with the City's future strategic goals and will inform future service planning, capital works, and community engagement.

Community ideas

Residents submitted over 6,000 ideas to improve liveability. Common themes included more local events, better lighting and footpaths, increased tree planting, and improved access to public transport. These ideas provide valuable local knowledge and will support place-based planning and project design. We use these ideas, together with the other survey results, to review our services, helping us assess community needs, identify gaps, and refine service delivery to better align with community expectations.

Strategic alignment

Each of the 50 liveability attributes has been mapped to the City's seven strategic goals. This enables us to measure progress from a community perspective and ensures that future planning remains aligned with community aspirations.

Informing the Council Plan 2025–2035

The insights gathered through the 2024 Liveability Survey have directly informed the development of the City's new Council Plan 2025–2035. The community's values, priorities, and lived experiences have shaped the draft vision, purpose, and strategic goals of the new plan, ensuring that future decision-making is grounded in what matters most to our residents. The Council Plan was adopted in August 2025 and will guide the City's strategic direction over the next decade.

Our corporate business plan

In 2024–25, the City planned to deliver 85 key projects aligned with the priorities in the Corporate Business Plan (CBP).

The figure below provides an overview of how these projects have progressed over the current year and the previous four years.

As at 30 June 2025, 94% of key projects were either completed, on target, or being monitored. This means that out of 85 initiatives, 80 are progressing as planned. This represents an improvement compared to the previous year's performance status of 79%.

The figure below shows the status of the 85 initiatives planned for delivery in 2024–25, as at 30 June 2025:

27
initiatives have been completed

43
are progressing as planned

10
are being monitored

1
is not reaching the expected target

4
have been deferred to 2025–26.

Performance trend

While project delivery performance has varied in previous years, the 2024–25 results mark a significant improvement. The performance rate of 94% this year reflects improved planning, stronger cross-team coordination, and enhanced monitoring practices. The increase in completed and on-track initiatives demonstrates our growing capability to deliver on our strategic commitments and respond effectively to community needs.

Delivering on Goal 1

An inclusive and accessible city with places and spaces that embrace all.

We're building a community where everyone feels welcome, valued and connected. Our public spaces and facilities are designed to be accessible and inclusive, supporting people of all ages, abilities and backgrounds. Through local programs, events and services, we're helping people stay active, healthy and engaged.

Our priorities

We are working towards this goal through the following priorities:

- **Priority 1:** Value the contribution of all people
- **Priority 2:** Value public places and spaces
- **Priority 3:** Facilities and activities for all
- **Priority 4:** Bringing people together
- **Priority 5:** Learning and discovery choices

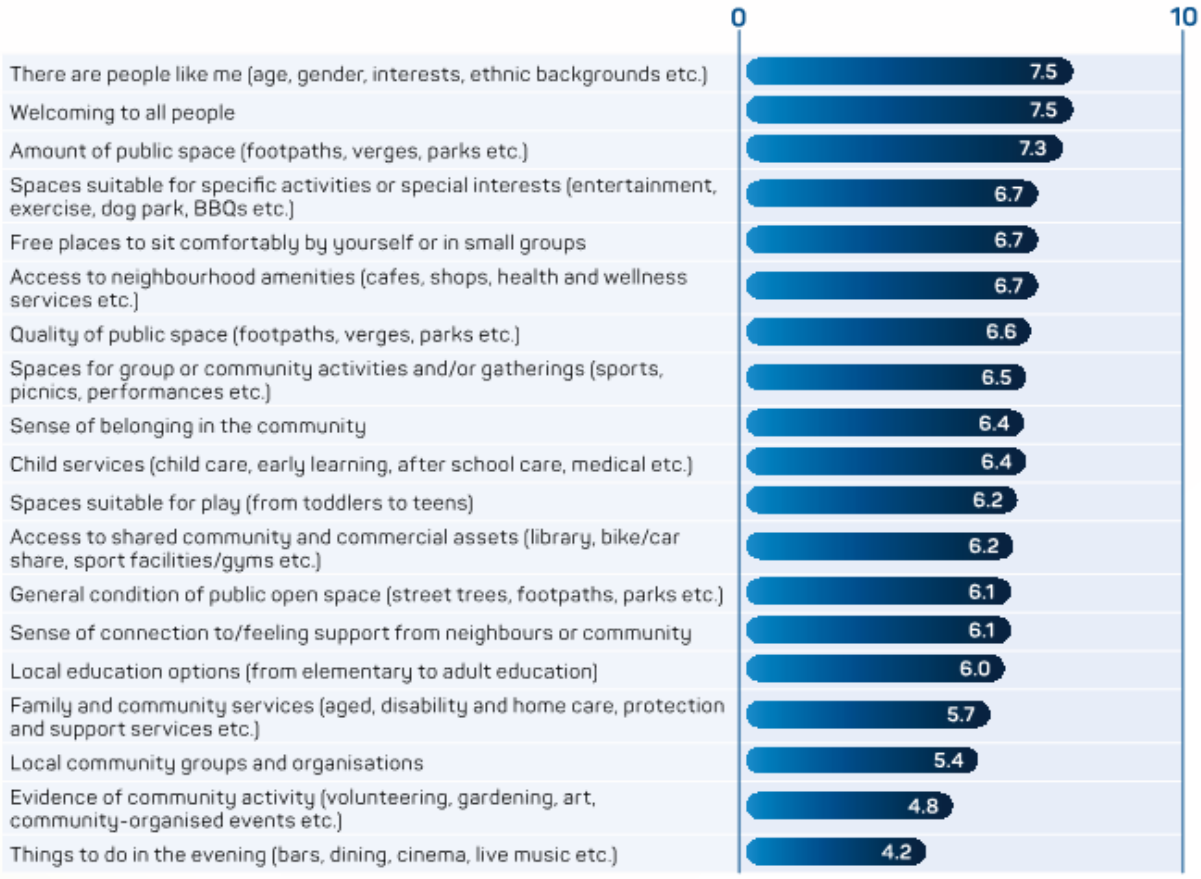
Services that support Goal 1

We deliver a range of services that help achieve this goal, including:

- Community recreation programs and facilities
- Place management
- Community development
- Library services.

Wanneroo Liveability Survey results

The following attributes from the 2024 Wanneroo Liveability Survey are aligned to Goal 1 and reflect how residents rate inclusion, accessibility and connection in their neighbourhoods.



Key achievements

The initiatives and outcomes summarised below reflect our progress in delivering on Goal 1 and its supporting priorities:

Inclusive infrastructure & facilities

What we delivered	What changed as a result?	Why it matters to our community
Heath Park Pavilion, Eglinton: Delivered a new facility with changerooms, activity rooms, universal access features, and a mural by local artist Brenton See.	Provided a modern, inclusive venue for sport and community events, with facilities for players, officials, and visitors.	Enhances community pride and access to quality infrastructure. Supports sport, gatherings, and cultural expression in a growing suburb.
Dordaak Kepup Library & Youth Innovation Hub: Commenced construction of a new library and innovation hub, scheduled to open in December 2025.	The new facility will offer programs, technology, and spaces for learning, creativity, and community connection.	Expands access to modern library services and youth innovation opportunities in a fast-growing area.
Aquamotion drowning prevention technology: Installed AI-based alert system that notifies lifeguards via smartwatch.	Improved safety and reduced response times for potential drowning incidents.	Creates a safer swim environment for families and staff, helping prevent serious injuries and saving lives.
Aquamotion gym upgrade: Upgraded gym with high-tech Matrix equipment featuring user integration.	Members now enjoy state-of-the-art fitness equipment used in leading gyms worldwide.	Promotes physical health and enhances user experience, encouraging regular exercise and community wellbeing.
Kingsway netball courts and floodlighting renewed: The City completed renewal works on the netball court surface and floodlighting at the western courts, with $4.2 million invested in 2024–25.	Upgraded facilities ensure the courts remain safe, functional, and accessible for years to come.	Quality sporting infrastructure supports active lifestyles, community participation, and local sporting events.

Community access & engagement

What we delivered	What changed as a result?	Why it matters to our community
Community facility bookings: processed 96,507 community facility bookings in 2024–25, supporting access to 107 venues across the City.	Enabled thousands of community groups, clubs, and residents to access spaces for sport, events, and activities.	Well-maintained, accessible spaces strengthen social cohesion, physical activity, and local identity. Every booking represents people coming together.
Strategic advocacy for community wellbeing: Advocated for youth diversion, homelessness support, and family violence services through evidence-based factsheets and stakeholder engagement.	Secured extension of HEART homelessness outreach to 2026 and funding for multicultural youth services in Butler through 2027.	Delivers tangible progress on critical social issues. Ensures vulnerable residents have access to essential support locally.
Community funding program: Provided $237,553 in funding to support 117 community initiatives across five grant streams.	More than 40,000 people participated in funded events, including 8 Christmas celebrations. $331,500 in additional support was leveraged.	Empowers local groups to deliver inclusive, vibrant programs. Strengthens community connections and amplifies the City's investment.

Youth development & leadership

What we delivered	What changed as a result?	Why it matters to our community
Youth leadership: delivered four youth leadership initiatives, engaging 167 young people in events and programs across the City.	Built confidence, teamwork, and civic engagement through activities like Youth Week, Level Up, and school leadership programs.	Fosters future-focused leadership and inclusion. Encourages young people to actively contribute to their communities.
Youth engagement sessions: Delivered 660 youth engagement sessions in centres, parks and community spaces, attracting over 12,000 attendees.	Created safe, inclusive spaces for skill-building, creativity, and connection. Partnered with Headspace, Constable Care, and others.	Provides positive alternatives and supports wellbeing. Strengthens belonging and community resilience through youth-led activities.

Literacy & early learning

What we delivered	What changed as a result?	Why it matters to our community
Early childhood program delivery: Delivered early childhood programs through City libraries, attracting over 35,000 attendees. Introduced book comprehension packs aimed at 3-year-olds for borrowing to support school readiness.	Strengthened early literacy and language development. Provided parents with tools to support learning at home.	Lays the foundation for lifelong learning and educational success. Supports families in preparing children for school and beyond.

Place activation & management

What we delivered	What changed as a result?	Why it matters to our community
Place-based activations: Delivered a series of place-based activations across key centres including Girrawheen, Wanneroo, and Yanchep.	Enhanced vibrancy, increased foot traffic, and fostered stronger community connections.	Supports local businesses, encourages civic pride, and creates welcoming public spaces.
Revitalising Wanneroo Town Centre: Delivered a revitalisation strategy for the Wanneroo Town Centre, shaped by extensive community and stakeholder engagement.	Established a shared vision and actionable framework for future development, activation, and investment.	Empowers local identity, supports economic growth, and ensures the Town Centre reflects community aspirations.
Empowering Yanchep: Activation and the YTRAC relaunch: Activated Yanchep through events, partnerships, and the relaunch of the Yanchep Two Rocks Access Centre (YTRAC).	Increased community participation, improved access to services, and strengthened local collaboration.	Supports social inclusion, local pride, and place-based service delivery in a rapidly growing coastal community.

Strategic place planning & engagement

What we delivered	What changed as a result?	Why it matters to our community
Place planning engagement: Conducted place planning workshops and engagement sessions with residents and stakeholders.	Gathered insights to inform future planning and activation strategies.	Ensures planning is community-led and responsive to local context.
Place based frameworks: Developed place-based frameworks to guide investment and service delivery.	Created clear pathways for implementation and monitoring.	Aligns City resources with community priorities and strategic goals.

Capital works

We undertake infrastructure projects based on community feedback and identified needs.

In 2024–25, the following capital works supported Goal 1 of the Strategic Community Plan:

Sports facilities – total expenditure
$28,935,752

Golf courses – total expenditure
$561,132

Community buildings – total expenditure
$14,926,071

Investment projects – total expenditure
$1,375,190

Performance indicators – Goal 1 outcomes

The following table presents the outcomes of the key performance indicators (KPIs) for Goal 1 as outlined in the Corporate Business Plan. These indicators reflect performance across various community-focused service areas.

✓ Achieved

✗ Not Achieved

Key performance indicator	2022–23	2023–24	2024–25 Target	2024–25 Actual	Performance	Service
% access items identified through audit completed as scheduled	97%	96%	>90%	92%	✓	Community development
% access infrastructure budget expended	90%	94%	>90%	96%	✓	Community development
Number of volunteers supporting City services	128	154	>125 & <135	134	✓	Community development
Number of page views Your Say	48,749	89,440	Increase	88,430	✗	Community development
Sporting facility attendance – Aquamotion and Kingsway Indoor Stadium	440,109	511,811	Increase	556,254	✓	Community recreation programs and facilities
Community facility bookings	97,532	100,514	Increase	96,507	✗	Community recreation programs and facilities
% of library members to total population	34%	35%	Increase	36%	✓	Library services
Attendance numbers at programs and activities	30,933	42,951	Increase	52,745	✓	Library services

Detailed performance of Goal 1 services

Community recreation programs and facilities

To support healthy and active lifestyles, we deliver a range of innovative community facilities and programs. Our services include:

- delivery of sport and recreation programs
- planning and development of community facilities
- management of facility bookings and usage
- maintenance and operations of community facilities
- support for community and sporting clubs
- provision of beach safety services
- management of golf courses.

Corporate Business Plan key projects 2024–25

The following key initiatives were commenced or delivered in the 2024–25 financial year:

Complete On Target Monitor

Key project	Action for 2024–25	Status	Comments
Construction of Halesworth Park sports facilities	Construction of sports amenities building at Halesworth Park.	Complete	Project completed.
Construction of Heath Park sports amenities building	Continue construction of the new sports amenities building at Heath Park.	Complete	Project completed.
Construction of the Alkimos Aquatic and Recreation Centre	Detailed design of the centre to be completed along with the progression of the construction tender.	On Target	Structural steel erection underway; foundations and pool structures poured.
Construction of the all-abilities playground at Riverlinks Park	Continue construction of an all-abilities playground at Riverlinks Park in Clarkson.	Complete	Project completed.
Facility planning for Alkimos district and regional open spaces	Present draft Masterplan to Council for consideration.	On Target	Advocacy did not secure funding; planning to proceed independently.
Implementation of the Golf Courses Strategic Plan	Implementation of management contract and leases for the Marangaroo and Carramar golf courses and confirm scope of upgrades and implementation.	On Target	Council approved side deed and funding arrangement in June 2025.
Progress planning for upgrades to the Wanneroo Recreation Precinct	Present draft Masterplan to Council for consideration.	On Target	Revised concept design developed; new facility preferred over refurbishment.
Review of the Northern Coastal Growth Corridor Community Facilities Plan	Undertake a review of the Northern Coastal Growth Corridor Community Facilities Plan.	Monitor	Consultant review to be completed by August for Council consideration in September.
Upgrade of tennis courts at Montrose Park	Upgrade of tennis courts, fencing and lighting at Montrose Park in Girrawheen.	Monitor	Delays due to sewerage connections and seasonal constraints; completion by Oct 2025.
Upgrades to Kingsway Netball Court surface and floodlighting	Commence and complete the renewal of drainage, playing surface and sports lighting on the Western Netball Courts.	Complete	Project completed.

Place management

We work with our community to shape vibrant, inclusive and distinctive places. Through local planning and engagement, we deliver services that reflect the unique character of each area and strengthen community connection.

Our place management services include:

- develop local area plans to reflect the distinctive character of a place
- activate places to support community identity, connection and inclusiveness
- manage City events
- coordinate community engagement.

Key projects 2024–25

The following key initiatives were commenced or delivered in the 2024–25 financial year:

Complete On Target Under Target

Key project	Action for 2024–25	Status	Comments
Delivery of the community events program	Deliver flagship and place-based events program that highlights the unique places in the City.		Program successfully delivered within planned timeframe.
Masterplanning for Yanchep Lagoon	Preparation of a staged Implementation Plan that considers designs for each precinct aligned with the Masterplan and funding models.		Council endorsed plan; implementation underway.
Place-led and sense of place planning	Undertake local area planning to improve understanding and awareness of priorities and needs in our local communities. • Facilitate the place-led approach in East Wanneroo to inform public realm design such as streetscapes, public open space and community facilities. • Broaden place-led approach across the City.		Planning policy and guidelines in development; Council workshops scheduled.
Review of the Community Engagement Framework	Undertake a review of the Community Engagement Framework.		Progress delayed due to scheduling issues.

Community development

We work with our community and stakeholders to foster connection and build capacity across all ages, cultures and abilities enhancing quality of life for everyone.

Our community development services include:

- social inclusion to ensure that all people can participate in community life
- community development to support capacity building
- childhood services to build confidence and capacity in families and the community
- youth development to build valued, empowered and supported youth
- community funding to support community groups and organisations.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Complete On Target

Key project	Action for 2024–25	Status	Comments
Review of the Reconciliation Action Plan	Undertake a review of the City's Reconciliation Action Plan and seek Council endorsement of a revised plan.	✓	RAP 2025–2027 endorsed by Council and accredited by Reconciliation Australia.
Review of the Social Strategy	Undertake a review of the City's 2019 Social Strategy.	◎	Review extended to align with new Council Plan adoption in August 2025.
Strategic social needs advocacy	Regularly monitor community needs and advocate for the provision of social services as outlined in the City's Advocacy Plan (Wellbeing pillar) and other identified emerging needs.	◎	Ongoing advocacy; strong engagement with Department of Communities.
Youth development service review	Undertake a youth development service review.	◎	Review findings presented to Service Review Working Group in June 2025.

Library services

Our libraries are welcoming community hubs that support learning, connection and access to information. We provide:

- community resources, facilities and engagement opportunities
- access to digital media and technology
- support for literacy and lifelong learning.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Key project	Action for 2024–25	Status	Comments
Construction of the Dordaak Kepup Library and Youth Innovation Hub	Continue construction of Dordaak Kepup Library and Youth Innovation Hub.	◎	Construction on track for September 2025; fit-out procurement progressing.
Deliver digital literacy program	Build digital literacy in the City through tailored workshops and training aligned to web interactions, employment and social connection.	◎	Tech help and niche digital literacy sessions delivered across libraries.
Local connectedness through libraries	Engage with the local community and stakeholders to explore and enable opportunities within libraries and via online platforms.	◎	Strong participation in literacy programs, workshops, and community-led activities.

Community impact story

Community connections through flagship funding

In 2024–25, the City of Wanneroo's flagship funding stream empowered 12 high-impact community events that brought over 23,000 residents together in celebration, remembrance, and connection.

From civic commemorations to cultural festivals, these events played a vital role in strengthening community bonds and fostering local pride.

Among the highlights were major commemorative services including Anzac Day, Remembrance Day, and Vietnam Veterans Day, hosted by RSLs across Wanneroo, Yanchep/Two Rocks, and Quinns Rocks. These solemn and inclusive gatherings drew more than 15,000 attendees, with growing involvement from schools, veterans, emergency services, and multicultural performers.

The Mookaroo NAIDOC Outer North Festival welcomed over 2,000 participants, celebrating First Nations culture through music, dance, and storytelling led by Indigenous youth and community groups. Meanwhile, Australia Day celebrations in Girrawheen and Yanchep/Two Rocks engaged over 1,100 residents in family-friendly festivities, and Carols in the Park in Yanchep drew an estimated 5,000 people, continuing a cherished local tradition.

With a City contribution of $77,000, these events leveraged an additional $161,000 in financial and in-kind support, including volunteer hours – delivering a combined value of nearly $240,000. This remarkable return on investment underscores the program's success not only in economic terms, but in its enduring impact on social cohesion, civic engagement, and the cultural vitality of the City of Wanneroo.

Delivering on Goal 2

A city that celebrates rich cultural histories, where people can visit and enjoy unique experiences.

We celebrate the rich cultural heritage and diversity that make Wanneroo unique. From Aboriginal traditions to global influences, our arts, events and tourism experiences reflect the stories of our community. We're proud to offer places and programs that invite people to explore, connect and enjoy.

Our priorities

We are working towards this goal through the following priorities:

- **Priority 1:** Valuing cultures and history
- **Priority 2:** Supporting arts and local creativity
- **Priority 3:** Enhancing tourism opportunities and visitor experiences

Services that support Goal 2

To deliver on this goal, we provide:

- museum, heritage and arts services
- tourism promotion initiatives.

Wanneroo Liveability Survey results

The following attributes from the 2024 Wanneroo Liveability Survey are aligned to Goal 2 and reflect how residents rate the City's cultural heritage, arts and tourism.

Key achievements

The initiatives and outcomes summarised below reflect our progress in delivering on Goal 2 and its supporting priorities:

Museum, heritage and arts

What we delivered	What changed as a result?	Why it matters to our community
Local Heritage Survey 2025: Council adopted a new Local Heritage Survey 2025, including the recommended Heritage List.	The review meets the City's obligations under *The Heritage Act 2018* and provides an important record of significant historic heritage places.	Preserves the city's identity and heritage. Recognises places of value to the community and ensures they are considered in future planning.
2024–25 Annual Gallery Program: The Wanneroo Regional Gallery welcomed over 5,500 visitors this year, with a dynamic program including the 2024 Community Art Awards, Walking Through a Songline, and Antipodean Manifesto, alongside rotating works by Andy Warhol from the National Gallery of Australia. These exhibitions enabled the community to engage with First Nations art, celebrate local artists, and explore key moments in Australia's art history.	The Wanneroo Regional Gallery provided the community with opportunities to experience First Nations art, learn about significant periods in Australia's art history, and celebrate local artists' achievements. Visitors engaged with nationally renowned works	These experiences enriched community understanding and connection through art in accessible, engaging ways.
Acquisition of the SS Alkimos Lifeboat: Wanneroo Regional Museum successfully acquired the SS Alkimos lifeboat; a rare maritime artefact linked to one of Western Australia's most iconic shipwrecks. The lifeboat will be preserved and eventually displayed as part of the museum's growing cultural heritage collections	The acquisition safeguards a significant piece of WA's maritime heritage and deepens local connection to coastal history. It enhances the museum's role as a cultural hub, offering residents and visitors meaningful opportunities to engage with the region's unique past.	Preserving and showcasing local maritime history strengthens community identity and pride. It provides educational and cultural value for current and future generations.

Visitor economy

What we delivered	What changed as a result?	Why it matters to our community
Develop Discover Wanneroo Visitor Economy Strategy: The City consulted and engaged with key stakeholders to develop a new vision and strategy for the local visitor economy. In June 2025, Council endorsed the new Visitor Economy Strategy, which identifies tourism as a key strategic industry. The strategy aims to position the City of Wanneroo as a destination that visitors enjoy, highlighting its active coastline, natural environment, and memorable experiences.	The strategy provides a clear direction for growing the visitor economy and elevates the City's profile as a tourism destination.	It strengthens the City's economic resilience, supports local businesses and tourism operators, and enhances the visitor experience for residents and tourists alike.
Active social media channels: The City maintained active and engaging social media channels through Facebook and Instagram, supporting small local businesses by helping them create fresh content and gain exposure. Over the year, Instagram followers grew by 57% and Facebook by 34%, reflecting strong community engagement.	The City collaborated with local influencers and creators to showcase activities and places to visit, delivering authentic and friendly content that serves as a one-stop shop for residents.	It promotes local pride, helps small businesses thrive, and keeps residents informed and connected to what's happening in their area.
Yanchep Park passes: In partnership with the Department of Biodiversity, Conservation and Attractions (DBCA), the City offered discounted annual park passes for residents to Yanchep National Park. The initiative allowed residents to purchase an annual pass for the same price as a single day visit. Over 2,000 passes were purchased in 2024–25, marking a steady increase from the previous year.	The program improved access to nature and recreation for residents, encouraging more frequent visits to the park.	It strengthens community connection to natural spaces, promotes outdoor activity, and supports wellbeing through affordable access to local environmental assets.

Capital works

There are no capital works programs relating to Goal 2.

Performance indicators – Goal 2 outcomes

The following table presents the outcomes of the key performance indicators (KPIs) for Goal 2 as outlined in the Corporate Business Plan. These indicators reflect performance across various community-focused service areas.

✓ Achieved

✗ Not Achieved

Key performance indicator	2022–23	2023–24	2024–25 Target	2024–25 Actual	Performance	Service
Number of visitors / participants in cultural services activities (including Wanneroo Regional Museum and historic houses)	24,664	44,939	Increase	31,039	✗	Museums, Heritage and the Arts
Discover Wanneroo website visitors	9,272	10,357	Increase	18,930	✓	Tourism
Social media metrics (total followers Instagram and Facebook)	3,329	4,005	Increase	6,018	✓	Tourism

Detailed performance of Goal 2 services

Museums, heritage and the arts

We create opportunities for the community to engage with a wide range of cultural activities and assets that reflect the richness of our diverse beliefs, values, life experiences and interests. Our services include:

- promoting cultural and artistic experiences for the community
- managing and promoting local heritage
- managing the City's cultural assets.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Complete On Target

Key project	Action for 2024–25	Status	Comments
Delivery of the museums and heritage program	Undertake key projects focusing on endorsement of the Heritage Management Plan, development of a Noongar Cultural Heritage Directory and finalising review of the Local Heritage Survey.		Local Heritage Survey adopted; Aboriginal Cultural Heritage List developed; strong community engagement.
Delivery of arts and exhibition experiences	Promotion of arts and gallery exhibition experiences including the Community Art Awards and arts development programs such as Tips and Tricks for Artists to maximise attendance and participation.		Gallery hosted major exhibitions and workshops; strong visitor numbers and participation.

Tourism

We work with our community, the tourism industry and state government agencies to grow tourism in our region. Through leadership, investment attraction and targeted marketing, we support tourism by:

- facilitating tourism opportunities
- supporting destination marketing
- improving destination signage
- maximising regional tourism.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Key project	Action for 2024–25	Status	Comments
Implementation of the Council resolution on the former Quinns Rock Caravan Park site	Pending development approval, progress with lease and otherwise implement project actions.		DA and building licence approved; tenant handover pending WAPC clearance.
Redevelopment of the Old Yanchep Surf Lifesaving Club site	Finalise agreement for lease and ground lease. Progress site design and approvals with lessee in consultation with Yanchep Lagoon Working Group and Design Review Panel.		Updated concept presented; development application preparation underway.
Review of the Tourism Plan	Undertake a major review of the Tourism Plan and present an updated plan to Council for consideration.		Discover Wanneroo Visitor Economy Strategy 2025–2030 endorsed by Council.

Community impact story

Creating visibility and recognition of Noongar culture through language.

The City of Wanneroo's Noongar Naming Project marks a significant shift toward respectful and meaningful engagement with Noongar Elders and Knowledge Holders.

Moving beyond opportunistic naming, we partnered with Noongar language experts Nyungar Birdiyia to develop a culturally grounded framework that reflects the interconnectedness of Noongar Country and culture. This comprehensive approach ensures consistency and authenticity in place naming across the City.

Guided by Elders, the framework prioritises cultural integrity over quantity, avoiding tokenistic or trend-driven naming. It supports the revival of Noongar language and heritage through thoughtful consultation and application. To our knowledge, Wanneroo's model is unique among Western Australian local governments and sets a new benchmark for respectful naming practices.

A key outcome of this process is the naming of the City's new library and youth innovation hub, now called Dordaak Kepup – 'place of living waters' – a name inspired by local waterways, heritage, and connection. Fifteen internal rooms also feature Noongar names, chosen for their symbolic and metaphorical significance rather than direct translations.

To enhance public understanding, entrance signage includes QR codes linking to pronunciation guides, cultural context, and artwork by local Noongar artists, with braille for accessibility. The City is committed to embedding this process into future developments and supporting others, including land developers, to adopt the framework and promote cultural continuity across the region.

Delivering on Goal 3

A vibrant, innovative city with local opportunities for work, business and investment.

We're supporting a strong and diverse local economy where businesses grow, jobs are created and innovation thrives. By attracting investment and helping local enterprises succeed, we're creating opportunities for people to work, learn and prosper close to home.

Our priorities

We are working towards this goal through the following priorities:

- **Priority 1:** Build a strong and diverse local economy
- **Priority 2:** Attract and support new and existing businesses
- **Priority 3:** Plan, develop and activate employment locations
- **Priority 4:** Develop local jobs and skills
- **Priority 5:** Create opportunities for investment

Services that support Goal 3

We deliver the following service that helps achieve this goal:

- Economic development.

Wanneroo Liveability Survey results

The following attributes from the 2024 Wanneroo Liveability Survey are aligned to Goal 3.

Key achievements

The initiatives and outcomes summarised below reflect our progress in delivering on Goal 3 and its supporting priorities:

What we delivered	What changed as a result?	Why it matters to our community
Supporting local business through Wanneroo Business Association partnership: The City celebrated 25 years of the Wanneroo Business Association (WBA) and delivered a range of events in partnership, including hosting the Wanneroo Business Expo at the Civic Centre for the first time. The City was also the major sponsor of the Wanneroo Business Awards and supported a series of targeted free workshops, training sessions, and networking events to address identified needs and gaps.	Supporting the WBA enabled the organisation to reach a broader range of local businesses, including small businesses and start-ups that often lack established support networks.	A strong local business community provides local jobs, sponsors community events and sporting teams, and contributes to a thriving local economy. Celebrating and promoting local business achievements fosters pride and economic resilience.
Investment attraction – Insights on Industry and Innovation Business Breakfast: The City partnered with the Chamber of Commerce and Industry WA and the WBA to deliver a future-focused business breakfast at the AARP. Over 100 attendees heard from CCIWA Chief Economist Aaron Morey about the unique opportunities for investment and business growth in the City of Wanneroo.	The event attracted both local businesses and attendees from across the Perth metropolitan region, highlighting the City's investment potential and the strategic importance of the Neerabup Industrial Area.	Promoting investment in the Neerabup Industrial Area supports long-term economic growth and job creation, with the potential to deliver up to 30,000 local jobs.
Support new local business – New Business Welcome Event: The City partnered with the Small Business Development Corporation and the WBA to host a welcome event for new businesses at the Civic Centre. Newly registered businesses, existing operators, and aspiring entrepreneurs were invited to learn about available support and network with others.	Over 100 registrations were received for this unique event, helping new businesses connect with support services and build valuable networks.	Supporting new businesses helps them succeed and grow, contributing to a vibrant and resilient local economy.
Investment attraction – prospectus and refreshed Business Wanneroo resources: The City developed an investment prospectus showcasing why Wanneroo is a prime location for business and investment. The Business Wanneroo website was refreshed with improved navigation, updated content, and resources tailored to business needs. The monthly business e-newsletter reached over 20,000 subscribers.	These resources provide clear, accessible information to help businesses navigate approvals, access opportunities, and grow within the City.	Making it easier to do business in Wanneroo encourages private investment, supports local enterprise, and strengthens the City's economic future.

Capital works

There are no capital works programs relating to Goal 3.

Performance indicators – Goal 3 outcomes

The following table presents the outcomes of the key performance indicators (KPIs) for Goal 3 as outlined in the Corporate Business Plan. These indicators reflect performance across various community-focused service areas.

✓ Achieved
✗ Not Achieved

Key performance indicator	2022–23	2023–24	2024–25 Target	2024–25 Actual	Performance	Service
Number of business training, events and workshops facilitated	14	8	8	15	✓	Economic Development
Total % participants attendance at business training, events and workshops	87.75%	86.00%	75%	63%	✗	Economic Development
% business applications approved within 60-day timeframe	95.70%	95.93%	Increase	88%	✗	Economic Development
% business applications approved within 90-day timeframe	92.80%	93.00%	Increase	81%	✗	Economic Development
$ value non-residential building approvals	$157.7m	$189m	Increase	$420.7m	✓	Economic Development

Detailed performance of Goal 3 services

Economic development

We focus on local, regional and strategically significant infrastructure and economic development initiatives that support economic growth and create job opportunities. Our services include:

- supporting the growth of existing industries and encouraging industry diversification
- helping local businesses grow by providing employment areas and workforce development
- developing and strengthening regional partnerships to boost the region's economic competitiveness.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

✓ Complete

Key project	Action for 2024–25	Status	Comments
Business Support Service	Measure, monitor and analyse how businesses interact with the Business Support Service and implement improvements to the service.	✓	Reporting framework ready for CRM integration.
Grow the digital presence of Business Wanneroo	Grow the digital presence of Business Wanneroo and undertake strategic targeted campaigns for business support and investment attraction.	✓	Website updates completed; investment prospectus added.
Investigate options to become a renewable energy supplier	Investigate the options available to the City in order to become a renewable energy supplier.	✓	Report findings presented; next steps outlined to Council.
Support activation of the Australian automation and robotics precinct (AARP)	As a foundation precinct partner, continue to build and maintain relationships with key stakeholders to develop, grow and promote the Australian Automation and Robotics Precinct (AARP) at the Neerabup Industrial Estate.	✓	Key events held; partnership obligations met for the year.

Delivering on Goal 4

A sustainable city that balances the relationship between urban growth and the environment.

We're planning for a future that protects our natural environment while supporting responsible growth. Through climate action, biodiversity conservation and resource management, we're making sure Wanneroo remains a beautiful, resilient and sustainable place to live.

Our priorities

We are working towards this goal through the following priorities:

- **Priority 1:** Plan for climate change
- **Priority 2:** Protect and manage local biodiversity
- **Priority 3:** Manage natural assets and resources
- **Priority 4:** Reduce waste and its impacts

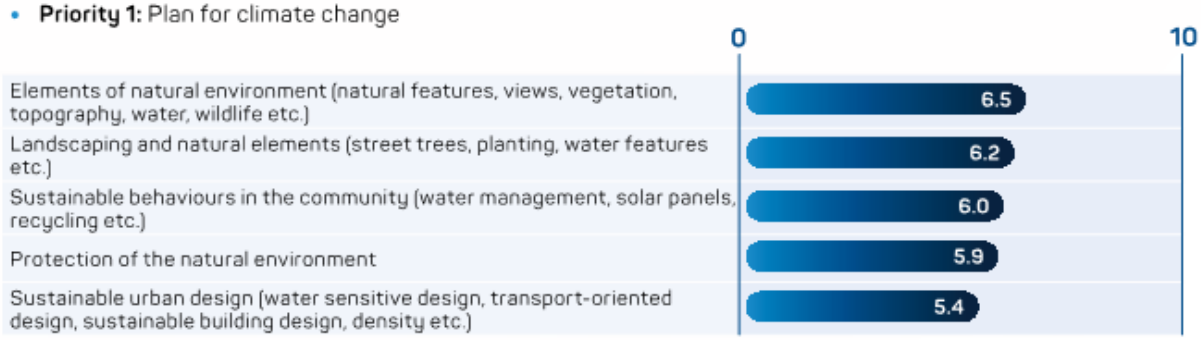
Services that support Goal 4

We deliver a range of services that help achieve this goal, including:

- environmental management
- parks and conservation area maintenance
- waste management.

Wanneroo Liveability Survey results

The following attributes from the 2024 Wanneroo Liveability Survey are aligned to Goal 4.



Key achievements

The initiatives and outcomes summarised below reflect our progress in delivering on Goal 4 and its supporting priorities:

Parks and conservation

What we delivered	What changed as a result?	Why it matters to our community
Manage and maintain streetscapes – service review implementation: The City implemented Council-endorsed actions to improve streetscape maintenance and accessibility across public spaces.	Enhanced maintenance has improved the visual appeal, safety, and usability of streetscapes, making shared areas more inviting for residents and visitors.	Well-maintained streetscapes foster community pride, support active lifestyles, and contribute to a more vibrant and welcoming urban environment.
Community Conservation program: The City delivered 37 community conservation events involving 29 community groups and 8 schools, resulting in 777 hours of volunteer conservation activity.	The program strengthened environmental awareness and stewardship by engaging participants in hands-on conservation efforts.	Protecting local ecosystems and involving the community builds a shared sense of responsibility and connection to nature.
Adopt a Bushland program: Community members participated in guided walks and planting activities across several conservation sites.	The program fostered deeper connections to local bushland and encouraged shared responsibility for conservation.	It strengthens environmental awareness and builds pride in protecting natural spaces for future generations.
Annual tree planting program: The City planted 4,286 new trees across various locations.	Increased canopy cover helps reduce urban heat, supports biodiversity, and enhances the resilience of public spaces.	Tree planting is a long-term investment in environmental sustainability and community wellbeing.
Save Our Snake Neck Turtle program: The City monitored and protected turtle nesting sites around Yellagonga Regional Park.	Efforts to safeguard nesting sites help preserve vulnerable native species and promote biodiversity.	Community involvement in conservation fosters environmental awareness and a shared commitment to protecting local wildlife.

Waste services

What we delivered	What changed as a result?	Why it matters to our community
Future investment in Wangara Waste Transfer Station: The City included $2.54 million in the 2025–26 budget to fund construction of the Wangara Waste Transfer Station, supporting future waste service needs.	This investment will enhance waste services operational efficiency and improve service delivery for the community.	Improved waste infrastructure ensures reliable service, supports environmental sustainability, and meets the needs of a growing population.
Neerabup Resource Recovery Precinct Masterplan endorsed: Council endorsed the Neerabup Resource Recovery Precinct Masterplan as the City's guiding document for developing a future-focused waste management precinct.	This milestone sets the foundation for modern, collocated facilities in the northern suburbs that support resource recovery and circular economic outcomes.	A strategic approach to waste management promotes innovation, reduces landfill reliance, and supports a cleaner, more sustainable future for residents.

Environmental management

What we delivered	What changed as a result?	Why it matters to our community
Delivered a successful plants for residents 'Wannagrow' program: The City distributed over 8,500 plants to more than 850 residents, promoting greener communities and environmental awareness, with $10,000 in grant funding from Water Corporation supporting the program's continued success.	The Wannagrow program directly supports the community through provision of plants and education on the importance of planting for biodiversity and urban cooling purposes. This program also supports the Urban Forest Strategy and Waterwise Council Program initiatives.	Encouraging residents to plant and care for local species fosters environmental stewardship, enhances biodiversity, and helps create cooler, more liveable neighbourhoods.

Capital works

In 2024–25, the following capital works supported Goal 1 of the Strategic Community Plan:

Environmental offset – total expenditure
$453,481

Conservation reserves – total expenditure
$758,958

Foreshore management – total expenditure
$3,602,357

Waste management – total expenditure
$1,043,977

Performance indicators – Goal 4 outcomes

The following table presents the outcomes of the key performance indicators (KPIs) for Goal 4 as outlined in the Corporate Business Plan. These indicators reflect performance across various community-focused service areas

Achieved | Deferred | Not Achieved | On Target

Key performance indicator	2022–23	2023–24	2024–25 Target	2024–25 Actual	Performance	Service
% of ground water licence allocations used	90%	98%	<100%	89%	✓	Environmental Management
% total canopy increase for the City	-1%	N/A	Increase	1%	✓	Environmental Management
Fleet diesel % reduction in GHG emissions per bin serviced per year (baseline 2016–17)	18%	26%	25% reduction by 2024–25	26%	✓	Environmental Management
Fleet ULP % reduction in GHG emissions (baseline 2017–18)	35%	42%	25% reduction by 2024–25	56%	✓	Environmental Management
Energy (electricity and gas) use per asset (reduction in emissions from energy use) (baseline 2019–20)	N/A	N/A	25% reduction by 2029–30	69.6%	✓	Environmental Management
% parks and reserves maintenance completed as scheduled	100%	100%	100%	100%	✓	Parks and Conservation Areas
Waste to landfill (tonnes)	58,394	59,277	Decrease	61,609	✗	Waste Management
Waste to recycle (tonnes)	35,879	33,068	Decrease	31,502	✓	Waste Management
Total waste per capita (kg)	432	402	Decrease	383	✓	Waste Management

Detailed performance of Goal 4 services

Environmental management

We support a healthy and sustainable environment by managing the City's natural and built environmental assets.

Our services include:

- managing the City's impact on climate change and building resilience
- protecting and enhancing local biodiversity
- reducing resource use and managing waste.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Key project	Action for 2024–25	Status	Comments
Review of the Local Biodiversity Plan	Review and update the current Local Biodiversity Plan.	On Target	Review ongoing; report anticipated late 2025.
Review of the Local Environmental and Sustainability Strategy	Review and update the current Local Environmental Strategy (expand to include focus on sustainability if agreement reached).	Deferred	The Local Environmental Strategy is being redesigned to align with the new Council Plan and broader strategic directions. Completion is now expected in late 2025 or early 2026.

Parks and conservation areas

We manage and enhance parks and reserves to support a healthy, active community and protect conservation values. Our services include:

- managing conservation areas, foreshores and coastal environments
- maintaining parks, reserves and streetscapes.

Key achievements

Throughout the year, we delivered a range of initiatives aligned with our strategic priorities.

The following achievements highlight the tangible outcomes of our work and the positive impact on the community and environment.

Our service activity

Each year, we deliver a wide range of essential services that help keep our City running smoothly. These figures show the scale of our day-to-day work that supports a clean, safe and sustainable community.

	2020–21	2021–22	2022–23	2023–24	2024–25
Trees planted	5,000	4,707	3,639	3,500	4,286
Tubestock planted	53,000	20,000	26,318	20,000	25,000
Volunteer hours contributed to conservation activities	764	1,042	1,142	869	1,212

Waste management

We lead environmentally sustainable approaches to waste management and provide reliable waste collection services. These include:

- domestic waste collection
- recycling collection
- bulk junk waste collection and management
- bulk green waste collection and management
- public place rubbish bin servicing
- removal of illegally dumped waste
- operation of the Wangara Greens Recycling Facility.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Complete On Target Monitor

Key project	Action for 2024–25	Status	Comments
Develop and implement waste management options	• Collaborate with Mindarie Regional Council (MRC) on Waste to Energy options for residual waste. • Develop FOGO processing and Waste Transfer options.	Monitor	Waste to Energy agreement to proceed signed with MRC. FOGO Tender in review.
Development of Neerabup Resource Recovery Precinct	Development of a masterplan for the Neerabup Resource Recovery Precinct.	On Target	Strategic projects progressing. Detail design out to tender.
Implementation of bulk waste service	Deliver and monitor the new pre-booked Bulk Waste Service in 2024–25.	Complete	Service has been implemented. Continue to monitor.
Review of food organics collection	Tender for a food and garden organics (FOGO) facility.	Monitor	FOGO under review via Mindarie Regional Council.
Review of the Waste Plan	Undertake a review of the Waste Plan in 2024–25.	On Target	Strategic Waste Management Plan workshop completed; awaiting finalisation of the State Waste Plan.

Our service activity

Each year, we deliver a wide range of essential services that help keep our City running smoothly. These figures show the scale of our day-to-day work that supports a clean, safe and sustainable community.

Key performance indicator	2020–21	2021–22	2022–23	2023–24	2024–25
Diversion*	53%	39%	35%	36%	34%
Waste per capita (kg)	414	422	404	392	383
Kerbside collections (t)	75,797	79,775	79,067	80,844	83,695
Recycling (t)	16,112	15,240	15,296	14,376	14,863
General waste (t)	59,604	51,276	50,711	51,764	54,039
Garden organics (t)	80–	13,258	13,060	14,704	14,793
Verge side collections (t)	10,943	10,999	10,465	9,209	6,970
Bulk hard waste (junk)^ (t)	7,524	7,761	7,071	5,754	5,607
Bulk green waste (t)	3,419	3,238	3,395	3,454	1,363
Wangara Recycling Facility (t)	2,077	1,661	1,529	1,425	1,323
Other (t)	857	858	1,033	983	1,124
Total waste collected (t)	89,674	93,293	92,094	92,462	93,111

* RRF closed August 2021

– Service commenced June 2021

^ includes mattresses, ewaste and whitegoods

Delivering on Goal 5

A well-planned, safe and resilient city that is easy to travel around and provides a connection between people and places.

We're designing neighbourhoods that are safe, connected and easy to get around. With diverse housing options, reliable transport and well-managed infrastructure, we're creating places where people can live, work and move freely. Our planning also supports community safety and resilience.

Our priorities

We are working towards this goal through the following priorities:

- **Priority 1:** Develop to meet current need and future growth
- **Priority 2:** Plan for and manage land use
- **Priority 3:** Manage and maintain assets
- **Priority 4:** People can move around easily
- **Priority 5:** People feel safe in public places
- **Priority 6:** Prepared and resilient

Services that support Goal 5

We deliver a range of services that help achieve this goal, including:

- public health
- community safety
- emergency management
- future land use planning
- planning and building approvals
- planning and building compliance
- transport and drainage.

Wanneroo Liveability Survey results

The following attributes from the 2024 Wanneroo Liveability Survey are aligned to Goal 5.

Key achievements

The initiatives and outcomes summarised below reflect our progress in delivering on Goal 5 and its supporting priorities:

Public health

What we delivered	What changed as a result?	Why it matters to our community
Environmental health services for Shire of Koorda: The City of Wanneroo provided approximately one week of statutory environmental health services and professional advice to the Shire of Koorda, in accordance with the City's 2024–25 fees and charges.	This initiative supported the Shire of Koorda in meeting its statutory environmental health obligations, which can be challenging for smaller, rural local governments.	Partnering with neighbouring councils strengthens regional collaboration and showcases the City's leadership in supporting public health across Western Australia.
Pool barrier inspection program delivered in-house: From 1 September 2024, the City's Compliance Services team began delivering the entire pool barrier inspection program directly, without contracted services.	Service quality improved, with City officers providing tailored support to residents to help them meet pool and spa safety barrier requirements.	Enhanced customer service and safety inspections help protect children and families, ensuring compliance with important safety standards.
Proactive midge larvae monitoring at Yellagonga Wetlands: The City delivered its annual proactive and preventative midge larvae monitoring program at the Yellagonga Wetland system.	Adult midge populations were successfully controlled throughout the 2024–25 spring and summer months.	Managing midge outbreaks reduces nuisance for nearby residents and supports a more enjoyable natural environment.
Proactive sand drift inspection program delivered: The City completed 706 inspections across 59 major development sites to monitor compliance with sand and dust drift minimisation requirements.	The inspections helped reduce nuisance caused by sand and dust drift and prevented negative impacts on roads and stormwater infrastructure.	Proactive monitoring protects public infrastructure and ensures cleaner, safer neighbourhoods near development sites.

Community safety and emergency management

What we delivered	What changed as a result?	Why it matters to our community
Bushfire mitigation treatments delivered: The City completed 17 prescribed burns, 29 fire access track upgrades, and two parkland clearing operations to reduce bushfire risk.	These treatments help minimise the potential impact of bushfires on people, property, and the environment.	Proactive bushfire mitigation protects lives and assets, especially in high-risk areas, and builds community resilience to natural disasters.
Firebreak inspection program delivered: Rangers and Fire Mitigation Officers conducted 2,846 firebreak inspections on private properties across the City.	Inspections ensured firebreaks were in place to slow fire spread and provide safe access for emergency services.	Effective firebreaks reduce bushfire risk and support safer, more prepared neighbourhoods.
Emergency management 'Prepare Together' events held: Two community events were held at Bunnings Wangara and Mindarie, with additional support provided at the Banksia Grove Bush Fire Brigade event.	Residents received emergency preparedness resources, including 'Grab and Go Bags' to help plan for evacuations.	These events empower residents to protect their families and homes during emergencies through practical, accessible information.
CCTV rebate program delivered: The City received 404 applications and paid out 306 rebates, supporting $637,236 in CCTV installations and distributing $143,893 in rebates.	Efficient processing times and increased promotion led to strong uptake, especially from March 2025 onward.	Encouraging CCTV installation enhances local safety, supports crime prevention, and strengthens partnerships between residents, WA Police, and the City.

Land use planning and land development

What we delivered	What changed as a result?	Why it matters to our community
Submission of the City's first Local Planning Strategy: The City submitted its first Local Planning Strategy to the Western Australian Planning Commission (WAPC) for approval.	Once approved, the strategy will guide Planning Scheme 3 and future land use plans and policies across the City.	The strategy supports sustainable urban growth, housing diversity, economic development, quality public spaces, and protection of environmental and community assets.
10 new parks constructed across the City: Ten new parks were built and reached practical completion in 2024–25, including Howden Park, Hugill Park, and Roebuck Park.	New recreational spaces were created for residents in growing suburbs.	Quality parks enhance liveability, promote active lifestyles, and foster community connection.
10 parks gifted to the City for ongoing maintenance: Following the developer maintenance period, ten parks were handed over to the City, including Capilano Park, McGiffen Park, and Lucky Park.	The City assumed responsibility for maintaining these well-used community assets.	Ongoing maintenance ensures parks remain safe, attractive, and accessible for all.
Expedition Park officially opened in Catalina Green: A community event on 12 April 2025 celebrated the opening of Expedition Park, featuring a play tower, water play, fitness equipment, BBQs, and a Miyawaki pocket forest.	The event attracted around 1,000 attendees and received overwhelmingly positive feedback.	Expedition Park provides a vibrant, inclusive space for families and strengthens community spirit.

Building approvals and compliance

What we delivered	What changed as a result?	Why it matters to our community
Local Structure Plan assessments accelerated: 22 local structure plans and amendments were assessed in quarter 1 of 2025, up from just one in quarter 1 of 2024, as part of a review of expiring plans.	Coordinated recommendations were provided to the WAPC, enabling planning certainty for urban expansion.	This supports staged delivery of housing, transport links, and community facilities in growth areas.
East Wanneroo Precinct Structure plans progressed: Precincts 7, 8, and 15 within the East Wanneroo District Structure Plan area were assessed and recommended for support.	Coordinated decision-making by the WAPC enabled urban development to progress in these precincts.	Provides certainty for landowners and developers, supporting timely delivery of housing, infrastructure, and community facilities in a major growth corridor.

Transport and drainage

What we delivered	What changed as a result?	Why it matters to our community
Safe Routes to School and Your Move program expanded: The City developed Safe Routes to School maps for five additional schools and welcomed six new schools into the Your Move program.	More schools now benefit from road safety initiatives and active travel promotion.	Encouraging walking and cycling to school improves student wellbeing, reduces traffic congestion, and builds safer, healthier communities.
Active transport infrastructure delivered: A 500m shared path was constructed on Jordan Street, Two Rocks, and successful WA Bicycle Network grants were secured for key cycle routes.	New infrastructure and planning support safer walking and cycling connections to future Metronet stations.	Improved connectivity encourages sustainable travel and enhances access to public transport.
Road Safety Action Plan delivered: The City identified major causes of road trauma and used this data to guide targeted safety measures and black spot funding applications.	New infrastructure and planning support safer walking and cycling connections to future Metronet stations.	Improved connectivity encourages sustainable travel and enhances access to public transport.
Southern beach accessway renewed in Jindalee: The City completed the renewal of the southern beach accessway in Jindalee.	The upgrade improved safety and functionality for beachgoers.	Safe and accessible beach entry enhances coastal enjoyment and supports active outdoor lifestyles.

Capital works

We undertake a range of infrastructure projects based on community feedback and needs. The following capital works programs were linked to Goal 5 in 2024–25:

Community safety – total expenditure
$416,672

Park furniture – total expenditure
$4,405,688

Park rehabilitation – total expenditure
$1,668,286

Passive park development – total expenditure
$1,958,518

Pathways and trails – total expenditure
$4,802,230

Roads – total expenditure
$18,871,121

Stormwater drainage – total expenditure
$118,046

Street landscaping – total expenditure
$50,000

Traffic treatments – total expenditure
$5,454,259

Performance indicators – Goal 5 outcomes

The following table presents the outcomes of the key performance indicators (KPIs) for Goal 5 as outlined in the Corporate Business Plan. These indicators reflect performance across various community-focused service areas.

Achieved

Not Achieved

Key performance indicator	2022–23	2023–24	2024–25 Target	2024–25 Actual	Performance	Service
% completion of annual firebreak inspections program	100%	100%	100%	100%	✓	Emergency Management
CCTV footage requests provided within agreed timeframe (7 days)	New measure	100%	>95%	99.5%	✓	Community Safety
Community safety customer requests addressed within agreed timeframe	100%	100%	100%	100%	✓	Community Safety
Emergency management preparedness sessions – number of families reached	170	2,504	Increase	2,800	✓	Emergency Management
% of building permit applications (certified and uncertified) processed within timeframes	99%	99%	95%	98%	✓	Planning and Building Approvals
% development applications processed within timeframes (60 and 90 days)*	95%	95%	90%	86%	✗	Planning and Building Approvals
% of public pool and caravan park inspections conducted within statutory timeframes	100%	100%	100%	100%	✓	Public Health
Infrastructure capital works practical completion of pathway projects per financial year	95%	90%	95%	88%	✗	Transport and Drainage
Percentage of major development sites monitored in the Proactive Sand Drift Program	New measure	New measure	100%	100%	✓	Planning and Building Compliance

* 1,775 Development were received and 1,531 were determined within the statutory timeframe.

Detailed performance of Goal 5 services

Public health

We help create healthy and safe communities by ensuring compliance with public health laws and regulations. Our services include:

- managing safe food preparation through education, inspections and sampling
- inspecting and sampling water quality
- investigating notifiable diseases and inspecting skin penetration premises to prevent illness
- monitoring and treating wetlands to control pests
- inspecting public buildings, events and caravan parks to ensure a safe built environment
- monitoring pollution, including noise, asbestos, air, soil and water.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Complete On Target Monitor

Key project	Action for 2024–25	Status	Comments
Field Services Mobility Project	Integration of mobile technology into operational service delivery.		Project will be rescoped and defined in line with recommendations from systems review.

Our service activity

Each year, we deliver a wide range of essential services that help keep our City running smoothly. These figures show the scale of our day-to-day work that supports a clean, safe and sustainable community.

	2020–21	2021–22	2022–23	2023–24	2024–25
No. of customer requests investigated by Health Services	1,433	1,111	1,060	1,144	1,349
No. of food premises within the City	1,154	1,239	1,162	1,275	1,304
No. of food handlers completed the 'I'm Alert' training tool	826	714	769	1,940	1,711
No. of swimming pools and spas registered within the City	13,964	14,357	15,295	15,766	16,863
No. of customer requests investigated by Compliance Services	1,710	1,449	1,917	2,694	2,093

Community safety

We work with the community and industry partners to help create public spaces where people feel safe, respected and supported. Our services include:

- sharing safety information in partnership with local organisations
- working with the community to raise awareness of and support enforcement of local, state and federal laws
- managing domestic animals, including registration and investigations
- helping prevent crime through safety patrols and CCTV monitoring
- providing a security presence at civic events.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Key project	Action for 2024–25	Status	Comments
CCTV and community safety initiatives	Implement the agreed recommendations and outcomes of the CCTV service review.		CCTV review endorsed by Council; implementation plan completed.
Construction of the Wanneroo Animal Care Centre	Commence design and construction of a new Animal Care Centre.		Design approved; procurement underway with construction expected in late 2025–26.

Our service activity

Each year, we deliver a wide range of essential services that help keep our City running smoothly. These figures show the scale of our day-to-day work that supports a clean, safe and sustainable community.

	2020–21	2021–22	2022–23	2023–24	2024–25
Community safety customer requests addressed within agreed timeframe	100%	100%	100%	100%	100%
Number of fixed CCTV cameras in the City	118	462	584	584	632
Wanneroo Animal Care Centre (WACC) admissions	695	701	875	918	728

Emergency management

We help protect our community from the risks and impacts of natural disasters – such as bushfires and severe weather – through prevention, preparedness, response and recovery. Our services include:

- managing local emergency preparedness
- supporting and coordinating the volunteer bushfire brigade
- taking action to reduce bushfire risk
- leading recovery planning and response after emergencies.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Complete Deferred

Key project	Action for 2024–25	Status	Comments
Construction of Two Rocks Emergency Services Hub	Apply for relevant State Government grant funding for the design and construction of the Two Rocks Emergency Services Hub.	✓	Concept plans and cost estimate completed; detailed design to commence next year.
Construction of Wanneroo Emergency Services Precinct	Secure land and commence detailed design for the Wanneroo Emergency Services Hub.	⏱	Project being rescoped to align with $17.5M State election commitment.
Implementation of the Bush Fire Risk Management Plan	Continue the implementation of mitigation actions identified in the Bush Fire Risk Management Plan and engage with the community as appropriate.	✓	15 of 21 burns completed; weather impacted schedule.
Mariginiup bush fire recovery	Continue to support those affected by the Mariginiup fire in their recovery journey.	✓	Cleanup has been completed

Our service activity

Each year, we deliver a wide range of essential services that help keep our City running smoothly. These figures show the scale of our day-to-day work that supports a clean, safe and sustainable community.

	2020–21	2021–22	2022–23	2023–24	2024–25
No. bushfire brigades	4	4	4	4	4
Bushfire brigade membership	230	193	207	240	230
No. incidents attended by bushfire brigade volunteers	325	293	287	86	52

Future land use planning

We plan for the future of our City by integrating land use, transport and environmental strategies to support healthy, sustainable communities. Our services include:

- strategic land use planning
- integrating transport and land use planning
- integrating environmental and land use planning
- administering developer contributions.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

On Target

Key project	Action for 2024–25	Status	Comments
Finalisation of the Local Planning Strategy	Finalise the draft Local Planning Strategy following Western Australian Planning Commission (WAPC) consent to advertise.		Strategy forwarded to WAPC in June 2025.
Preparation of the Local Planning Scheme No 3	Prepare Local Planning Scheme No.3 following the finalisation of the Local Planning Strategy.		Draft scheme in preparation; expected completion in late 2026.

Planning and building approvals

We provide integrated planning and building approval services to support quality development and a positive customer experience. Our services include:

- assessing development applications
- assessing subdivision applications
- reviewing town planning scheme amendments
- developing and reviewing planning policies
- preparing and assessing structure plan proposals
- assessing uncertified building permit applications
- issuing licences, permits and certificates.

Key Projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Key project	Action for 2024–25	Status	Comments
Identify Smart City development opportunities	Finalise Smart City developer guidelines, standards and specifications with key stakeholders and implement at the Alkimos Central Rail Station Precinct.		Smart Parks fibre integration under review; developer discussions underway.

Planning and building compliance

We help maintain safe and healthy communities by ensuring developments meet planning and building requirements. Our services include:

- monitoring compliance with planning approvals
- inspecting swimming pool barriers for safety compliance
- monitoring compliance with building approvals.

Key Projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Key project	Action for 2024–25	Status	Comments
Proactive Sand Drift Program	Monitor the compliance of developers and their contractors in relation to sand and dust drift minimisation.		59 sites monitored with 100% compliance.

Our service activity

Each year, we deliver a wide range of essential services that help keep our City running smoothly. These figures show the scale of our day-to-day work that supports a clean, safe and sustainable community.

	2020–21	2021–22	2022–23	2023–24	2024–25
% of swimming pools and spas inspected for barrier compliance under legislated requirements	100	100	100	100	99
No. of customer requests investigated by Compliance Services	2,721	2,419	1,917	2,694	2,093

Transport and drainage

We manage local transport and drainage infrastructure to ensure it remains accessible, sustainable and cost-effective – now and into the future.

Our services include:

- providing and maintaining roads, car parks, bus shelters and street furniture
- providing and maintaining pathways, bridges and underpasses
- providing and maintaining drainage infrastructure.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Complete On Target Monitor

Key project	Action for 2024–25	Status	Comments
Construction of shared pathway on Alexander Drive in Landsdale	Seek approvals and undertake construction of shared path on Alexander Drive from Hepburn Avenue to Gnangara Road.	On Target	First section completed; remaining works scheduled and dependent on utilities.
Development of Lot 9100 Mather Drive in Neerabup	Commence construction at Lot 9100 Mather Drive in the Neerabup Industrial Estate.	Monitor	Design submitted; awaiting Western Power response and external review.
Implementation of the Active Transport Plan	Design and construct pathways as identified in the Active Transport Plan in 2024–25 (and as approved in 2024–25 budget).	Complete	WA Bicycle Network milestones met; Hartman Drive pathway construction commenced.
Improve road safety and network optimisation	Review crash and traffic data to prioritise applications for annual Blackspot and/or Metropolitan Regional Road Group grant funding in the long-term capital works program.	On Target	Multiple grant applications submitted; awaiting Ministerial advice.
Infrastructure upgrade for Yanchep Lagoon on Brazier Road	Continue design consultancy for Yanchep precinct services infrastructure.	On Target	Consultant appointed; preliminary studies and gap analysis underway.
Intersection upgrade of Marangaroo Drive and Girrawheen Avenue	Re-design of the intersection to incorporate the construction of a suitable traffic treatment.	Monitor	Design delayed; land acquisition and service relocation scheduled for late 2025.
Neerabup Industrial Area road and infrastructure upgrades	Undertake construction for the upgrade of roads and services infrastructure in the Neerabup Industrial Estate.	Complete	Project completed.
Participate in and promote the Department of Transport 'Your Move' Initiative	Work with the Department of Transport to promote the 'Your Move' initiative and assist local schools and workplaces to implement.	On Target	Events and education programs delivered in partnership with WestCycle.
Road upgrades to Flynn Drive in Neerabup	Construction from Wanneroo Road to Old Yanchep Road.	Monitor	Adjustment of the utilities have commenced on site. Aboriginal cultural heritage has been cleared. Clearing permit has been appealed. Works will continue to progress; however, the progress of the clearing permit review will be closely monitored.
Road upgrades to Lenore Road in Hocking	Undertake construction for the upgrade to the dual carriageway from Kemp Street to Elliot Road.	Complete	Project completed.
Upgrade of existing roundabout in Landsdale	Undertake construction works to the existing roundabout at Mirrabooka Avenue and Kingsway Drive in Landsdale.	On Target	Project progressing as scheduled.

Our service activity

Each year, we deliver a wide range of essential services that help keep our City running smoothly. These figures show the scale of our day-to-day work that supports a clean, safe and sustainable community.

	2020–21	2021–22	2022–23	2023–24	2024–25
Km of streets swept	4,400	6,000	4,380	2,922	6,431
No. of stormwater pipes inspected	4,432	7,019	4,235	5,779	6,467
No. of gross pollutant traps cleaned	184	184	292	458	253
Beach renourishment (tonnes)	9,000	13,000	11,000	7,000	9,000

Delivering on Goal 6

A future focused city that advocates, engages and partners to progress the priorities of the community.

We're listening to our community and working together to make things happen. By engaging with residents, building partnerships and advocating for local needs, we're making sure our decisions reflect what matters most to the people of Wanneroo.

Our priorities

We are working towards this goal through the following priorities:

- **Priority 1:** Advocate in line with community priorities
- **Priority 2:** Actively seek to engage
- **Priority 3:** Build local partnerships and work together with others
- **Priority 4:** Understand our stakeholders and their needs

Services that support Goal 6

We deliver the following service that helps achieve this goal:

- advocacy.

Key achievements

See Community First highlight project starting at page 114.

Capital works

There are no capital works programs relating to Goal 6.

Performance indicators – Goal 6 outcomes

The following table presents the outcomes of the key performance indicators (KPIs) for Goal 6 as outlined in the Corporate Business Plan. These indicators reflect performance across various community-focused service areas.

Complete Not Achieved Not available

Key performance indicator	2022–23	2023–24	2024–25 Target	2024–25 Actual	Performance	Service
$ committed (election year – all projects)	100%	N/A (non-election year)	% priority projects supported	33%		Advocacy
$ committed funds received for City of Wanneroo delivered projects (non-election year)	-	100% ($16.1m)	100% as committed	N/A	election year	Advocacy

Detailed performance of Goal 6 services

Advocacy

We work with government, regional partners and stakeholders to advocate for the priorities identified by our community.

Our services include:

- designing and managing advocacy campaigns
- managing stakeholder relationships.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Key project	Action for 2024–25	Status	Comments
Implementation of the Advocacy Plan	Develop collateral, advocacy tactics and undertake campaigns for the upcoming state and federal elections.		The City's Putting Community First campaign was completed for both state and federal elections.

Community highlight project

Putting community first: Coordinated advocacy across state and federal elections

Strategic foundations

In a rare political moment, both the state and federal elections occurred within months of each other in 2025 – on 8 March and 3 May respectively. The City of Wanneroo seized this opportunity to launch a coordinated advocacy campaign that resonated with both political stakeholders and the local community.

The campaign built on a decade of advocacy experience, and a refreshed Advocacy Plan endorsed by Council in April 2024. It focused on three key projects:

- Girrawheen Hub Precinct
- Wanneroo Recreation Precinct
- Alkimos Regional Open Space.

Community engagement

The online campaign, launched on 22 November 2024, empowered residents to advocate directly to decision-makers. By the state election, 7,038 emails had been sent to state politicians. A targeted review ahead of the federal election led to an additional 2,580 emails, bringing the total to 9,618 community-generated emails.

Investment outcomes

The campaign contributed to significant funding commitments from both levels of government:

Investment type	Amount	Projects
Direct State investment to the City	$27.28 million	18 projects
Direct Federal investment to the City	$5.5 million	1 project (Girrawheen Hub)
State community investment	$12.0 million	66 projects
Federal community investment	$2.0 million	1 project (Wanneroo Cricket)
Regional State investment	$110.1 million	3 projects
Total commitments	$156.9 million	-

Progress on other priorities

The campaign also advanced several strategic priorities:

- **Yanchep Hospital:** Planning confirmed, and land purchased
- **State services hub for Yanchep:** Strengthened by promise of a Medicare Urgent Care Clinic
- **Road infrastructure:** Substantial investment committed
- **Youth mental health:** Funding secured for Headspace under federal mental health investment
- **Urban greening:** $16.9 million committed by State Labor to improve Perth's tree canopy.

Looking ahead

To prepare for the 2028 federal and 2029 state elections, the City will continue working with regional, state, and national partners, including the National Growth Areas Alliance (NGAA), to ensure ongoing advocacy success.

Delivering on Goal 7

A well-governed and managed city that makes informed decisions, provides strong community leadership and valued customer focused services.

We're committed to good governance, ethical leadership and excellent service. Our decisions are transparent and informed by community priorities. We're focused on delivering a seamless customer experience and making sure people can access the information and services they need.

Our priorities

We are working towards this goal through the following priorities:

- **Priority 1:** Clear direction and decision making
- **Priority 2:** Responsibly and ethically managed
- **Priority 3:** Anticipate and adapt quickly to change
- **Priority 4:** Promote offerings, opportunities and initiatives
- **Priority 5:** Customer focused information and services

Services that support Goal 7

We deliver a range of services that help achieve this goal, including:

- leadership, strategy and governance
- customer and stakeholder delivery
- results and sustainable performance.

Wanneroo Liveability Survey results

The following attributes from the 2024 Wanneroo Liveability Survey are aligned to Goal 7.

Key achievements

The initiatives and outcomes summarised below reflect our progress in delivering on Goal 7 and its supporting priorities:

What we delivered	What changed as a result?	Why it matters to our community
ICT disaster recovery services reviewed: The City reviewed and improved its backup and disaster recovery capabilities.	Systems are now better protected against cyber threats and disruptions.	Reliable ICT infrastructure ensures business continuity and safeguards essential services.
Culture survey delivered: 63% of staff participated in the City's culture survey, with results shared across the organisation and each service unit committing to its own action plan.	The survey provided a clear snapshot of workplace climate and areas for improvement.	A strong internal culture boosts morale, productivity, and service quality – helping attract and retain top talent.
New people systems implemented: New systems for recruitment, learning management and performance management were rolled out.	These systems support talent acquisition, staff development, and performance tracking.	A skilled and engaged workforce leads to more responsive and effective service delivery.
Reward and recognition program revised: The City updated its reward and recognition program following staff consultation.	Employee contributions are better acknowledged, boosting morale and performance.	Motivated staff are more engaged and committed to delivering positive outcomes for residents.
Strategic Procurement Roadmap stage 1 completed: The City completed a procurement maturity assessment and implemented online dashboard reporting.	Procurement practices are now more transparent, and data driven.	Robust governance builds trust and ensures value for money in public spending.
Asset renewal modelling and presentations delivered: The City completed asset renewal modelling and presented scenarios to Council at concept forums to inform the Long-Term Financial Plan (LTFP).	Council endorsed increased funding and higher service targets for infrastructure renewal.	Sustained investment ensures high-quality infrastructure remains safe, functional, and fit for future needs.
Infrastructure asset management plans and strategy endorsed: All infrastructure asset management plans for 2025 and the Asset Management Strategy 2024 were reviewed, updated, and endorsed by Council in March 2025.	The City now has a clear framework for managing infrastructure using sound asset management practices.	Effective planning balances safety, cost, and service quality – ensuring long-term infrastructure reliability.
Environmental planning support for capital works delivered: Over 250 environmental planning consideration reports were completed, including native vegetation assessments, and eight clearing permits submitted to DWER.	Environmental impacts were assessed and minimised, enabling timely project delivery.	Responsible planning protects natural assets while supporting infrastructure development.
Privacy and responsible information sharing readiness achieved: The City achieved a satisfactory standard across all areas of privacy and responsible information sharing readiness.	The City is prepared to fully implement the *Privacy and Responsible Information Sharing Act 2024*.	Strong privacy standards protect personal information and build trust in how the City manages data.

Capital works

The City undertakes a range of infrastructure projects based on community feedback and needs. The following capital works programs were linked to Goal 7 of the SCP in 2024–25:

Corporate buildings – total expenditure
$697,726

Fleet management – total expenditure
$2,258,959

IT equipment and software – total expenditure
$4,788,546

Performance indicators – Goal 7 outcomes

The following table presents the outcomes of the key performance indicators (KPIs) for Goal 7 as outlined in the Corporate Business Plan. These indicators reflect performance across various community-focused service areas.

✓ Complete ✗ Not Achieved

Key performance indicator	2022–23	2023–24	2024–25 Target	2024–25 Actual	Performance	Service
% customer requests responded to within the target time	97%	95%	95%	90%	✗	Customer and Stakeholder Delivery
Lost time injuries - Number of lost time injuries recorded in the City's Safety Management System	17	10	Decrease	11	✗	Customer and Stakeholder Delivery
All injury frequency rate (AIFR)	12.8	8.7	Decrease	7.2	✓	Customer and Stakeholder Delivery
External audit qualifications	0	0	0	0	✓	Leadership, Strategy and Governance
% of revised capital budget spent	73%	86%	<110%	94%	✓	Results and Sustainable Performance
% of original operational budget spent	97%	100%	<110%	99%	✓	Results and Sustainable Performance
% key asset management reserve targets met	102%	110%	>80%	94%	✓	Results and Sustainable Performance

Detailed highlights and performance of Goal 7 services

Leadership, strategy and governance

We ensure the City is unified by a shared vision, culture and values – providing clear purpose, direction and action. Strong governance processes help us meet legal obligations and make ethical decisions in the interests of our community and stakeholders.

We deliver this through:

- governance and legal services
- corporate support
- strategic planning.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Complete On Target Deferred

Key project	Action for 2024–25	Status	Comments
4-year Legal Panel review	Review the composition of the Legal Panel and implement reporting and KPIs.	Complete	Continued use of WALGA panel ensures legal coverage.
4-year review of the risk management framework and risk registers	Review and integrate risk management across the City's corporate planning processes.	On Target	New risk register structure in progress; Council workshops scheduled. Risk appetite statements and system investigation underway.
8-year local law review	Undertake the statutory 8-year local law review.	Complete	Statutory review completed.
Governance health check	Undertake an online survey to test the organisation's governance performance.	Deferred	Deferred for consideration in 2025–26.
Quality management system	Continue implementation of the roadmap for quality management aligned to ISO standards utilising a digital process management system.	On Target	Change management procedure approved; implementation across organisation underway.
Respond to Local Government Reform (governance)	Develop a plan to implement the LGA reform agenda across governance, risk and policy.	On Target	Monitoring reforms and developing stakeholder communication strategy.
Respond and adapt to Local Government Reform (planning)	Implementation of changes to the Integrated Planning and Reporting Framework as part of Local Government Act reform, including the development of a Council Plan.	On Target	Council Plan adopted.

Customer and stakeholder delivery

We work with our community and stakeholders to deliver services they value. We manage the City's resources to meet current and future needs in a socially, culturally, environmentally and financially sustainable way. Our services include:

- customer services
- information services
- communications and branding
- people and culture
- finance
- contracts and procurement
- property services.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Complete On Target Monitor

Key project	Action for 2024–25	Status	Comments
5-Year review of the City's contract conditions	Review procurement contracts and terms in relation to new legislation.		Contract review completed; training arrangements underway.
Develop a strategic procurement plan	Review the strategic procurement roadmap, relevant legislative frameworks and policy in order to develop a strategic procurement plan for the City.		Stage 1 complete; maturity assessment and dashboard reporting established.
Development of 246 Mary Street in Wanneroo	Planning for future land use and potential development of City freehold property.		Planning status monitored; lease to continue pending tenant decision.
Development of the Human Resources Information System (HRIS)	Continue the HRIS project for new modules to meet the future needs and requirements of the organisation.		Learning module went live. Performance module (PDRC) business ready.
Implement a new customer relationship management (CRM) system	Continue with the implementation of the customer relationship management (CRM) system.		EOI evaluated; recommendation presented to Executive.
Implement the data management framework	Continue implementation of data management framework actions to reach desired level of organisational maturity.		Project reactivated; RFTs in progress; next milestone set for July 2026.
Implementation of the Asset Management Strategy	Advocate and promote enhancements and improvements to asset management practises to meet short and long-term asset management goals and objectives.		All Asset Management plans and Strategy endorsed by Council.
Implementation of the Smart City Strategy	Continue progressing the implementation of the Smart City Strategy.		Implementation progressing as per schedule.
Industrial relations transition from federal to state	Ensure statutory requirements are met when bargaining for relevant industrial agreements in line with state IR legislation.		SOIA negotiations finalised and lodged; Fleet Services Agreement pending.
Monitoring compliance with the work health and safety legislation	Continue the improvement to policies and safety culture.		High-risk VOCs completed; WHS system objectives under review.
New property and rating system	• Progress to a decision on the replacement or mitigation actions for the City's property and rating system. • Based on project decision, complete tender for new property and rating system or complete mitigation of system / process issues.		EOI completed and recommendation report provided to CEO.

Complete On Target Monitor Deferred

Key project	Action for 2024–25	Status	Comments
Property-based income streams	Monitor disposal, acquisition and development opportunities in relation to the Strategic Land Policy and reviewed by the Strategic Lands Working Group and reported to the Revenue Review Committee as required.		Koondoola acquisition approved; Yanchep unit under contract; reporting ongoing.
Redevelopment of the City website	Continue with the development of the City's website in line with the recommendations of the independent review carried out in 2022–23.		RFQ issued; evaluation underway with outcome expected Sept/Oct 2025.
Review the Communications and Brand Strategy	Present Communications Strategy for endorsement.		Draft prepared; finalisation pending Council Plan endorsement and October elections.
Strategic workforce and people planning	Development of a new 10-year Workforce Plan.		Planning training scheduled; existing actions tracked via SharePoint.
Undertake service reviews	Undertake service reviews as identified by service review working group.		Youth development review completed and presented to SRWG.

Our service activity

Each year, we deliver a wide range of essential services that help keep our City running smoothly. These figures show the scale of our day-to-day work that supports a clean, safe and sustainable community. This year we had 293,997 customer contacts through various channels. Here is an overview of the contact methods compared to previous years.

Contact method	2020–21	2021–22	2022–23	2023–24	2024–25
Email	51,565	52,651	50,896	56,458	61,937
Online services	71,621	56,461	56,514	68,939	70,130
Telephone	138,744	136,399	121,391	125,869	138,567
In person	22,455	23,109	20,588	19,827	17,580
Hard copy mail	9,904	11,461	9,051	5,536	5,783

Results and sustainable performance

We track key results to measure progress toward our community's vision and strategic outcomes. We also manage risk and capability to ensure long-term, sustainable performance.

Our services include:

- performance management
- financial management and reporting.

Key projects 2024–25

We commenced and delivered the following key projects in the 2024–25 year.

Key project	Action for 2024–25	Status	Comments
Develop asset management sustainability performance indicators	Develop and implement performance indicators to manage asset management sustainability.		Development progressing; presentations to key groups rescheduled due to availability. Final endorsement expected following AMSG and ELM review.
Review the Long-Term Financial Plan	Review of the Long-Term Financial Plan in line with prevailing economic conditions.		Review deferred to first half of 2025–26 to align with updated economic conditions.

Grant funding

We actively seek grants to support the delivery of new and existing projects, programs, services and events.

These grants help us achieve high-quality outcomes for our community while ensuring responsible financial management.

In 2024–25, the City of Wanneroo secured over $1.75 million in grant funding across a diverse range of initiatives. These grants supported key strategic priorities including environmental sustainability, coastal resilience, youth engagement, emergency services, and community wellbeing.

Notable projects included:

- **Coastal adaptation and protection** studies and surveys, strengthening our long-term coastal management strategy
- **Youth engagement in Banksia Grove,** addressing antisocial behaviour and improving community safety
- **Bushfire mitigation and emergency services support,** enhancing local preparedness and response capabilities
- **Waterwise and e-waste initiatives,** contributing to our sustainability and circular economy goals.

The following table provides a detailed breakdown of other Government grants received during the financial year.

Grant program / name	Funder	Amount (excl. GST)	Purpose / Details
Urban Greening grant project	WALGA	$41,500	Landscape upgrades to Neerabup Road, Clarkson
Gnangara Waterwise Council grants funding	DWER	$150,000	Installation of smart irrigation control system
Coastal Adaptation and Protection grant program	Department of Transport	$65,154.50	Offshore sand source investigations for beach renourishment (with Joondalup and Stirling)
Coastal Adaptation and Protection grant program	Department of Transport	$107,268.00	Yanchep Coastal Management Study
Coastal Adaptation and Protection grant program	Department of Transport	$80,750.00	Coastal surveys for the Northern Beaches Alliance
E-waste infrastructure grants	DWER	$18,693.00	Enhancing collection and storage capacity at Wangara Greens Recycling Facility
Engaging Youth in Banksia Grove	WA Police (WAPOL)	$121,886	Addressing youth disengagement and antisocial behaviour in Banksia Grove
AEDC 'It's All About You and Me'	Department of Communities	$90,747	Community education to improve developmental outcomes for children
Bushfire mitigation	DFES	$191,725	Bushfire mitigation treatments
Local Government grant scheme (ESL)	DFES	$390,130	Operating grant for Bush Fire Brigades and Two Rocks SES Unit
CSRFF – Abbeville Park upgrade	Department of Local Government, Sport & Culture	$419,266	Upgrade of Abbeville Park sports amenities building
Waterwise Greening Scheme	Water Corporation	$10,000	Purchase of waterwise plants for the 'Wannagrow' resident program
Hiking Participation grant	DLGSC	$12,920	Supporting hiking participation initiatives

Community impact story

Engaging youth in Banksia Grove: A community-led pilot initiative

The Engaging Youth in Banksia Grove Project was a pilot initiative funded by a WA Police grant, designed to support the City and WA Police in understanding the root causes of anti-social behaviour among young people.

At its core, the project aimed to strengthen community cohesion by empowering youth to actively shape their local environment – fostering inclusion, innovation, and future-focused leadership.

Recognising the complexity of youth disengagement, the project adopted a multi-faceted, youth-led approach that placed young people at the centre of the solution.

The City facilitated seven voluntary placemaking workshops with students from Joseph Banks Secondary College, inviting young voices into the design of safer, more inclusive public spaces. A dedicated stakeholder workshop brought together 21 local representatives to build shared ownership and deepen community collaboration.

To support ongoing engagement, the project delivered ten weeks of co-designed youth outreach programming, reaching 217 young people. The initiative culminated in a vibrant community event, co-led and designed by youth participants, which attracted over 300 community members.

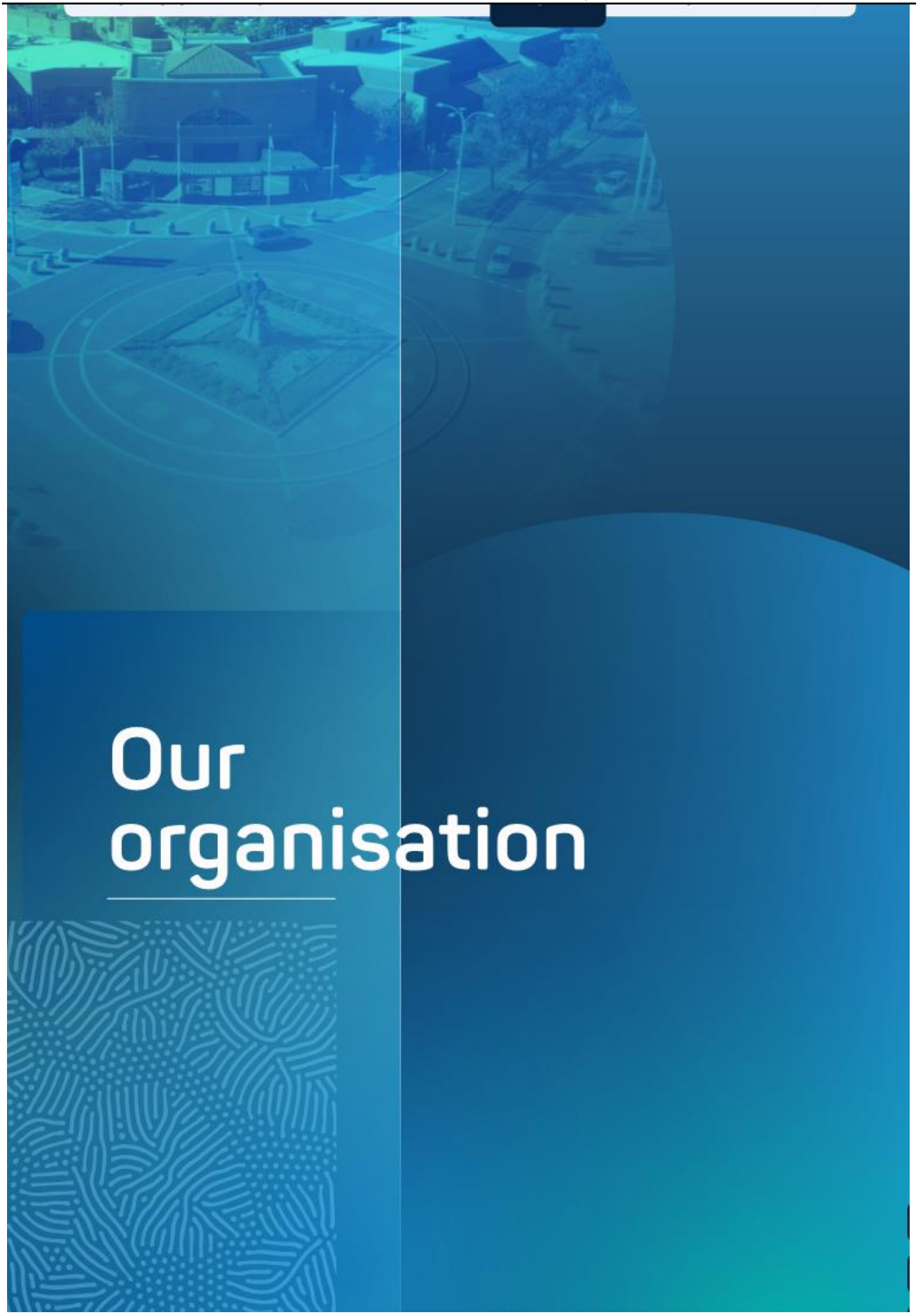
Throughout the program, social and relationship-based challenges consistently emerged as key barriers to youth engagement. These themes were echoed in 2025 program data, which showed a rise in young people expressing these concerns – likely a reflection of stronger rapport and more intentional outreach efforts.

Feedback from participants highlighted the importance of authentic inclusion. As one student shared:

> *"Lots of adults immediately assume people our age are badly behaved or sketchy – but you didn't. You treated us like adults."*

Another added:

> *"Being included and able to contribute ideas to the community meant a lot."*



Our organisation

Our organisation

The Council is the governing body of the City and is responsible for appointing the Chief Executive Officer (CEO).

The CEO manages the day-to-day operations of the organisation in line with the Council's strategic direction, as outlined in the Strategic Community Plan and the four-year priorities of the Corporate Business Plan.

Together with four directors, the CEO forms the Executive Leadership Team (ELT). The ELT is responsible for implementing the Council's strategic direction, monitoring delivery of commitments to government and the community, and leading a customer-focused organisational culture.

The CEO is directly accountable to the Council, which is elected by the residents of Wanneroo.

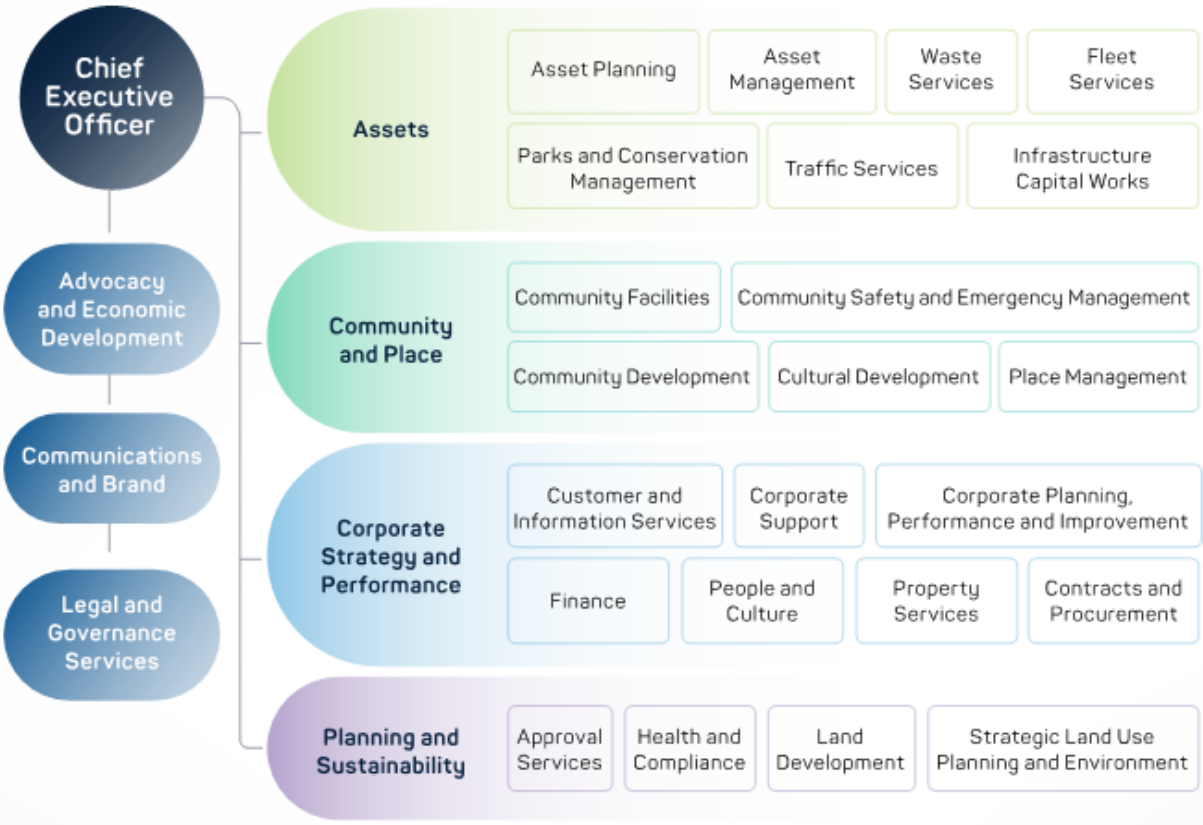
Organisational structure

The City's organisational structure includes the Office of the CEO and four directorates:

- Assets
- Community and Place
- Corporate Strategy and Performance
- Planning and Sustainability.

Each directorate plays a key role in delivering services, managing resources and supporting the City's strategic goals.

The chart below outlines the current organisational structure, highlighting key roles and reporting lines.



Our executive leadership team

The following table details the members of our Executive Leadership Team.

Bill Parker

Chief Executive Officer

Commenced: 4 September 2023

Qualifications: Bachelor of Business (Edith Cowan University); Master of Business (Property) (University of South Australia)

Bill has extensive experience in local government in both metropolitan and regional WA, working across many disciplines, including property, finance and administration, governance and strategic planning.

Service units

- Advocacy and Economic Development
- Legal and Governance Services
- Communications and Brand
- CEO administrative functions

Harminder Singh

Director Assets

Commenced: 1 July 1996

Qualifications: Bachelor of Civil Engineering (Punjab University, India); Master of Technology (Civil Engineering) from the College of Agricultural Engineering (Punjab Agricultural University)

Harminder has been employed at the City for over 25 years, including leadership positions for the past 16 years.

Service units

- Assets Maintenance
- Infrastructure Capital Works
- Parks and Conservation Management
- Asset Planning
- Traffic Services
- Waste Services
- Fleet Services

Kirstie Davis

Director Community and Place

Commenced: 1 July 2024

Qualifications: Bachelor of Behavioural Science, post graduate qualifications in Public Policy, and currently undertaking a Master of Bioethical Decision Making at the University of Notre Dame.

Kirstie oversees the strategic planning and implementation of initiatives that enhance the liveability, vibrancy and inclusivity of our community, working closely with key partners to foster a sense of belonging and drive development in the City. She has significant experience within local government, representing the needs of residents, ratepayers and visitors through the provision of key community sporting and cultural assets.

Service units

- Community Facilities
- Community Safety and Emergency Management
- Community Development
- Cultural Development
- Place Management

Noelene Jennings PSM

Director Corporate Strategy and Performance

Commenced: 7 July 2014

Qualifications: Bachelor of Science (UWA); Graduate Diploma in Computing (Curtin University); Master of Commerce (Industrial Relations) (UWA); Graduate Australian Institute of Company Directors.

With over 30 years in senior leadership roles in state and local government, Noelene has been involved in information systems, emergency management planning, health, strategic and business planning, human resource and employee relations, finance, customer service, land information and governance. Noelene has also been an Australian Business Excellence Evaluator since 2000 and an Australasian Reporting Awards adjudicator for the past 6 years.

Service units

- Contracts and Procurement
- Corporate Support
- Customer and Information Services
- People and Culture
- Property Services
- Corporate Planning, Performance and Improvement
- Finance

Mark Dickson

Director Planning and Sustainability

Commenced: 11 September 2006

Qualifications: Bachelor of Arts (Hons) in Urban and Regional Planning; Bachelor of Town Planning; Post-Graduate Diploma in Management Studies

Mark has over 20 years of experience in senior leadership positions and over 25 years in local government.

Service units

- Approval Services
- Strategic Land Use Planning and Environment
- Health and Compliance
- Land Development

In 2024–25, our leadership team continued to strengthen corporate accountability – particularly in delivering projects and services aligned with the Corporate Business Plan (CBP). The following summary outlines the role of each directorate in achieving the goals set out in the CBP and Strategic Community Plan (SCP).

Office of the CEO

Provides overall leadership and oversees strategic planning, policy and program development across all areas of the City's operations. The CEO is responsible for the systems we work within, support to the elected Council, and implementation of Council decisions. The Office includes corporate governance, legal services, communications, advocacy and economic development.

Assets

Plans, builds and manages the City's assets to a high standard. This includes major infrastructure (such as roads and buildings) and natural assets (such as parks and the coastal environment), ensuring resources are used effectively to benefit the community.

Community and Place

Engages directly with the community to manage infrastructure, programs and services. The directorate also advocates for funding and services from other agencies and supports the growth of self-sufficient community organisations.

Corporate Strategy and Performance

Supports the organisation's internal operations through corporate planning, performance monitoring and business improvement. The directorate ensures systems and processes are effective, promotes continuous improvement, and supports long-term financial sustainability.

Planning and Sustainability

Manages land use planning and development from concept to delivery. The directorate balances urban growth with environmental protection to support the creation of sustainable communities.

Corporate governance

Corporate governance provides the framework for accountable, transparent and effective decision-making across the City.

It supports the delivery of high-quality services and strengthens community trust. Our approach to governance is based on strong ethical standards, clear roles and responsibilities, and continuous improvement.

The City's Corporate Governance Framework outlines how we ensure good governance in serving our diverse community, which includes residents, businesses, workers and visitors. It also defines the responsibilities of Council Members, the Council, the Chief Executive Officer (CEO) and staff.

To enhance accountability and performance, we align our practices with international standards, including the ISO Management System Standards. This provides an integrated approach to compliance, risk management and continuous improvement.

Compliance

Each year, the City completes a compliance audit of its performance against the *Local Government Act 1995*. The audit is submitted to the Department of Local Government, Sport and Cultural Industries[1] by the end of March. Results are presented to the Audit and Risk Committee and Council.

In 2024–25, the City commenced a comprehensive Regulation 17 review of its risk management, internal control, and legislative compliance systems in accordance with the *Local Government (Audit) Regulations 1996*. The review demonstrates the City's commitment to robust governance and continuous improvement, with findings scheduled to be presented to the Audit and Risk Committee in September 2025.

Fraud and misconduct prevention

We are committed to the highest ethical standards and have zero tolerance for fraud, corruption, bribery and misconduct. Our Fraud and Misconduct Control and Resilience Framework aligns with AS8001:2021 and guides our approach to preventing, detecting and responding to wrongdoing.

Key features of the framework include:

- promoting a strong ethical culture aligned with our organisational values
- reducing opportunities for fraud and misconduct
- clearly outlining expectations for Council Members, staff and contractors
- supporting robust internal controls and transparent governance.

The City's Legal and Governance team is responsible for investigating reports of serious misconduct, corruption or fraud. A biennial fraud and misconduct risk assessment is undertaken in accordance with the Risk Management Framework with the most recent completed through the Internal Audit Plan in 2024–25.

An online form is available on our website for the community to report suspected fraud or misconduct. Reports can be made anonymously and are handled confidentially in accordance with the principles of natural justice.

Reported matters in 2024–25

- Nil

Statement of business ethics

The City's Statement of Business Ethics outlines the ethical standards expected of contractors, service providers and suppliers. The statement is provided to all suppliers through our contract documentation. Our six guiding principles are:

- Safety
- Ethics and integrity
- Governance
- Openness and effective communication
- Value for money
- Sustainability.

1 Note that from 1 July 2025, the WA state government department responsible for local government will be the Department of Local Government, Industry Regulation and Safety (LGIRS).

Conflicts of interest and gifts

The City takes conflicts of interest seriously and ensures transparent decision-making in accordance with the *Local Government Act 1995* and associated regulations. Council Members and the CEO must declare gifts valued over $300, or cumulative gifts from a single donor exceeding this threshold in a 12-month period.

Where a matter involves a donor, Council Members must not vote and the CEO must not provide advice or a report unless Ministerial approval is granted.

Certain gifts are excluded from conflict provisions, including those received under the Council's Attendance at Events Policy or from exempt entities.

Staff are guided by the City's Code of Conduct and Gifts and Benefits Policy. These documents prohibit the acceptance of gifts from individuals or organisations involved in discretionary decision-making. They also promote consistency and integrity in the acceptance and disclosure of gifts and hospitality.

Public interest disclosures

No public interest disclosures were received during the reporting period.

Privacy

We are committed to protecting the personal information of community members, employees and stakeholders. The City's Personal Information Privacy Policy ensures compliance with the Australian Privacy Principles under the *Privacy Act 1988* (Cth).

There were no reported breaches of personal information privacy during 2024-25.

Council policies

Under section 2.7(2)(b) of the *Local Government Act 1995*, Council is responsible for policy adoption. While there is no statutory review period, the City regularly reviews its policies to ensure they:

- align with community expectations
- reflect best practice and legislative change
- support efficiency and strategic direction.

Policies adopted in 2024–25

- Flag Management Policy

Policies reviewed in 2024–25

- City Tree Policy
- Community Funding Policy
- Bereavement Recognition Policy
- Chief Executive Performance Review Policy
- Circuses and Performing Animals Policy
- Student Citizenship Award Policy
- Closed Circuit Television (CCTV) and Video Surveillance Devices Management Policy
- Community Groups Policy
- Volunteering Policy
- Conferral of the Honour of 'Keys to the City' Policy
- Council Policy Framework Policy
- Bus Stop Infrastructure Policy
- Local Area Traffic Management Policy
- Pathways Policy
- Customer Experience Policy
- Execution of Documents Policy
- Integrity Policy
- Investment Policy
- Leasing Policy
- Local Planning Policy 4.12 – Heritage Places
- Local Planning Policy 5.3 – East Wanneroo
- Ordinary Council Meetings and Forums of Council Policy
- Pesticide Management Policy
- Council Members use of the City's Corporate Logo Policy
- Electronic Attendance at Meetings Policy
- Public Guidance Signage in Road Reserves Policy
- Legal Representation and Costs Indemnification Policy
- Local Planning Policy 2.5: Telecommunications Infrastructure
- Community Engagement Policy
- Recording and Access to Recordings of Council Meetings Policy
- Sports Floodlighting Policy
- Deductible Gift Recipient Status Policy.

Policies repealed in 2024–25

- Local Planning Policy 3.8, Marmion Avenue Arterial Road Access.

Long term financial plan

The City's Long Term Financial Plan (LTFP) plays a vital role in ensuring responsible and sustainable financial management over a 20-year horizon.

It helps the City assess the long-term financial and operational impacts of its decisions, ensuring we continue to meet the needs of our growing and evolving community.

The LTFP is guided by a range of policies, strategies and principles that are regularly reviewed to reflect changes in our economic environment and demographic trends. This approach ensures the City can operate within its means while delivering quality services and infrastructure.

Our strategic planning framework begins with the Strategic Community Plan, which outlines the long-term vision and aspirations of the community. This is supported by the Corporate Business Plan, which identifies key priorities over a four-year period. These priorities are further informed by the:

- Strategic Asset Management Plan
- local area plans
- development contribution plans
- environmental strategies and plans
- service levels
- Waste Strategic Plan
- Active Reserve Master Plan
- Strategic Workforce Plan
- population growth forecasts (sourced from id forecasting tools).

Together, these elements form the foundation of the LTFP and support our commitment to prudent financial management.

The LTFP is reviewed regularly to accommodate changing priorities and financial conditions. This may result in adjustments to project timing or funding allocations to better align with Council and community expectations. Key financial assumptions and parameters are also reviewed and updated to reflect the City's current and projected economic outlook.

Council formally adopts the LTFP and aims to review it at least every two years. The review process considers the latest financial data, prevailing economic conditions, Council Member priorities and feedback from the community. This ensures the LTFP remains responsive, realistic and aligned with long-term goals.

Land transactions and trading undertakings

Major land transactions and trading undertakings

The following is an overview of major land transactions and trading undertakings undertaken in 2024–25.

Major trading undertaking: Alkimos Aquatic and Recreation Centre (AARC)

The Alkimos Aquatic and Recreation Centre (AARC) has been designated a major trading undertaking under Section 3.59 of the *Local Government Act 1995*. This designation reflects the scale and strategic importance of the project, which will deliver a state-of-the-art aquatic and recreation facility to meet the needs of the rapidly growing northern corridor.

The AARC will be located within the Alkimos Central development, adjacent to the Metronet station. It will include a 50-metre outdoor pool, 25-metre indoor pool, indoor sports courts, fitness and wellness facilities, and community spaces. The project is currently in the construction phase, which started in January 2025. The project is expected to be completed in September 2026.

The business plan for the AARC was publicly advertised and adopted by Council in 2024, in accordance with legislative requirements. The total project budget is approximately $88 million, with funding contributions from the Federal and State governments, developer contributions, and the City of Wanneroo.

Land acquisition for the site has not yet been finalised, and this remains a key milestone in the project's delivery. Once operational, the AARC is expected to deliver substantial community, health, and economic benefits, while operating with a minimal net financial impact over the long term.

In accordance with Section 3.59 of the *Local Government Act 1995*, details of this trading undertaking, as well as major land transactions from previous years that remain relevant or ongoing, are disclosed in the Financial Report section of this report.

Other land transactions (non-exempt)

The City also undertook other land transactions as defined under section 3.59 of the Act, which do not meet the threshold for major land transactions. These disposals, while not exempt, were subject to section 3.58 of the Act.

Transactions have been approved (by Council or under delegation) and executed by all parties, unless otherwise indicated.

Disposals subject to an exemption under the Local Government Act and applicable regulations are considered separately.

Time	Transaction type and location	Counterparty (i.e. purchaser, seller, lessee)	Approval (i.e. Council resolution or delegation)
July 2024	**Agreement for Lease and Ground Lease:** Portion of Reserve 28058, 100 Kingsway, Madeley (Kingsway Regional Sporting Complex)	Northern Suburbs Men's Shed Inc	CS05-07/24
November 2024	**Lease:** Portion of Lot 521 (21) Civic Drive, Wanneroo (Limelight Theatre)	Wanneroo Repertory Inc.	CS07-11/24
November 2024	**Lease:** Reserve 27744, 22 Crisafulli Avenue, Wanneroo	Wanneroo Sports & Social Club (Inc.)	CS08-11/24
November 2024	**Lease:** Portions of Reserve 28058 and Reserve 44878, Kingsway Regional Sporting Complex	Wanneroo District Netball Association	CS09-11/24
November 2024	**Purchase of land (part area for public works – road reserve):** Lot 5 (326) Gnangara Road, Landsdale	Andrew Gerard Dunne and Mikayla Kym Dunne (as trustees for the Dunne Family Trust) and Maccaw Investments Pty Ltd ACN 612 560 522	CR02-11/24
December 2024	**Purchase of land (part area for public works – road reserve):** Lot 901 (150) Flynn Drive, Neerabup	Carmelo Borrello, Franklin John Borrello, Carl Albert Borrello, Adam Robert Borrello and Paul Anthony Borrello	SCR03-12/24
December 2024	**Purchase of land (part area for public works – road reserve):** Lot 900 (170) Flynn Drive, Neerabup	Primeprivate Property Pty Ltd ACN 667 462 544	SCR04-12/24
June 2025	**Lease:** Portion of Lot 600 (570) Wattle Avenue East, Neerabup	Tiger Kart Club (Incorporated)	CS05-06/25 **Execution pending at 30 June 2025*

Other land transactions (exempt disposals)

This section lists new land transactions that were exempt from the disposal requirements under section 3.58(5) of the *Local Government Act 1995*, primarily through regulation 30 of the *Local Government (Functions and General) Regulations 1996*.

Only new transactions are included. Renewals of existing leases under an option for a further term are not listed.

Time	Transaction type and location	Counterparty (i.e. purchaser, seller, lessee)	Approval (i.e. Council resolution or delegation)
July 2024	**Lease:** Kingsway Football & Sporting Club - Part of Reserve 28058 being part of Lot 555 on deposited Plan 64232	Kingsway Football & Sporting Club	Delegation
July 2024	**Lease:** Lot 288 (10) Neville Drive, Wanneroo	The Evelyn Enrichment Foundation Ltd	CS05-05/24
August 2024	**Lease:** Part of Kingsway Reserve 28058	Northern Suburbs Men's Shed	CS05-07/24
September 2024	**Deed of Variation Renewal of Lease:** CAHS Portion of lot 7 Mindarie Drive Quinns Rock	CAHS Portion of lot 7 Mindarie Drive Quinns Rock - Combined Lease	Delegation
November 2024	**Lease:** Ashby Site 1204 Wanneroo Road, Ashby	Telstra Limited	CS06-05/24
November 2024	**Lease:** Portion of Wanneroo Community Centre, 23 Civic Drive, Wanneroo	Unique Support Services Pty Ltd	Delegation
December 2024	**Lease:** Part Reserve 44878 & Part Reserve 28058, 100 Kingsway, Madeley	The Badminton Association of Western Australia	Delegation
December 2024	**Lease:** 21 Civic Drive, Wanneroo	Wanneroo Repertory Inc – Limelight Theatre	CS07-11/24
December 2024	**Lease:** Portion of Wanneroo Community Centre, 23 Civic Drive, Wanneroo	Avivo Live Life Inc	Delegation
January 2025	**Lease:** Part Reserve 28058 Being Part of Lot 555 on Deposited Plan 64232	Wanneroo Districts Netball Association (inc)	CS09-11/24
April 2025	**Lease:** Portion of 30 Tranquil Drive Carramar	Amplitel Pty Limited	Delegation
April 2025	**Lease:** Portion of 935-937 Wanneroo Road, Wanneroo (Enterprise House)	The Returned & Services League (WA Branch)	CS07-02/25
May 2025	**Lease:** Portion of Lot 503 Old Yanchep Road, Pinjar	Water Corporation	CS04-04/25

Management of the City's property

We manage 1,199 parcels of freehold and Crown land across our portfolio. Most of these are reserved for community use, recreation or environmental conservation.

As part of ongoing review of the portfolio, we will continue to assess how our properties are used to ensure they support service delivery and deliver positive planning, community, commercial and environmental outcomes.

In 2024–25, we managed more than 128 leases, licences and agreements, generating approximately $1.70 million in income and delivering significant community benefit. In addition, we collected, $95,894 in maintenance fee income, which offsets costs incurred by the City in supporting the running of community and sporting tenancies.

Community and commercial leases

We lease more than 86 land parcels and premises for community and commercial purposes. These include leases to sporting clubs and cafés, either on City-managed or City-owned land. Leases may cover land only (ground leases) or include buildings. All leases are governed by our Leasing Policy.

Shared use agreements

We have 20 shared use agreements with the Department of Education. These agreements support the joint use of ovals and parks by schools and the wider community for recreation and public amenity.

Public works acquisitions

To deliver public works – such as new roads and recreation facilities – we may need to acquire land from private owners. These acquisitions ensure we can deliver infrastructure that benefits the community.

In 2024–25, four acquisitions were approved to support major road upgrades, primarily focused on the upgrade of Flynn Drive. These are listed in the other land transactions section above.

Risk management

We take a City-wide approach to risk management, embedding risk awareness into strategic thinking and decision-making.

Our approach aligns with AS ISO 31000:2018 and includes identifying, analysing, reporting and recording risks across all levels of the organisation.

Risk registers

The City captures three levels of risks on our risk registers managed under our Risk Management Framework.

Strategic risks

Strategic risks may affect the achievement of our Strategic Community Plan (SCP). In June 2025 there were 14 strategic risks:

- Long term financial planning
- Integrated infrastructure and utility planning
- Water availability
- Climate change
- Economic growth
- Strategic community planning
- Stakeholder relationships
- Strategic asset management
- Legislative reform
- Resilient and productive communities
- Rising groundwater
- Local housing planning
- Waste services
- Polyphagous shot-hole borer.

Corporate risks

Corporate risks affect business operations and are aligned with the Corporate Business Plan (CBP) and annual operational plans.

Operational risks

Operational risks affect individual directorates, service units or projects. These are aligned to group or project plans.

Fraud risks

Fraud risks are operational risks and are reviewed as part of the annual operational risk review. The Strategic Internal Audit Plan is reviewed annually to ensure it covers fraud risks.

Business continuity

Business continuity ensures we can maintain essential services during and after major incidents. Business continuity plans are reviewed to ensure continuity information remains current.

Insurance

We work with the Local Government Insurance Service (LGIS) to manage risk and insurance through a pooled fund and mutual scheme.

In 2024–25, our total insurance contributions and premiums exceeded $2.8 million across 10 policies.

Internal audit oversight

The City's internal audit function (IAF) adheres to the International Professional Practices Framework set by the Institute of Internal Auditors, which includes the Global Internal Audit Standards. The IAF is co-sourced, a combination of an in-house team and an external service provider. Council has endorsed the City's Internal Audit Charter that defines the IAF's mandate, authority and responsibilities.

A strategic three-year Internal Audit Plan directs audit activity across key risk areas. The plan is reviewed by management and the Audit and Risk Committee annually and adopted by Council, with the last review conducted in June 2024 to ensure alignment with evolving strategic and operational risks.

Internal audits undertaken in 2024–25

In line with the Strategic Internal Audit Plan, the following audits were undertaken and presented to the Audit and Risk Committee:

- Land Development Asset Handover
- Asset Renewal Review
- Fraud, Misconduct and Corruption Risk Assessment
- Compliance Audit Return 2024
- Infrastructure Capital Works Program.

Other reviews presented:

- South Ward Bulk Junk Waste Review
- OAG Management of Purchasing Cards – City Review.

All findings and recommendations are monitored in accordance with the City's Internal Audit Procedure, with biannual updates provided to the Audit and Risk Committee and Executive Leadership Team.

Audit and Risk Committee oversight

The Audit and Risk Committee met regularly during the reporting period to review matters relating to financial oversight, risk management, internal controls, and governance. Key reports considered included:

- Internal audit reviews and updates on the Internal Audit Log
- Risk management, including the Strategic Risk Register and Risk Management Framework
- Financial statements and the Auditor's Findings Report
- Compliance reports, including the Annual Compliance Audit Return 2024
- Corporate performance monitoring (quarterly performance reports)
- Development contribution plan reviews
- Governance matters, such as the review of committee terms of reference and purchasing exemptions
- Reports from the Office of the Auditor General.

Tracking of audit actions

The Internal Audit Log tracks the status of audit findings and corrective actions. Updates are provided every six months by action owners, with progress reviewed and approved by directors, items requesting closure validated by IAF, items requesting extensions approved by the CEO and the report presented to the Audit and Risk Committee.

The Internal Audit Log was formally reported to the Committee on 17 September 2024 and 17 March 2025.

External audit

The City's external audit is conducted by the Office of the Auditor General (OAG) in accordance with the *Local Government Act 1995*.

For the 2024–25 financial year, the OAG issued an unqualified audit opinion with no significant findings, reflecting sound financial management and compliance with statutory requirements.

Project governance

The City maintains a robust project management framework to ensure projects are delivered effectively, efficiently, and with clear community value.

Aligned with the Project management body of knowledge (PMBOK), the framework covers all key project phases – initiation, planning, execution, monitoring and control, and closure – and incorporates key knowledge areas such as:

- scope, schedule, and cost management
- quality and risk management
- human resources and stakeholder engagement
- communications and procurement management.

Project governance is further supported by the Project Management Office (PMO), which standardises project processes and promotes best practice across the organisation. The PMO also manages the City's enterprise project management system, providing oversight and performance reporting across the project portfolio.

Access and inclusion

The City of Wanneroo continues to champion access and inclusion through our integrated Community Development Plan (CDP), which includes the legislated Disability Access and Inclusion Plan (DAIP).

Developed through extensive community engagement, the CDP ensures a holistic approach to removing barriers, raising awareness, and improving participation for people of all abilities.

Empowering inclusive initiatives

In 2024–25, we supported several community-led projects through our community funding program, including:

- ***Self-Made Girls Autism Business Skills Workshop* ($3,100):** Delivered business training for neurodivergent youth, culminating in a vibrant market day with 284 attendees.
- ***Intelife Group – Easy Beatz* ($5,000):** Hosted accessible disco events and produced a training video to promote inclusive nightlife across Australia.
- ***Participation Fund*:** Enabled five individuals with disability to compete in national sporting championships.

Innovative accessibility tools

To support neurodiverse residents, the City co-designed Social Stories with People with Disability WA and the Disability Access and Inclusion Reference Group (DAIRG). These visual guides help reduce anxiety and improve confidence in public spaces like libraries, pools, and playgrounds. Auslan interpreters were provided at major events, and the City celebrated International Day of People with Disabilities through a themed Auslan Storytime event.

Inclusive outdoor spaces

The Beach Wheelchair Program at Quinns Beach saw 23 bookings, enhanced by infrastructure upgrades and promotional efforts. The newly completed Riverlinks all-abilities playground, featuring accessible amenities and pathways, was recognised with an IPWEA WA Award for Excellence. Together, these initiatives promote barrier-free recreation and social inclusion.

Infrastructure and planning

In 2024–25, the City delivered:

- 6 park upgrades ($60,000)
- 6 building upgrades ($160,000)
- 8 carpark upgrades ($140,000).

These included accessible toilets, ACROD bays, seating, and signage. The City also joined the AITPM Inclusive Mobility Program, reinforcing our commitment to equitable access.

Embedding inclusive voices

Consultation with the City's DAIRG informed key projects, including Changing Places facility expansion, mobility mapping, and the Community Engagement Framework. This collaborative approach ensures lived experience shapes planning and policy, fostering a culture of inclusion across City operations.

Our volunteers

Volunteers remain the heart of the City of Wanneroo, generously offering their time, skills, and passion to build a more connected, resilient, and vibrant community.

Their contributions are especially vital during times of crisis, need, and social isolation.

Volunteer impact in 2024–25

Approximately 150 active volunteers supported a wide range of City programs, enriching every corner of our community. Their efforts included:

- **Heritage and history:** Cockman House, Buckingham House, Wanneroo Museum, Art Gallery, and community history programs
- **Learning and literacy:** Books on Wheels, English conversation groups, technology help, résumé help, and digital literacy
- **Community services:** Community transport, gardens, and early childhood programs like *It's All About Play, Stories, Rhymes, Junior Chess,* and *Lego Club*
- **Environment and waste:** Conservation in parks and reserves, and waste services
- **Advisory and working groups:** Arts, Community Safety, Disability Inclusion, Environment, Heritage, Multicultural, Ni Kadadjiny Koort, and Roadwise.

Together, these volunteers contributed an estimated 22,515 hours, with an estimated volunteer replacement cost of $1.1 million per year.

Emergency services

In partnership with the Department of Fire and Emergency Services, the City supports 230 volunteers across four volunteer bushfire brigades:

- Two Rocks
- Quinns Rocks
- Wanneroo Central
- Fire Support Unit.

Volunteer support and recognition

To support and celebrate our volunteers, we delivered several initiatives in 2024–25:

- Regular updates and new opportunities
- A wellbeing-focused National Volunteer Week event with ECU health presentations, massages, and connection activities
- Health and safety promotions, including free skin checks and access to the Employee Assistance Program (EAP)
- Appreciation events and awards
- Role-specific training, such as fire extinguisher training for community transport drivers.

Facility hire concession

We provide a range of spaces and places for community events, activities and functions.

Under our Facility Hire and Use Policy, eligible clubs, organisations and groups may qualify for concession rates.

These include:

- junior (under 18) use
- senior (over 60) clubs and organisations
- support services
- charitable purposes
- emergency services organisations.

National competition policy

In 1995, federal, state and territory governments agreed to implement the National Competition Policy (NCP) – a package of legislative and administrative reforms designed to promote effective competition where it enhances community wellbeing.

Local governments play a key role in administering legislation and delivering services that impact state economies, businesses and consumers. Reform at the local level is therefore an important part of the NCP process.

In 2019–20, we reviewed our NCP obligations – specifically competitive neutrality and competitive advantage issues – in relation to the operations of the Wanneroo Aquamotion aquatic facility. Circumstances remained unchanged in 2024–25.

We apply industry pricing benchmarks to ensure our service costs are fair, feasible and do not create unfair competition. While the NCP allows flexibility in delivering social and community services, we remain mindful of balancing these objectives with the economic interests of our ratepayers.

In pursuing our social, community and equity objectives, we satisfied the following provisions under the Competition Policy Agreement:

- balancing the benefits of a policy or action against its costs
- determining the merits or appropriateness of a policy or action
- considering social welfare and equity, including community service obligations
- complying with legislation and policies related to work health and safety, industrial relations, and access and equity
- reviewing benchmarks and standards through industry related peak corporate bodies.

Contracts and procurement

Legislation and policy framework

All procurement is undertaken in accordance with the *Local Government Act 1995*, the *Local Government (Functions and General) Regulations 1996*, and the City's Purchasing Policy, Corporate Guidelines and Statement of Business Ethics.

The revised Purchasing Policy continues to support local business procurement through mandatory qualitative criteria and reinforces our commitment to effective contract management.

The public tender threshold of $250,000 allows for streamlined procurement through invited quotations. We also apply the legislated tender exemption for contracting with Aboriginal and Torres Strait Islander businesses. Our approach to sustainable social procurement continues to prioritise local, Indigenous and disability enterprise suppliers.

Systems, procedures and business processes

We maintain robust systems and processes to manage procurement and contracts. Our Purchasing Policy and Corporate Procurement and Contract Management guidelines outline the rules and thresholds for quotations, tenders and contract management.

In 2024–25, and as part of a broader strategic procurement roadmap, we completed a maturity review of our procurement framework and established an online dashboard reporting capability around our procurement spend profile. A formal procurement strategy is planned.

Our Statement of Business Ethics document was reviewed and refreshed, and is available on our website.

Procurement activity in 2024–25

We prioritise probity and compliance in all procurement activities. Our contract management software and e-tendering portal streamline the issuing and receipt of tender and quotation documents.

In 2024–25, the Contracts and Procurement team facilitated 212 formal procurement processes, including:

- 81 public and restricted tenders and expressions of interest
- 131 formal requests for quotation.

Also 177 contracts were awarded and commenced, valued at approximately $142 million.

Significant contracts awarded included:

- **AARC construction** – $75.6 million (PS Structures)
- **Footpath construction** – $5.4 million (Dowsing Group)
- **Drainage cleaning and CCTV inspections** - $5.1m (DFS Industrial & Environmental Services)
- **Provision of park and streetscape maintenance in Jindalee, Alkimos and Eglinton** - $4.9m (Environmental Industries)
- **Kingsway Netball West Courts refurbishment** - $4.1m (Civcon Civil & Project Management)

Contract status updates are reported to the Audit and Risk Committee biannually. Digital signatures to both internal and external documentation provides efficiencies to contract formation and execution and to subsequent contract administration processes.

In conjunction with the City's Legal and Governance team, a formal review of our contract templates was completed, incorporating legislative changes, work health and safety, and commercial risk considerations.

Safety and risk

Workplace health and safety is a key evaluation criterion in procurement planning and decision-making. All contractors must meet safety standards to be eligible. A systemised WHS contractor assessment tool is used to evaluate initial and ongoing safety risk.

Our Purchasing Policy underpins a strong commitment to ethical business practices. The recently enhanced Statement of Business Ethics outlines expectations for contractors and suppliers. Independent probity advisors are engaged for selected procurements, with lessons learned recorded in an internal review register.

Education and training

All contract managers receive training in the City's procurement and contract management systems, covering both functionality and day-to-day use. This supports contractor performance and value-for-money outcomes.

Mandatory online procurement training is provided to all staff on a regular basis through LG Professionals' Introduction to Procurement in Local Government module, with refresher training every three years.

We also partner with LGIS to deliver contract risk training, raising awareness of key terms, common pitfalls, and mitigation strategies.

Supply chain impacts

External factors continued to affect our ability to source goods and services, particularly in vehicle availability and rising costs in consulting and construction. Despite these challenges, our supplier registration and selection processes remain well defined.

Supplier relationships and the status of contractor performance are monitored and reported to the Audit and Risk Committee biannually.

Corporate social responsibility

We give preference to suppliers that demonstrate sustainable business practices and strong corporate social responsibility (CSR). This includes consideration of social, economic, and environmental impacts in procurement decisions.

Environmental screening

Tender documents include an environmental and social consideration schedule for goods, services or works with potential environmental impacts. We seek a response from our suppliers as to their:

- environmental management system certification
- environmental credentials of proposed products or materials
- commitment to sustainability initiatives.

While we do not currently quantify supplier contributions to environmental outcomes, we include mandatory requirements in specifications where relevant and monitor accordingly.

Social screening

Our tender document templates include an access and inclusion schedule. This schedule raises awareness of the City's Access and Inclusion Plan (AIP), delivered through the Community Development Plan (CDP), and the requirements of the *Disability Services Act 1993*.

Suppliers outline how their business operations align with the AIP. Their responses form part of the non-weighted qualitative evaluation criteria and support our commitment to inclusive and socially responsible procurement.

Specific procurement actions are also included within our Reconciliation Action Plan, which is also endorsed by Reconciliation Australia.

Our spend during 2024–25 with West Australian Disability Enterprises was $911,198 and we spent a further $426,768 with suppliers registered on the Aboriginal Business Directory.

Local supplier opportunity

We are also committed to supporting local businesses based in the City of Wanneroo. In 2024–25, we awarded $2.45m of contracts to local (City of Wanneroo-based) suppliers.

Reconciliation

We continued our strong commitment to reconciliation through the implementation of our fourth Reconciliation Action Plan (RAP) 2023–2025, endorsed by Reconciliation Australia.

Guided by the pillars of Relationships, Respect, Opportunities, and Governance, the RAP aims to foster inclusive communities built on mutual respect and understanding between Aboriginal and Torres Strait Islander peoples and other Australians.

In 2024–25, we made significant progress across cultural celebrations, education, strategic partnerships, and community engagement. Key focus areas included strengthening relationships with Elders and Knowledge Holders, increasing Aboriginal and Torres Strait Islander employment, and promoting cultural awareness Citywide.

Cultural events and recognition

We celebrated National Reconciliation Week and NAIDOC Week with events such as a flag raising ceremony, walk for reconciliation, Noongar Storytime sessions, and the *Warangka Moorditj* singing workshops. The Wanneroo Regional Museum hosted exhibitions including *For Our Elders* and launched a permanent Welcome to Country display. Community funding supported the Mookaroo Festival and NAIDOC rounds at local football clubs.

Noongar naming and cultural projects

The Noongar Naming Project established a framework for incorporating Aboriginal place names across the City, with 15 Noongar names integrated into the new Dordaak Kepup Library and Youth Innovation Hub. Cultural initiatives included the Galup VR experience, Walking Through a Songline exhibition, and installation of interactive Noongar Six Seasons artworks.

Strategic partnerships

We partnered with Derbarl Yerrigan Health Service at the Clarkson Youth Centre, offering culturally sensitive health services and youth-led programs such as art therapy, yarning circles, and suicide prevention. We also hosted Welcome to Country ceremonies at major events and embedded Acknowledgement of Country across publications, websites, and meetings.

Cultural celebrations

Highlights included the appointment of Noongar Elder Oriel Green OAM as the inaugural Holder of the Keys to the City, acquisition of Kookaburra Club artworks, and delivery of cultural awareness training for staff.

Continuous improvement and quality management

In 2024–25, we continued to strengthen our commitment to operational excellence through the application of Lean Six Sigma methodologies and Quality Management practices.

These initiatives delivered measurable efficiency gains, enhanced service quality, and reinforced a culture of continuous improvement across the organisation.

We remain committed to aligning our practices with internationally recognised standards, including:

- ISO 9001 Quality Management Systems
- ISO 13053-1 & 2 Quantitative Methods in Process Improvement (Six Sigma)
- ISO 55001 Asset Management system
- ISO 14001 Environmental Management System
- ISO 31000 Risk Management
- ISO 45001 Occupational Health and Safety

Establishment of the Business Improvement Team

A key milestone during the year was the formation of the Business Improvement Team, established by the Executive Leadership Team to drive efficiencies across the organisation. This dedicated team provides capacity to support leaders in improving day-to-day operations while also shaping longer-term, transformative initiatives.

Quality Management System

Our Quality Management System (QMS) continued to mature and is now firmly embedded across the organisation.

Over the past year, the QMS has played a central role in:

- driving consistency and efficiency across functions
- enabling teams to assess workflows objectively and identify opportunities for improvement
- supporting knowledge retention and accelerating staff skill development.

Key improvements in 2024–25

- **Customer service:** Reduced turnaround times for customer requests through process optimisation and clearer accountability.
- **QMS expansion:** Increased documentation of critical processes, improving accessibility, governance, and onboarding.
- **Data and reporting:** Enhanced Power BI dashboards to provide real-time insights and support evidence-based decision-making.
- **Workshops and reviews:** Collaborated with teams across the City to identify and implement process improvements in priority areas.
- **Business Improvement Team:** Secured approval and resourcing to establish the team, with a mandate to lead organisation-wide efficiency initiatives.
- **Collaboration:** Strengthened the Local Government Business Improvement Network, expanding cross-council knowledge sharing and best practice exchange.

Looking ahead to 2025–26

- Further embed Lean Six Sigma practices into everyday operations
- Deliver quick wins alongside targeted service unit improvements
- Strengthen digital reporting and predictive analytics
- Continue building internal process improvement capability across the City.

Customer service

Our customer commitment

We take a customer-first approach to deliver the best possible experience across every interaction. Our customer-first principles guide us in providing consistent, high-quality service:

Objective	Description
Ease	We make it easier and simpler to deal with us
Accessibility	We ensure information and our services are accessible to all
Reliability	We deliver a reliable, consistent and high-quality customer experience
Responsiveness	We respond in a timely manner and use feedback to improve. We will regularly monitor how we deliver on our Customer Service Commitment

Highlights from 2024–25

We delivered on our customer-first approach through several key initiatives:

- Introduced online forms across more service units, making it easier for the public to submit requests and reducing the volume of emails received by the City. These forms help direct requests to the relevant departments for timely action.
- Launched a general enquiries form to streamline incoming queries and improve response times.
- Integrated Google Maps into the CRM system to allow more precise location data.
- Successfully transitioned all animal registrations to the e-Service platform.
- The Name and Address Register Working Group completed a bulk clean-up of over 250,000 records.
- Improved staff rostering by moving to a mobile app platform, increasing efficiency.
- Managed a significant increase in Snap Send Solve emails by centralising them through a dedicated email filter, enabling better tracking and reporting.

Compliments, feedback and complaints

We value customer feedback. It helps us celebrate success and identify areas for improvement.

The table below shows the number of compliments, feedback and complaints received over the past five years. In 2024–25, we recorded the highest figures to date:

- **Compliments:** 247
- **Feedback:** 468
- **Complaints:** 994

Waste Services generated the most CRM requests, largely due to the introduction of the bookable verge collection. This initiative also became the most frequent topic of resident feedback.

The Customer Relations Centre processed more requests this year, reflecting increased community engagement and demand for services.

The following table includes compliments, feedback and complaints that have come through in person, by email, by phone, and via our online forms.

	2020–21	2021–22	2022–23	2023–24	2024–25
Compliments	190	163	151	184	247
Feedback	202	124	153	320	468
Complaints	333	335	294	620	994

Information management

The *State Records Act 2000* requires the City to maintain an approved Record Keeping Plan (RKP), which outlines how we manage our records. Our current RKP was adopted in May 2018, and a review commenced in 2022–23 was finalised in September 2023.The next review of our RKP is scheduled for 2028.

Our dedicated Information Management team ensures our practices align with legislation and the RKP. They also support business areas across the City through various management procedures.

Record keeping compliance

In accordance with the State Records Commission Standard 2, Principle 6, we continue to implement a recordkeeping training program for staff. The program's efficiency and effectiveness is periodically reviewed through feedback and compliance checks. Our induction program also includes modules to ensure that new employees understand their responsibilities under the City's approved Recordkeeping Plan.

Improvements

In 2024–25 we made the following improvements:

- Content Manager upgraded to CM23.4
- transitioned to a digital mail service, with mail now printed and posted offsite by a third party
- implemented an electronic disposal program to streamline records management.

Freedom of Information

Community members can request access to documents under the *Freedom of Information Act 1992* (FOI Act). An information statement and application form are available on our website. The statement outlines the FOI process and lists the types of documents available outside FOI.

While any document may be requested, we recommend using the FOI process only for documents that cannot be accessed through other means. Documents released under FOI are often edited to remove exempt information – most commonly third-party personal details, which are frequently the subject of requests.

FOI activity in 2024–25

63 FOI applications

received and processed a 31 per cent increase compared to the previous year.

31 of 63 applications

were completed within the timeframe. Negotiations were made with the applicants for extension of time for the remaining applications

45 calendar days

average response time

2 internal reviews

conducted, all of which were upheld.

Asset management

We recognise asset management as a whole-of-organisation responsibility.

It requires coordinated efforts across teams to work strategically and collaboratively toward shared outcomes, as outlined in our Asset Management Framework.

Strategic asset management approach

Our Asset Management Framework integrates with our Integrated Planning and Reporting Framework. It includes:

- **Asset Management Policy**
  Defines the principles and requirements for planning and managing assets. It ensures long-term financial sustainability and safety for our community, customers and stakeholders. The policy sets expectations for decisions, activities and behaviours related to asset management, aligning with our corporate vision and objectives.
- **Asset Management Strategy**
  Builds on the policy by outlining how we will strengthen our asset management capability to meet future challenges. It sets high-level objectives and ensures practices align with the Strategic Community Plan (SCP), business goals, and ISO 55001 standards.
- **Asset Management Implementation Plan**
  Supports the strategy by detailing planned actions, timeframes and improvements to meet strategic objectives.

Improvements in 2024–25

We progressed several improvements, including:

- reviewing and completing, including Council endorsing, the following strategic plans:
  - Asset Management Strategy
  - Parks Asset Management Plan
  - Buildings Asset Management Plan
  - Transport Infrastructure Asset Management Plan
  - Stormwater Drainage Asset Management Plan
  - Natural Areas Asset Management Plan, and
  - Coastal Infrastructure Asset Management Plan
- fully implementing a dedicated Asset Management Information System widely used across City operations.

Challenges in 2024–25

We continue to face several challenges in managing our assets:

- economic pressures, including inflation
- climate change impacts
- population growth and the increasing rate of assets acquired through land development
- rising community demand for infrastructure and services across diverse areas
- financial planning to ensure intergenerational equity
- limited funding and resources to meet current and future needs
- legislative requirements to demonstrate sustainable service delivery
- environmental and cultural legislation changes affecting project planning and delivery.

Planned improvements for 2025–26

In the coming year, we will:

- advance and mature the utilisation of the Asset Management Information System to support operations, data capture, validation and performance reporting
- improve efficiency and accuracy of asset data captured
- advance and improve on the accuracy of the long-term asset renewal demand modelling to inform the Long-Term Financial Plan (LTFP)
- continue to progress actions detailed in the Asset Management Strategy 2024
- plan annual funding increases in the LTFP to support Council's desire to renew infrastructure assets to meet agreed levels of service and also to fund upgrades to older City buildings.

Our asset portfolio

We manage a diverse infrastructure portfolio with a total replacement value of over **$2.3 billion** in depreciable assets. Transport-related assets, including roads and pathways, represent the largest portion. Natural area assets, such as bushland and wetlands, form the smallest.

Road, pathway and park assets are expected to continue to drive long-term renewal funding needs.

Growth and future asset needs

Based on historical trends, roads and pathways are expected to grow by:

25 kilometres
of roads per year

20 kilometres
of pathways per year

The number and area of parks are also projected to increase annually by:

9
new parks

15
hectares of parkland

Growth continues to be concentrated in the northern coastal corridor, with new suburbs such as **Alkimos** and **Eglinton** alongside ongoing developments in **Two Rocks** and **Yanchep**.

Our asset management plans are designed to ensure that we can meet the needs of current and future communities in the most economical way, optimising long-term return on investment. Through our Asset Management Policy, we also recognise the importance of balancing:

- the provision of new services and assets to support growth
- the renewal and upgrade of existing services and infrastructure.

Our People

Our workforce

The City of Wanneroo employs 1,089 people across a diverse range of roles, delivering more than 100 vital services to our community and stakeholders. As one of the region's largest employers, we invest in a skilled, adaptable, and well-supported workforce to drive strategic priorities and achieve meaningful outcomes.

Underpinned by our values – Customer Focus, Improvement, Accountability, Collaboration, and Respect – we cultivate a positive workplace culture where our people feel valued and empowered. We also offer a range of development opportunities that support employees to grow, achieve their goals, and build the capability needed to meet both current demands and future challenges.

Employee conduct and ethical standards

All employees of the City of Wanneroo are expected to uphold the highest standards of integrity and professionalism. Our Employee Code of Conduct provides clear guidance on appropriate workplace behaviour and reflects our commitment to ethical governance and public trust.

The Code outlines expectations in key areas including:

- personal conduct
- professional standards and responsibilities
- appropriate and respectful communication
- the prevention of fraud, corruption, and misconduct.

By setting a consistent standard across the organisation, the Code helps foster a safe, respectful, and accountable working environment for all.

Living our values

The City's corporate values are central to how we work, lead, and engage with the community. These values are actively reinforced across the organisation and reflected in the way we recruit, develop, and support our people.

Our values are embedded in key processes, including:

- performance and development reviews
- recruitment and selection
- position descriptions and employment contracts
- leadership development programs
- performance and conduct conversations
- reward and recognition initiatives
- internal communications that celebrate values in action.

By integrating our values into everyday practice, we help build a consistent and values-driven culture across the organisation.

Executive remuneration reporting

In accordance with Regulation 19B of the *Local Government (Administration) Regulations 1996*, we report the number of employees earning $130,000 or more base salary, presented in $10,000 salary bands.

This comprehensive reporting provides a clear and accurate view of remuneration across senior roles within the organisation.

Salary band – base salary		Number of employees
From	To	
$130,000	$139,999	1
$140,000	$149,999	4
$150,000	$159,999	7
$160,000	$169,999	7
$170,000	$179,999	14
$180,000	$189,999	7
$190,000	$199,999	7
$200,000	$209,999	0
$210,000	$219,999	0
$220,000	$229,999	0
$230,000	$239,999	2
$250,000	$259,999	1
$260,000	$269,999	1
$270,000	$279,999	1
$280,000	$289,999	0
$300,000	$309,999	1
Total headcount		**53**

Remuneration and employment framework

The City engages Mercer Australia to provide annual remuneration benchmarking for all roles at manager level and above. This data, along with advice from the Salaries and Allowances Tribunal, Consumer Price Index trends, and individual performance outcomes, informs salary decisions for senior leadership positions.

All other employees are remunerated under industrial agreements.

To support fair and transparent pay practices, we have adopted attraction and retention guidelines. In circumstances where labour market demand or critical skills shortages apply, an attraction or retention allowance may be considered in accordance with agreed parameters.

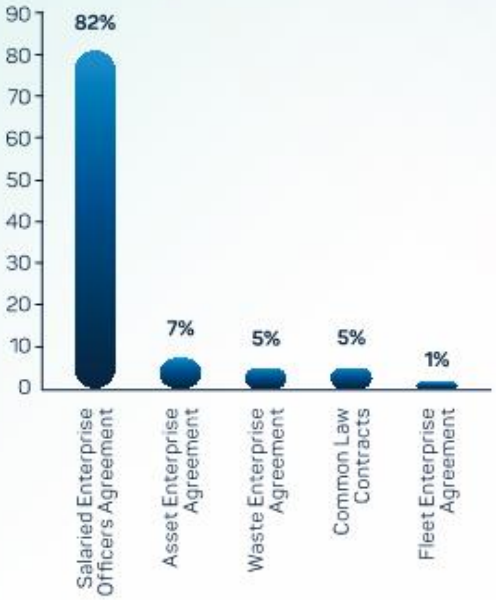
Additional payments

In line with section 5.50 of the *Local Government Act 1995*, the City has a policy for assessing additional payments to employees upon exit. The Payments to Employees in Addition to a Contract or Award Policy is publicly available on our website.

Employment instruments

Employees are paid according to the terms of their employment instrument. As at 30 June 2025, 94.5% of the workforce was covered by an enterprise agreement. The following chart provides a breakdown of employment instrument coverage.

Percentage of Employees Covered by Industrial Agreements



Chief Executive Officer remuneration

In accordance with Regulation 19B of the *Local Government (Administration) Regulations 1996*, the total remuneration paid or provided to the Chief Executive Officer for the financial year ending 30 June 2025 was $417,544. This includes salary, superannuation contributions, and other benefits.

Workforce profile

We take a strategic approach to workforce growth, ensuring staffing levels remain sustainable and aligned with long-term financial planning. Changes to full-time equivalent (FTE) positions are reviewed through the integrated planning cycle and operational workforce planning processes.

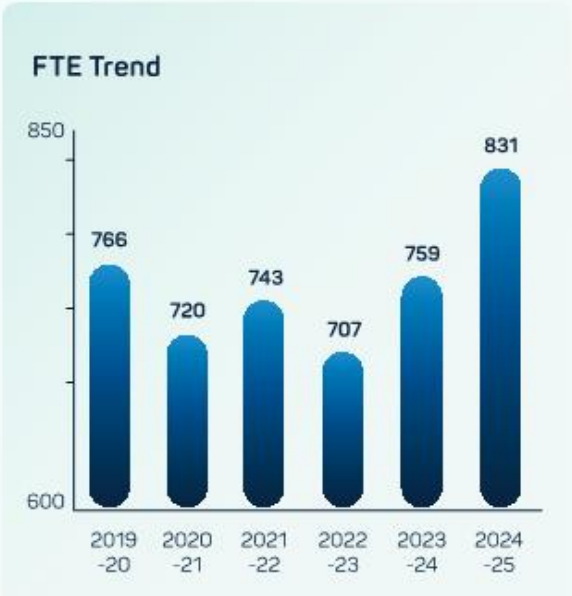
A business case model guides workforce decisions, drawing on factors such as:

- the City's strategic direction
- strategic project priorities
- population growth and community needs
- evolving service delivery requirements.

Vacancies are assessed on a case-by-case basis to determine:

- whether the role remains part of core service delivery
- if duties can be absorbed or redistributed
- opportunities for more efficient delivery
- potential risks of not continuing the work
- whether the FTE should be redirected to a higher priority.

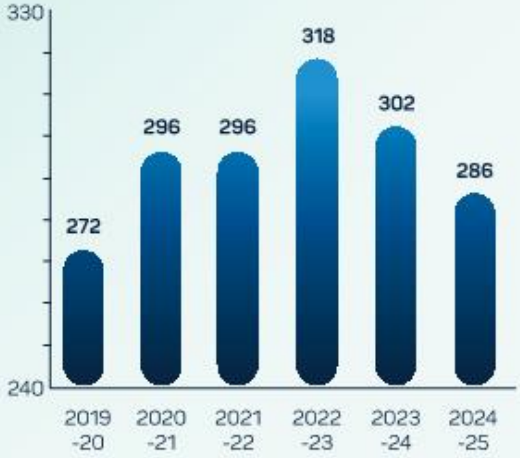
The following figures show the number of FTE employed over the past five years.



Population per full time equivalent (FTE)

This metric tracks the number of residents per FTE and provides a high-level indicator of workforce efficiency relative to community growth. In 2024–25, the City recorded 286 residents per FTE – down from the 2022–23 peak of 318.

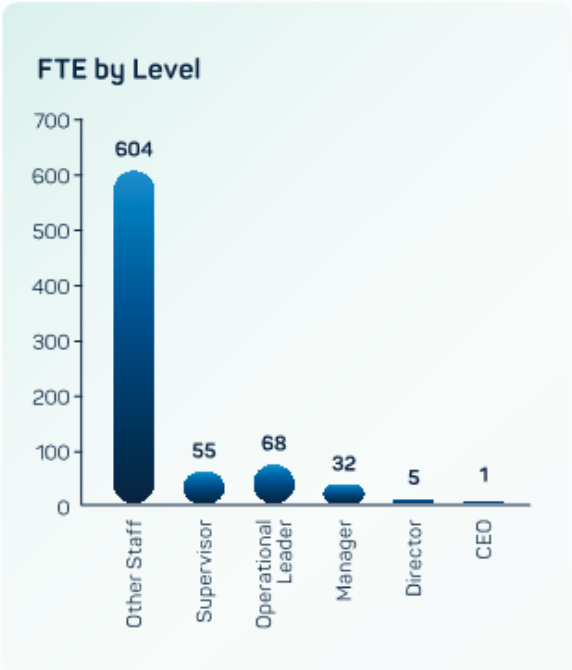
This reduction reflects investment in workforce capacity to support a growing population and maintain service delivery standards. The City continues to monitor this ratio closely as part of long-term financial and workforce planning, ensuring resource levels remain sustainable and responsive to community needs.

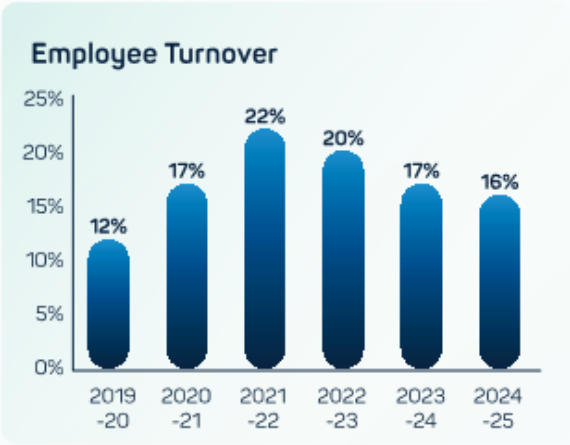


Workforce planning

Balancing service delivery with population growth and financial sustainability is an ongoing organisational focus. Workforce planning plays a critical role in ensuring the City remains equipped to meet current needs while preparing for future demand. In 2024–25, we developed and published a Workforce Plan that is available on our website and that sets out our approach to workforce planning and key priorities.

The following chart shows the breakdown of headcount by classification level as at 30 June 2025.





Employee turnover

Employee turnover at the City of Wanneroo was 16% in 2024–25, continuing a gradual decline since its peak in 2021–22. This trend reflects greater workforce stability following several years of labour market volatility.

We continue to monitor turnover closely as part of our broader workforce planning strategy, with a focus on retention, capability development, and maintaining service continuity.

Aboriginal and Torres Strait Islander employment

The City is committed to supporting employment and inclusion outcomes for Aboriginal and Torres Strait Islander peoples, in alignment with our Reconciliation Action Plan.

Our focus includes building cultural awareness, supporting culturally inclusive recruitment practices, and creating a workplace that is safe, respectful and welcoming.

Work is underway to review and strengthen our approach to Aboriginal and Torres Strait Islander employment across the organisation.

Diversity and inclusion

The City is committed to fostering a diverse and inclusive workplace, with a particular focus on gender equity and creating a culture of respect and belonging.

As at 30 June 2025:	Women	Men
Executive Leadership Team	2	3
Operational leadership roles or above	76	92
Employees below manager level	59%	41%

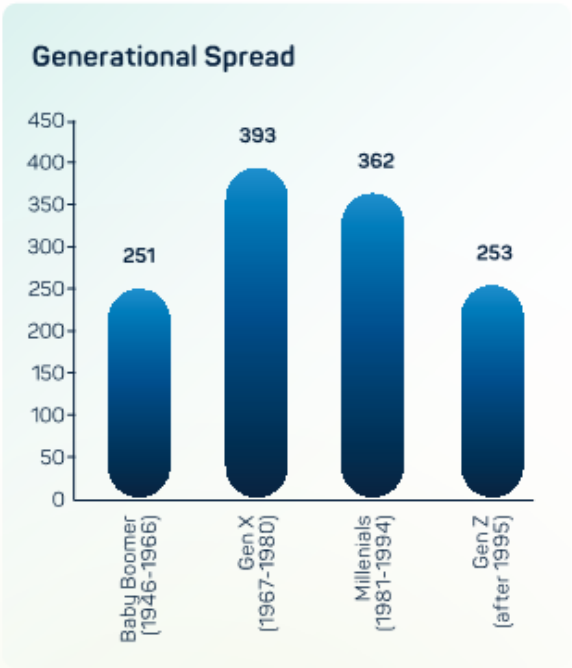
The City is working towards improving the collection of workforce diversity data to strengthen future reporting and inform inclusive workforce practices.

At the time of reporting, 2 employees had identified as intersex or intermediate.

Age diversity

The City's workforce spans four generations, bringing a broad range of experience, perspectives, and capabilities. Gen X and Millennials represent the largest cohorts, while the proportion of Baby Boomers continues to decline as employees retire. The number of Gen Z employees is steadily increasing, reflecting early career growth and new talent entering the organisation. This generational spread supports knowledge transfer, innovation, and workforce renewal across all service areas.

As generational shifts continue, the People and Culture team is focused on attracting emerging talent, supporting career pathways for younger employees, and fostering a workplace that values experience at every stage of working life.



Future workforce planning

Strategic workforce planning remains a core focus for the City, supporting the alignment of people, services, and long-term financial sustainability. This planning helps shape a workforce that can meet current demands while adapting to emerging needs.

In 2024–25, work commenced on strengthening our approach to workforce planning. This includes early modelling of population growth and service pressures, with a view to improving how workforce resources are structured and allocated across the organisation.

Key areas of focus include:

- adopting more agile and flexible ways of working
- building organisational resilience and supporting mental wellbeing
- responding to the future of work through increased use of technology, automation, and digital service delivery.

As the needs of the community evolve, we remain committed to developing a scalable workforce model that balances service expectations with economic and operational constraints.

Workforce change

The City operates under four industrial agreements that outline employment conditions and consultation requirements for significant workforce changes, including potential redundancies.

In 2024–25, a new Salaried Officers Industrial Agreement and a new Assets Agreement were successfully negotiated. The process involved formal consultation with relevant representatives, reinforcing our commitment to open communication and fair employment practices.

Consultation processes are guided by our industrial obligations and designed to promote transparency, build trust, and support informed decision-making during times of organisational change.

Building organisational capability

Our learning and development approach supports a culture of continuous improvement and shared accountability between employees and leaders. Capability development is aligned with organisational priorities and focused on building a safe, inclusive, and high-performing workplace.

In 2024–25, key areas of focus included:

- increasing access to mental health and equal employment opportunity training
- addressing shifting social expectations and workplace behaviour standards
- strengthening understanding of sexual discrimination, bullying, and harassment prevention.

Psychosocial hazard identification training was delivered to leaders, while verification of competency programs continued across operational areas to ensure safety and technical proficiency.

Training participation in 2024–25

Course title	Number of participants
Employee Code of Conduct Acknowledgement	604
Fraud and Corruption Awareness	486
Working Safely at the City of Wanneroo	459
Welcome to Our City	373
Harassment Awareness	372
Records Awareness Training	367
Introduction to Procurement in Local Government	177
Corporate Induction	94
Using Content Manager Effectively	89
Casual Induction	77
Big Red Sky (Recruitment & Onboarding) Demonstration	65
Galup VR Experience	51
WALGA Introduction to Local Government	40
Wellness Courses	29
Governance Fundamentals	24
Kaarla Baapba Cultural Safety and Awareness Training	17
Be Kind To Yourself	16
Working from Home	13
Authority - Name and Address Register (NAR) and Customer Request Management (CRM)	12
SBS First Nations	11
Enterprise Project Management (EPM) System - eLearning	10
Leadership & Management - Effective Criticism and Feedback (MiQuick)	9
Build Resilience Through Perseverance	8
Project Management Framework - eLearning	8
The Agile Leader: Adaptability	8

Leadership capability

Strong leadership is essential to delivering high-quality outcomes and fostering a culture of collaboration, accountability, and innovation. We are committed to developing leadership capability at all levels to meet current and future organisational needs.

In 2024–25, significant progress was made in developing and implementing the City's Leadership Capability Framework. The framework defines clear behavioural expectations across four capability groups – Personal Qualities, Relationship Focused, Business Enabling, and Fosters Purpose – and is grounded in leading practice, including the SMART work design model, ISO 9001 principles, and public sector leadership benchmarks.

The framework is now being applied across key areas such as:

- performance and development planning
- leadership development and coaching
- recruitment and selection
- career progression and succession planning
- workforce planning and cultural alignment.

We also launched a new People Leader Program, designed to build core capabilities such as emotional intelligence, psychological safety, leading change, and coaching others. The program includes action learning, practical application, and tailored support through People business partner-led workshops and group coaching.

Together, these initiatives support a consistent, values-driven approach to leadership that enables high performance and prepares the organisation for future challenges.

Employee performance review process

The City's workforce spans a broad range of roles, from frontline service delivery to technical and professional positions. To support performance and growth, all employees participate in an annual Performance Development Review Conversation (PDRC).

These conversations are designed to:

- set clear performance expectations
- assess progress against key deliverables
- align individual contributions with the Strategic Community Plan and Corporate Business Plan.

The PDRC process supports accountability, encourages meaningful dialogue between employees and leaders, and helps guide development planning across the organisation.

Health and wellbeing

The City is committed to fostering a safe, healthy, and supportive workplace. With funding support from Local Government Insurance Services (LGIS) – our local government insurance provider – a range of health and wellbeing initiatives were delivered during 2024–25 to promote physical, mental, and emotional wellbeing.

Key initiatives included:

- access to mental health training and educational resources
- onsite mental health support services
- regular promotion of wellbeing initiatives through internal communications.

These programs form part of the City's broader focus on psychosocial safety, employee resilience, and early intervention. We continue to explore new ways to support employee wellbeing and respond to emerging workforce needs.

Employee rewards and recognition

The City's Reward and Recognition Program celebrates employees who exemplify our values, deliver exceptional outcomes, and contribute positively to workplace culture. The program takes a tiered approach, offering both formal and informal opportunities to acknowledge performance and behaviour at all levels.

Recognition opportunities include:

- peer and leader acknowledgements, such as thank-you cards and coffee vouchers
- value-able awards presented at directorate meetings for impactful contributions
- annual Wanneroo Awards recognising individuals and teams who consistently go above and beyond
- service milestones, celebrated at biannual events, acknowledging tenure from five years through to 45 years.

All employees are encouraged to participate in building a culture of appreciation by using the Applause Board and the City's intranet-based nomination system. Recognition efforts are designed to be timely, meaningful, and aligned with our organisational values.

Looking ahead

In 2024–25, we continued to strengthen our workforce foundations, with an increased focus on leadership, planning, and employee experience. While key frameworks and initiatives have taken shape, the year ahead will see further refinement of the People and Culture function to ensure it delivers high-impact, future-focused outcomes.

With the foundations now in place, we are well-positioned to evolve our approach – shifting from transactional service delivery to more strategic, people-centred practices aligned with organisational priorities and community needs.

Community highlight story

Development of our Workforce Plan

In 2024–25, the City of Wanneroo developed and endorsed our revised Workforce Plan, setting a clear direction for shaping, supporting, and strengthening our workforce to deliver on organisational goals and community priorities.

The plan was informed by comprehensive internal consultation and detailed research into current and emerging workforce trends. It identifies critical resourcing needs and outlines an action plan focused on four key areas: Culture, People, Processes, and Systems. Together, these pillars form the foundation for a workforce that is motivated, capable, and aligned with the City's vision.

Following presentation at Council Forum, the Workforce Plan was formally endorsed by Council and published online to ensure transparency and accessibility. Implementation is now underway, with ongoing monitoring and reporting in place to track progress and maintain accountability.

A well-designed workforce plan ensures we have the right people, skills, and structures to meet both current and future needs. By proactively addressing talent gaps, supporting staff development, and planning for growth, we are building a future-ready workforce. This commitment strengthens organisational capability and ensures the delivery of high-quality services that provide lasting value to the communities we serve.

Work health and safety

We continue to foster a strong and improving safety culture, where staff are encouraged to protect themselves, their colleagues, contractors and the broader community.

We meet our obligations under the *Work Health and Safety Act 2020*, the *Workers Compensation and Injury Management Act 2023*, and our enterprise agreements. These obligations are taken seriously, as the health and wellbeing of our workforce are critical to engagement, productivity and community service.

Our WHS management system continues to evolve through a focus on continuous improvement, innovation, and best practice. In 2025–26, we will explore opportunities to enhance integration across our broader management systems to support more streamlined, effective, and sustainable operations.

WHS requirements are embedded in key systems and processes:

- **Recruitment**
  WHS questions are mandatory during interviews and reference checks. New employees in high-risk roles must complete a pre-employment medical assessment based on job-specific physical requirements.
- **Procurement**
  Safety risk assessments are required for all purchases of goods, services and works, in line with our Contractor Safety Management Risk Framework. In 2025-26 we will continue developing a dedicated Contractor Management module within our safety system to enhance oversight of contractor safety performance and compliance. This module will support more effective procurement and risk management processes by capturing key contractor data, which can be leveraged for improved reporting, analysis, and decision-making across projects and operations.

Continuous WHS improvement

In alignment with the *Work Health and Safety Act 2020* and ISO 45001, we maintain a strong governance framework by regularly reviewing our WHS policies, procedures, and practices to ensure they reflect current legislative requirements and operational needs. Our vision is to foster a healthy, engaged, and productive workforce. In 2024–25, we delivered the following key initiatives:

- Improved our online safety management by:
  - integrating the risk register into the safety system to centralise risk data and improve accessibility
  - developed control modules to support the identification, implementation, and monitoring of risk controls.
- Conducted targeted workshops with risk owners to build understanding, promote ownership, and ensure accurate risk representation.
- Delivered tailored training session to Assets Directorate leaders focused on operational risk responsibilities
- Continued the early intervention physiotherapy program to proactively prevent workplace injuries and introduced a comprehensive health and wellbeing initiative. This includes regular yoga and Pilates sessions, as well as facilitated discussions focused on mental health awareness and support.
- Commenced development of an enhanced onboarding and high-risk training process, with a focus on streamlining, digitising, and improving the consistency of safety-critical training delivery.

Safety training

We provided a range of safety training throughout the year, including:

- Health and safety representative training
- First aid, CPR and emergency warden training
- Load restraint training
- Managing mental health at work training
- Traffic management training
- Assets leaders safety training sessions
- Dangerous goods training
- Working safely at the City training.

Safety risk identification and control

Our top three WHS risks are:

- **Confined spaces**
  Confined Spaces remain a key area of operational risk due to the potential for hazardous atmospheres, restricted access, and emergency response limitations. At the procurement stage, we assess contractor safety documentation to ensure appropriate controls are in place, including Safe Work Method Statements (SWMS) and relevant high-risk work licences. For internal works, we rely on trained personnel and documented procedures to manage confined space entry. While foundational controls are in place, further opportunities exist to strengthen oversight, assurance, and alignment with the Confined Spaces Code of Practice.
- **Electrical hazards (including lithium-ion batteries)**
  Electrical safety continues to be a priority, particularly with the increased use of lithium-ion batteries in tools, vehicles, and equipment. We are monitoring developments in this area to better understand and manage associated risks such as thermal runaway and fire.
- **Forklift operations**
  Forklift operations present notable risks, including collisions, load instability, and pedestrian interaction. We maintain essential controls such as ensuring operators hold the appropriate high-risk work licences and a verification of competency (VoC) is conducted to confirm that licensed operators can safely perform tasks in our specific work environment.

Employee engagement in WHS

We currently have 29 elected health and safety representatives (HSRs) who play a key role in supporting a safe and healthy workplace Their responsibilities include:

- conducting workplace inspections to identify hazards
- participating in incident investigations to support continuous improvement
- attending WHS committee meetings to contribute to safety planning and communication
- consulting with management on health and safety matter
- representing employee safety concerns and promoting a culture of shared responsibility.

The HSRs and the Health and Safety Committee are currently undergoing a review and restructure to improve efficiency, strengthen engagement, and enhance responsiveness, contributing to safer and more proactive workplace outcomes.

WHS risk assessments

Risk assessments are conducted regularly to identify and control hazards. These assessments involve consultation with HSRs, team leaders and WHS staff. Our risk assessment template prompts engagement and documentation of employee input, in line with our WHS Risk and Hazard Management Procedure.

Safety performance

Our **MySafety system** records injuries and incidents involving employees, volunteers, contractors and community members. In 2024–25:

- **87 injuries** were recorded:
  - 78 employee injuries (90%)
  - 4 contractor injuries (4%)
  - 5 volunteer injuries (6%)
- **8 notifiable incidents** occurred and were reported within legislated timeframes
- **No regulatory interventions** occurred.

A notifiable incident is the death of a person, a serious injury or illness of a person or a dangerous incident that occurs due to business or workplace activities.

Historically, reporting under previous legislation primarily focused on injuries necessitating immediate hospital treatment or those preventing a worker from attending work for 10 or more days.

However, current regulations require workplaces to report a broader range of incidents. This expanded scope includes:

- injuries that require restricted duties for 10 or more days
- certain types of infectious diseases
- some psychological injuries
- an expanded list of dangerous incidents, even if no injury has occurred.

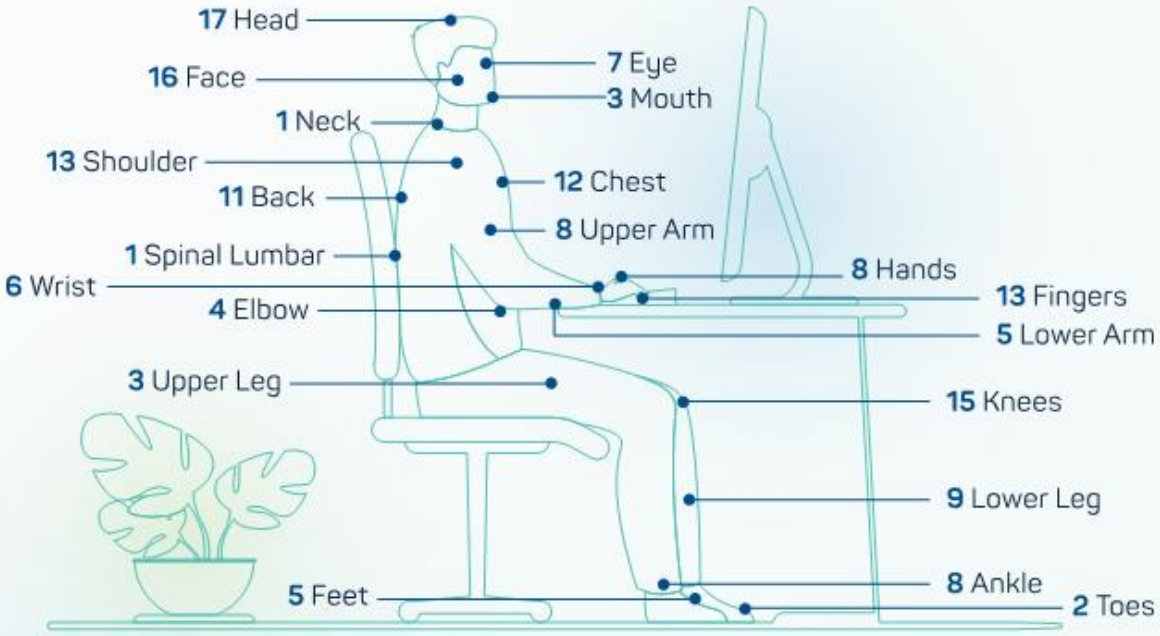
5-year injury tracking

The following table provides a five-year summary of reported workplace injuries, categorised by type. It highlights trends in minor injuries, lost time injuries, medical treatment injuries, and restricted work injuries from 2020–21 to 2024–25.

Year	Minor	Lost time injury	Medical treatment injury	Restricted work injury
2020–21	35	10	4	4
2021–22	42	9	7	2
2022–23	51	17	21	7
2023–22	70	10	19	6
2024–25	54	12	7	7

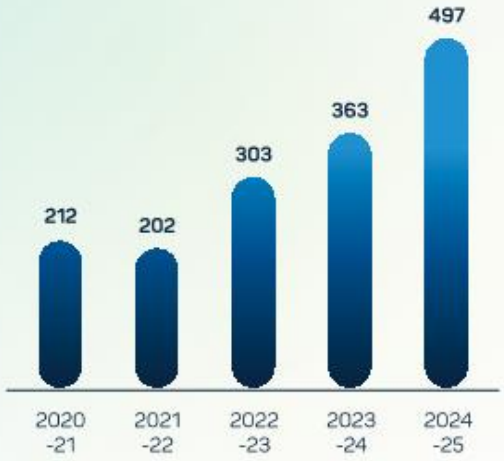
Injury overview

The infographic provides an overview of injured body parts identified in incident reports. Please note that not all reports had progressed to body part identification at the time of reporting. **Psychological injuries** are recorded against the **head**.

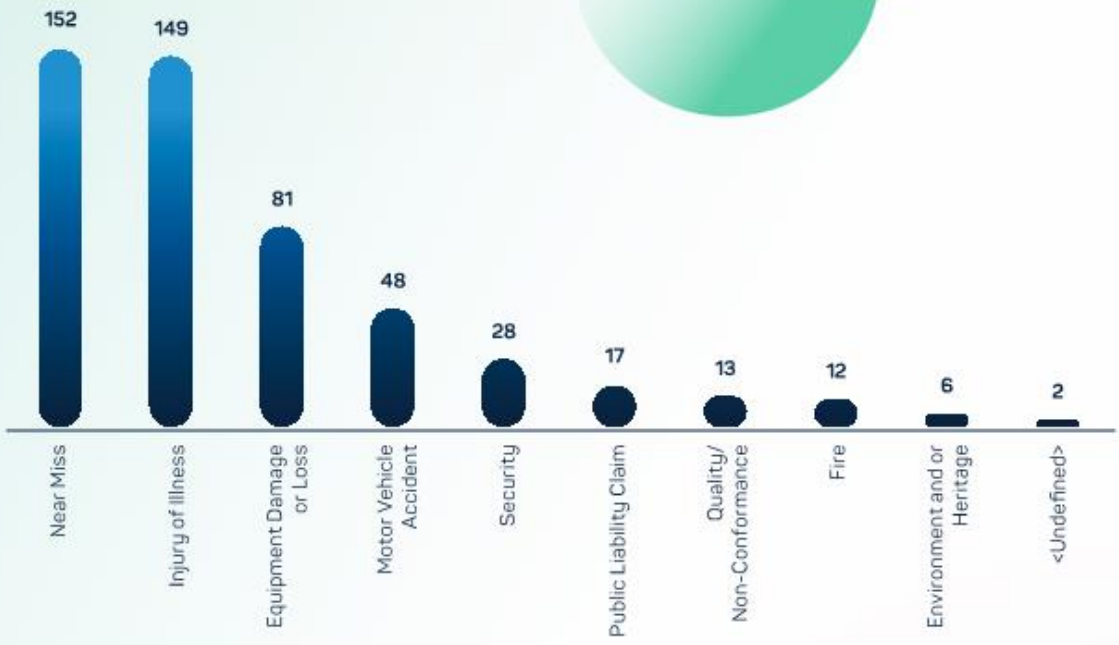


Incident reporting

In 2024–25, we recorded **497 incidents** in our MySafety system.



Incidents are categorised in different ways, and some may be recorded under multiple categories.



Injury management

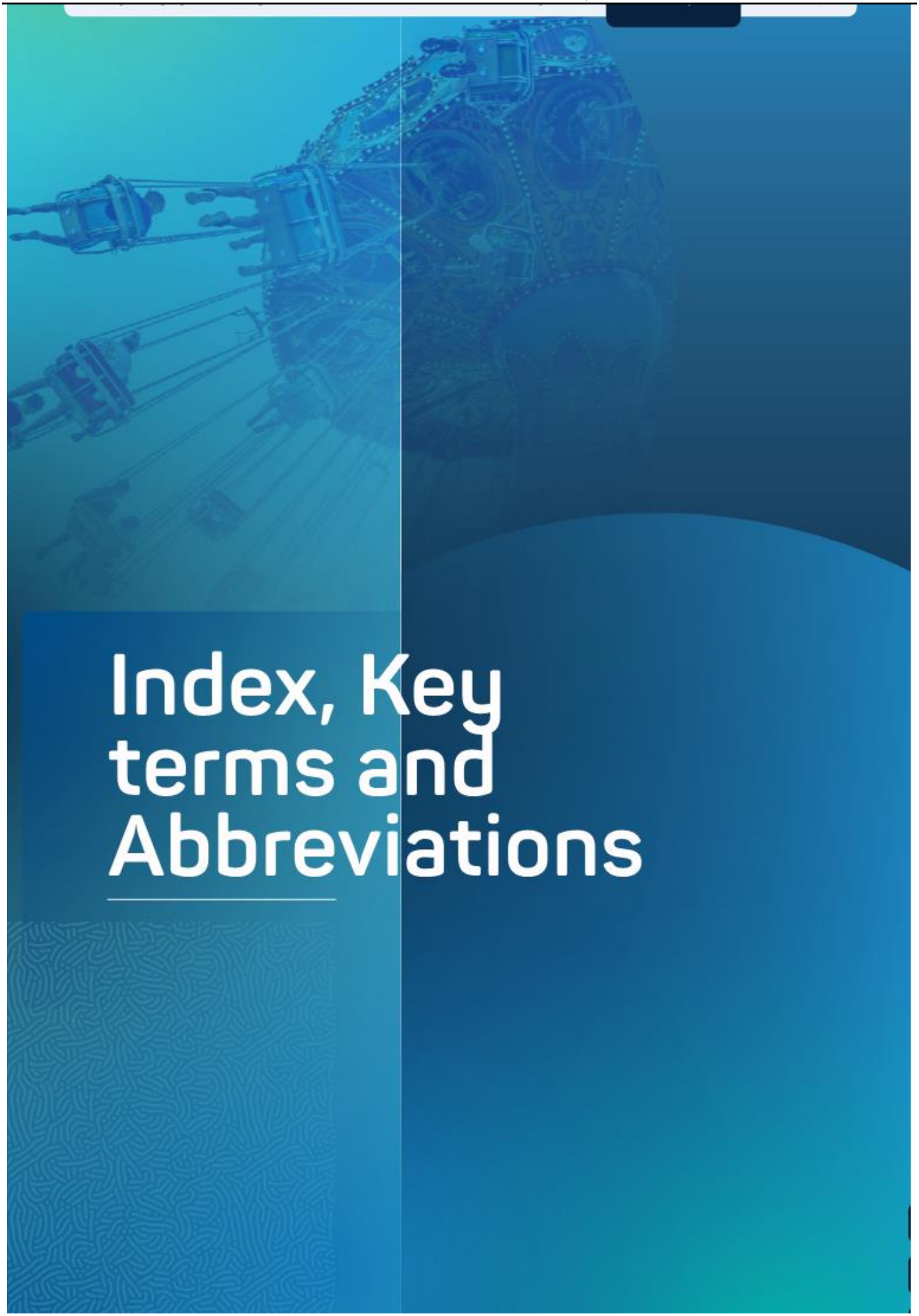
Our approach to injury management focuses on promoting positive behaviours and practices that support safe and timely return to work. We now have a dedicated injury management resource onsite, providing direct support to service units in managing workplace injuries, coordinating recovery processes, and ensuring consistent application of injury management protocols.

Leaders are encouraged to remain actively involved in injury management processes, ensuring consistent communication and support to help with employees navigating injury recovery.

The People and Culture team works closely with leaders and employees to manage non-work-related injuries and fitness-for-work concerns. This collaborative approach helps ensure employees are fit to undertake their duties and contributes to reducing the risk of injury in the workplace.

Workers' compensation claims

In 2024–25, a total of 18 workers' compensation claims were registered, including 4 that remain pending. This compares to 16 claims in the previous year. Most claims were associated with musculoskeletal injuries.



Index, Key terms and Abbreviations

Key terms

Accessibility	When the needs of people with disabilities are specifically considered, and products, services, and facilities are built or modified so that they can be used by people of all abilities. This may include physical and online products, services, and facilities.
Activation	Planning for a diverse range of activities in a location or precinct, ensuring the needs of all potential users are met as part of their daily life.
Advocacy	The ability to obtain public and/or government support for a project, policy or program. Local governments have a role in advocating on behalf of their constituencies to state and federal levels of government, statutory authorities and other sectors.
Asset	An asset is an object (physical or intangible) that has an identifiable value and a useful life greater than 12 months, that is or could be used by the City to provide a service. Our assets include roads, the water supply network, sewerage network and buildings.
Asset management	The City's activity used to sustainably manage its assets and asset systems to achieve our corporate plan. This includes asset performance, risks and expenditures over the asset's life cycle.
Audit	A review or examination of any aspect of the operations of the City's Administration. An audit can be conducted by an internal (someone who is ordinarily part of the organisation) or an external (someone from outside the organisation) auditor.
Biodiversity	The variety of all living things including plants, animals and micro organisms, their genes and the ecosystems of which they are a part.
Canopy	Foliage that grows above 3 metres and can provide overhead shade for people, surfaces and materials within the environment. Also known as tree canopy.
Capital works	Scheduled infrastructure works generally encompassing major works for road, drainage and building assets.
Community	A group of individuals sharing one or more characteristics such as geographic location (e.g. our neighbourhood), culture, age, or a particular risk factor.
Corporate governance	The process by which agencies are directed and controlled. Generally understood to encompass authority, accountability, stewardship leadership, direction and control.
Council Member	Also known as a Councillor, or previously an Elected Member, a Council Member is an individual elected to serve on the Council.
Developer	A person whose business either alone or as part of or in connection with any other business, is to act on their own behalf in respect of the sale, exchange, or other disposal of real estate.
Development	A development is any change to the use of land requiring town planning approval or oversight.

Key terms

Diversity	Understanding that each individual is unique and recognising our individual differences.
Election	Local government ordinary elections are held on the third Saturday in October every two years. Councillors are elected for terms of four years. Elections are held every two years for half of the council, and candidates are elected using a preferential voting system. If a vacancy occurs within a term, an extraordinary election is held. In the City of Wanneroo, the Mayor is popularly elected every four years.
Financial sustainability	When a local government's infrastructure capital and financial capital can be maintained over the long term.
Hub	Centre of an activity, region or network.
Infrastructure	Infrastructure supports many of the services provided by Local Governments – for example, roads, bridges, community buildings, water and sewerage services.
International Organization for Standardization	An independent, non-government international organisation that brings together standards bodies from 169 countries to develop international standards.
Kaya	Noongar for 'hello'.
Landfill	Sites for disposal of non-recyclable waste.
Lean Six Sigma	A process improvement approach that uses a collaborative team effort to improve performance by systematically removing operational waste and reducing process variation.
Local Planning Strategy	A guide for future decisions in relation to rezoning and funding for future services and infrastructure.
Procurement	The act of obtaining or buying goods and services.
Program	An activity or group of activities that delivers benefits or services to the City's Administration or the community as a whole.
Rates	An annual tax on residential or commercial property. Rates are calculated by multiplying the gross rental value (GRV) of a property by the rate in the dollar. The GRV is determined by the State Government (Landgate) and the rate in the dollar is determined by individual councils.
Risk management	The process of measuring or assessing risk and developing strategies to manage it.
Service unit	An organisational unit within the City that administers defined functions.
Services	Business activity that involves doing things for customers rather than producing goods, or a single act of doing something for a customer. We deliver a wide range of services to meet community needs, such as town planning, waste collection, play groups and recreation facilities. Some services are required by law and others the Council chooses to provide. We also have corporate services – such as finance, payroll, human resources and ICT – to support our frontline service delivery.
Smart city	An urban area that uses advanced technologies and data-driven approaches to enhance the quality of life for its residents.
Stakeholder	Individuals, groups or organisations interested in, impacted by or in a position to influence the City's activities or objectives.
Sustainability	The ability to meet present-day needs without compromising the ability of future generations to meet their own needs.
Urban forest	A collection of trees that grow within a city, town or suburb.
Wandjoo	Noongar for 'welcome'

Abbreviations

AARC	Alkimos Aquatic and Recreation Facility
AARP	Australian Automation and Robotics Precinct
ACN	Australian Company Number
AIFR	All injury frequency rate
AIP	Access and Inclusion Plan
ARA	Australasian Reporting Awards
CBP	Corporate Business Plan
CCTV	closed-circuit television
CDP	Community Development Plan
CEO	Chief Executive Officer
CRM	customer relationship management
CSR	corporate social responsibility
CSRFF	Community Sporting and Recreation Facilities Fund
DAIP	Disability Access and Inclusion Plan
DAIRG	Disability Access and Inclusion Reference Group
DBCA	Department of Biodiversity, Conservation and Attractions
DFES	Department of Fire and Emergency Services
DLGSC	Department of Local Government, Sport and Cultural Industries
EAP	Employee Assistance Program
ELT	Executive Leadership Team
EOI	expression of interest
ESL	Emergency services levy
FOGO	Food organics and garden organics
FOI	freedom of information
FTE	full-time equivalent
GAPP	Growth Areas Perth and Peel
GST	Goods and Services Tax
ha	hectares
HRIS	Human resources information system
HSR	health and safety representative (employee)
IAF	Internal Audit Function
IAP2	International Association for Public Participation
ICT	information and communications technology
IPRF	Integrated Planning and Reporting Framework
IPWEA	Institute of Public Works Engineering Australia
ISO	International Organization for Standardization

Abbreviations

KPI	key performance indicator
LGA	Local Government Act 1995 (WA)
LGIRS	Department of Local Government, Industry Regulation and Safety
LGIS	Local Government Insurance Scheme
LTFP	Long Term Financial Plan
MIS	media impact score
MODAP	Metro Outer Development Assessment Panel
MRC	Mindarie Regional Council
NCP	National Competition Policy
NGAA	National Growth Areas Alliance
NIA	Neerabup Industrial Area
OAG	Office of the Auditor General
OIC	Office of the Information Commissioner (WA)
PDRC	performance development review conversation
PMBOK	Project management body of knowledge
PMO	project management office
PV	photovoltaic
QMS	quality management system
QMSLSC	Quinns Mindarie Surf Lifesaving Club
RAP	Reconciliation Action Plan
RKP	recordkeeping plan
RSL	Returned and Services League
SAA	Salaries and Allowances Act 1975
SCP	Strategic Community Plan
SWMS	Safe Work method statement
VoC	Verification of competency
WACC	Wanneroo Animal Care Centre
WALGA	Western Australian Local Government Association
WAPC	Western Australian Planning Commission
WAPOL	WA Police
WBA	Wanneroo Business Association
WHS	workplace health and safety
WTC	Wanneroo Town Centre
YTRAC	Yanchep Two Rocks Access Centre

Notations

Tables throughout the report use notations as follows:

$m	=	million dollars
$b	=	billion (thousand million) dollars
km	=	kilometre
kl	=	kilolitre
ha	=	hectare
t	=	tonne
-	=	either zero or nil
n/a	=	not applicable

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Financial
report

Message from the Chief Financial Officer

On behalf of the City, I am pleased to present the City's Annual Statutory Financial Report for 2024-25.

This report includes the Audit Report from the Office of the Western Australian Auditor General, along with the financial report and supplementary disclosure notes for the financial year ending 30 June 2025. The financial report has been prepared in compliance with Australian Accounting Standards for general purpose financial reports and the relevant legislative requirements under the *Local Government Act 1995*. It offers our community an update on the City's financial performance, progress over the past year and the financial position.

Importance of Transparent Financial Reporting

The financial report aims to provide users with reliable quantitative information about the City's current financial position and performance. It also demonstrates how the City has fulfilled its accountability and obligations in managing public funds and assets. The City is dedicated to delivering comprehensive financial reports that offer transparent, clear, and accurate information to ratepayers and the broader community. These reports align with the City's forward planning tools, including the Council Plan, Long-Term Financial Plan, Annual Budget and Service Plans.

The City consistently benchmarks its annual report against the Australasian Reporting Awards **(ARA)**, which set the standard for excellence in financial and non-financial reporting across Australia, New Zealand, and the Asia-Pacific region. These Awards assess reports based on transparency, accountability, and communication, reflecting global best practices. The City's dedication to these principles has been recognised with nine Gold Awards to date, a testament to its high reporting standards. Winning these awards demonstrates not only compliance but also the City's commitment to clear stakeholder communication, sound governance, and continuous improvement. This recognition reinforces the City's reputation for operational excellence, fostering public trust and accountability in its performance.

The Year in Review

The City managed to deliver positive and strong financial outcomes in the last financial year. A summary of our performance is outlined below while detailed information is included within the financial report and notes to the financial report.

Total operating revenue for the year was $261.7 million, surpassing the budgeted $245.2 million and improving upon the $245.8 million reported in 2023-24. Majority of the operating revenue is derived from rates, representing about 63% of total revenue, with approximately 21% of total City revenue coming from Fees & Charges. Grants and subsidies from the Federal/State governments account for around 7% of total revenue. The remaining 9% of revenue is made up of interest and other miscellaneous income. This growth reflects the City's ability to generate diverse income streams.

"The City will strive to provide sufficient resources to meet current and future demands sustainably."

Total operating expenses for the year was $252.7 million, which was slightly below budget by $1.6 million. This is driven by employee costs being lower than budgeted reflecting our efficiency in containing costs against growth in properties to service and within the expectations of the industrial agreements.

Compared to the City's total 2024-25 budgeted deficit from operating activities of $9.1 million, the City has produced an operating surplus of $9.0 million. This is mainly due to the advanced payment of the Financial Assistance Grant and higher than budgeted Fees and Charges.

Net non-operating revenue and expenses for the year totalled $105.9 million, above the budgeted $74.0 million and significantly higher than the $57.7 million reported in 2023-24. This included $87.1 million in capital grants, subsidies and contributions, enabling continued investment in infrastructure and community projects, exceeding the budgeted $65.6 million and improving upon the $43.6 million reported in 2023-24. Of the capital grants, subsidies and contributions, $59.4 million is attributed to contributed assets.

The City's total assets reached $3.7 billion, a significant increase from $3.6 billion reported in the financial year 2023-24, mainly driven by property, plant & equipment and infrastructure investments. Key metrics include:

- **Cash and cash equivalents:** $42.1 million, ensuring adequate liquidity to meet operational requirements.
- **Other financial assets:** $505.3 million, indicating strategic financial management.

On the liabilities side, total liabilities rose to $327.3 million, reflecting a manageable increase in payables and bond and security deposits. The City has reported its current ratio for the year at 1.3 (2023-24 was 1.4).

Borrowings remained stable at $74.3 million, demonstrating disciplined debt management. Employee-related provisions decreased to $18.6 million due to a decrease in the workers compensation provision. Other provisions, including development contributions, were carefully monitored to ensure sustainability.

The financial year 2024-25 results reflect the City's commitment to financial sustainability and effective resource management. The strong operating surplus, enhanced asset values, and prudent debt management demonstrate the City's ability to meet current obligations while preparing for future challenges.

Looking Forward

As we advance into financial year 2025-26 and to longer term, the City remains focused on delivering excellent services and addressing its planned infrastructure requirements. Additionally, we will continue to support our ratepayers and local businesses. Our planning framework, which includes short-term (1-year annual service plans), mid-term to long-term (10-year Council Plan and Long-Term Financial Plan), allows us to formally review our objectives, update strategies, and track our progress. Most importantly, the City is dedicated to ensuring adequate resources are available to meet both current and future demands.

The City will strive to provide sufficient resources to meet current and future demands sustainably. Our current projects include:

- Enhancing operational functionality within the City's Financial Management Information Systems.
- Reviewing the Long-Term Financial Plan.
- Implementing a new property and rating system.
- Improving reporting on service costing; and
- Support major Project Initiatives.

Conclusion

I would like to take this opportunity to express my gratitude to the Mayor, Councillors and the Executive Leadership Team for their guidance and dedication in achieving the strong financial results for 2024-25. I also want to acknowledge the passion and commitment of all City employees and our Finance team, whose hard work and dedication have been integral to our success. Our achievements are a direct result of this unwavering commitment to excellence across all levels of the organisation.

Looking ahead, I am excited for the opportunities and challenges the next 12 months and beyond will bring. I look forward to working closely with the Mayor, Councillors, the Chief Executive Officer (CEO), and our Executive Leadership Team to further strengthen the City's financial position and continue delivering value to our community. Together, we will build on this year's achievements to ensure sustainable growth and prosperity for the City of Wanneroo.

Bimsara Pathirathna CPA, ACA, ACMA, CGMA, MAAT, ASCMA, BSc (Acc. & Fin. Mgt. Special)
Chief Financial Officer

Statement of financial position

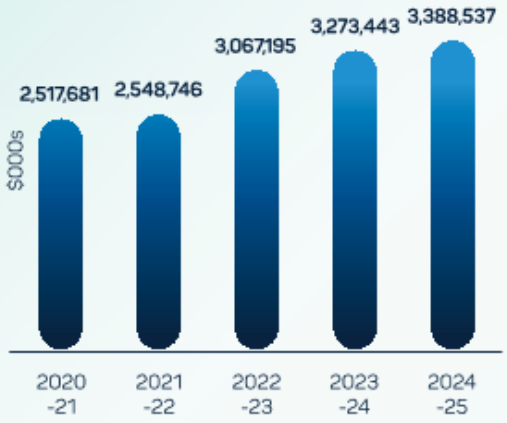
The accompanying financial report for the year ended 30 June 2025 have been prepared in accordance with the Local Government Act 1995 (as amended) and the relevant Regulations, the Australian Accounting Standards and professional pronouncements, and the Local Government Code of Accounting Practice and Financial Reporting (Update No. 26).

The financial reports comprise general purpose financial report that have been audited by the Office of the Auditor General.

Description	2020–21 Actual $'000	2021–22 Actual $'000	2022–23 Actual $'000	2023–24 Actual $'000	2024–25 Actual $'000
Total assets	2,769,133	2,830,544	3,356,715	3,589,137	3,715,876
Total liabilities	251,452	268,234	289,520	315,694	327,338
Net assets	**2,517,681**	**2,562,310**	**3,067,195**	**3,273,443**	**3,388,532**

The marginal increase in total assets is due to the expanding asset base of the city.

Net Assets 5-Year Trend Comparison



The increase in total assets is mainly due to additions to Property, Plant & Equipment and Infrastructure assets including Contributed Assets. In addition, development in the City, with respect to Development Contribution Plan assets also contributed to the increase.

Total liabilities have increased over the last year, mainly due to an increase in Trade Payables and Bonds and Security Deposits.

Capital grants, subsidies and contributions

During the 2024-25 financial year the City received various capital grants, subsidies and contributions for replacing and renewing assets.

Below is an overview of the amounts received by the City during the year and the two years before this financial year.

Year	Amount Received
2024-25	$5,375,244
2023-24	$6,709,097
2022-23	$3,922,730

Major land transactions financial overview

Golf Courses

The City has entered into a lease agreement with Belgravia Health & Leisure Group Pty Ltd for a period of 10 Years, to manage and operate Carramar and Marangaroo Golf Courses. The commencement date of the lease was 01 November 2022.

Current year transactions	2024-25 Actual $	2024-25 Budget $	2023-24 Actual $
Operating revenue			
Fees and Charges	1,609,317	1,488,000	1,540,582
Other Revenue	587,271	564,000	466,998
	2,196,588	**2,052,000**	**2,007,580**
Operating expenditure			
Materials and Contracts	(511,427)	(519,226)	(377,601)
Depreciation	(147,324)	(126,203)	(128,479)
	(658,750)	**(645,429)**	**(506,080)**
Capital expenditure			
Golf Course Upgrade	(561,132)	(602,530)	(560,987)
	(561,132)	**(602,530)**	**(560,987)**

Expected future cash flows	2024-25 $	2025-26 $	2026-27 $	2027-28 $	2028-29 $	Total $
Cash outflows						
Operating Expenditure	(658,750)	(500,000)	(515,000)	(530,450)	(546,364)	(2,750,564)
Capital Expenditure	(561,132)	(602,530)	(12,600,000)	(9,320,000)	(1,240,000)	(24,323,662)
	(1,219,883)	**(1,102,530)**	**(13,115,000)**	**(9,850,450)**	**(1,786,364)**	**(27,074,226)**
Cash Inflows						
Operating Revenue	2,196,588	2,052,000	2,113,560	2,176,967	2,442,276	10,981,390
	2,196,588	**2,052,000**	**2,113,560**	**2,176,967**	**2,442,276**	**10,981,390**
Net cash flows	**976,705**	**949,470**	**(11,001,440)**	**(7,673,483)**	**655,912**	**(16,092,836)**

Assets	2024-25 $	2025-26 $	2026-27 $	2027-28 $	2028-29 $
Property, Plant & Equipment and Infrastructure	**41,731,681**	**42,334,211**	**54,934,211**	**64,254,211**	**65,494,211**

Notes

a. A reserve is in place to ensure a proportion of the operating income is transferred to the reserve and for capital outflows to be transferred from the reserve.
b. The reserve balance as at 30/6/2024 is $8,079,023
c. Marangaroo Land is Crown Land and hence has no value in the Asset Register.

Neerabup

It is anticipated that the tender for the development of Lot 9100 will be awarded in Quarter 3 of the 2025-26 financial year, followed by the commencement of construction in Quarter 4. Sales of Lots are expected in the 2027-28 financial year.

Current year transactions	2024-25 Actual $	2024-25 Budget $	2023-24 Actual $
Operating revenue			
Other Revenue	407,234	660,000	371,747
Profit on Disposal of Assets	0	0	0
	407,234	**660,000**	**371,747**
Operating expenditure			
Materials and Contracts	0	(50,000)	0
	0	**(50,000)**	**0**
Capital expenditure			
Development Costs	(540,925)	(561,013)	(444,986)
	(540,925)	**(561,013)**	**(444,986)**

Expected future cash flows	2024-25 $	2025-26 $	2026-27 $	2027-28 $	2028-29 $	Total $
Cash outflows						
Operating Expenditure	0	0	0	0	0	0
Capital Expenditure	(540,925)	(658,000)	(12,059,408)	(2,792,050)	(2,718,750)	(18,769,133)
	(540,925)	**(658,000)**	**(12,059,408)**	**(2,792,050)**	**(2,718,750)**	**(18,769,133)**
Cash Inflows						
Operating Revenue	407,234	564,000	1,400,000	1,400,000	1,397,700	5,168,934
Proceeds on Land Sales	0	0	0	18,930,000	18,930,000	37,860,000
	407,234	**564,000**	**1,400,000**	**20,330,000**	**20,327,700**	**43,028,934**
Net cash flows	**(133,691)**	**(94,000)**	**(10,659,408)**	**17,537,950**	**17,608,950**	**24,259,801**

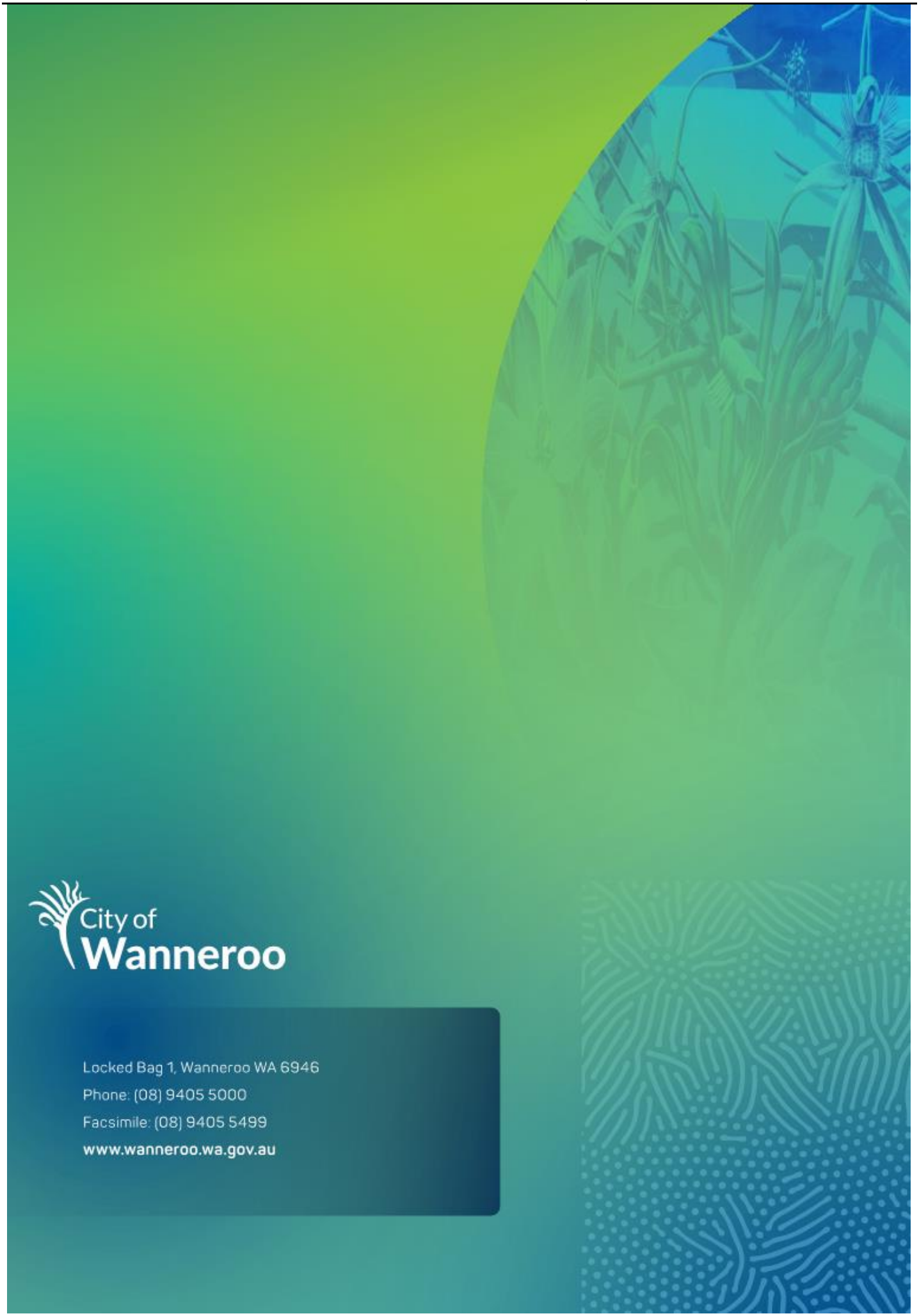
Assets	2024-25 $	2025-26 $	2026-27 $	2027-28 $	2028-29 $
Land Held for Resale	**4,276,420**	**4,934,420**	**16,993,828**	**18,598,725**	**20,038,427**

Notes

a. A reserve (Neerabup Development Reserve) is in place to ensure a proportion of the operating income is set aside for capital outflows.

b. The balance of the Neerabup Development Reserve as at 30/6/2025 is $14,392,452.

c. It is assumed that all lots are to be sold over the life of the project, commencing in 2027-28 with 6% and in 2028-29 another 6%.



City of Wanneroo

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