

# Report

30 March 2026

<b>To</b>	Shane Ivers, Shire of Irwin	<b>Contact No.</b>	(08) 9920 9430
<b>Copy to</b>		<b>Email</b>	Antoinette.Krause@ghd.com
<b>From</b>	Antoinette Krause, GHD	<b>Project No.</b>	12650028
<b>Project Name</b>	Shire of Irwin Milo Road Crossing Upgrade		
<b>Subject</b>	Department of Water and Environment Regulation Native Vegetation Clearing Permit application supporting document		

## 1. Introduction

The Shire of Irwin (the Shire) engaged GHD Pty Ltd (GHD) to prepare a Department of Water and Environment Regulation (DWER) Native Vegetation Clearing Permit application (NVCP) and Supporting Document (this report) for proposed clearing of native vegetation associated with the Milo Road Crossing upgrade (the Project), located approximately 15 km north-east of the Dongara townsite in the Shire of Irwin.

The existing Milo Road crossing, Main Roads WA Bridge No. 3015A, is located on Milo Road at SLK 0.70, over the Irwin River and links properties to the south of the Irwin River to Midland Roads to the north. The current bridge consists of two-spans with timber substructure supporting a concrete slab. It is planned for Milo Road to be re-aligned to accommodate category 7 Restricted Access Vehicles (RAV) with new structures and floodway located on the new alignment (Figure 1, Appendix A).

During medium to heavy rain events the Milo Road Irwin River crossing is often inundated with water causing the crossing to be closed periodically. In very large events water flows over both the concrete bridge culvert and concrete floodway. Additionally, the road often remains closed for a significant period post medium and heavy rainfall events due to debris and silt being deposited on the road as the river slows and water levels fall. Closing this crossing results in road users requiring to detour approximately 19 km east along the Midlands Road to access the end terminus of Milo Road.

The realignment of Milo Road and upgrade of associated structures at the Irwin River crossing will have the following benefits:

- Reduce average closure times of Milo Road, allowing road users to access Midlands Road without a significant detour.
- Reduce ongoing maintenance and repair costs due to the age of the existing structure and extent of sediment build up within the spans and existing floodway.
- Provide a road alignment compliant to the current standards to increase safety and useability.

### 1.1 Project location

The Project area comprises 3.36 ha on Midlands Road and Milo Road. The land parcels and existing land uses within the Project area are summarised in Table 1. Letters of authorisation to access the land for the purposes as described above are provided in Appendix B.

Table 1 Land parcels intersected by the Project and existing land uses

Land Parcel	Owner	Land Use	Tenure	Zoning
Portion of Lot 100 on Plan 048103	Privately Owned	Agricultural (Grazing) and remnant native vegetation	FHOLD	General Farming
Portion of Lot 556 on Plan 231555	Privately Owned	Agricultural (Cropping) and remnant native vegetation	CROWN	General Farming
Portion of Lot 205 on Plan 231555	Privately Owned	Agricultural (Cropping), remnant native vegetation and Irwin River	CROWN	General Farming
Portion of Land ID 3169858	Department of Planning Lands and Heritage (DPLH)	Remnant native vegetation and Irwin River	WATER	General Farming
Portion of Lot 21 on Plan 143782, Reserve 17690	Shire of Irwin	Agricultural (Grazing and Cropping) and remnant native vegetation	CROWN	Local Reserve
Portion of Lot 302 on Plan 048103	Shire of Irwin	Milo Road Reserve	ROAD	General Farming
Portion of Lot 300 on Plan 048103	Shire of Irwin	Milo Road Reserve	ROAD	General Farming
Portion of Land ID 3144506 (Road reserve PIN 1219182)	Shire of Irwin	Milo Road Reserve	ROAD	Local Road
Portion of Land ID 3144507 (Road reserve PIN 1219183)	Shire of Irwin	Milo Road Reserve	ROAD	Local Road
Portion of Land ID 3144585 (Road reserve PIN 1219266)	Shire of Irwin	Milo Road Reserve	ROAD	Local Road
Portion of Land ID 3144583 (Road reserve PIN 1219264)	Main Roads Western Australia (MRWA)	Midlands Road Reserve	ROAD	Local Road

## 1.2 Purpose of this report

The purpose of this NVCP supporting document is to inform the DWER of the outcome of the assessment against the Ten Clearing Principles for the proposed works. This document has been prepared in support of an application for a NVCP (purpose permit) under Section 51E of Part V of the *Environment Protection Act 1986* (EP Act).

## 1.3 Limitations

*This report: has been prepared by GHD for Shire of Irwin and may only be used and relied on by Shire of Irwin for the purpose agreed between GHD and Shire of Irwin as set out in section 1.2 of this report.*

*GHD otherwise disclaims responsibility to any person other than Shire of Irwin arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.*

*The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.*

*The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.*

*The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.*

*If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.*

*GHD has prepared this report on the basis of information provided by Shire of Irwin and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.*

## 2. Native Vegetation Clearing Permit application area

The Shire commissioned GHD Pty Ltd (GHD) to prepare an NVCP application for clearing up to 1.80 ha of native vegetation within the 3.36ha Project area. The remaining 1.56 ha within the Project area is comprised of existing road and previously cleared agricultural land.

The Project area, location of the 1.80ha of native vegetation proposed to be cleared and the 16.7 ha survey area are shown in Figure 2 (Appendix A).

This Supporting Document has been prepared in support of an application for a NVCP under Section 51E of Part V of the EP Act, for activities associated with the Project.

## 3. Avoidance and mitigation

### 3.1 Avoidance

Avoidance of native vegetation clearing was a key consideration in the design of the Project. Avoidance measures that have been undertaken include:

- The road realignment has been selected with the intent to reduce the clearing footprint, selecting an alignment along existing roads and cleared agricultural land where possible.
- Alternative designs have been carefully considered, including lowering the road and using smaller batters to reduce the clearing footprint.
- The proposed upgrade design has been restricted to the southern side of Midlands Road to avoid locations of previous records of Threatened flora species and potential Black Cockatoo habitat. This has reduced the area of impact to native vegetation by 0.51 ha and avoided seven potential nesting trees<sup>1</sup>.

### 3.2 Mitigation

A site-specific Construction Environmental Management Plan (CEMP) will be developed by the Shire appointed construction contractor prior to commencement and implemented during construction works. The following measures and actions will be undertaken to minimise and manage potential impacts during construction of the Project:

- Clearing areas shall be clearly demarcated on site prior to the commencement of any clearing to minimise extent of clearing of native vegetation.
- Laydown area, truck turn around, and site facilities are to be sited in a previously cleared areas.
- Prior to clearing, pre-clearance fauna searches will be undertaken within the area to be cleared and a suitably qualified fauna spotter will be on site during all native vegetation clearing activities.
- Vehicles and equipment should remain on designated vehicle tracks where possible and avoid driving over, or parking on native vegetation.
- Fire danger ratings and Local Government vehicle movement bans to be observed and then requirements of these implemented.
- All hot work will be undertaken in accordance with standard hot work procedures.
- Construction works will be undertaken in accordance with the Environmental Protection (Noise) Regulations 1997.
- Dust emissions will be controlled through appropriate measures where practicable.
- Standard spill management procedures to be implemented during construction.

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<sup>1</sup> Potential nesting tree: Trees that have a suitable DBH to develop a nest hollow, but do not currently have hollows.

## 4. Relevant investigation reports and management plans

The following reports and management plans have been prepared for the purpose of the Project:

- Milo Crossing Biological Survey (GHD 2025a) including a Detailed and Targeted flora and vegetation survey, Basic fauna survey and Black Cockatoo habitat assessment
- Milo Crossing Waterways Report (GHD 2025b)
- Milo Road Bridge Upgrade Archaeological and Ethnographic Site Identification Survey (GHD 2025c)
- Milo Crossing Upgrade 85% Design report (GHD 2025d)
- Port Denison Boat Ramp and Foreshore & Milo Road Crossing Upgrade Chance Find Protocol (GHD 2025e).

## 5. Summary of the Ten Clearing Principles assessment

Schedule 5 of the EP Act defines Ten Clearing Principles for native vegetation. These principles aim to ensure that all potential impacts resulting from removal of native vegetation can be assessed in an integrated way. Clearing required for the proposed clearing has been assessed against the Ten Clearing Principles, in accordance with the DWER's *A Guide to the Assessment of Applications to Clear Native Vegetation* (DER 2014) to determine whether the application is at variance.

Proposed clearing for construction of the Project will result in residual environmental impacts of the following:

- The loss of up to 1.80ha of potential habitat for Carnaby's Cockatoo including 56 potential nesting trees<sup>2</sup> of which one is a Suitable nesting tree<sup>3</sup> (with no evidence of use).
- The loss of native vegetation that is significant as a remnant of native vegetation in an area that has been extensively cleared.
- Up to 1.45 ha of riparian vegetation.

The assessment, based on clearing of up to 1.80 ha of native vegetation, indicates that the proposed clearing area is at variance to principles (c) and (e), may be at variance to principle (b) and considered not likely to be at variance to the remaining clearing principles (Appendix D).

The Shire is in the process of developing an offset proposal to counterbalance the residual environmental impacts of the proposed clearing. The Shire proposes a combination of offset types including revegetation of the future disused portion of Milo Road reserve following the realignment and 'like for like' vegetation which is located adjacent to the impact area, along the Irwin River (Lots 205 and 206 on Deposited Plan 231555), to be placed under a conservation covenant to protect it in perpetuity. The offset site proposed is currently being negotiated with landowners and relevant stakeholders.

## 6. Other approvals

The Shire is currently in the process of applying for the following planning and environmental approvals for the Project, as required:

- DWER manages the Irwin River where the proposed infrastructure will be positioned as part of the upgrade works. Consent from DWER will be required for the clearing and construction on this land parcel.
- Aboriginal heritage approvals under the *Aboriginal Heritage Act 1972*.
- Consultation with relevant utility authorities for protection/ relocation of assets to suit proposed works.

An *Environment Protection, Biodiversity and Conservation Act 1999* (EPBC Act) Significance Assessment (Appendix E) has been undertaken against the *Significant Impact Guidelines 1.1* (DoE 2013) with regard to potential impacts to Matters of National Environmental Significance (MNES) listed under the EPBC Act as a result of construction of the Proposal. It is expected that, based on the proposed avoidance, mitigation measures and offsets that the proposed clearing is unlikely to require referral to DCCEEW under the EPBC Act.

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<sup>2</sup> Potential nesting tree: Trees that have a suitable DBH to develop a nest hollow, but do not currently have hollows.

<sup>3</sup> Suitable nesting tree: Trees with suitable nesting hollows present, although no evidence of use.

## 7. References

- Beard, J S. 1979. *Vegetation Survey of Western Australia: the Vegetation of the Perth Area Western Australia, map and explanatory memoir 1:250,000 series*. Applecross: Vegmap Publications.
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- GHD. 2025c. *Milo Road Bridge Upgrade Archaeological and Ethnographic Site Identification Survey*. Unpublished report prepared for the Shire of Irwin.
- GHD. 2025d. *Milo Road Crossing Upgrade 85% Design Report*. Unpublished report prepared for the Shire of Irwin.
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# Appendix A

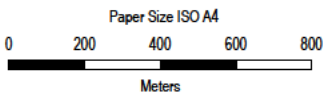
## Figures

- Figure 1*      *Locality*
- Figure 2*      *Project area, survey area, proposed clearing area*
- Figure 3*      *Vegetation types*
- Figure 4*      *Vegetation condition*
- Figure 5*      *Fauna habitat and native vegetation proposed to be cleared*
- Figure 6*      *Black Cockatoo breeding and roosting habitat desktop assessment*
- Figure 7*      *Hydrology*



**Legend**

- Watercourse
- Cadastre
- Project area



**Shire of Irwin**  
**Milo Road Crossing Upgrade**

Project No. **12650028**  
 Revision No. **0**  
 Date **27/03/2026**

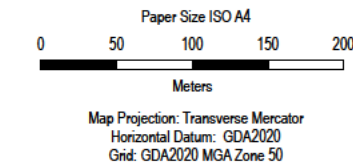
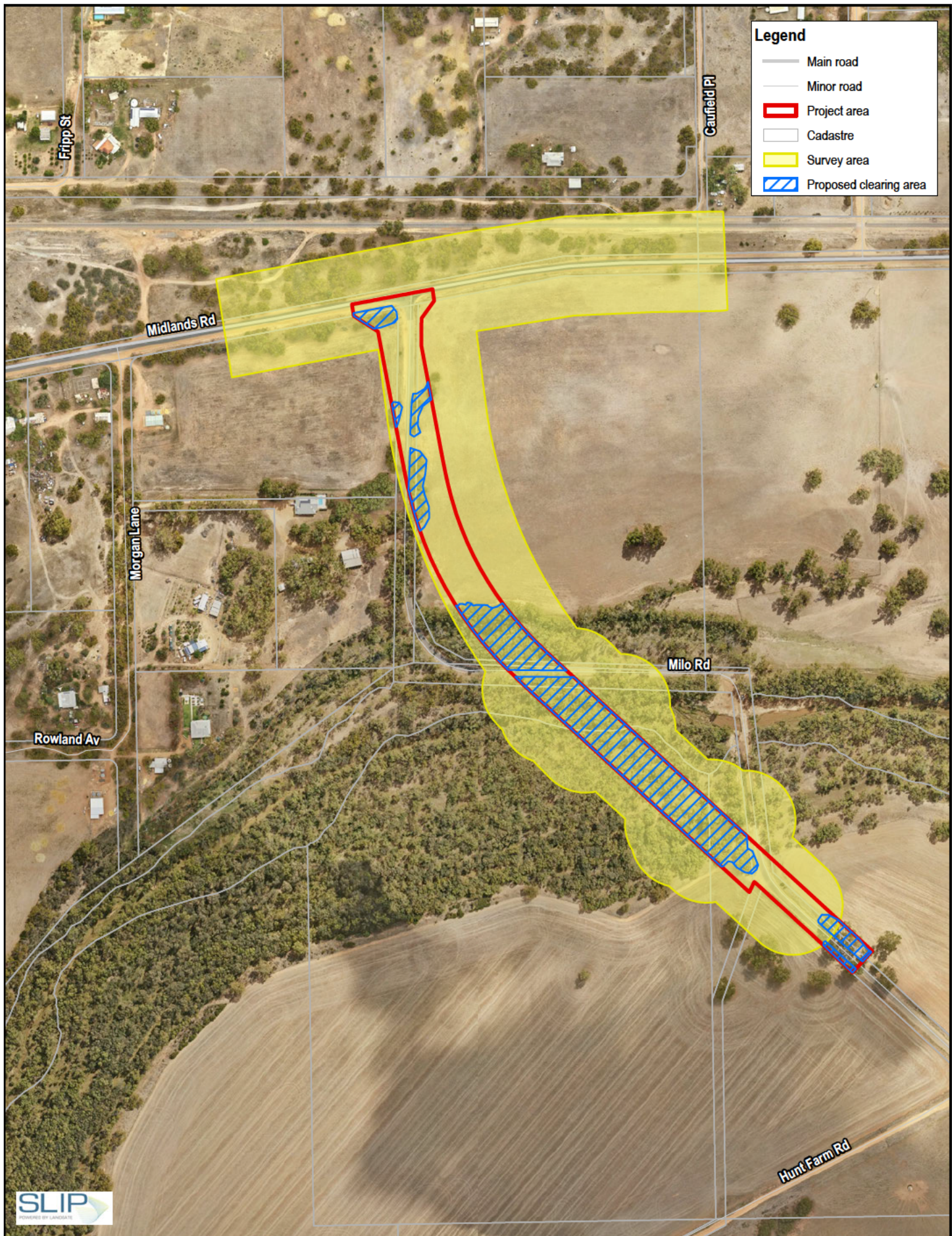
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**Locality**

**FIGURE 1**

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 Print date: 27 Mar 2026 - 09:16

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 Hybrid Reference Layer: Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community. Created by: closaria

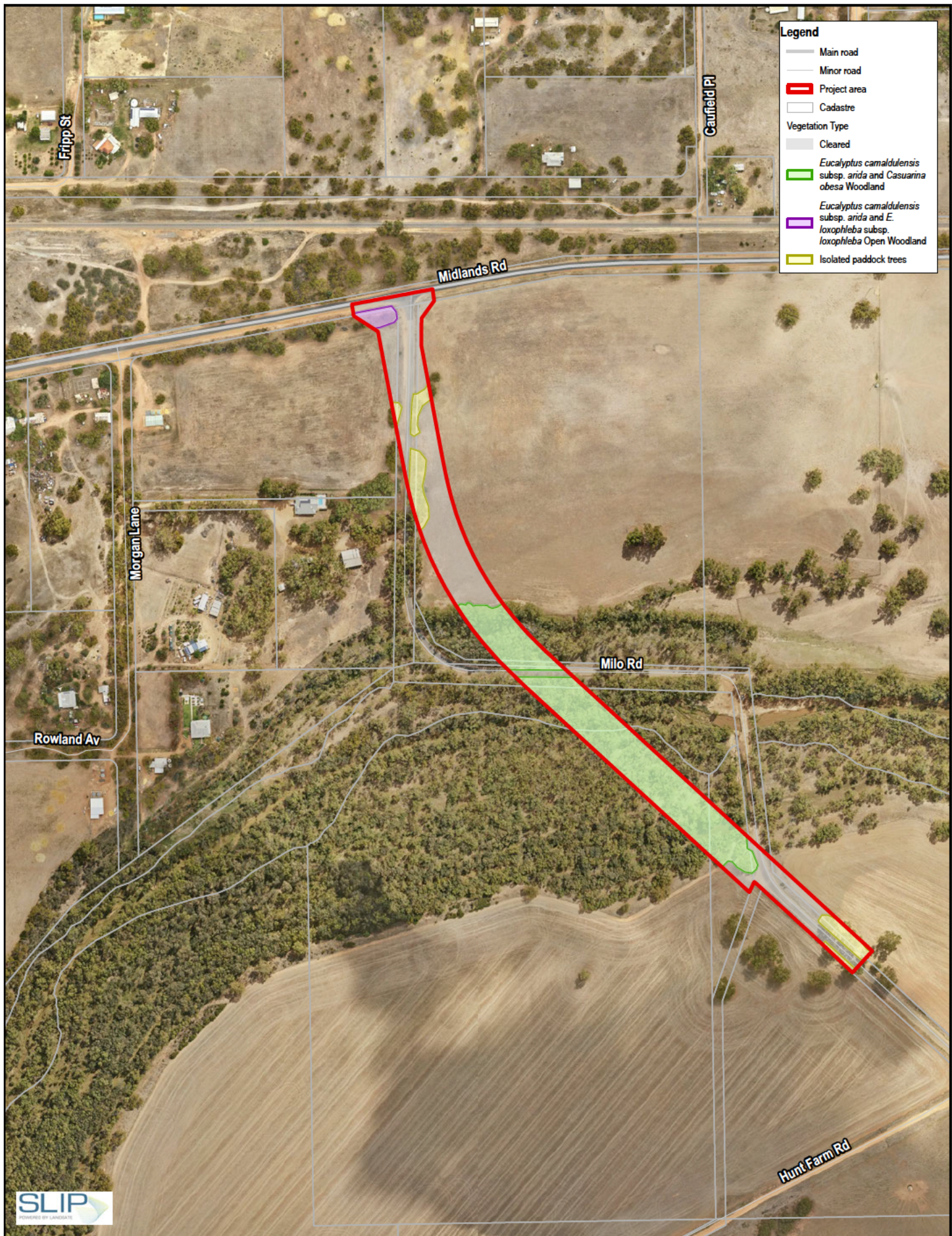


Shire of Irwin  
Milo Road Crossing Upgrade

Project No. 12650028  
Revision No. 0  
Date 27/03/2026

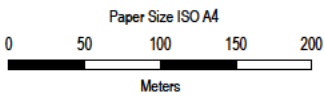
Proposal Area, Survey Area  
and Proposed Clearing Area

FIGURE 2



**Legend**

- Main road
- Minor road
- ▭ Project area
- ▭ Cadastre
- Vegetation Type**
- ▭ Cleared
- ▭ *Eucalyptus camaldulensis* subsp. *arida* and *Casuarina obesa* Woodland
- ▭ *Eucalyptus camaldulensis* subsp. *arida* and *E. loxophleba* subsp. *loxophleba* Open Woodland
- ▭ Isolated paddock trees



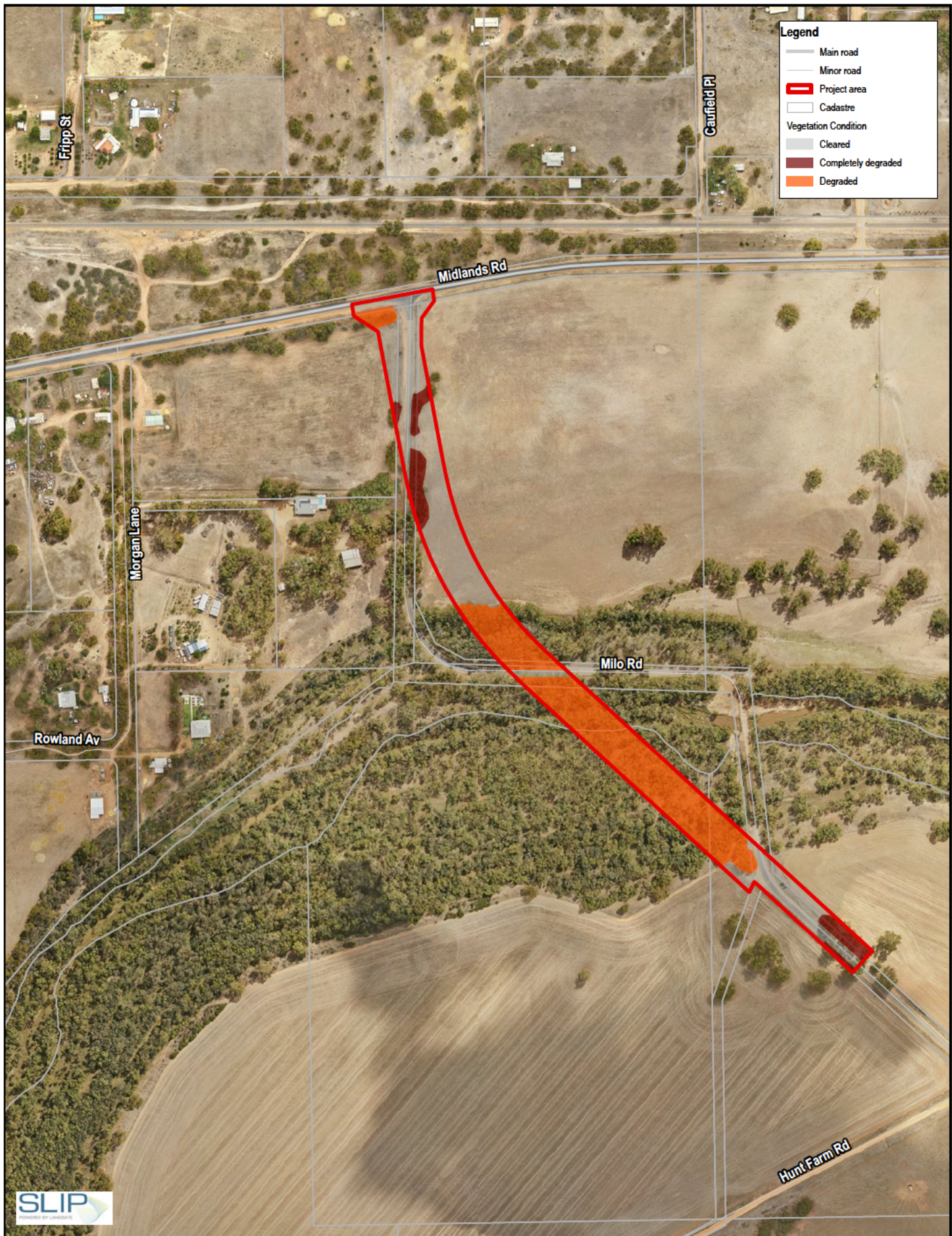
Shire of Irwin  
Milo Road Crossing Upgrade

Project No. 12650028  
Revision No. 0  
Date 27/03/2026

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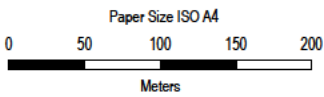
Vegetation Types

**FIGURE 3**



**Legend**

- Main road
- Minor road
- ▭ Project area
- ▭ Cadastre
- Vegetation Condition
- ▭ Cleared
- ▭ Completely degraded
- ▭ Degraded



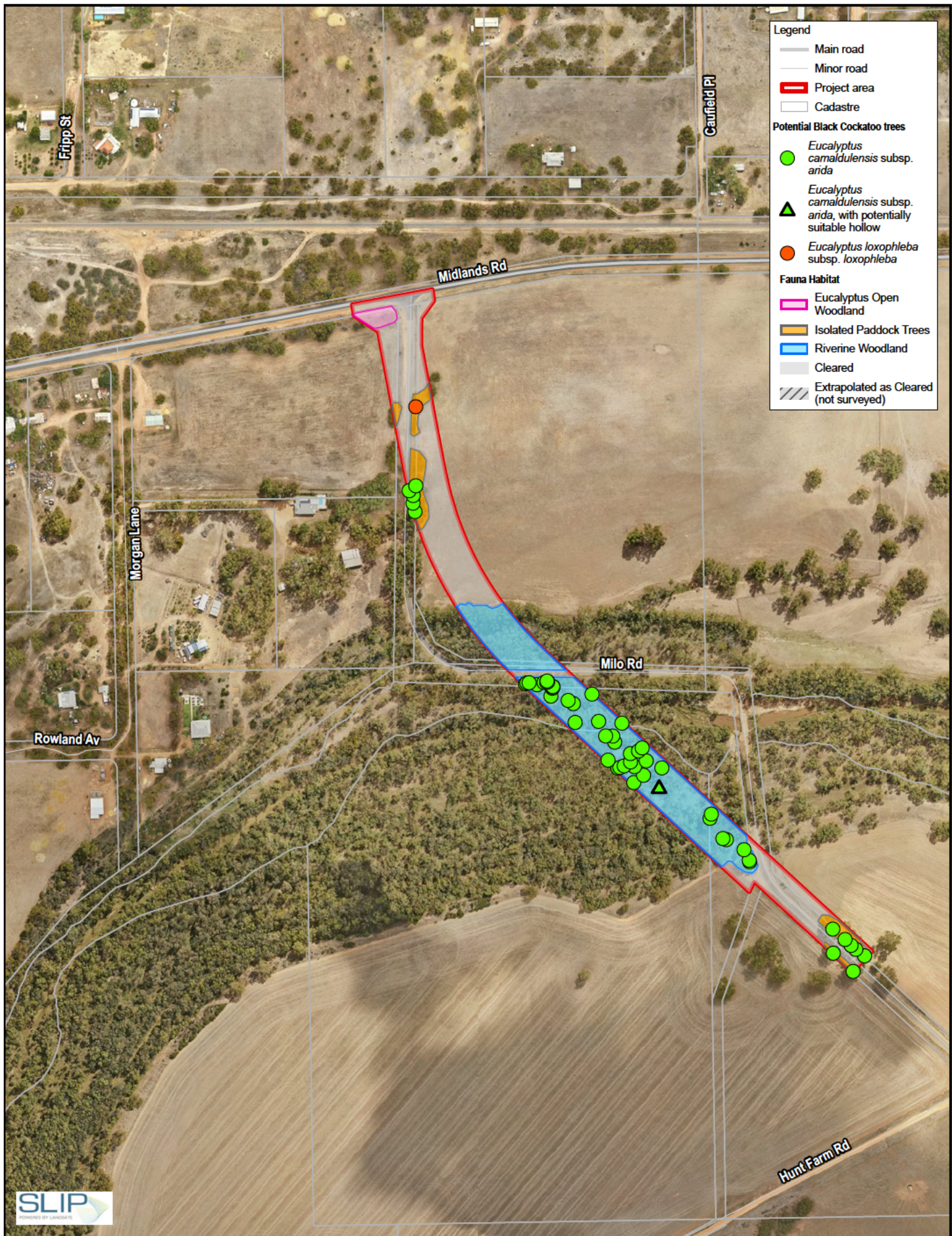
Shire of Irwin  
Milo Road Crossing Upgrade

Project No. 12650028  
Revision No. 0  
Date 27/03/2026

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Grid: GDA2020 MGA Zone 50

Vegetation Condition

**FIGURE 4**



**Legend**

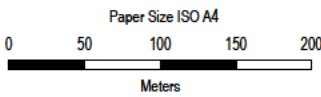
- Main road
- Minor road
- ▭ Project area
- ▭ Cadastre

**Potential Black Cockatoo trees**

- *Eucalyptus camaldulensis* subsp. *arida*
- ▲ *Eucalyptus camaldulensis* subsp. *arida*, with potentially suitable hollow
- *Eucalyptus loxophleba* subsp. *loxophleba*

**Fauna Habitat**

- ▭ Eucalyptus Open Woodland
- ▭ Isolated Paddock Trees
- ▭ Riverine Woodland
- ▭ Cleared
- ▨ Extrapolated as Cleared (not surveyed)



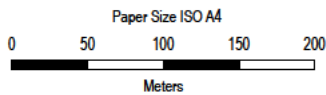
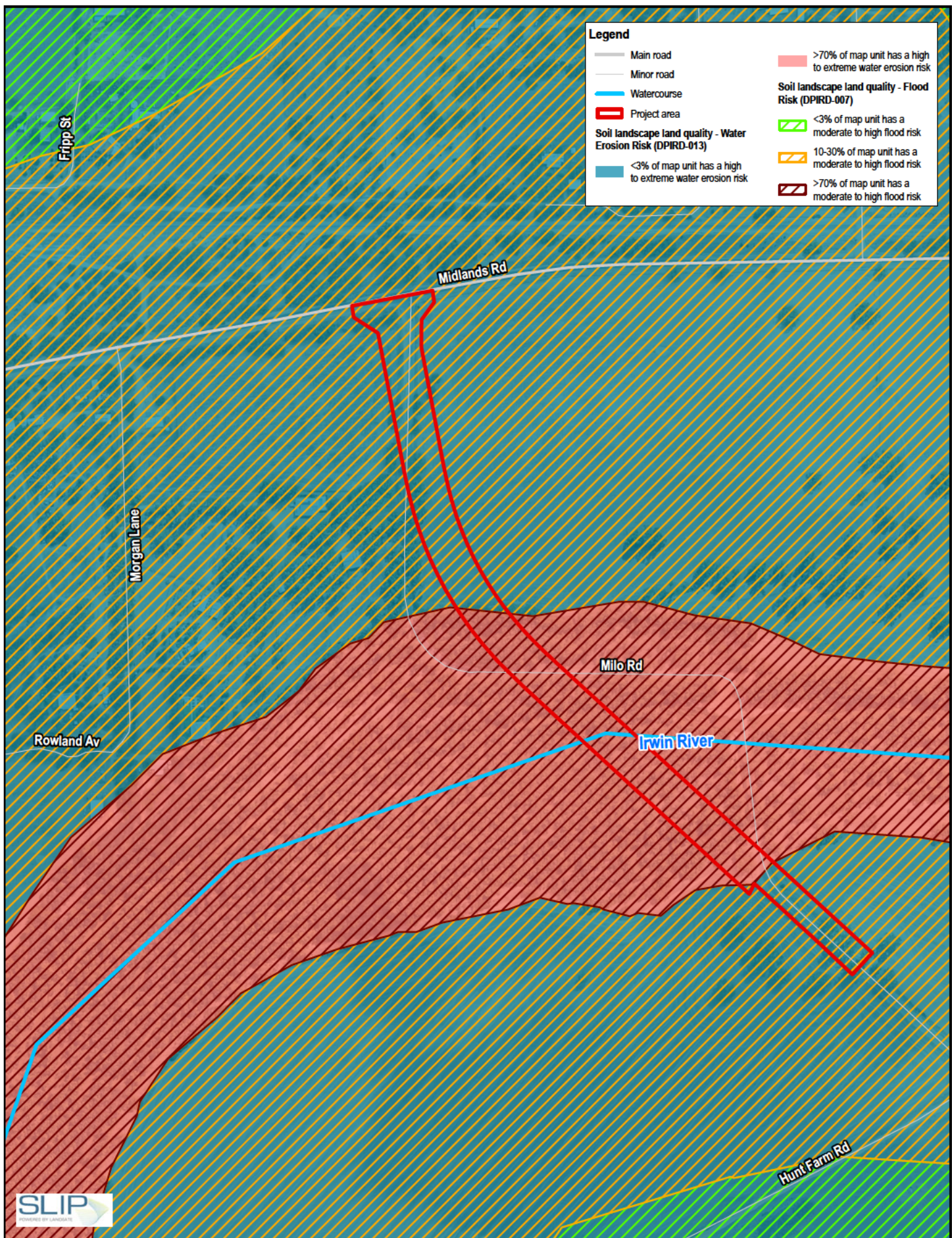
Shire of Irwin  
Milo Road Crossing Upgrade

Project No. 12650028  
Revision No. 0  
Date 27/03/2026

Map Projection: Transverse Mercator  
Horizontal Datum: GDA2020  
Grid: GDA2020 MGA Zone 50

Fauna Habitat

FIGURE 5



Shire of Irwin  
Milo Road Crossing Upgrade

Project No. 12650028  
Revision No.  
Date 27/03/2026

Map Projection: Transverse Mercator  
Horizontal Datum: GDA2020  
Grid: GDA2020 MGA Zone 50

Hydrology

FIGURE 6

# **Appendix B**

**Authorisation to clear**

12 March 2026

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

### **Request to construct and clear native vegetation for upgrades to Milo Road**

Dear [REDACTED]

During medium to heavy rain events the Milo Road Irwin River crossing is often inundated with water causing the crossing to be closed periodically. In very large events, water flows over both the concrete bridge culvert and concrete floodway. Additionally, the road often remains closed for a significant period post rainfall events due to debris and silt being deposited on the road. Closing this crossing is an inconvenience to road users requiring them to detour approximately 19 km east along the Midlands Road to access the end terminus of Milo Road.

The Shire's solution is for Milo Road to be re-aligned to accommodate Restricted Access Vehicles (RAV) Category 7 with new structures and floodway located within the new alignment. The upgrade of Milo Road and its associated structures will:

- Reduce average closure times of Milo Road, allowing road users to access Midlands Road without a significant detour.
- Reduce ongoing maintenance and repair costs due to the age of the existing structure and extent of sediment build up within the spans and existing floodway.
- Provide a road alignment compliant to the current standards to increase safety and useability.

### **Landowner consent to support project approvals**

The design for the upgrade has now progressed with a draft alignment determined (Figure 1). The Shire is finalising the design and the necessary statutory approvals for construction.

Ecological survey was conducted of the site and surrounds during spring 2025 and this has confirmed that approval from both the Western Australian and Commonwealth governments will be required to clear native vegetation. The intended clearing footprint on your property is shown in Figure 2, and amounts 0.02 ha of native vegetation. The intent is to revegetate ~2ha of land post clearing however additional habitat improvements may be required to adequately offset the impacts of clearing.

To support environmental approval applications, the Shire require written consent from all landowners. The Shire requested that landowners complete the attached consent forms as an acknowledgement and consent to the extent of land clearing proposed and for construction to occur as part of the upgrade to Milo Road.



SHIRE OF IRWIN  
DONGARA-PORT DENISON  
A BRILLIANT BLEND



Figure 1 Concept Design Milo Road Upgrade

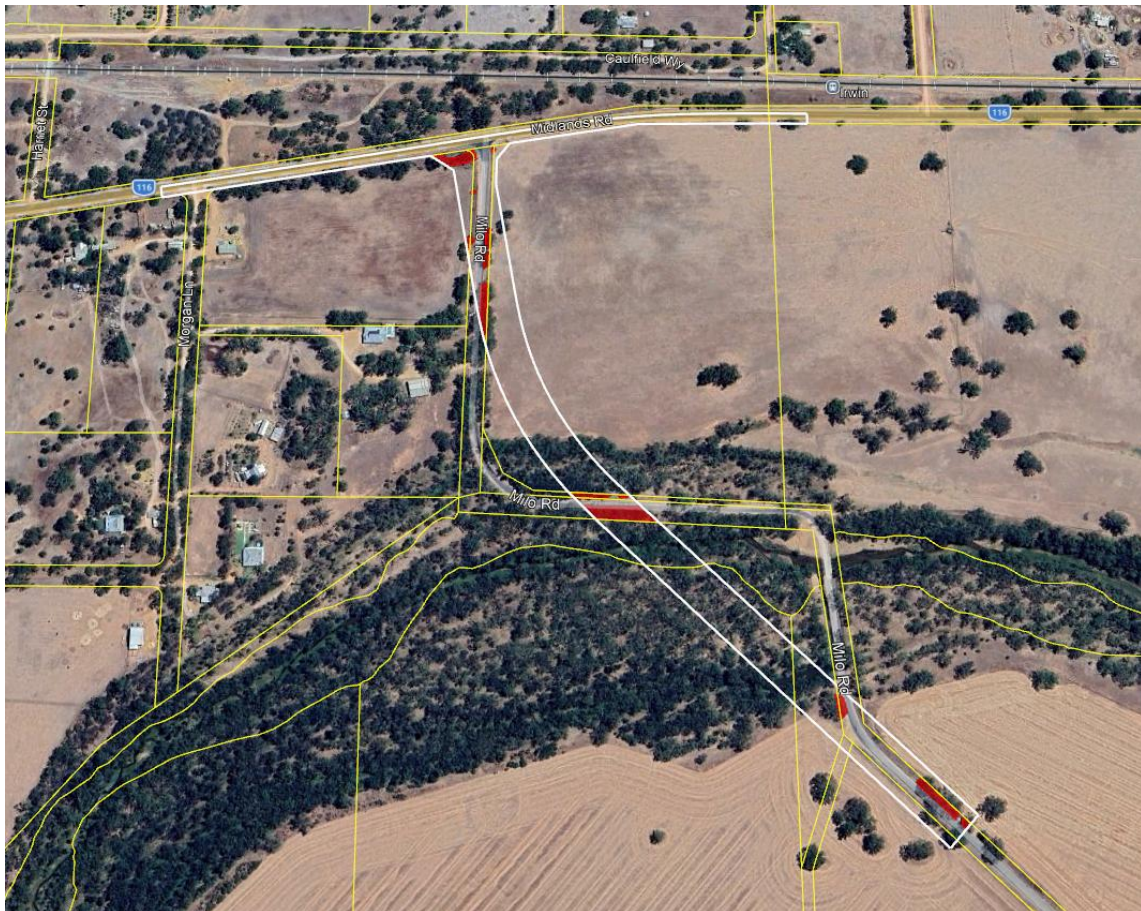


Figure 2 Clearing area on Milo Road Reserve, Lots 300 and 302 on Plan 48103, and Lot 21 On Plan 143782

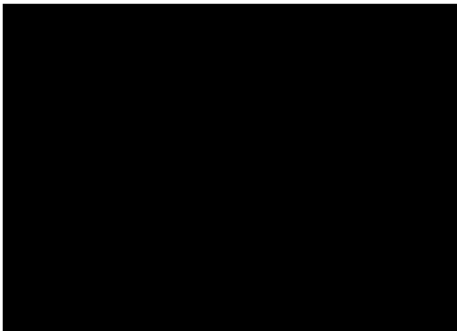


As part of the consent forms, comments and insights are requested and any feedback you may have about the project is valued by the Shire.

Should you have any questions regarding the above, please do not hesitate to contact the undersigned via [REDACTED].

Please return the signed document to my Executive Assistant via [REDACTED] once completed.

Yours sincerely



**Chief Executive Officer**

**Landowner Consent Form: Milo Road Upgrade**

**Project:** Request to construct and clear native vegetation for upgrades to Milo Road  
**Date:** [Insert Date]

**Landowner details**

Field	Response
Landowner Name	Shire of Irwin
Property Address	As follows
Lot number	Lot 302 and 300 on plan 048103, Lot 21 on plan 143782, Land ID's 3144506, 3144507 and 3144585
Contact Number	██████████
Email Address	██████████

**Consent statement**

I, the undersigned, confirm that I am the legal owner of the property described above. I hereby give my consent for:

- The clearing of native vegetation on my property as required for the Milo Road upgrade project.
- Construction activities to occur on my land as part of the project.

**I understand that:**

- The construction footprint on my property is limited to the clearing footprint shown in Figure 2.
- The construction footprint is based on draft design (15%) for the project design and may change.

**Additional Comments or insights (optional):**

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**SHIRE OF IRWIN**  
DONGARA-PORT DENISON  
A BRILLIANT BLEND

**Contact Preferences**

Preferred Method(s)	Contact	Please tick all that apply
<input type="checkbox"/> Phone		
<input type="checkbox"/> Email		
<input type="checkbox"/> Mail		
<input type="checkbox"/> I wish to be contacted for further consultation		
<input type="checkbox"/> Should the final design change the construction footprint on my property I wish to reassess my approval to clear and construct.		
<input type="checkbox"/> Other (please specify)		

Preferred Times	Contact	Please tick all that apply
<input type="checkbox"/> Morning (8am–12pm)		
<input type="checkbox"/> Afternoon (12pm–5pm)		
<input type="checkbox"/> Evening (5pm–8pm)		
<input type="checkbox"/> Other (please specify)		



**SHIRE OF IRWIN**  
DONGARA-PORT DENISON  
A BRILLIANT BLEND

**Signature**

Field	Response
Landowner/s Signature	
Date	12 March 2026

**For Office Use Only**

Field	Response
Received by	
Date Received	
Employee Name	
Employee Title	
Contact Phone	
Email	















[REDACTED]  
Our Ref: 22/350

Your Ref: 3.00018

25 November 2025

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
Dear [REDACTED],

**Letter of Authority – Proposed Clearing within Midlands Road SLK 253.30 - 253.45 (0.02 ha) – Milo Road Upgrade Project – Shire of Irwin**

Main Roads Western Australia (Main Roads) provides this letter of authority in relation to the Shire of Irwin's proposed works associated with the Milo Road Upgrade Project.

We understand that the Shire of Irwin intends to clear approximately 0.02 ha (204 m<sup>2</sup>) of native vegetation within the Midlands Road road reserve (SLK 253.30 - 253.45) to support the proposed realignment and upgraded crossing. This clearing footprint is identified in the Shire's correspondence and supporting figures.

Environmental surveys undertaken for the project indicate that both Western Australian and Commonwealth environmental approvals will be required to undertake the proposed clearing and associated works. The Shire of Irwin is responsible for determining the applicable approval pathways and ensuring compliance with all legislative requirements.

On this basis, Main Roads grants its consent for the Shire of Irwin to seek all necessary State and Commonwealth environmental approvals for the proposed clearing and works within the Midlands Road road reserve.

Please note the following:

1. This consent is provided solely to support the Shire of Irwin's applications for environmental approvals required under State and Commonwealth legislation for the proposed clearing and associated works.
2. This letter does not constitute approval to undertake construction works within the road reserve. All construction activities remain subject to:
  - Main Roads' separate approvals processes (including, but not limited to, design acceptance, traffic management approvals and any relevant permits/licences); and
  - Compliance with any conditions or requirements imposed by State or Commonwealth regulatory authorities.
3. The Shire of Irwin and its contractors are responsible for:
  - Identifying all applicable environmental approvals;
  - Lodging complete and accurate applications; and
  - Ensuring all works are undertaken in accordance with the relevant legislation, standards, guidelines and approval conditions.



We acknowledge receipt of the Shire's correspondence and supporting documentation and will continue to liaise with you regarding any further comments or requirements from Main Roads' internal stakeholders.

If you have any questions regarding this letter, please contact

[REDACTED]

Yours sincerely



**Mid West – Gascoyne Region**



**Landowner Consent Form: Milo Road Upgrade**

**Project:** Request to construct and clear native vegetation for upgrades to Milo Road  
**Date:** 30 March 2026

**Landowner details**

Field	Response
Landowner Name	Dhungarra Pty Ltd
Property Address	Milo Rd, Irwin
Lot number	Lot 100 on Deposited plan 48103 Lot 556 on Deposited plan 231555
Contact Number	
Email Address	

**Consent statement**

I, the undersigned, confirm that I am the legal owner of the property described above. I hereby give my consent for:

- The clearing of native vegetation on my property as required for the Milo Road upgrade project.
- Construction activities to occur on my land as part of the project.

**I understand that:**

- The construction footprint on my property is limited to the clearing footprint shown in Figure 2.
- The construction footprint is based on draft design (15%) for the project design and may change.

**Additional Comments or insights (optional):**

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SHIRE OF IRWIN  
DONGARA-PORT DENISON  
A BRILLIANT BLEND

**Contact Preferences**

Preferred Contact Method(s)	Please tick all that apply
<input type="checkbox"/> Phone	
<input checked="" type="checkbox"/> Email	
<input type="checkbox"/> Mail	
<input type="checkbox"/> I wish to be contacted for further consultation	
<input type="checkbox"/> Should the final design change the construction footprint on my property I wish to reassess my approval to clear and construct.	Notify Please
<input type="checkbox"/> Other (please specify)	

Preferred Contact Times	Please tick all that apply
<input type="checkbox"/> Morning (8am–12pm)	
<input type="checkbox"/> Afternoon (12pm–5pm)	
<input type="checkbox"/> Evening (5pm–8pm)	
<input type="checkbox"/> Other (please specify)	

Email preference whenever



**SHIRE OF IRWIN**  
DONGARA-PORT DENISON  
A BRILLIANT BLEND

**Signature**

Field	Response
Landowner/s Signature	[Redacted]
Date	

**For Office Use Only**

Field	Response
Received by	
Date Received	
Employee Name	
Employee Title	
Contact Phone	
Email	



**Landowner Consent Form: Milo Road Upgrade**

Project: Request to construct and clear native vegetation for upgrades to Milo Road

**Landowner details**

Field	Response
Landowner Name	MEPAU (WA) Investment Company Pty Ltd
Property Address	N/A - No registered street address
Lot number	Lot 205 on Deposited Plan 231555
Contact Number	[REDACTED]
Email Address	[REDACTED]

**Consent statement**

I, the undersigned, confirm that I am the legal owner of the property described above. I hereby give my consent for:

- The clearing of native vegetation on my property as required for the Milo Road upgrade project.
- Construction activities to occur on my land as part of the project.

I understand that:

- The construction footprint on my property is limited to the clearing footprint shown in Figure 2.
- The construction footprint is based on draft design (15%) for the project design and may change.

Additional Comments or insights (optional):


### Contact Preferences

Preferred Contact Method(s)	Please tick all that apply
<input type="checkbox"/> Phone	
<input checked="" type="checkbox"/> Email	
<input type="checkbox"/> Mail	
<input type="checkbox"/> I wish to be contacted for further consultation	
<input type="checkbox"/> Other (please specify)	

Preferred Contact Times	Please tick all that apply
<input checked="" type="checkbox"/> Morning (8am–12pm)	
<input checked="" type="checkbox"/> Afternoon (12pm–5pm)	
<input type="checkbox"/> Evening (5pm–8pm)	
<input type="checkbox"/> Other (please specify)	

### Signature

Landowner/s Signature	
Date	

# **Appendix C**

**Milo Crossing Biological Assessment  
(GHD 2025a)**



# Milo Crossing

## Biological Survey

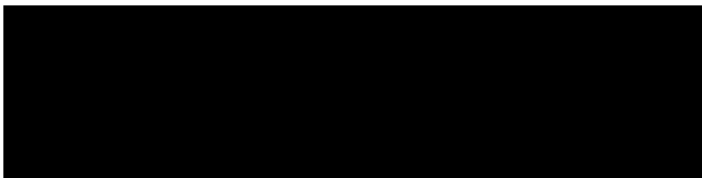
Shire of Irwin

05 December 2025

→ **The Power of Commitment**



<b>Project name</b>		Shire of Irwin_Milo Crossing					
<b>Document title</b>		Milo Crossing   Biological Survey					
<b>Project number</b>		12650028					
<b>File name</b>		12650028-REP_Milo Crossing Biological Survey.docx					
Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date



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# Executive summary

GHD Pty Ltd (GHD) was commissioned by the Shire of Irwin to complete an assessment of flora, vegetation and fauna values of the construction footprint (survey area) for the proposed replacement of an existing bridge at Milo Crossing (the Project). The survey area is located approximately 15 kilometres (km) north-east of the Dongara townsite. The Detailed flora and vegetation survey, Basic fauna survey and Targeted Black Cockatoo habitat assessments were completed in 2025 to inform the environmental assessment and approvals process for the Project.

This report is subject to, and must be read in conjunction with, the limitations set out in section 1.6 and the assumptions and qualifications contained throughout the Report.

## Flora and vegetation

Two remnant vegetation types were mapped within the survey area, as well as isolated paddock trees and cleared areas (paddocks and roads). The two remnant vegetation types are described as *Eucalyptus camaldulensis* subsp. *arida* and *Casuarina obesa* Woodland associated with the Irwin River and *Eucalyptus camaldulensis* subsp. *arida* and *Eucalyptus loxophleba* subsp. *loxophleba* Open Woodland along the road reserve.

Much of the survey area has been extensively cleared for roads and agriculture with isolated native trees the remaining native vegetation. Remnant vegetation within the survey area is highly modified and lacks an intact mid and ground cover of native species having been replaced by introduced (weed) species. The native vegetation in the survey area ranged from Degraded (40.70%) to Completely Degraded (3.76%) condition. The remainder was mapped as Cleared (55.54%).

No Threatened Ecological Communities (TECs) listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or *Biodiversity Conservation Act 2016* (BC Act) or Priority Ecological Communities (PECs) listed by Department of Biodiversity Conservation and Attractions (DBCA) were identified during the field survey.

A total of 38 native flora taxa (including species, subspecies, varieties, forms and specimens not identified to species level) from 20 families and 31 genera were recorded. Twenty-two of the flora recorded were native species while 17 were introduced (weed) species. None of the introduced species recorded are listed as a Declared Pest under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) or are a Weed of National Significance (WoNS).

No Threatened flora listed under the EPBC Act and/or BC Act or Priority flora listed by the DBCA were recorded. One Threatened flora species *Wurmbea tubulosa* was previously recorded in the survey area in the roadside vegetation along Midlands Road, however targeted searches undertaken during this current survey failed to record this species.

## Fauna

Four fauna habitat types were identified based on predominant landforms, soil and vegetation structure in the area. These are: Riverine Woodland, *Eucalyptus* Open Woodland, Isolated Paddock Trees, and Cleared.

The survey recorded a total of 31 fauna species, including 23 birds, four mammals, three amphibians and one reptile. Of these, three mammal species are introduced (Dog (*Canis familiaris*), Red Fox (*Vulpes vulpes*) and Cat (*Felis catus*)).

No threatened fauna listed under the EPBC Act and/or BC Act or Priority fauna listed by the DBCA were recorded during the survey. The Great Egret (*Ardea alba*), which is listed as a Marine species under the EPBC Act, was observed foraging in the water in the Riverine Woodland habitat during the survey.

Of the 48 significant fauna species identified in the desktop assessment, one species is considered likely to occur, Carnaby's Cockatoo (*Zanda latirostris*) (Endangered) and one species is considered possible to occur, the Peregrine Falcon (*Falco peregrinus*) (Other specially protected).

## **Black cockatoo habitat assessment**

The survey area is located within the modelled distribution (and northern extent of its breeding range) of the Carnaby's Cockatoo (DAWE 2022). The closest confirmed breeding area is located more than 50 km south-east of the survey area and the closest confirmed roost site is more than 100 km south of the survey area (Government of Western Australia 2025).

No foraging, roosting or breeding evidence of the Carnaby's cockatoo was observed during the survey. Suitable foraging habitat for Carnaby's Cockatoo is sparse within the survey area and comprises of scattered/ isolated trees and shrubs of *Eucalyptus loxophleba* (York Gum), *Hakea preissii* and *Acacia saligna*. Based on the foraging quality scoring tool (DAWE 2022) the survey area habitats are considered to have a foraging score of 5 for the Carnaby's Cockatoo.

River Red Gums are listed as a less important food source and low priority for roosting and breeding by Carnaby's Cockatoo. There is also some anecdotal evidence of this cockatoo species using River Red Gum for breeding and roosting on the northern edge of the Carnaby's Cockatoo extent. Using the precautionary principle, under the *Environmental Protection Act 1986* (EP Act), River Red Gum trees have been recorded within the survey area as potential habitat trees, noting that this species is naturalised in the region.

A total of 156 (144 River Red Gum and 12 York Gum) potential habitat trees (DBH >500 mm) were recorded in the survey area. Of the potential habitat trees recorded, 14 trees had hollows, four of which contained suitable nest hollows for black cockatoos.

The woodland habitats containing York Gum and River Red Gum provide suitable roosting habitat for Carnaby's Cockatoo. The trees are large and mature and provide connectivity to nearby food resources (however fragmented). The Irwin River is moderately saline (Xanthe Mayer, 2005), and there were no farm dams (DPIRD-083) or other freshwater sources identified within 2 km of the survey area.

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# 1. Introduction

## 1.1 Project background

The Shire of Irwin (the Shire) is planning to replace an existing bridge at Milo Crossing, located approximately 15 km north-east of the Dongara townsite (the Project). GHD Pty Ltd (GHD) was engaged by the Shire to undertake a biological survey of the construction footprint to support the native vegetation clearing process for the bridge replacement.

## 1.2 Purpose of this report

GHD was commissioned by the Shire to assess the biological values of the construction footprint. The outcome of the survey and information supplied in this biological survey report will inform the environmental assessment and approvals process and refinement of the proposed design. The results of the biological survey may also assist in the preparation of other environmental approvals documents.

## 1.3 Location

### 1.3.1 Survey area

The survey area is located at the Milo Road crossing of the Irwin River approximately 16 km east of Dongara in the mid-west region of Western Australia. The total area of the survey area is approximately 16.71 ha. The survey area encompasses a portion of Midlands Road, Milo Road, farmland and remnant vegetation.

### 1.3.2 Study area

The study area was defined using a 20 km buffer around the survey area. The study area was used for the desktop-based searches of the assessment.

## 1.4 Scope of works

The scope of works was to undertake an assessment of the flora and fauna values of the survey area. The following actions were completed to fulfill the scope:

- A desktop assessment including literature review and database interrogation to identify if the project has the potential to contain Threatened/Priority listed flora, Threatened Ecological Communities (TECs), Priority Ecological Communities (PECs) and fauna habitat of significance.
- A Detailed Flora and Vegetation survey, Targeted Flora Survey, Basic Fauna Survey and Black Cockatoo Habitat Assessment of the survey area.
- Preparation of this biological survey report that documents the methods and results of the desktop assessment and field surveys.
- Provision of all spatial data collected during the survey in electronic format consistent with Index of Biodiversity Surveys for Assessment (IBSA) data standards.

## 1.5 Relevant legislation, conservation codes and background information

In Western Australia (WA) significant communities, and flora and fauna are protected under both Federal and State Government legislation, including the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), *Environmental Protection Act 1986* (EP Act), *Biodiversity Conservation Act 2016* (BC Act) and the *Biosecurity and Agriculture Management Act 2007* (BAM Act).

In addition, regulatory bodies also provide a range of guidance and information on expected standards and protocols for environmental surveys. An overview of key legislation and guidelines, conservation codes and background information relevant to this Project are provided in Appendix B.

## 1.6 Limitations and assumptions

*This report: has been prepared by GHD for Shire of Irwin and may only be used and relied on by Shire of Irwin for the purpose agreed between GHD and Shire of Irwin as set out in section 1.2 of this report.*

*GHD otherwise disclaims responsibility to any person other than Shire of Irwin arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.*

*The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.*

*The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.*

*GHD has prepared this report on the basis of information provided by Western Power and others who provided information to GHD (including Government authorities), which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.*

*The opinions, conclusions and any recommendations in this report are based on information obtained from, and testing undertaken at or in connection with, specific sample points. Site conditions at other parts of the site may be different from the site conditions found at the specific sample points.*

*Site conditions may change after the date of this report. GHD does not accept responsibility arising from, or in connection with, any change to the site conditions. GHD is also not responsible for updating this report if the site conditions change. This report has assessed desktop environmental aspects and biological factors in the field for the survey area. Should these areas change or be refined, further assessment may be required.*

*The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.*

### **Accessibility of documents**

*If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.*

## 2. Methodology

### 2.1 Desktop assessment

A desktop assessment was undertaken prior to the field survey to identify relevant environmental information pertaining to the study area and to assist with the survey methodology. Geographic information system (GIS) spatial files, largely sourced from the Government of WA (GoWA), and publicly available government managed databases were reviewed during the desktop assessment. The information sources utilised during this assessment are presented in Table 1. The identified environmental constraints are visually presented in Figure 2, Appendix A. A copy of relevant database search results is provided in Appendix C.

Table 1 Desktop information sources

Aspect	Information source
Climate	Bureau of Meteorology (BoM) Climate Data Online (BoM, 2025)
Land systems, Geology, landforms and soil	Soil Landscape Mapping – Systems (DPIRD-064) (DPIRD, 2022)
Environmentally Sensitive Areas (ESAs)	Clearing Regulations - Environmentally Sensitive Areas (DWER-046) (DWER, 2020)
Conservation estates and reserves	Department of Biodiversity Conservation and Attractions (DBCA) – Legislated Lands and Water (DBCA-011) (DBCA, 2025a)
Hydrology	Public Drinking Water Source Areas (DWER-033) (DWER, 2018a) Rights in Water and Irrigation Act 1914 (RIWI Act), Surface Water Areas and Irrigation Districts (DWER-037) (DWER, 2018b) RIWI Act, Groundwater Areas (DWER-034) (DWER, 2018c) RIWI Act, Rivers (DWER-036) (DWER, 2018d) Waterways Conservation Act Management Areas (DWER-072) (DWER, 2018e) Ramsar Sites (DBCA-010) (DBCA, 2025b) Directory of Important Wetlands in Australia - Western Australia (DBCA-045) (DBCA, 2025c)
Fauna Diversity and Significant fauna Vegetation, flora and fauna	DCCEEW Protected Matters Search Tool (PMST) database to identify fauna and flora species listed under the EPBC Act potentially occurring within the study area (DCCEEW, 2025) Pre-European Vegetation (DPIRD-006) (DPIRD, 2019) Native Vegetation Extent (DPIRD-005) (DPIRD, 2017) Statewide Vegetation Statistics (DBCA, 2019a) Threatened and Priority Ecological Communities (DBCA, 2025d) Threatened and Priority Flora database (DBCA, 2025e) Threatened and Priority Fauna database (DBCA, 2025f) Dandjoo (DBCA, 2025g) DBCA Black Cockatoo Roosting Sites (buffered) (DBCA, 2018) and Black Cockatoo Breeding Sites (buffered) (DBCA, 2019b) Farm dams of Western Australia (DPIRD-083)

## 2.2 Field survey

### 2.2.1 Survey timing and personnel

GHD senior ecologist [REDACTED] and environmental scientist [REDACTED] completed a Detailed and Targeted vegetation and flora survey and a Basic fauna survey on the 18 August 2025.

### 2.2.2 Vegetation and flora

The survey methodology and data collection by GHD was consistent with relevant aspects of:

- Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016).
- Methods for survey and identification of Western Australian threatened ecological communities (DBCWA 2023).

#### Data collection and storage

The survey methods involved a combination of relevés, walking transects and field notes. Sampling was undertaken from two relevés, photographic points and opportunistic collections. No quadrats were undertaken due to the degraded condition of the vegetation and lack of a native understorey, therefore relevés using a search area of approximately 100 m<sup>2</sup> were conducted to assist with mapping. The survey effort (track log and sample sites) is presented in Figure 3, Appendix A.

Field data at each relevé was recorded on a pro-forma data sheet and included the parameters detailed in Table 2.

Table 2 Data collected during the field survey

Aspect	Measurement
Collection attributes	Site code, personnel/recorder, date, photograph of the site
Physical features	Landform, slope, aspect, soil attributes, ground surface cover
Location	Coordinates recorded in Geocentric Datum of Australia (GDA) 20 datum using a GPS enabled tablet with approximately 3-5 m accuracy.
Vegetation condition	Broad-scale vegetation condition using the condition rating scale adapted by EPA (2016) for the region. The vegetation condition was assessed and mapped in accordance with the vegetation condition rating scale for the South West and adapted by EPA (2016). The scale recognises the intactness of vegetation and consists of six rating levels. The vegetation condition rating scale is outlined in Appendix B. Areas devoid of vegetation were mapped
Disturbances	Level and nature of disturbances (e.g. weed presence, fire and time since last fire, impacts from grazing, infrastructure development activities).
Flora	List of dominant flora from each structural layer, including stratum, average height and cover using National Vegetation Information System (NVIS) (NVIS Technical Working Group, 2017).
Vegetation	Vegetation types are consistent with NVIS Level V (Association) and are grouped within NVIS Level III (Broad Floristic Formation). At Level V up to three taxa per stratum are used to describe the association (NVIS 2017).

A flora inventory was compiled from taxa listed in relevés and from opportunistic floristic records throughout the survey area. The data are provided in Appendix D.

Flora field data collection for the survey was undertaken using Stonex S580+ tablets with S580 DGPS units to achieve centimetre-level accuracy. Fauna field data was captured using Global Positioning System (GPS) enabled Samsung tablets using electronic forms in Collector. Data was synced to the cloud at the conclusion of each field day. GPS devices were used to capture survey effort (track logs) displayed in Figure 3, Appendix A. Field photographs were stored and where applicable have been provided as part of the deliverables.

#### Vegetation types

Vegetation types were identified and boundaries delineated using a combination of aerial photography, topographical features and field data/observations. Vegetation types were described based on structure, dominant taxa and cover characteristics as defined by relevé data, Black Cockatoo tree point data and field observations.

Vegetation type descriptions followed NVIS and consistent with NVIS level V (Association). At Level V up to three taxa per stratum are used to describe the association (NVIS Technical Working Group, 2017)

### Vegetation condition

The vegetation condition was assessed and mapped in accordance with the vegetation condition rating scale for the South West and Interzone Botanical Provinces (devised by (Keighery, 1994) and adapted by EPA (2016). The scale recognises the intactness of vegetation and consists of six rating levels. The vegetation condition rating scale is outlined in Appendix B.

### Targeted flora searches

Habitats and vegetation types in the survey area considered to have the potential to support significant flora (based on previously recorded significant flora records and associated habitat preference information, and the results of the pre-survey likelihood assessment) were targeted in the field via meandering transects to record the presence or absence of significant flora.

### Taxonomy and nomenclature

Plant specimens not identified in the field were identified and verified at the WA Herbarium (WA Herb) by Erin Lynch. The assigned nomenclature is consistent with the current listing of scientific names recognised by the WA Herb and was used for the species list and associated species information collected.

## 2.2.3 Fauna assessment

A Basic fauna survey and Targeted Black Cockatoo assessment was undertaken concurrently with the flora and vegetation survey in accordance with, where relevant:

- Technical Guidance -Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA 2020)
- Referral guidelines for 3 WA threatened black cockatoo species: Carnaby’s Cockatoo (*Zanda latirostris*, Baudin’s Cockatoo (*Zanda baudinii*), Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) (Department of Climate Change, Energy, the Environment and Water (DAWE, 2022)

In the context of a Basic fauna survey, the guidance statement advises field observers to describe the fauna habitats of the survey area, which gives a comprehensive list of fauna that can reasonably be expected to occur. Therefore, the aim of the fauna component of the survey included descriptions of fauna habitats in the survey area and a compilation of fauna species recorded opportunistically as the survey area was traversed. Significant fauna considered likely to occur were targeted during the traverses undertaken, through targeting and recording any secondary signs of fauna (mounds, tracks, feeding evidence) or visible/audible encounters of the target species in suitable habitat.

### Data collection and fauna identification

Field data collection for the fauna survey was undertaken using GPS enabled tablets using electronic forms in Collector and tailored to IBSA spatial data requirements. Data was synced to the cloud at the conclusion of each field day. Field photographs were stored and where applicable have been provided as part of the deliverables.

Identification of fauna species was made in the field using available field guides and electronic guides (Table 3). Where identification was not possible, photographs of specimens were collected to be later identified.

Table 3 Fauna references

Fauna group	Field guide
Mammals	Menkhorst & Knight (2010), Van Dyck & Strahan (2008)
Bats	Churchill (2008), Menkhorst and Knight (2010)
Birds	Morcombe (2004)
Reptiles	Wilson & Swan (2017), Storr <i>et al.</i> (1999), Storr <i>et al.</i> (2002)
Amphibians	Tyler & Doughty (2009)

Nomenclature used in this report follows that used by the WA Museum Fauna Species Checklist (2024). This nomenclature is deemed the most up-to-date species information for WA fauna.

## Habitat assessment

A fauna habitat assessment was undertaken to document the type, value and extent of habitats within the survey area. Specifically, the assessment included:

- Habitat structure (e.g. vegetation type, presence/absence of structural layers such as ground cover and mid storey)
- Presence/absence of refuge including density of ground covers, fallen timber (coarse woody debris), hollow-bearing trees and stags and rocks/boulder piles, and the type and extent of each refuge
- Presence/absence of waterways
- Location of the habitat within the survey area in comparison to the habitat within the surrounding landscape
- Habitat connectivity and identification of wildlife corridors within and immediately adjacent to the survey area
- Current land use and disturbance history
- Evaluation of key habitat features, and types identified during the desktop assessment relevant to fauna of conservation significance
- Evaluation of the likelihood of occurrence of significant fauna within the habitat (based on presence of suitable habitat)
- A representative photograph of each habitat type.

## Opportunistic fauna searches

Opportunistic fauna searches were undertaken across the survey area, involving:

- Searching the survey area for tracks, scats, bones, diggings and feeding areas for both native and feral species
- Searching through microhabitats including turning over logs or rocks, turning over leaf litter and examining tree hollows and logs
- Visual and aural surveys, which accounted for many bird species potentially utilising the survey area
- Recording GPS locations of any significant fauna species observed.

## Targeted Black Cockatoo habitat assessment

A Targeted Black Cockatoo habitat assessment was completed 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).

The assessment involved visual and aural assessment of the survey area, identifying breeding habitat (presence/absence of actual and potential breeding trees), foraging habitat, roosting areas, current species' activity, and any other signs of use by Black Cockatoos.

## Foraging habitat

Foraging habitat is defined by DAWE (2022) as 'Plant species known to support foraging within the range of cockatoo species'. Foraging habitat was assessed to quantify the value of each habitat type within the survey area. The flora species were identified within the survey area from on-site habitat assessment and vegetation and flora survey. Plants were classified as foraging species based on established cockatoo food plant species in literature (Valentine & Stock, 2008). As part of the foraging assessment, the ground below known food plants and trees was searched for evidence of Black Cockatoo foraging residue. Opportunistic sightings of foraging cockatoos were also recorded as part of the assessment.

Information gathered on foraging habitat in the field was then used in the scoring tool in Table A1 of the Referral Guidelines (DAWE, 2022). A foraging score was calculated (out of 10) for the quality of the habitat. The following information was required to undertake the foraging habitat assessment using the scoring tool:

- Known usage (evidence of foraging or observations of foraging)
- Proximity to roosting or nesting areas – DBCA spatial data (GoWA, 2024)
- Amount of foraging habitat within the local region
- Numbers of birds known to forage in the area

- Vegetation type, especially high priority food species such as *Banksia*, *Eucalyptus*, *Corymbia* and *Hakea*.

### **Breeding habitat**

Breeding habitat was assessed via a ground-based assessment measuring trees in the field with a DBH measuring tape and using binoculars to identify suitable and known hollows. Descriptions used within this report are consistent with the Referral Guidelines (DAWE, 2022) and for breeding habitat include:

- Known nesting trees: Trees (live or dead but still standing) which contains a hollow where black cockatoo breeding has been recorded or which demonstrates evidence of breeding (i.e. showing evidence of use through scratches, chew marks or feathers)
- Suitable nesting trees: Trees with suitable nesting hollows present, although no evidence of use
- Suitable nest hollow: Any hollow with dimensions suitable for use for nesting by black cockatoos. Suitable nest hollows are only found in live trees with a DBH of at least 500 mm. Usually this will be a natural hollow, but artificial hollows may also be suitable in some circumstances (for example, where the artificial hollow has been specifically designed for use by black cockatoos)
- Potential nesting trees: Trees that have a suitable DBH to develop a nest hollow, but do not currently have hollows. Trees suitable to develop a nest hollow in the future are 300-500 mm DBH (based on tree species).

### **Roosting habitat**

Based on the referral guidelines, night roosts for Black Cockatoo species tend to be the tallest trees of an area, and usually close to a source of drinking water and in proximity to quality foraging habitat (DAWE, 2022). The survey area was visually surveyed for trees or stands of trees that matched these descriptions, and for any evidence of recent use as a roost site (feathers and droppings).

## **2.3 Survey limitations**

### **2.3.1 Desktop limitations**

The EPBC Act PMST is based on bioclimatic modelling for the potential presence of species. As such, this does not represent actual records of the species within the area. The records from the DBCA searches provide more accurate information for the general area and local occurrence. However, some collection, cannot be dated and often misrepresent the current range of significant fauna species.

### **2.3.2 Field survey limitations**

The EPA (2016) states flora and fauna survey reports for environmental impact assessment in WA should contain a section describing the limitations of the survey methods used. The limitations and constraints associated with this field survey are discussed in Table 3. Based on this assessment, the present survey effort has not been subject to any constraints, which affect the thoroughness of the assessment or the conclusions that have been formed.

Table 4 Field survey limitations

<b>Aspect</b>	<b>Constraint</b>	<b>Comment</b>
Sources of information and availability of contextual information	Nil	Adequate information is available for the survey area. This information includes broad scale (1:250,000) mapping by Beard (1979) and digitised by Shepherd <i>et al.</i> (2002)
Scope (what life forms were sampled etc.)	Nil	Vascular flora were sampled during the survey, non-vascular flora were not surveyed. Basic fauna assessment sampled significant and non-significant species opportunistically. Terrestrial invertebrate fauna were not surveyed, nor were any freshwater or marine vertebrate species.

Aspect	Constraint	Comment
Proportion of flora collected and identified (based on sampling, timing and intensity)	Minor	The vegetation survey was a single season survey and was undertaken in late winter. Spring is considered the most optimal time to undertake vegetation surveys in the bioregion. The survey timing was considered appropriate for the purpose of the assessment. The flora recorded from the field survey is discussed in section 4.2 and a full flora species list is provided in Appendix D. The portion of flora collected and identified was considered suitable for the purposes of the assessment and the condition of the survey area.
Proportion of fauna identified, recorded and/ or collected	Minor	The fauna assessment sampled those species that can be easily seen, heard or have distinctive signs, such as tracks, scats, diggings, etc. Many cryptic species would not have been identified during a basic survey and seasonal variation within species often requires targeted surveys at a particular time of the year. Of the fauna species recorded during the survey, all were identified to species level. The survey timing was considered appropriate for the purpose of the assessment.
Flora determination	Minor	Flora determination was undertaken by GHD botanist/ecologist in the field. Four species could not be confirmed to species level, these did not resemble any significant flora species.  The taxonomy and conservation status of the WA flora is dynamic. This report was prepared with reliance on taxonomy and conservation status current at the time of report development, but it should be noted this may change in response to ongoing research and review of the International Union for Conservation Nature criteria.
Completeness and further work which might be needed (e.g. was the relevant area fully surveyed)	Nil	The survey area was accessed by vehicle and on foot. The survey area was adequately surveyed during the field survey in line with the scope. An adequate number of floristic sampling sites were done for a Detailed flora and vegetation survey based on the condition of the site. Habitats considered suitable for significant flora and fauna were traversed by foot.
Mapping reliability	Minor	The vegetation types were mapped using high-resolution ESRI aerial imagery obtained from Landgate, topographical features, previous broad scale mapping (Beard, 1979) and field data.  Data were recorded in the field using hand-held GPS tools (e.g. Samsung tablet and Garmin GPS). Certain atmospheric factors and other sources of error can affect the accuracy of GPS receivers. The Garmin® GPS units and Android® tablets used for this survey are accurate to within ±5 m on average. Therefore, the data points consisting of coordinates recorded from the GPS may contain inaccuracies.  However, the aerial imagery displayed on the interactive tablet surface allowed for greater accuracy as field staff could use key visual indicators (such as tree canopy's, cleared areas, fence line etc.) to more accurately locate points.
Timing/weather/season/cycle	Minor	The field survey was undertaken on 18 August 2025. The recommended survey timing for flora and vegetation surveys within the South West Botanical Province is Spring (September-November) (EPA, 2016). In the three months prior to the field survey the Irwin House weather station (Station 008276) recorded a total of 276.40 mm of rainfall. This is above the long-term average of 233.90 mm (BoM 2025). Significant flora species flower at varying times of the year, the timing of the survey was considered a minor limitation.
Disturbances (e.g. fire, flood, accidental human intervention)	Nil	A large portion of the survey area has been subject to historical disturbances such as clearing and introduced flora. These disturbances did not impact the survey.
Resources	Nil	Adequate resources were employed during the field survey. Two person days were spent undertaking the survey by experienced ecologists.
Access restrictions	Nil	The survey area was accessible by vehicle and on foot. There were no access restrictions.
Experience levels	Nil	The ecologists who executed the survey are practitioners suitably qualified and experienced. Ecologist Erin Lynch has over 18 years' experience undertaking flora surveys and taxonomy. Erin was assisted in the field by Sarah Broadhurst, an environmental scientist with two years' experience.

## 3. Desktop assessment

### 3.1 Climate

The survey area is in the Mid-west region of Western Australia (WA) and experiences a Mediterranean climate with hot dry summers and mild winters (BoM, 2025). Climate data has been collected from the Mingenew Bureau of Meteorology (BoM) weather station (station 008088) located approximately 35 km east of the survey area. This is the nearest weather station with historical climate data.

The average annual rainfall at the Mingenew station is 391.9 mm. The majority of rainfall occurs in June with average rainfall of 80.0 mm while the driest month is December with an average rainfall of 6.2 mm. The highest temperatures are experienced in January with a mean maximum temperature of 36.4°C and lowest temperatures are experienced in August with a mean minimum temperature of 6.9°C (BoM, 2025).

In the three months prior to the field survey the Irwin House weather station (Station 008276) recorded a total of 276.40 mm of rainfall. This is above the long-term average of 233.90 mm.

### 3.2 Landforms, geology and soils

The survey area is located within the Irwin (224Ir) soil system described as: 'Level to very gently inclined alluvial flats and terraces of the Irwin and Lockier Rivers' (DPIRD, 2025a). The survey area is located across two soil subsystems which are detailed in Table 5.

Table 5 Soil subsystems intercepted by the survey area

Subsystem Name	Subsystem ID	Description (DPIRD, 2025b)
Irwin 2	224Ir_2	Level alluvial flats with sandy and loamy duplex soils.
Irwin 2 – river channel phase	224Ir_2Dr	Drainage lines in the alluvial plain. Red Sandy earth and loams and Semi-wet soils

### 3.3 Land use

#### 3.3.1 Current land use

The survey area intercepts the land uses detailed in Table 6.

Table 6 Survey area current land uses

Land ID (Landgate, 2025)	Land use(s)
Lot 100 on Plan 048103	Agriculture (Grazing) and native vegetation
Road Reserve 3144583 (Midlands Road Reserve)	Road
Road Reserve 3144585 (Milo Road Reserve)	Road
Road Reserve 3144506 (Milo Road Reserve)	Road
Railway Reserve 3102012	Railway and native vegetation
Lot 302 on Plan 048103	Road and native vegetation
Lot 300 on Plan 04103	Native vegetation
Lot 205 on Plan 231555	Agriculture (Cropping) and native vegetation
Lot 556 on Plan 231555	Agriculture (Cropping) and native vegetation
Land Parcel 3169858	Irwin River

The surrounding land use consists primarily of cleared agricultural land for both grazing and cropping purposes and isolated patches of native vegetation, particularly along the Irwin River. North of Midlands Rd and west of Milo Rd is the townsite of Irwin that consists of several rural residential properties.

### 3.3.2 Conservation reserves, estates and ESAs

There are no DBCA-legislated lands within the survey area. There are three DBCA-legislated lands within the study area, as detailed in Table 7.

Table 7 DBCA-legislated lands within the study area

Reserve ID/name	Category	Approximate distance/direction from survey area
R23600/Dongara Nature Reserve	Nature Reserve	15.9 km west
R24496/Beekeepers Nature Reserve	Nature Reserve	15.2 km south-west
R36203/Yardanogo Nature Reserve	Nature Reserve	13.0 km south

There is one DWER listed environmentally sensitive area (ESA) within the survey area (DWER, 2020). This is likely associated with the presence of a threatened flora species (DBCA, 2025e). There are 11 DWER ESAs within the study area.

## 3.4 Hydrology

DWER geographic data layers identified the hydrology and hydrogeology aspects within the study area that are provided in Table 8.

Table 8 Hydrology aspects within the study area

Aspect	Details	Results
Groundwater Areas	Groundwater areas proclaimed under the RIWI Act	The survey area is within the Arrowsmith groundwater area (DWER, 2018c).
Surface Water Areas	Surface water areas proclaimed under the RIWI Act	The survey area and study area do not intersect any RIWI listed Surface water areas (DWER, 2018b)
Irrigation District	Irrigation Districts proclaimed under the RIWI Act	The survey area and study area do not intersect any RIWI listed Irrigation District areas (DWER, 2018b)
Rivers	Rivers proclaimed under the Rights in RIWI Act	The survey area and study area do not intersect any RIWI listed Rivers (DWER, 2018d)
Public Drinking Water Source Areas (PDWSA)	PDWSA is a collective term used for the description of Water Reserves, Catchment Areas and Underground Pollution Control Areas declared (gazetted) under the provisions of the <i>Country Area Water Supply Act 1947</i> (the CAWS Act)	The survey area does not intersect any PDWSA or CAWS Act control catchments (DWER, 2018a). The Allanooka-Dongara Water Reserve is located approximately 370 m north of the survey area.
Waterways Management Areas	Areas proclaimed under <i>the Waterway Conservation Act 1976</i>	The survey area and study area do not intersect any waterways management areas (DWER, 2018e)

### 3.4.1 Wetlands

#### **Globally and nationally significant wetlands**

There are no RAMSAR Wetlands or Wetlands of National importance within the study area (DBCA, 2025b).

#### **Regionally mapped wetlands**

There is no available wetland mapping for the region, however the survey area intersects with the Irwin River and its associated wetland environment.

## 3.5 Vegetation

### 3.5.1 Regional biogeography

The survey area is located within the Southwest Botanical Province of WA (Beard, 1979) within the Geraldton Sandplains (GES) bioregion and the Geraldton Hills (GES01) subregion, as described by the Interim Biogeographic Regionalisation of Australia (IBRA) (DAWE, 2012).

The Geraldton Hills subregion is characterised by areas of exposed Permian/Silurian siltstone and Jurassic sandstones overlain by sandplains, alluvial plains and coastal limestones. Sandplains support emergent *Banksia* and *Actinostrobos*, alluvial plains support York Gum woodlands and limestones support proteaceous heaths and *Acacia* scrubs (Desmond & Chant, 2001).

### 3.5.2 Vegetation associations and their extent

Broad scale (1:250,000) pre-European vegetation mapping has been completed at an association level (Beard, 1979). This mapping indicates that the survey area is located within vegetation association 352 (Irwin). This vegetation association is described by DBCA (2019) as 'Medium woodland; York Gum'.

The pre-European mapping has been adapted and digitised by Sheperd et al. (2002). The extent of vegetation associations has been determined by the statewide vegetation remaining extent calculations maintained by DBCA (DBCA, 2019a). The Environmental Protection Authority (EPA) states that a vegetation association is at risk of decline if it has less than 30 % of the pre-European extent remaining (EPA, 2016).

As presented in Table 9, the current extent of vegetation association 352 is below the threshold at all scales.

Table 9 Extent of pre-European vegetation association 352 at the state, IBRA region and subregion, and LGA scales

Vegetation Association	Scale	Pre-European extent (ha)	Current extent (ha)	Remaining (%)	% Current extent in all DBCA managed lands
352	State: Western Australia	724,268.73	142,012.22	19.61	8.92
	IBRA region: GES	19,711.46	4,080.13	20.70	12.34
	IBRA subregion: GES01	14,589.42	2,102.45	14.41	2.58
	LGA: Shire of Irwin	10,140.25	1,536.34	15.15	1.26

### 3.5.3 Significant ecological communities

The EPBC Act Protected Matters Search Tool (PMST) (DCCEEW, 2025) and DBCA database (DBCA, 2025d) identified that there are no Threatened or Priority Ecological communities within the survey area. There are however one EPBC Act Threatened Ecological Community (TEC) and one State Priority 1 Ecological Community (PEC) within the study area. These communities are described in Table 10 and are visually presented in Figure 2, Appendix A.

Table 10 TECs within the study area

Threatened Ecological Community	Status		Description
	BC Act/ DBCA	EPBC Act	
Subtropical and Temperate Coastal Saltmarsh	P3	VU	Consists of the assemblage of plants, animals and micro-organisms associated with saltmarsh in coastal regions of sub-tropical and temperate Australia (south of 23oS latitude). It occurs on the coastal margin, along estuaries and coastal embayments and on low wave energy coast in places with at least some tidal connection, including rarely-inundated supratidal areas, intermittently opened or closed lagoons, and groundwater tidal influences. The community occurs on sandy or muddy substrate

Threatened Ecological Community	Status		Description
	BC Act/ DBCA	EPBC Act	
			and may include coastal clay pans and similar habitats. It consists of dense to patchy areas of characteristic coastal saltmarsh plant species that include salt-tolerant herbs, succulent shrubs or grasses, and may also include bare sediment as part of the mosaic. It can occur where the proportional cover by tree canopy such as mangroves, <i>Melaleucas</i> or <i>Casuarinas</i> or seagrass is not greater than 50% (DBCA, 2023a).
Coastal sands dominated by <i>Acacia rotellifera</i> , <i>Eucalyptus oraria</i> and <i>Eucalyptus obtusiflora</i>	P1	-	Floristically, this community is similar to other <i>Acacia rotellifera</i> communities but is differentiated on structure, being dominated by mallee eucalypts. The community occurs on limestone ridges, in some swales in the coastal dunes between Cape Burney and Dongara, on the Greenough Alluvial Flats on limestone soil and near Tarcoola Beach. Some very small occurrences have also been recorded on the limestone scarp north of the Buller River (DBCA, 2023b).

## 3.6 Flora

### 3.6.1 Flora diversity

The DBCA *Dandjoo* (DBCA, 2025g) search identified the presence/ potential presence of 922 plant species (search includes vascular and non-vascular flora) within the study area. The most diverse families were Myrtaceae (125 species), Fabaceae (79 species) and Proteaceae (62 species). The DBCA *Dandjoo* results are provided in Appendix C.

### 3.6.2 Significant flora

The EPBC PMST (DCCEEW, 2025), DBCA *Dandjoo* (DBCA, 2025g), and DBCA Threatened (Declared Rare) and Priority Flora (DBCA, 2025e) databases identified the presence/ potential presence of 84 significant flora taxa within the study area.

The locations of significant flora registered on the DBCA databases are mapped on Figure 2, Appendix A. A list of the significant flora species identified in the desktop assessment is provided in the likelihood of occurrence assessment (Appendix D).

## 3.7 Fauna

### 3.7.1 Fauna diversity

The DBCA *Dandjoo* (DBCA, 2025g) search identified the presence/ potential presence of 70 terrestrial vertebrate fauna species within the study area. These consisted of eight species of amphibian, 31 species of bird, three species of mammal, and 28 species of reptile. The DBCA *Dandjoo* results are provided in Appendix C.

### 3.7.2 Significant fauna

The EPBC PMST (DCCEEW, 2025), DBCA *Dandjoo* (DBCA, 2025g), and DBCA fauna database (DBCA, 2025f) searches identified the presence/ potential presence of 48 significant fauna taxa within the study area. The likelihood of occurrence assessment of these species, with brief species and habitat overviews, is provided in Appendix E.

### 3.7.3 Black Cockatoo Habitat

Carnaby's Cockatoo (*Zanda latirostris*), Baudin's Cockatoo (*Zanda baudinii*) and Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) are endemic to the south-west of Western Australia with a wide-spread distribution. The survey area occurs within the modelled non-breeding range of Carnaby's Cockatoo and within the modelled breeding range (DAWE, 2022).

The survey area occurs outside the modelled distribution range of Forest Red-tailed Black Cockatoos and Baudin's Cockatoos (DAWE, 2022).

Carnaby's Cockatoo nests in hollows of live or dead eucalypts, primarily Marri, Jarrah, Flooded Gum, smooth-barked Salmon Gum and Wandoo, though breeding has been reported in other wheatbelt tree species and some tree species on the Swan Coastal Plain and Jarrah Forest (Saunders D. , 1979). Success in breeding is dependent on the quality and proximity of feeding habitat within 12 km of nesting sites. Along with the trees that provide nest hollows, the protection, management and increase of this feeding habitat that supports the breeding of Black Cockatoo is a critical requirement for the conservation of the species.

A review of DBCA's mapping of Carnaby's Black Cockatoo confirmed roosting and breeding sites (DBCA, 2019b) indicates that there are no confirmed roosting or breeding areas within the study area. The nearest confirmed breeding area is located approximately 56 km south-east of the survey area while the nearest confirmed roosting site is located approximately 200 km south-south-east of the survey area.

# 4. Field survey results

## 4.1 Vegetation



### 4.1.1 Vegetation types


The remnant vegetation within the survey area was highly modified and lacked an intact mid and ground cover of native species and is replaced by introduced (weed) species. Much of the survey area has been extensively cleared for roads and agriculture and consists of cleared paddocks with isolated native trees. Remnant areas of native vegetation remain within the road reserves and along the Irwin River. The survey identified two broad vegetation types as well as scattered isolated remnant trees and cleared areas (paddocks and roads).

The two broad vegetation types comprise of *Eucalyptus camaldulensis* subsp. *arida* and *Casuarina obesa* Woodland associated with Irwin River and *Eucalyptus camaldulensis* subsp. *arida* and *Eucalyptus loxophleba* subsp. *loxophleba* Open Woodland along the road reserve.

Table 11 provides a summary of the vegetation types present in the survey area. Mapping of the vegetation types is provided in Figure 4, Appendix A.

Table 11 Vegetation types

Broad vegetation type	Description	Extent (ha/%)	Photograph
<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>Casuarina obesa</i> Woodland	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>Casuarina obesa</i> woodland over <i>Melaleuca raphiophylla</i> , <i>Acacia saligna</i> and <i>Hakea preissii</i> scattered/isolated shrubs over <i>Cenchrus clandestinus</i> , <i>Cynodon dactylon</i> and <i>Avena barbata</i> scattered grasses over <i>Oxalis pes-caprae</i> closed forland on brown loamy sand floodplain. Scattered sedges ( <i>Cyperus</i> ) and <i>Typha</i> occur along the banks of the river.  Riparian vegetation (along Irwin River)	4.82 ha (28.84%)	
<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> Open Woodland	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> open woodland over <i>Acacia</i> spp., <i>Hakea preissii</i> and <i>Enchylaena tomentosa</i> scattered/isolated shrubs over a mixed grassland and forland of introduced (weed) species.	1.98 ha (11.86%)	

Broad vegetation type	Description	Extent (ha/%)	Photograph
Isolated paddock trees	Isolated trees ( <i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> ) over pasture grasses/weeds.	0.63 ha (3.76%)	
Cleared	Roads, tracks and cleared paddocks.	9.28 ha (55.54%)	

#### 4.1.2 Vegetation condition

The remnant vegetation remaining within the survey area was in Degraded (40.7%) to Completely Degraded (3.76%) condition. The vegetation structure of the remnant native vegetation within the survey area has been significantly altered by multiple disturbances such as clearing, grazing and weed invasion. The native mid and understory has been largely replaced and dominated by weedy grasses and herbs.

The remaining 55.54% of the survey area is cleared, comprising of roads, railway, tracks and paddocks.

Table 12 Vegetation condition within the survey area

Vegetation condition	Total extent in survey area (ha)	Proportion of survey area (%)
Degraded	6.80	40.70
Completely Degraded	0.63	3.76
Cleared	9.28	55.54
<b>Total</b>	<b>16.71</b>	<b>100</b>

#### 4.1.3 Significant ecological communities

The survey area is not located within the mapped extent / buffer of any TECs listed under the EPBC Act and/or BC Act or PECs listed by the DBCA. Additionally, the vegetation recorded within the survey area is not representative of any TECs or PECs.

## 4.2 Flora

### 4.2.1 Flora diversity

A total of 38 native flora taxa (including species, subspecies, varieties, forms and specimens not identified to species level) from 20 families and 31 genera were recorded in the survey area. Of the total taxa recorded 22 are native and 17 are introduced (weed) species. The dominant families within the survey area included:

- Poaceae (7 taxa)
- Fabaceae (6 taxa)
- Myrtaceae (4 taxa)

The inventory of flora recorded during the survey is presented in Appendix D.

### 4.2.2 Introduced flora

A total of 17 introduced flora taxa were recorded in the survey area from eight families. Introduced flora represented 45% of all flora taxa recorded during the survey. None of the recorded introduced species are listed as a Declared Pest under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) or are a Weed of National Significance (WoNS).

### 4.2.3 Significant flora

No Threatened flora listed under the EPBC Act and/or BC Act or Priority flora listed by the DBCA were recorded during the field survey.

One Threatened flora species *Wurmbea tubulosa* has previously been recorded in the survey area (recorded in 1991) in the roadside vegetation along Midlands Road. Targeted searches undertaken during the survey did not record this species. Given the degraded nature of the area and dominance of weed species within the ground layer, it is considered unlikely that this species persists in the area.

#### Likelihood of occurrence assessment

A likelihood of occurrence assessment was conducted post survey for all significant flora species identified in the desktop assessment. The assessment took into consideration previous records, habitat requirements, efficacy and intensity of the survey, flowering times and the cryptic nature of the species.

The likelihood of occurrence assessment post-field survey concluded one species is likely to occur in the survey area (based on historical records), two species are considered possible to occur and the remaining 81 flora species are considered unlikely or highly unlikely to occur. Significant flora identified as likely and possible to occur are summarised in Table 12.

Table 13 Significant flora identified as known or likely to occur within the survey area



Taxon	Status		Likelihood of occurrence
	BC Act /DBCA	EPBC Act	
<i>Wurmbea tubulosa</i>	VU	EN	Likely - There are two DBCA records (recorded 2009 and 2014) within the survey area (intersection of Milo Rd and Midlands Rd). Targeted searches did not record this species during the current survey, noting its small size and perennial nature. The survey was undertaken in the optimal time for this species.
<i>Conostylis dielsii</i> subsp. <i>teres</i>	VU	EN	Possible - The closest DBCA record is immediately north of the survey area (dated from 1970). Given the degraded nature of the ground cover within the survey area and efficacy of the survey it is unlikely to be present. Noting its small size and density of grasses/herbs undetected individuals is possible.
<i>Liparophyllum congestiflorum</i>	P4	-	Possible - Suitable habitat is present and the closest record is less than 2 km east of the survey area (recorded in 2008). Targeted searches did not record this species during the survey.



## 4.3 Fauna

### 4.3.1 Fauna habitat types

Four fauna habitat types were identified within the survey area: Riverine Woodland, *Eucalyptus* Open Woodland, Isolated Paddock Trees, and Cleared. Details of these habitat types are presented in Table 14.

Table 14 Fauna habitats

Habitat type and description	Extent (ha/%)	Photograph
<p><b>Riverine Woodland</b></p> <p>This habitat is growing in association with the Irwin River and comprises of a tall woodland of River Red Gum (<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>) and Swamp Sheoak (<i>Casuarina obesa</i>) over scattered/isolated trees and shrubs of <i>Melaleuca</i>, <i>Acacia</i> and <i>Hakea</i> over an understorey lacking native species and completely dominated by weedy grasses and herbs (dominated by soursob (<i>*Oxalis pes-caprae</i>)) with occasional sedges. Although degraded and lacking a native understorey, this habitat provides a diversity of micro habitats including a fresh water source, fallen logs, hollows and sandy soils which support a diversity of fauna.</p> <p><b>Significant fauna</b></p> <p>Peregrine Falcon (<i>Falco peregrinus</i>) (OS) are likely to utilise this habitat for foraging and potential nesting in suitable hollows in large, mature trees.</p> <p>The Carnaby's Cockatoo (<i>Zanda latirostris</i>) (EN) may utilise River Red Gum for roosting. Although there is potential for Carnaby's to utilise River Red Gum for breeding they are not considered to be a preferred species. Foraging value is also low, with few scattered <i>Acacia saligna</i> and <i>Hakea preissii</i> as suitable foraging species.</p>	<p>4.82/ 28.84</p>	
<p><b>Eucalyptus Open Woodland</b></p> <p>This habitat is roadside remnant of River Red Gum and York Gum open woodland. Majority of the understorey has been cleared, leaving isolated tall shrubs of <i>Casuarina</i>, <i>Acacia</i> and <i>Hakea</i> over a ground cover almost completely dominated by weeds. Remnant native shrubs and trees provide a food source, shelter and nesting habitat for a number of bird species and arboreal reptiles.</p> <p><b>Significant fauna</b></p> <p>The Carnaby's Cockatoo are likely to utilise this habitat for foraging and potential nesting in the York Gums and to a lesser extent River Red Gums. Additionally, they may potentially utilise the habitat for roosting. These remaining stands of mature trees are of significant importance to Black Cockatoos, as the region has sustained extensive clearing for agricultural purposes.</p> <p>The Peregrine Falcon may utilise the habitat opportunistically for foraging. Although fragmented and degraded, this habitat is considered to have moderate value.</p>	<p>1.98/ 11.86</p>	

Habitat type and description	Extent (ha/%)	Photograph
<p><b>Isolated Paddock Trees</b> These Eucalypts are isolated in farm paddocks and along narrow roadsides and consist mostly of River Gums.</p> <p><b>Significant fauna</b> Carnaby's Cockatoo may potentially utilise the River Gums for roosting however they are not a preferred species for nesting or foraging. The Peregrine Falcon may utilise the surrounding open paddocks for foraging and flying overhead. This habitat is considered to have low value.</p>	0.63/3.76	
<p><b>Cleared</b> Roads, tracks and cleared paddocks.</p> <p><b>Significant fauna</b> The Peregrine Falcon (<i>Falco peregrinus</i>) (OS) may utilise the open paddocks for foraging and flying overhead. This habitat is considered to have low value.</p>	9.28/55.54	

### 4.3.2 Fauna diversity

The survey recorded a total of 31 species, including 23 birds, four mammals, three amphibians and one reptile. Of these, three mammal species are introduced (Dog (*Canis familiaris*), Red Fox (*Vulpes vulpes*) and Cat (*Felis catus*)).

A full list of fauna recorded during the survey is provided in Appendix E.

### 4.3.3 Significant fauna

No threatened fauna listed under the EPBC Act and/or BC Act or Priority fauna listed by the DBCA was recorded during the survey. One bird, listed as a Marine species under the EPBC Act was recorded during the survey. The Great Egret (*Ardea alba*) was observed foraging in the water in the Riverine Woodland habitat.

#### 4.3.3.1 Likelihood of occurrence assessment

A likelihood of occurrence assessment was conducted post survey for all significant fauna species identified during the desktop assessment. This assessment was based on species biology, habitat requirements, the likely quality and availability of suitable habitat (based on vegetation associations present within the survey area) and records of the species in the vicinity of the survey area. No assumptions were made on the transient potential of these species. Of all the 48 identified significant species from the desktop study, one species was assessed as being likely to occur within the survey area, this being Carnaby's Black Cockatoo (*Zanda latirostris* – listed as Endangered under both the EPBC Act and BC Act), and one species assessed as possibly occurring, this being the Peregrine Falcon (*Falco peregrinus* – Listed as Species of Special Protection (OS) under the BC Act).

### **Carnaby's Cockatoo (*Zanda latirostris*)**

The Carnaby's Cockatoo is listed as Endangered under the EPBC Act and BC Act. This species is endemic to the south-west of WA from near Cape Arid on the south coast through the eastern Wheat Belt and north to about Kalbarri. Carnaby's Cockatoo nest in hollows of live or dead eucalyptus, primarily smooth-barked salmon gum (*Eucalyptus salmonophloia*) and Wandoo (*E. wandoo*) (Saunders 1979, 1982) though breeding has been reported in other Wheatbelt tree species and some tree species on the Swan Coastal Plain and Jarrah forest (Saunders 1979, 1982, Storr 1991, Johnstone & Storr 1998).

Success in breeding is dependent on sufficient high quality foraging habitat located in proximity of nesting and is nominally a radius of up to 12 km of nesting sites (Saunders 1979, 1982, Saunders and Ingram 1987). High quality foraging habitat includes Kwongan heathlands and Banksia woodlands having abundant Banksia species and other proteaceous plants.

No individuals were recorded during the survey, and no evidence of foraging or feeding evidence was recorded within the survey area. However, the high number of confirmed recordings of the species throughout neighbouring locations to the current survey area suggests that the species may temporarily utilise the site for perching, resting or temporary fly-over activity, albeit for brief periods. Furthermore, several potential nesting trees of sufficient DBH with potentially suitable hollow were recorded highlighting the potential for future nesting and breeding activity. Along with the small sections of potentially suitable foraging habitat present, there is sufficient potential for the species to occur on an at least occasional basis given the number of suitable breeding trees present.

### **Peregrine Falcon (*Falco peregrinus*)**

The Peregrine Falcon is listed as Species of Special Protection (OS) under the BC Act. This species is found in most habitats, from rainforests to the arid zone, and at most altitudes, from the coast to alpine areas across Australia. Although it has a wide distribution it is not considered common. It requires abundant prey and secure nest sites, and prefers coastal and inland cliffs or open woodlands near water, and may even be found nesting on high city buildings (Australian Museum, 2019).

No individuals were observed during the survey however suitable habitat is present throughout the survey area. The closest known record is more than 10 km west of the survey area near Dongara.

## **4.3.4 Black cockatoo habitat assessment**

The survey area is located within the modelled distribution (and northern extent of its breeding range) of the Carnaby's Cockatoo (DAWE 2022). The closest confirmed breeding area is located more than 50 km south-east of the survey area. The closest confirmed roost site is more than 100 km south of the survey area (DBCA, 2018).

### **Foraging habitat**

Suitable foraging habitat for Carnaby's Cockatoo is sparse within the survey area and was identified in the form of remnant roadside or farmland patches. Suitable foraging species recorded in the survey area include *Eucalyptus loxophleba* (York Gum), *Hakea preissii* and *Acacia saligna*. *Eucalyptus camaldulensis* subsp. *arida* (River Red Gum) is not considered a primary foraging resource for Carnaby's Cockatoo.

The Black Cockatoo Referral Guidelines (DAWE 2022) are used to define the foraging quality of the survey area. The foraging quality scoring results for the survey area are summarised in Table 15 using the Foraging Quality Scoring Tool Template (DAWE 2022). Based on the foraging quality scoring tool, the survey area habitats are considered to have a foraging score of 5 for the Carnaby's Cockatoo.

The survey area lacks core foraging species for Carnaby's Cockatoo (proteaceous species and Marri) with very few scattered foraging species available. No evidence of foraging was observed during the survey. Furthermore, the survey area is located more than 50 km from any known breeding and roosting sites. There is however potential foraging habitat in the surrounding region, although heavily cleared and fragmented.

Table 15 Black cockatoo foraging score tool (DAWE 2022)

Starting score	Carnaby's 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.
Attribute/score subtraction	
Foraging potential (-2)	Subtract 2 from your score if there is no evidence of feeding debris on your site. 8
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. 8
Proximity to breeding (-2)	Subtract 2 if you have evidence to conclude that your site is more than 12 km from breeding habitat 6
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. 5
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 5
Total foraging score	5

### Breeding habitat

The York Gum and to a lesser extent the River Red Gum trees within the survey area provide potential breeding habitat for Carnaby's Cockatoo. Whilst the River Red Gum is not listed as a preferred breeding tree for Carnaby's Cockatoo in the DAWE (2022) guidelines it is noted that other Eucalypts can provide breeding habitat if they have suitable hollows. There is also some anecdotal evidence of this cockatoo species using River Red Gum for breeding on the northern edge of the Carnaby's Cockatoo extent. Using the precautionary principle, under the EP Act, River Red Gum trees have been recorded within the survey area as potential habitat trees, noting that this species is naturalised in the region.

A total of 156 (144 River Red Gum and 12 York Gum) potential habitat trees (DBH >500 mm) were recorded in the survey area. Of the potential habitat trees recorded, 14 trees had hollows, four of which contained suitable nest hollows (suitable nesting trees<sup>1</sup>) for black cockatoo's. No evidence of breeding was observed during the survey.

### Roosting habitat

Black Cockatoo's roost in tall, large trees over 8 m in height, typically within close proximity to a water source and within 6 km of potential feeding habitat (DAWE, 2022). The woodland habitats containing York Gum and River Red Gum provide suitable roosting habitat for Carnaby's Cockatoo. The trees are large and mature and provide connectivity to nearby food resources (however fragmented) and water resources.

<sup>1</sup> Suitable nesting trees: Trees with suitable nesting hollows present, although no evidence of use

## 5. Conclusion

### 5.1 Flora and vegetation

Two remnant vegetation types were mapped within the survey area, as well as isolated paddock trees and cleared areas (paddocks and roads). The two remnant vegetation types are described as *Eucalyptus camaldulensis* subsp. *arida* and *Casuarina obesa* Woodland associated with Irwin River and *Eucalyptus camaldulensis* subsp. *arida* and *Eucalyptus loxophleba* subsp. *loxophleba* Open Woodland along the road reserve.

Much of the survey area has been extensively cleared for roads and agriculture and consists of cleared paddocks with isolated native trees (predominantly *Eucalyptus camaldulensis* subsp. *arida*). The remnant vegetation within the survey area was highly modified and lacked an intact mid and ground cover of native species and was replaced by introduced (weed) species. The vegetation in the survey area ranged from Degraded (40.770%) to Completely Degraded (3.76%) condition. The remainder was mapped as Cleared (55.54%).

No Threatened Ecological Communities (TECs) listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) or *Biodiversity Conservation Act 2016* (BC Act) or Priority Ecological Communities (PECs) listed by Department of Biodiversity Conservation and Attractions (DBCA) were identified within the survey area during the field survey.

A total of 38 native flora taxa (including species, subspecies, varieties, forms and specimens not identified to species level) from 20 families and 31 genera were recorded in the survey area. Twenty-two of the flora recorded were native species while 17 were introduced (weed) species. None of the introduced species recorded are listed as a Declared Pest under the *Biosecurity and Agriculture Management Act 2007* (BAM Act) or are a Weed of National Significance (WoNS).

No Threatened flora listed under the EPBC Act and/or BC Act or Priority flora listed by the DBCA were recorded during the field survey. One Threatened flora species *Wurmbea tubulosa* has previously been recorded in the survey area in the roadside vegetation along Midlands Road. However targeted searches undertaken during the current survey failed to record this species.

A likelihood of occurrence assessment was conducted post survey for all significant flora species identified in the desktop assessment, taking into consideration previous records, habitat requirements, efficacy and intensity of the survey, flowering times and the cryptic nature of the species. The assessment concluded one species is likely to occur (*Wurmbea tubulosa*) and two species are considered as possible to occur (*Conostylis dielsii* subsp. *teres* and *Liparophyllum congestiflorum*) within the survey area. The remaining 81 significant flora species are considered unlikely or highly unlikely to occur.

### 5.2 Fauna

Four fauna habitat types were identified within the survey area based on predominant landforms, soil and vegetation structure in the area. These are: Riverine Woodland, *Eucalyptus* Open Woodland, Isolated Paddock Trees, and Cleared.

The survey recorded a total of 31 fauna species, including 23 birds, four mammals, three amphibians and one reptile. Of these, three mammal species are introduced (Dog (*Canis familiaris*), Red Fox (*Vulpes vulpes*) and Cat (*Felis catus*)).

No threatened fauna listed under the EPBC Act and/or BC Act or Priority fauna listed by the DBCA was recorded during the survey. The Great Egret (*Ardea alba*), which is listed as a Marine species under the EPBC Act, was observed foraging in the water in the Riverine Woodland habitat during the survey. This species would be an opportunistic visitor to the area.

A likelihood of occurrence assessment was conducted post survey for all significant fauna species identified during the desktop assessment based on species biology, habitat requirements, the likely quality and availability of suitable habitat (based on vegetation associations present within the survey area) and records of the species in the vicinity of the survey area. Of the 48 significant fauna species identified in the desktop assessment, one species is considered likely to occur, Carnaby's Cockatoo (*Zanda latirostris*) (Endangered) and one species is considered possible to occur, the Peregrine Falcon (*Falco peregrinus*) (Other specially protected).

### **Black cockatoo habitat assessment**

The survey area is located within the modelled distribution (and northern extent of its breeding range) of the Carnaby's Cockatoo (DAWE 2022). The closest confirmed breeding area is located more than 50 km south-east of the survey area and the closest confirmed roost site is more than 100 km south of the survey area (Government of Western Australia 2025).

No foraging, roosting or breeding evidence of the Carnaby's cockatoo was observed during the survey. Suitable foraging habitat for Carnaby's Cockatoo is sparse within the survey area and comprises of scattered/isolated trees and shrubs of *Eucalyptus loxophleba* (York Gum), *Hakea preissii* and *Acacia saligna*. Based on the foraging quality scoring tool (DAWE 2022) the survey area habitats are considered to have a foraging score of 5 for the Carnaby's Cockatoo.

River Red Gums are listed as a less important food source and low priority for roosting and breeding by Carnaby's Cockatoo. However, this tree species has still been included as a potential for future breeding and roosting habitat as there are anecdotal records of Carnaby's utilising this species on the northern extent of their range.

A total of 156 (144 River Red Gum and 12 York Gum) potential habitat trees (DBH >500 mm) were recorded in the survey area. Of the potential habitat trees recorded, 14 trees had hollows, four of which contained suitable nest hollows for black cockatoos.

The woodland habitats containing York Gum and River Red Gum provide suitable roosting habitat for Carnaby's Cockatoo. The trees are large and mature and provide connectivity to nearby food resources (however fragmented) and water resources.

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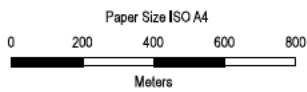
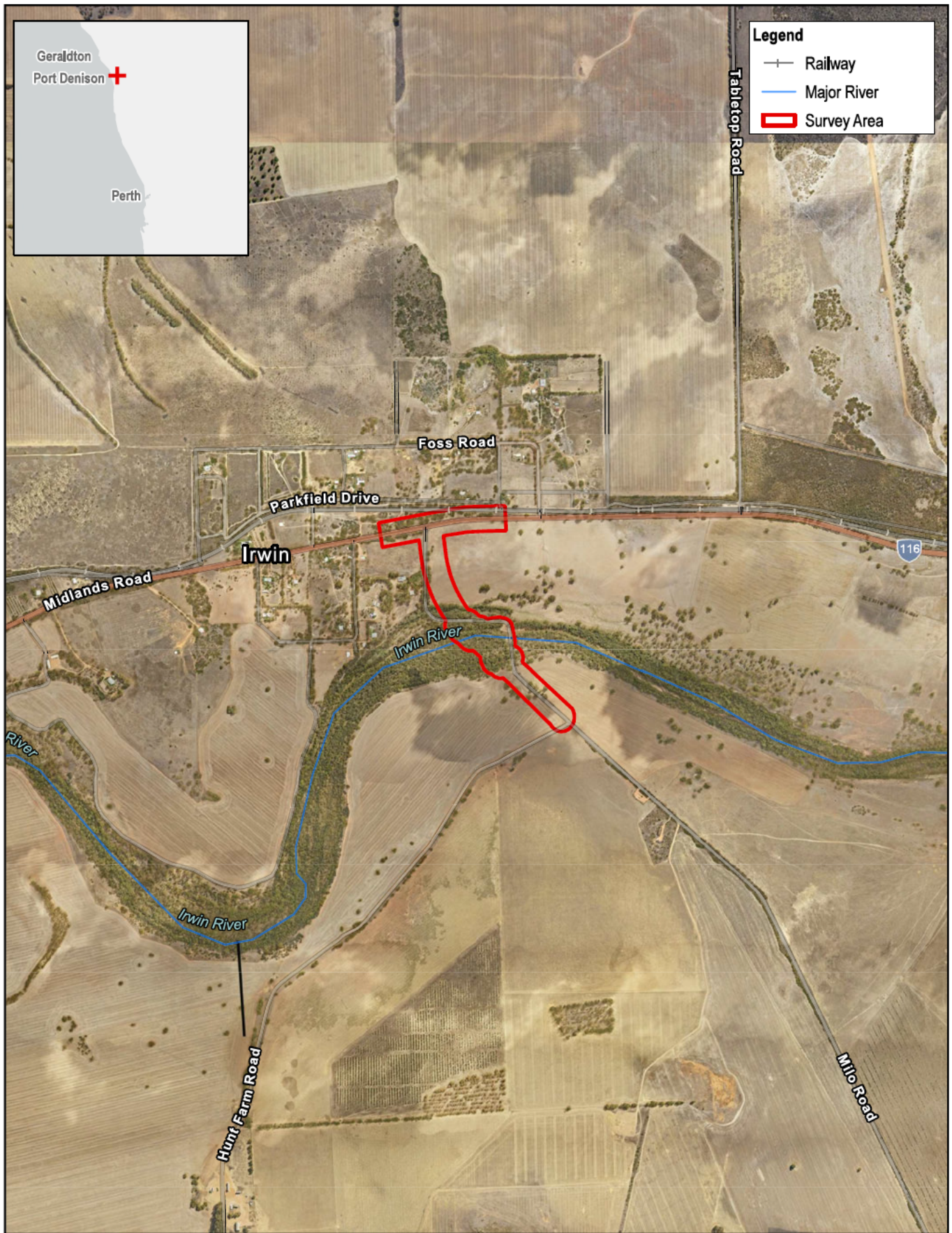
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# Appendices

# Appendix A

## Figures

- Figure 1*      *Project locality*
- Figure 2*      *Environmental constraints*
- Figure 3*      *Survey effort*
- Figure 4*      *Vegetation types*
- Figure 5*      *Vegetation condition*
- Figure 6*      *Fauna habitat and Black Cockatoo habitat*



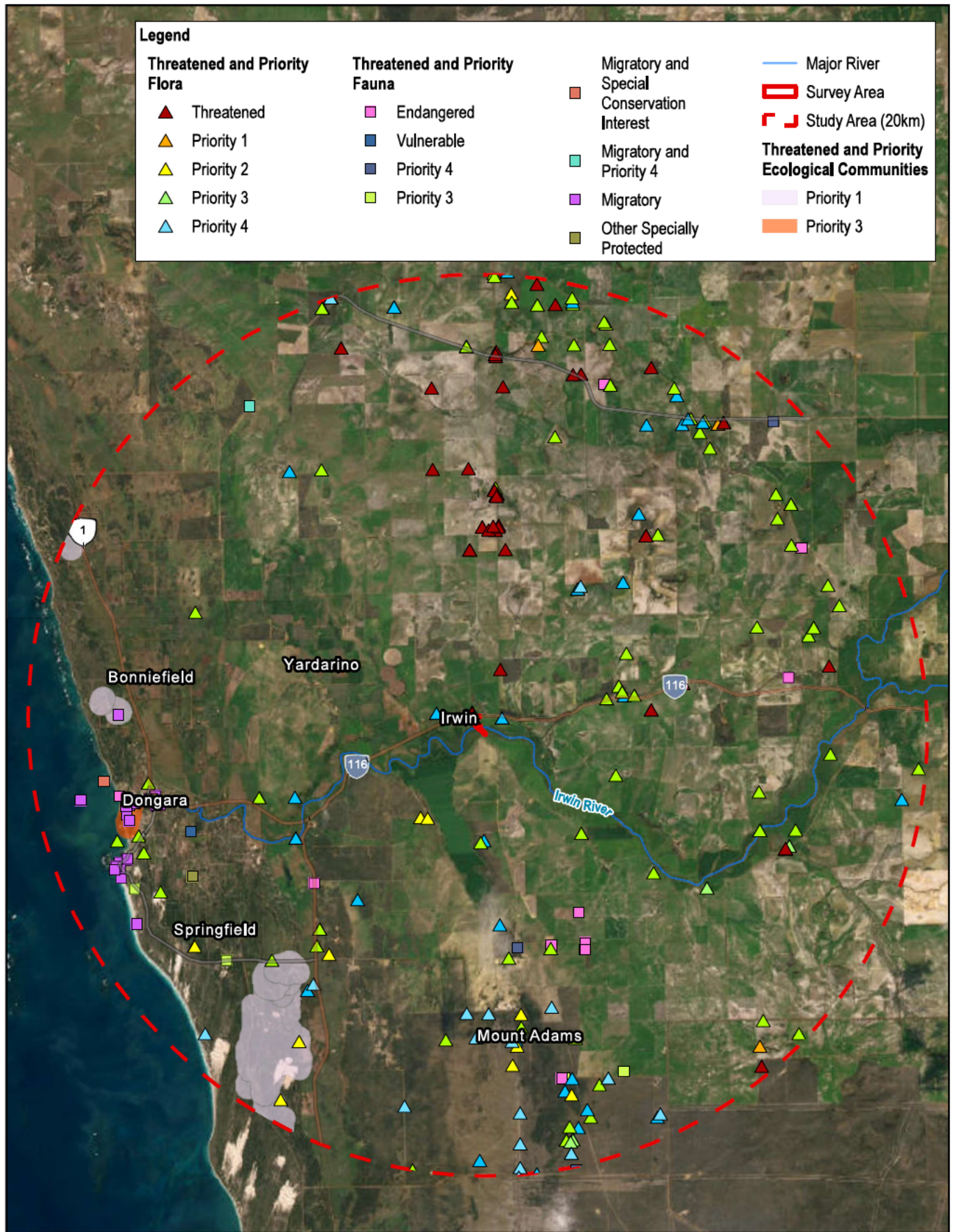
Map Projection: Transverse Mercator  
 Horizontal Datum: GDA 1994  
 Grid: GDA 1994 MGA Zone 50

Shire of Irwin  
 Milo Crossing

Project No. 12650028  
 Revision No. 0  
 Date 4/12/2025

Locality

**FIGURE 1**



Paper Size ISO A4  
0 1 2 3 4  
Kilometers



Map Projection: Transverse Mercator  
Horizontal Datum: GDA 1994  
Grid: GDA 1994 MGA Zone 50

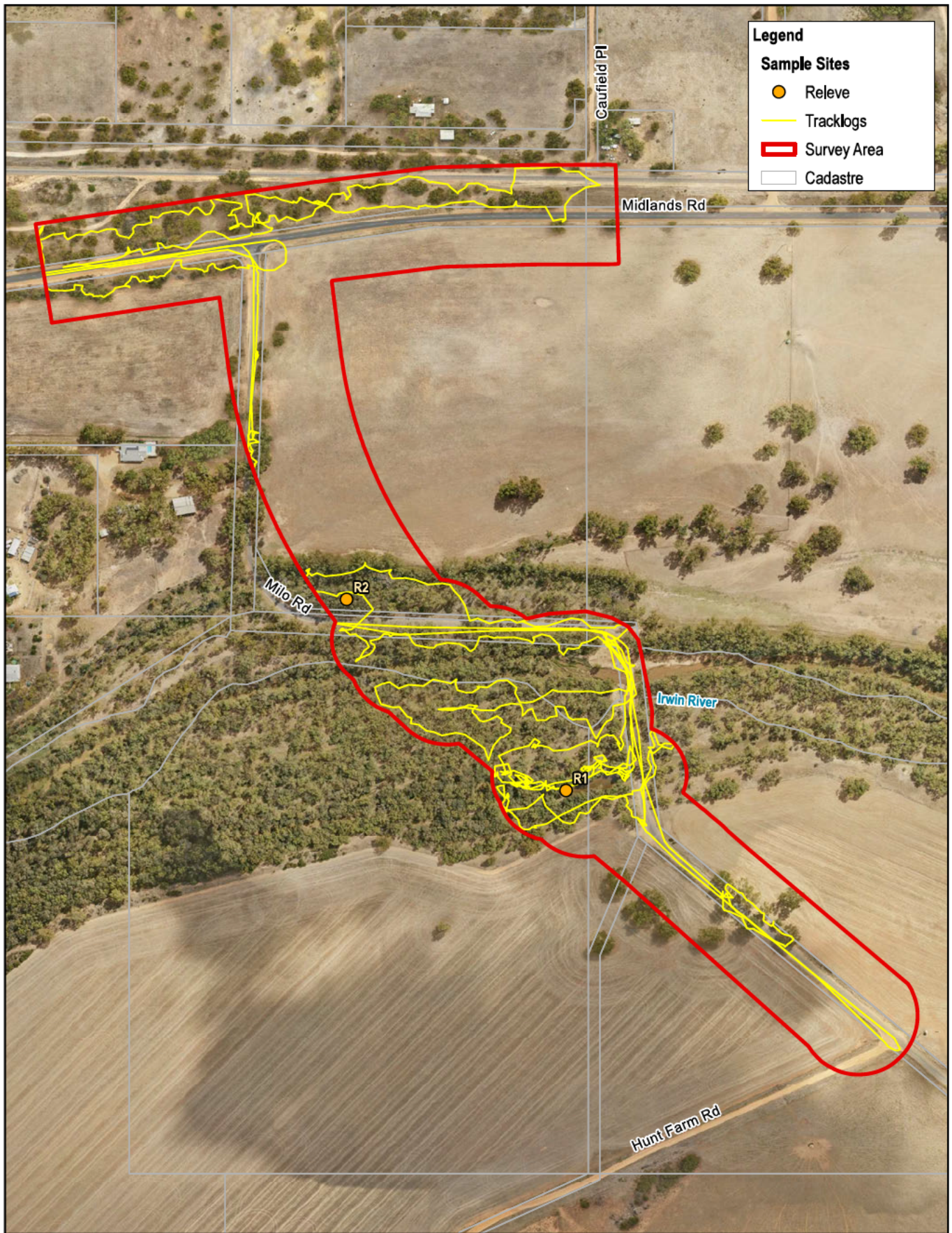


Shire of Irwin  
Milo Crossing

Project No. 12650028  
Revision No. 0  
Date 4/12/2025

Environmental Constraints

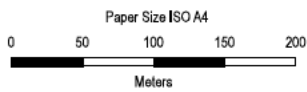
FIGURE 2



**Legend**

**Sample Sites**

- Releve
- Tracklogs
- Survey Area
- Cadastre



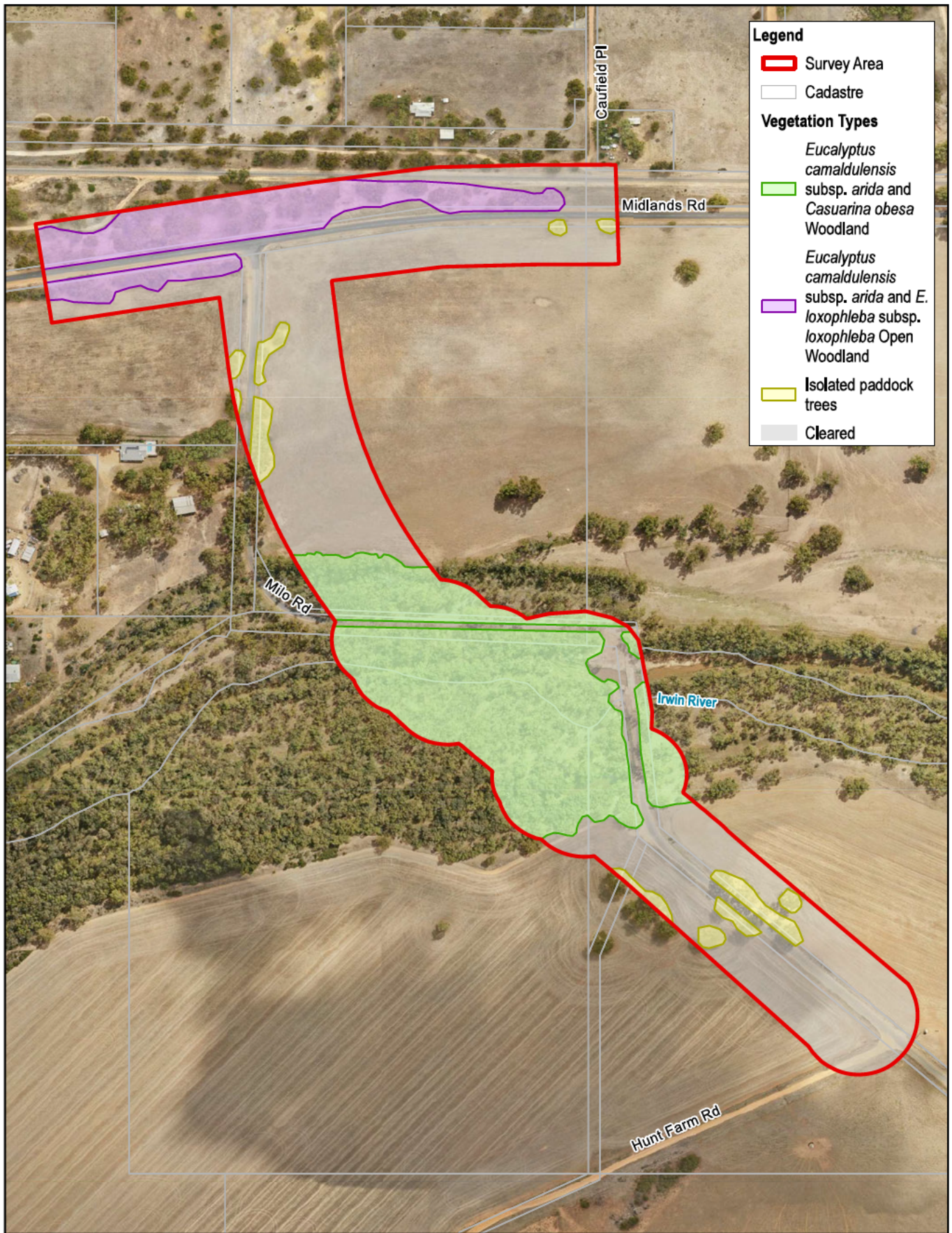
Shire of Irwin  
Milo Crossing

Project No. 12650028  
Revision No. 0  
Date 4/12/2025

Horizontal Datum: GDA2020  
Grid: GDA2020

**Survey Effort**

**FIGURE 3**

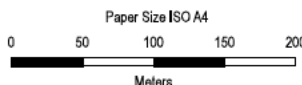


**Legend**

- Survey Area
- Cadastre

**Vegetation Types**

- Eucalyptus camaldulensis* subsp. *arida* and *Casuarina obesa* Woodland
- Eucalyptus camaldulensis* subsp. *arida* and *E. loxophleba* subsp. *loxophleba* Open Woodland
- Isolated paddock trees
- Cleared



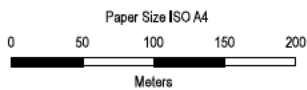
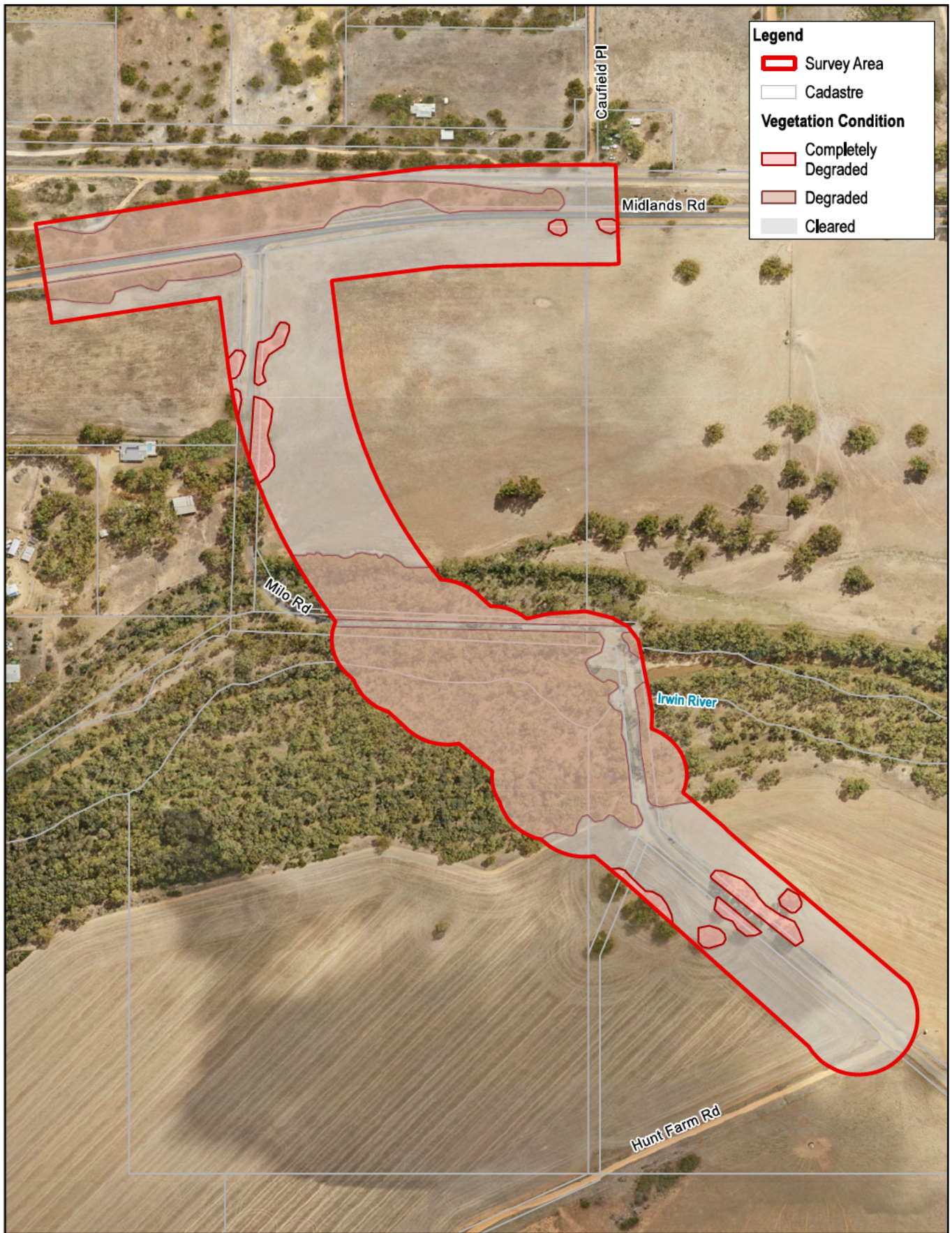
Shire of Irwin  
Milo Crossing

Project No. 12650028  
Revision No. 0  
Date 4/12/2025

Horizontal Datum: GDA2020  
Grid: GDA2020

**Vegetation Types**

**FIGURE 4**



Horizontal Datum: GDA2020  
Grid: GDA2020

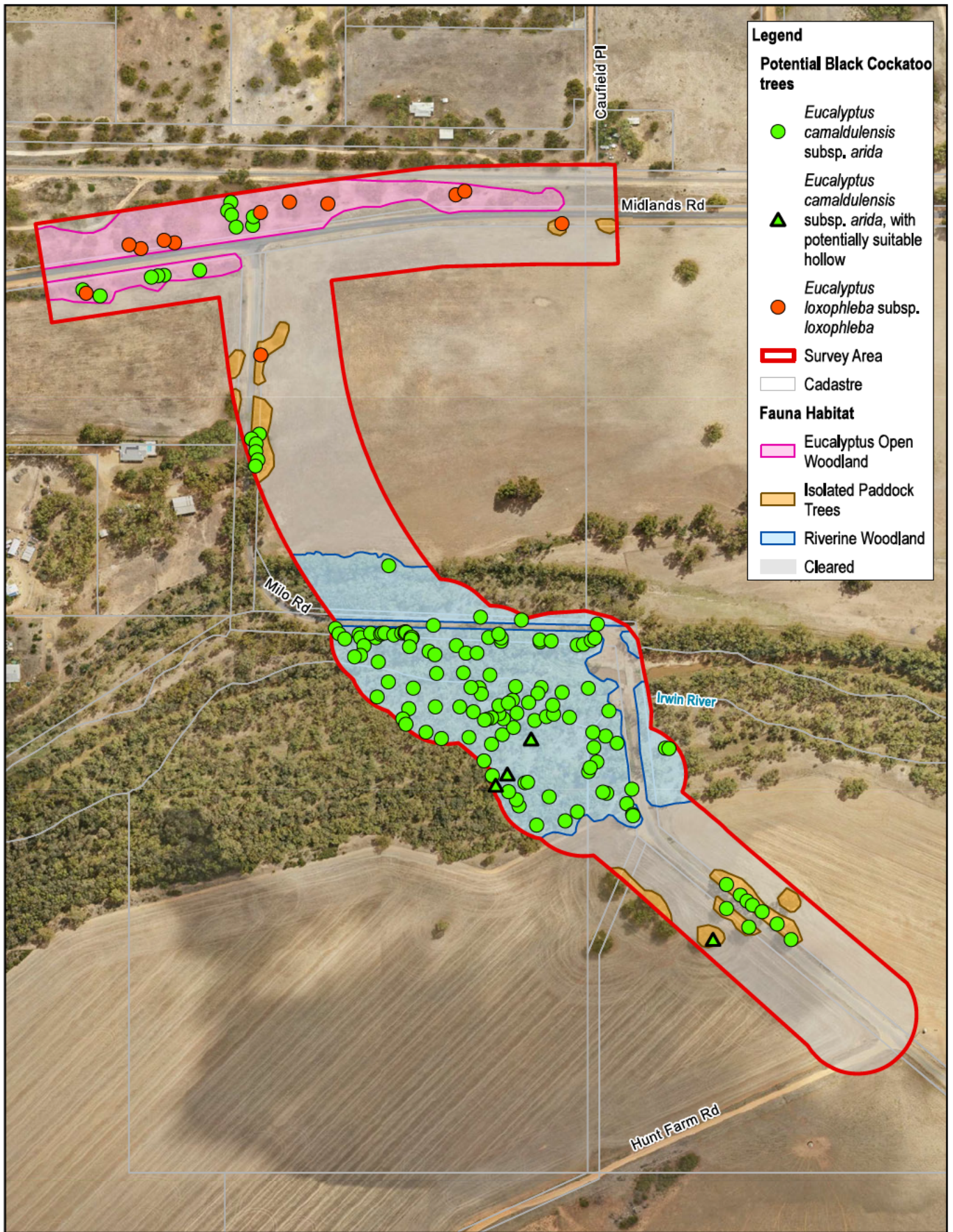


Shire of Irwin  
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**Vegetation Condition**

**FIGURE 5**



**Legend**

**Potential Black Cockatoo trees**

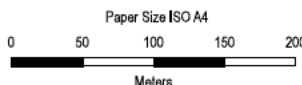
- *Eucalyptus camaldulensis* subsp. *arida*
- ▲ *Eucalyptus camaldulensis* subsp. *arida*, with potentially suitable hollow
- *Eucalyptus loxophleba* subsp. *loxophleba*

Survey Area

Cadastre

**Fauna Habitat**

- Eucalyptus Open Woodland
- Isolated Paddock Trees
- Riverine Woodland
- Cleared



Shire of Irwin  
Milo Crossing

Project No. 12650028  
Revision No. 0  
Date 4/12/2025

Horizontal Datum: GDA2020  
Grid: GDA2020

**Fauna Habitat and Black Cockatoo Habitat**

**FIGURE 6**

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Print date: 04 Dec 2025 - 22:02

Data source: WMS, Created by: vdesire

# **Appendix B**

**Relevant legislation, conservation codes  
and background information**

## Relevant legislation

### **Commonwealth *Environment Protection and Biodiversity Conservation Act 1999***

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) is the Federal Government's central piece of environmental legislation. It provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places, which are defined in the EPBC Act as Matters of National Environmental Significance (MNES).

The biological aspects listed as MNES include:

- Nationally threatened flora and fauna species and ecological communities
- Migratory species
- A person must not undertake an action that has, will have, or is likely to have a significant impact (direct or indirect) on MNES, without approval from the Federal Minister for the Environment.

The EPBC Act is administered by the Department of Agriculture, Water and the Environment (DAWE).

### **State *Environmental Protection Act 1986***

The *Environmental Protection Act 1986* (EP Act) is the primary legislative Act dealing with the protection of the environment in Western Australia. The Act allows the Environmental Protection Authority (EPA), to prevent, control and abate pollution and environmental harm, for the conservation, preservation, protection, enhancement and management of the environment and for matters incidental to or connected with the foregoing. Part IV of the EP Act is administered by the EPA and makes provisions for the EPA to undertake environmental impact assessment of significant proposals, strategic proposals and land use planning schemes.

The Department of Water and Environment Regulation (DWER) is responsible for administering the clearing provisions of the EP Act (Part V). Clearing of native vegetation in Western Australia requires a permit from the DWER, unless exemptions apply. Applications for clearing permits are assessed by the Department and decisions are made to grant or refuse the application in accordance with the Act. When making a decision the assessment considers clearing against the ten clearing principles as specified in Schedule 5 of the EP Act:

- 1) Native vegetation should not be cleared if it comprises a high level of biodiversity.
- 2) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a significance habitat for fauna indigenous to Western Australia.
- 3) Native vegetation should not be cleared if it includes, or is necessary, for the continued existence of rare flora.
- 4) Native vegetation should not be cleared if it comprises the whole or part of native vegetation in an area that has been extensively cleared.
- 5) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.
- 6) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.
- 7) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.
- 8) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.
- 9) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.
- 10) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.

Exemptions for clearing include clearing that is a requirement of a written law or authorised under certain statutory processes (listed in Schedule 6 of the EP Act) and exemptions for prescribed low impact day-to-day activities (prescribed in the Environmental Protection (Clearing of Native Vegetation) Regulations 2004); these exemptions do not apply in environmentally sensitive areas (ESAs).

## State Biodiversity and Conservation Act 2016

The *Biodiversity Conservation Act 2016* (BC Act) provides for the conservation and protection of biodiversity and biodiversity components, as well as the promotion of the ecologically sustainable use of biodiversity components in Western Australia. The BC Act replaces both the repealed *Wildlife Conservation Act 1950* (WC Act) and the *Sandalwood Act 1929* (Sandalwood Act), as well as their associated regulations. To attain the objectives of the BC Act, principles of ecological sustainable development have been established:

- Decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations
- If there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
- The present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations
- The conservation of biodiversity and ecological integrity should be a fundamental consideration in decision making
- Improved valuation, pricing and incentive mechanisms should be promoted.

The BC Act is administered by the Department of Biodiversity Conservation and Attractions (DBCA).

## State Biosecurity and Agriculture Management Act 2007

The *Biosecurity and Agriculture Management Act 2007* (BAM Act) and associated regulations are administered by the Department of Primary Industries and Regional Development (DPIRD) and replace the repealed *Agriculture and Related Resources Protection Act 1976*. The main purposes of the BAM Act and its regulations are to:

- Prevent new animal and plant pests (vermin and weeds) and diseases from entering WA
- Manage the impact and spread of those pests already present in the state
- Safely manage the use of agricultural and veterinary chemicals
- Increased control over the sale of agricultural products that contain violative chemical residues.

The Western Australian Organism List (WAOL) provides the status of organisms which have been categorised under the BAM Act. A Declared Pest is a prohibited organism or an organism for which a declaration under Section 22(2) of the Act is in force. Declared Pests may be assigned a control category including: C1 (exclusion), C2 (eradication) and C3 (management). The category may apply to the whole of the State, LGAs, districts, individual properties or even paddocks, and all landholders are obliged to comply with the specific category of control. Categories of control are defined below.

### DPIRD Categories for Declared Pests under the BAM Act

Control class code	Description
C1 (exclusion)	Pests will be assigned to this category if they are not established in Western Australia and control measures are to be taken, including border checks, in order to prevent them entering and establishing in the State.
C2 (Eradication)	Pests will be assigned to this category if they are present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility.
C3 (Management)	Pests will be assigned to this category if they are established in Western Australia but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area which currently is free of that pest.

## Background Information

Environmentally Sensitive Areas (ESAs) are declared by the Minister for Environment under Section 51B of the EP Act. The Table below outlines the aspects of areas declared as ESA in the Environmental Protection (Environmentally Sensitive Areas) Notice 2005.

### Aspects of ESAs

Aspects of Environmentally Sensitive Areas
A declared World Heritage property as defined in Section 13 of the EPBC Act.
An area that is included on the Register of the National Estate (RNE), because of its natural values, under the <i>Australian Heritage Commission Act 1975</i> of the Commonwealth (the RNE was closed in 2007 and is no longer a statutory list – all references to the RNE were removed from the EPBC Act on 19 February 2012).
A defined wetland and the area within 50 m of the wetland. Defined wetlands include Ramsar wetlands, conservation category wetlands and nationally important wetlands.
The area covered by vegetation within 50 m of rare flora, to the extent to which the vegetation is continuous with the vegetation in which the rare flora is located.
The area covered by a Threatened Ecological Community.
A Bush Forever Site listed in "Bush Forever" Volumes 1 and 2 (2000), published by the Western Australia Planning Commission, except to the extent to which the site is approved to be developed by the Western Australia Planning Commission.
The areas covered by the <i>Environmental Protection (Gnangara Mound Crown Land) Policy 1992</i> .
The areas covered by the <i>Environmental Protection (Western Swamp Tortoise Habitat) Policy 2002</i> .
The areas covered by the lakes to which the <i>Environmental Protection (Swan Coastal Plain Lakes) Policy 1992</i> (EPP Lakes) applies.
Protected wetlands as defined in the <i>Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998</i> .

## Reserves and conservation areas

### Bush Forever

Bush Forever, which was released in December 2000 and proclaimed in 2010, is a Government initiative aimed to retain and protect regionally significant bushland on the Swan Coastal Plain within the Perth Metropolitan Region. Bush Forever aims to protect more than 51,000 hectares of regionally significant bushland within 287 sites across the metropolitan portion of the Swan Coastal Plain (Government of Western Australia (GoWA) 2000). Bush Forever sites constitute ESAs as declared by a notice under Section 51B of the EP Act.

### Department of Biodiversity, Conservation and Attractions managed lands and waters

DBCA manages lands and waters throughout Western Australia to conserve ecosystems and species, and to provide for recreation and appreciation of the natural environment. DBCA managed lands and waters include national parks, conservation parks and reserves, marine parks and reserves, regional parks, nature reserves, State forest and timber reserves. Access to, or through, some areas of DBCA managed lands may require a permit or could be restricted due to management activities. Proposed land use changes and development proposals that abut DBCA managed lands will generally be referred to DBCA throughout the assessment process.

# Wetlands

Wetlands include not only lakes with open water, but areas of seasonally, intermittently or permanently waterlogged soil.

## Ramsar Wetlands (Wetlands of International Importance)

The Convention of Wetlands of International Importance was signed in 1971 at the Iranian town of Ramsar. The Convention has since been referred to as the Ramsar Convention. Ramsar Listed wetlands are “sites containing representative, rare or unique wetlands, or wetlands that are important for conserving biological diversity ... because of their ecological, botanical, zoological, limnological or hydrological importance” (DAWE 2020b). Once a Ramsar Listed Wetland is designated, the country agrees to manage its conservation and ensure its wise use. Under the Convention, wise use is broadly defined as “maintaining the ecological character of a wetland” (DAWE, 2021).

## Nationally Important Wetlands

Wetlands of national significance are listed under the Directory of Important Wetlands in Australia. Nationally important wetlands are wetlands which meet at least one of the following criteria (DAWE 2020a):

- It is a good example of a wetland type occurring within a biogeographic region in Australia
- It is a wetland which plays an important ecological or hydrological role in the natural functioning of a major wetland system/complex
- It is a wetland which is important as the habitat for animal taxa at a vulnerable stage in their life cycles, or provides a refuge when adverse conditions such as drought prevail
- The wetland supports one percent or more of the national populations of any native plant or animal taxa
- The wetland supports native plant or animal taxa or communities which are considered endangered or vulnerable at the national level
- The wetland is of outstanding historical or cultural significance

## Geomorphic wetlands

Categorisation of wetlands has been conducted by Hill et al. (1996), delineating Swan Coastal Plain wetlands into levels of protection and management categories. Conservation Category Wetlands are wetlands that support high levels of attributes and functions. Resource Enhancement Wetlands are those that have been partly modified but still support substantial functions and attributes. Multiple Use Wetlands are classified as those wetlands with few attributes that still provide important wetland functions. Multiple Use wetlands have few important ecological attributes and functions remaining.

The Geomorphic Wetlands Swan Coastal Plain dataset displays the location, boundary, geomorphic classification (wetland type) and management category of wetlands on the Swan Coastal Plain.

## Vegetation extent and status

The National Objectives and Targets for Biodiversity Conservation 2001–2005 (Commonwealth of Australia 2001) recognise that the retention of 30 percent or more of the pre-clearing extent of each ecological community is necessary if Australia’s biological diversity is to be protected. This is the threshold level below which species loss appears to accelerate exponentially and loss below this level should not be permitted. This level of recognition is in keeping with the targets recommended in the review of the National Strategy for the Conservation of Australia’s Biological Diversity (ANZECC 2000).

The extent of remnant native vegetation in WA has been assessed by Shepherd et al. (2002) and the GoWA (2019), based on broadscale vegetation association mapping by Beard (various publications). The GoWA produces Statewide Vegetation Statistics Reports that are used for a number of purposes including conservation planning, land use planning and when assessing development applications. The reports are updated every 2-3 years.

## Vegetation condition

The vegetation condition can be assessed in accordance with the vegetation condition rating scale for the South West and Interzone Botanical Provinces (EPA 2016a). The scale recognises the intactness of vegetation and consists of six rating levels as outlined below.

### **Vegetation condition rating scale for the South West and Interzone Botanical Provinces**

Condition	South West and Interzone Botanical Provinces description
Pristine	Pristine or nearly so, no obvious signs of 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 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 or shrubs.

## Conservation codes

Species of significant flora, fauna and communities are protected under both Federal and State Acts. The Federal EPBC Act provides a legal framework to protect and manage nationally important flora and communities. The State BC Act is the primary wildlife conservation legislation in Western Australia. Information on the conservation codes is summarised in the following sections.

## Ecological communities

### Significant communities

Ecological communities are defined as naturally occurring biological assemblages that occur in a particular type of habitat (English and Blyth 1997). Federally listed Threatened Ecological Communities (TECs) are protected under the EPBC Act. The BC Act provides for the Minister to list an ecological community as a TEC (section 27), or as a collapsed ecological community (section 31) statutory listing of State TECs by the Minister. The legislation also describes statutory processes for preparing recovery plans for TECs, the registration of their critical habitat, and penalties for unauthorised modification of TECs.

Possible TECs that do not meet survey criteria are added to the DBCA Priority Ecological Community (PEC) List under Priorities 1, 2 and 3. These are ecological communities that are adequately known; are rare but not threatened, or meet criteria for Near Threatened. PECs 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. PECs are not listed under any formal Federal or State legislation, however, may be listed as TECs under the EPBC Act.

**Codes and definitions for TECs listed under the EPBC Act and/or BC Act**

Categories	Definitions
<b>Federal Government Conservation Categories (EPBC Act)</b>	
Critically Endangered (CR)	An ecological community if, at that time, is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000).
Endangered *(EN)	An ecological community if, at that time: is not critically endangered; and is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000).
Vulnerable (VU)	An ecological community if, at that time: is not critically endangered or endangered; and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria (as outlined in Environment Protection and Biodiversity Conservation Regulations 2000).
<b>Western Australia Conservation Categories (BC Act)</b>	
<u>Threatened Ecological Communities</u>	
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.
<u>Collapsed ecological communities</u>	
<p>An ecological community is eligible for listing as a collapsed ecological community at a particular time if, at that time:</p> <ul style="list-style-type: none"> <li>– there is no reasonable doubt that the last occurrence of the ecological community has collapsed); or</li> <li>– the ecological community has been so extensively modified throughout its range that no occurrence of it is likely to recover: <ul style="list-style-type: none"> <li>• its species composition or structure; or</li> <li>• its species composition and structure.</li> </ul> </li> </ul> <p>Section 33 of the BC Act provides for a collapsed ecological community to be regarded as a threatened ecological community if it is discovered in a state that no longer makes it eligible for listing as a collapsed ecological community.</p>	

**Categories and definitions for PECs as listed by the DBCA**

Category	Description
Priority 1	<p>Poorly known ecological communities.</p> <p>Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤100 ha). 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.</p>

Category	Description
Priority 2	<p>Poorly known ecological communities.</p> <p>Communities that are known from few occurrences with a restricted distribution (generally <math>\leq 10</math> occurrences or a total area of <math>\leq 200</math> ha). At least some occurrences are not believed to be under immediate threat 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.</p>
Priority 3	<p>Poorly known ecological communities.</p> <ul style="list-style-type: none"> <li>– 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;</li> <li>– 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, or;</li> <li>– 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, and inappropriate fire regimes.</li> </ul> <p>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.</p>
Priority 4	<p>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.</p> <ul style="list-style-type: none"> <li>– 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.</li> <li>– 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 Vulnerable.</li> <li>– Ecological communities that have been removed from the list of threatened communities during the past five years</li> </ul>
Priority 5	<p>Conservation Dependent ecological communities.</p> <p>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.</p>

## Other significant vegetation

Vegetation may be significant for a range of reasons other than a statutory listing. The EPA (2016a, b) states that significant vegetation may include vegetation that includes the following:

- Restricted distribution
- Degree of historical impact from threatening processes
- A role as a refuge
- Providing an important function required to maintain ecological integrity of a significant ecosystem
- Local endemism in restricted habitats
- Novel combinations of taxa
- A role as a key habitat for Threatened species or large population representing a significant proportion of the local to regional total population of a species
- Being representative of a vegetation unit in 'pristine' condition in a highly cleared landscape, recently discovered range extensions, or isolated outliers of the main range.

This may apply at a number of levels, so the unit may be significant when considered at the fine-scale (intralocality), intermediate-scale (locality or inter-locality) or broad-scale (local to region).

# Flora and fauna

## Significant flora and fauna

Species of significant flora are protected under both Federal and State legislation. Any activities that are deemed to have a significant impact on species that are recognised by the EPBC Act, and/or the BC Act can warrant referral to DAWE and/or the EPA.

The Federal conservation level of flora and fauna species and their significance status is assessed under the EPBC Act. The significance levels for flora and fauna used in the EPBC Act align with the International Union for Conservation of Nature (IUCN) Red List criteria, which are internationally recognised as providing best practice for assigning the conservation status of species. The EPBC Act also protects land and migratory species that are listed under International Agreements. 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)

The State conservation level of flora and fauna species and their significance status also follows the IUCN Red List criteria. Under the BC Act flora and fauna can be listed as Threatened, Extinct and as Specially Protected species.

Threatened species are those species which have been adequately searched for and are deemed to be, in the wild, either rare, under identifiable threat of extinction, or otherwise in need of special protection, and have been gazetted as such. The assessment of the conservation status of Threatened species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria. Specially protected species meet 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 or Extinct species under the BC Act cannot also be listed as Specially Protected 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 flora or fauna.

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.

For the purposes of this assessment, all species listed under the EPBC Act, BC Act and DBCA Priority species are considered significant.

**Categories and definitions for EPBC Act and BC Act listed flora and fauna species**

Conservation category	Definition
Threatened species	
Critically Endangered (CR)	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.
Endangered (EN)	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.
Vulnerable (VU)	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.
Extinct species	
Extinct (EX)	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).
Extinct in the Wild (EW)	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).
Specially protected species	
Migratory (MI)	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.
Species of Special conservation interest (conservation dependent fauna) (CD)	Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened.
Other specially protected fauna (OS)	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).

**Codes for DBCA listed Priority flora and fauna**

Priority category	Definition
Priority 1	Poorly-known taxa 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 category	Definition
Priority 2	<p>Poorly-known taxa</p> <p>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.</p>
Priority 3	<p>Poorly-known taxa</p> <p>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.</p>
Priority 4	<p>Rare, Near Threatened and other taxa in need of monitoring</p> <ul style="list-style-type: none"> <li>– Rare: Taxa 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 taxa are usually represented on conservation lands.</li> <li>– Near Threatened. Taxa that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.</li> <li>– Taxa that have been removed from the list of threatened taxa during the past five years for reasons other than taxonomy.</li> </ul>

## Other significant flora

Flora species, subspecies, varieties, hybrids and ecotypes may be significant for a range of reasons, other than a statutory listing. The EPA (2016a, b) states that significant flora may include taxa that have/are:

- A keystone role in a particular habitat for Threatened or Priority flora or fauna species, or large populations representing a considerable proportion of the local or regional total population of a species
- Relictual status, being representation of taxonomic or physiognomic groups that no longer occur widely in the broader landscape
- New species or anomalous features that indicate a potential new species
- Being representative of the range of a species (particularly, at the extremes of range, recently discovered range extensions, or isolated outliers of the main range)
- Unusual species, including restricted subspecies, varieties, or naturally occurring hybrids
- Local endemism (a restricted distribution) or association with a restricted habitat type (e.g. surface water or groundwater dependent ecosystems).

## Other significant fauna

Fauna species may be significant for a range of reasons other than those protected by international agreement or treaty, Specially Protected or Priority Fauna. Significant fauna may include short-range endemic species, species that have declining populations or declining distributions, species at the extremes of their range, or isolated outlying populations, or species which may be undescribed (EPA, 2010).

## Introduced plants (weeds)

### Declared Pests

Information on species considered to be Declared Pests is provided under *State Biosecurity and Agriculture Management Act 2007*.

## Weeds of National Significance

The spread of weeds across a range of land uses or ecosystems is important in the context of socio-economic and environmental values. The assessment of Weeds of National Significance (WoNS) is based on four major criteria:

- Invasiveness
- Impacts
- Potential for spread
- Socio-economic and environmental values.

Australian state and territory governments have identified thirty-two Weeds of National Significance (WoNS); a list of 20 WoNS was endorsed in 1999 and a further 12 were added in 2012.

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Shepherd, DP, Beeston, GR & Hopkins, AJM 2002, Native Vegetation in Western Australia – Extent, Type and Status, Resource Management Technical Report 249, Perth, Department of Agriculture.

Threatened Species Scientific Community (TSSC) 2016, Environmental Protection and Biodiversity Conservation Act 1999 Approved Conservation Advice (incorporating listing advice) for the banksia Woodlands of the Swan Coastal Plain Ecological Community, Department of the Environment and Energy, Canberra. Available at <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/131-conservation-advice.pdf>

# **Appendix C**

**Database searches**



# 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: 06-Aug-2025

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

# Summary

## Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may 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 a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

<a href="#">World Heritage Properties:</a>	None
<a href="#">National Heritage Places:</a>	None
<a href="#">Wetlands of International Importance (Ramsar)</a>	None
<a href="#">Great Barrier Reef Marine Park:</a>	None
<a href="#">Commonwealth Marine Area:</a>	None
<a href="#">Listed Threatened Ecological Communities:</a>	1
<a href="#">Listed Threatened Species:</a>	59
<a href="#">Listed Migratory Species:</a>	44

## 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.

<a href="#">Commonwealth Lands:</a>	1
<a href="#">Commonwealth Heritage Places:</a>	None
<a href="#">Listed Marine Species:</a>	67
<a href="#">Whales and Other Cetaceans:</a>	11
<a href="#">Critical Habitats:</a>	None
<a href="#">Commonwealth Reserves Terrestrial:</a>	None
<a href="#">Australian Marine Parks:</a>	None
<a href="#">Habitat Critical to the Survival of Marine Turtles:</a>	None

## Extra Information

This part of the report provides information that may also be relevant to the area you have

<a href="#">State and Territory Reserves:</a>	3
<a href="#">Regional Forest Agreements:</a>	None
<a href="#">Nationally Important Wetlands:</a>	None
<a href="#">EPBC Act Referrals:</a>	12
<a href="#">Key Ecological Features (Marine):</a>	None
<a href="#">Biologically Important Areas:</a>	7
<a href="#">Bioregional Assessments:</a>	None
<a href="#">Geological and Bioregional Assessments:</a>	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
<a href="#">Subtropical and Temperate Coastal Saltmarsh</a>	Vulnerable	Community likely to occur within area	In buffer area only

### 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
<b>BIRD</b>			
<a href="#">Anous tenuirostris melanops</a> Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Aphelocephala leucopsis</a> Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
<a href="#">Diomedea amsterdamensis</a> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Falco hypoleucos</a> Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Leipoa ocellata</a> Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Limosa lapponica menzbieri</a> Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Phaethon rubricauda westralis</a> Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Pterodroma mollis</a> Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Rostratula australis</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Sternula albifrons</a> Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Sternula nereis nereis</a> Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Thalassarche carteri</a> Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche cauta</a> Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Zanda latirostris listed as Calyptorhynchus latirostris</a> Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to occur within area	In feature area
<b>MAMMAL</b>			
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Dasyurus geoffroi</a> Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Eubalaena australis</a> Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Macroderma gigas</a> Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
<a href="#">Neophoca cinerea</a> Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat known to occur within area	In buffer area only
<a href="#">Parantechinus apicalis</a> Dibbler [313]	Endangered	Species or species habitat may occur within area	In feature area
<b>PLANT</b>			
<a href="#">Caladenia hoffmanii</a> Hoffman's Spider-orchid [56719]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Caleana dixonii listed as Paracaleana dixonii</a> Sandplain Duck Orchid [87944]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Chorizema humile</a> Prostrate Flame Pea [32573]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Conostylis dielsii subsp. teres</a> Irwin's Conostylis [3614]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Conostylis micrantha</a> Small-flowered Conostylis [17635]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Daviesia speciosa</a> Beautiful Daviesia [56698]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Drummondita ericoides</a> Morseby Range Drummondita [9193]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Eucalyptus crispata</a> Yandanooka Mallee [24268]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Eucalyptus cuprea</a> Mallee Box [56773]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Eucalyptus leprophloia</a> Scaly Butt Mallee, Scaly-butt Mallee [56712]	Endangered	Species or species habitat likely to occur within area	In feature area
<a href="#">Hemiandra gardneri</a> Red Snakebush [7945]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Leucopogon marginatus</a> Thick-margined Leucopogon [12527]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Leucopogon oblectus</a> Hidden Beard-heath [19614]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Tetratheca nephelioides</a> [83217]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Thelymitra stellata</a> Star Sun-orchid [7060]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Wurmbea tubulosa</a> Long-flowered Nancy [12739]	Endangered	Species or species habitat known to occur within area	In feature area
<b>REPTILE</b>			
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#"><i>Dermochelys coriacea</i></a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#"><i>Egernia stokesii badia</i></a> Western Spiny-tailed Skink, Baudin Island Spiny-tailed Skink [64483]	Endangered	Species or species habitat may occur within area	In feature area
<a href="#"><i>Natator depressus</i></a> Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

## SHARK

<a href="#">Carcharias taurus (west coast population)</a> Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Carcharodon carcharias</a> White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<a href="#">Pristis pristis</a> Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Rhincodon typus</a> Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Sphyrna lewini</a> Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only

## SPIDER

<a href="#">Idiosoma nigrum</a> Shield-backed Trapdoor Spider, Black Rugose Trapdoor Spider [66798]	Vulnerable	Species or species habitat may occur within area	In buffer area only
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## Listed Migratory Species

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">[ Resource Information ]</a>			
<b>Migratory Marine Birds</b>			
<a href="#">Anous stolidus</a> Common Noddy [825]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
<a href="#">Ardenna carneipes</a> Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
<a href="#">Diomedea amsterdamensis</a> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Hydroprogne caspia</a> Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Phaethon lepturus</a> White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
<a href="#">Phaethon rubricauda</a> Red-tailed Tropicbird [994]		Species or species habitat may occur within area	In buffer area only
<a href="#">Sternula albifrons</a> Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Thalassarche carteri</a> Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche cauta</a> Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<b>Migratory Marine Species</b>			
<a href="#">Balaenoptera edeni</a> Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Carcharhinus longimanus</a> Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only
<a href="#">Carcharias taurus</a> Grey Nurse Shark [64469]		Species or species habitat likely to occur within area	In buffer area only
<a href="#">Carcharodon carcharias</a> White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Eubalaena australis as Balaena glacialis australis</a> Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Lamna nasus</a> Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In buffer area only
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
<a href="#">Mobula alfredi as Manta alfredi</a> Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat known to occur within area	In buffer area only
<a href="#">Mobula birostris as Manta birostris</a> Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
<a href="#">Natator depressus</a> Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
<a href="#">Pristis pristis</a> Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Rhincodon typus</a> Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<b>Migratory Terrestrial Species</b>			
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
<b>Migratory Wetlands Species</b>			
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat likely to occur within area	In buffer area only
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Pandion haliaetus</a> Osprey [952]		Breeding known to occur within area	In feature area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In buffer area only

## 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 to 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 - [50381]	WA	In buffer area only

### Listed Marine Species

[\[ Resource Information \]](#)

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
<a href="#">Actitis hypoleucos</a>			
Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
<a href="#">Anous stolidus</a>			
Common Noddy [825]		Species or species habitat may occur within area	In buffer area only
<a href="#">Anous tenuirostris melanops</a>			
Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Apus pacificus</a>			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
<a href="#">Ardenna carneipes as Puffinus carneipes</a>			
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
<a href="#">Bubulcus ibis as Ardea ibis</a>			
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Calidris acuminata</a>			
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area overfly marine area	In buffer area only
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Chalcites osculans as Chrysococcyx osculans</a> Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
<a href="#">Diomedea amsterdamensis</a> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Haliaeetus leucogaster</a> White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
<a href="#">Hydroprogne caspia as Sterna caspia</a> Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Larus pacificus</a> Pacific Gull [811]		Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat likely to occur within area	In buffer area only
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Merops ornatus</a> Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Pandion haliaetus</a> Osprey [952]		Breeding known to occur within area	In feature area
<a href="#">Phaethon lepturus</a> White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
<a href="#">Phaethon rubricauda</a> Red-tailed Tropicbird [994]		Species or species habitat may occur within area	In buffer area only
<a href="#">Pterodroma mollis</a> Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Puffinus assimilis</a> Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Rostratula australis as Rostratula benghalensis (sensu lato)</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Stercorarius antarcticus as Catharacta skua</a> Brown Skua [85039]		Species or species habitat may occur within area	In buffer area only
<a href="#">Sternula albifrons as Sterna albifrons</a> Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche carteri</a> Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche cauta</a> Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thinornis cucullatus as Thinornis rubricollis</a> Hooded Plover, Hooded Dotterel [87735]		Species or species habitat may occur within area overfly marine area	In buffer area only
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In buffer area only

Fish

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Acentronura australe</a> Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only
<a href="#">Campichthys galei</a> Gale's Pipefish [66191]		Species or species habitat may occur within area	In buffer area only
<a href="#">Choeroichthys suillus</a> Pig-snouted Pipefish [66198]		Species or species habitat may occur within area	In buffer area only
<a href="#">Halicampus brocki</a> Brock's Pipefish [66219]		Species or species habitat may occur within area	In buffer area only
<a href="#">Hippocampus angustus</a> Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area	In buffer area only
<a href="#">Hippocampus breviceps</a> Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In buffer area only
<a href="#">Hippocampus subelongatus</a> West Australian Seahorse [66722]		Species or species habitat may occur within area	In buffer area only
<a href="#">Lissocampus fatiloquus</a> Prophet's Pipefish [66250]		Species or species habitat may occur within area	In buffer area only
<a href="#">Maroubra perserrata</a> Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
<a href="#">Mitotichthys meraculus</a> Western Crested Pipefish [66259]		Species or species habitat may occur within area	In buffer area only
<a href="#">Nannocampus subosseus</a> Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Phycodurus eques</a> Leafy Seadragon [66267]		Species or species habitat may occur within area	In buffer area only
<a href="#">Phyllopteryx taeniolatus</a> Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
<a href="#">Pugnaso curtirostris</a> Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only
<a href="#">Solegnathus lettiensis</a> Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In buffer area only
<a href="#">Stigmatopora argus</a> Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
<a href="#">Stigmatopora nigra</a> Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
<a href="#">Syngnathoides biaculeatus</a> Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only
<a href="#">Urocampus carinirostris</a> Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
<a href="#">Vanacampus margaritifer</a> Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
<b>Mammal</b>			
<a href="#">Arctocephalus forsteri</a> Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
<a href="#">Neophoca cinerea</a> Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat known to occur within area	In buffer area only
<b>Reptile</b>			

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Aipysurus pooleorum</a> Shark Bay Sea Snake [66061]		Species or species habitat may occur within area	In buffer area only
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Hydrophis kingii as Disteira kingii</a> Spectacled Sea Snake [93511]		Species or species habitat may occur within area	In buffer area only
<a href="#">Hydrophis platura as Pelamis platurus</a> Yellow-bellied Sea Snake [93746]		Species or species habitat may occur within area	In buffer area only
<a href="#">Natator depressus</a> Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Whales and Other Cetaceans			[ <a href="#">Resource Information</a> ]
Current Scientific Name	Status	Type of Presence	Buffer Status
<b>Mammal</b>			
<a href="#">Balaenoptera acutorostrata</a> Minke Whale [33]		Species or species habitat may occur within area	In buffer area only
<a href="#">Balaenoptera edeni</a> Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
<a href="#">Delphinus delphis</a> Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
<a href="#">Eubalaena australis</a> Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Grampus griseus</a> Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
<a href="#">Stenella attenuata</a> Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
<a href="#">Tursiops aduncus</a> Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
<a href="#">Tursiops truncatus s. str.</a> 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
Beekeepers	Nature Reserve	WA	In buffer area only
Dongara	Nature Reserve	WA	In buffer area only
Yardanogo	Nature Reserve	WA	In buffer area only

EPBC Act Referrals					[ Resource Information ]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status	

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
<a href="#">BEHARRA SILICA SAND PROJECT</a>	2022/09308		Completed	In buffer area only
<a href="#">Zemira 3D Seismic Survey</a>	2020/8658		Completed	In buffer area only
<b>Controlled action</b>				
<a href="#">construction and operation of a unmanned platform at the Cliff Head oil field, a</a>	2003/1300	Controlled Action	Post-Approval	In buffer area only
<a href="#">Karara Magnetite Project</a>	2006/3017	Controlled Action	Post-Approval	In buffer area only
<a href="#">Mount Gibson Iron Ore Pellet Project</a>	2000/95	Controlled Action	Completed	In buffer area only
<a href="#">Natta 3D Seismic Acquisition Survey, 36 km east of Dongara</a>	2021/8992	Controlled Action	Referral Decision	In buffer area only
<a href="#">open cut mine &amp; assoc infrastructure</a>	2005/2381	Controlled Action	Post-Approval	In buffer area only
<a href="#">Tiwest Dongara Project, mineral sands mining and concentrating operation, 25km</a>	2009/5032	Controlled Action	Post-Approval	In buffer area only
<b>Not controlled action</b>				
<a href="#">Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia</a>	2015/7522	Not Controlled Action	Completed	In feature area
<a href="#">Waitsia Gas Project Stage 2, Yardarino WA</a>	2020/8633	Not Controlled Action	Completed	In buffer area only
<b>Not controlled action (particular manner)</b>				
<a href="#">Marine Seismic Survey for oil and gas in Commonwealth waters off the WA coast.</a>	2004/1802	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
<b>Referral decision</b>				
<a href="#">Transmission Line Rebuild and Extension</a>	2009/4972	Referral Decision	Completed	In buffer area only
<b>Biologically Important Areas</b>			<b>[ Resource Information ]</b>	
Scientific Name		Behaviour	Presence	Buffer Status
<b>Seabirds</b>				
<a href="#">Ardenna pacifica</a>				
Wedge-tailed Shearwater [84292]		Foraging (in high numbers)	Known to occur	In buffer area only

Scientific Name	Behaviour	Presence	Buffer Status
<a href="#">Hydroprogne caspia</a> Caspian Tern [808]	Foraging (provisioning young)	Known to occur	In buffer area only
<a href="#">Larus pacificus</a> Pacific Gull [811]	Foraging (in high numbers)	Known to occur	In buffer area only
<a href="#">Puffinus assimilis tunneyi</a> Little Shearwater [59363]	Foraging (in high numbers)	Known to occur	In buffer area only
<a href="#">Sternula nereis</a> Fairy Tern [82949]	Foraging (in high numbers)	Known to occur	In buffer area only
<b>Seals</b>			
<a href="#">Neophoca cinerea</a> Australian Sea Lion [22]	Foraging (male and female)	Known to occur	In buffer area only
<b>Whales</b>			
<a href="#">Megaptera novaeangliae</a> 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 referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is 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 report 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 on the contents of this report.

## 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 and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

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); or 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 to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

## 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 breeding sites; and
- 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.



# Dandjoo Species List Export

Created by Guest User on 06 Aug 2025

Source	Dandjoo – Department of Biodiversity, Conservation and Attractions
Method	User defined polygon: [[[[[114.86824035644533, -29.17853816967128], [114.92454528808594, -29.1047703414148], [115.01449584960939, -29.058563546733016], [115.07080078125001, -29.04895953476066], [115.12435913085939, -29.049559811709067], [115.18272399902345, -29.061564617057556], [115.21156311035158, -29.078368996463897], [115.23696899414064, -29.117368596639448], [115.25962829589845, -29.147358232198815], [115.26924133300783, -29.173741872563664], [115.27267456054689, -29.186331674316282], [115.2678680419922, -29.22588956225378], [115.25413513183595, -29.255248418524193], [115.22460937500001, -29.28040644762522], [115.21430969238283, -29.3121446461392], [115.20263671875001, -29.353449400718432], [115.18272399902345, -29.37200116036731], [115.16006469726564, -29.379779924646158], [115.1195526123047, -29.383369923025867], [115.07423400878908, -29.382771598757937], [115.0481414794922, -29.3809766048451], [114.99664306640626, -29.377386522033103], [114.96849060058595, -29.365418664755257], [114.93759155273439, -29.348062773041857], [114.90943908691408, -29.319927980497745], [114.88746643066408, -29.281005372854608], [114.87304687500001, -29.231282636560547], [114.86824035644533, -29.17853816967128]]]]].
Date time	2025-08-06T15:10:44.689150+08:00

Conservation status summary	Count
CR	3
Cons code inherited from parent	1
EN	7
EX	1
None	1328
P1	7
P2	11
P3	34
P4	12
Parent of conservation listed taxa	1
VU	5
<b>Total</b>	<b>1410</b>

Kingdoms	Count
Animalia	488
Plantae	922
<b>Total unique species</b>	<b>1410</b>

#	Class	Family	Name	Establishment	Conservation
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## Animalia

1	None	None	Barbuligobius boehlkei Lachner & McKinney, 1974		
2	None	None	Beliops xanthokrossos Hardy, 1985		
3	None	None	Belonepterygion fasciolatum (Ogilby, 1889)		
4	None	None	Chironemus maculosus (Richardson, 1850)		
5	None	None	Choeroichthys suillus Whitley, 1951		
6	None	None	Gomeza bicornis		

7	None	None	<i>Ibacus peronii</i>		
8	None	None	<i>Leucascus</i> sp.		
9	None	None	<i>Limnoria uncapedis</i> Cookson, 1991		
10	None	None	<i>Norfolkia brachylepis</i> (Schultz, 1960)		
11	None	None	<i>Paraplotosus albilabris</i> (Valenciennes, 1840)		
12	None	None	<i>Parvicrepis</i> Whitley, 1931		
13	None	None	<i>Pedinura flindersia</i> Bruce, 2003		
14	None	None	<i>Perryena leucometopon</i> (Waite, 1922)		
15	None	None	<i>Phorbas</i> sp.		
16	None	None	<i>Porocephalichthys dasyrhynchus</i> (Hutchins & Cohen, 1982)		
17	None	None	<i>Posidonichthys hutchinsi</i> Briggs, 1993		
18	None	None	<i>Quadrimaera viridis</i> (Haswell, 1879)		
19	None	None	<i>Spirastrella</i> sp.		
20	None	None	<i>Sticharium dorsale</i> Günther, 1867		
21	None	None	<i>Suezichthys cyanolaemus</i> Russell, 1985		
22	None	None	<i>Tetrapocillon minor</i>		
23	None	None	<i>Thorecta</i> sp.		
24	None	None	<i>Xiphophorus hellerii</i> Heckel, 1848		
25	None	None	<i>Zephyrichthys barryi</i> Müller & Schwarzhans, 2007		
26	Actinopterygii Klein, 1885	None	<i>Heteroscarus acroptilus</i> (Richardson, 1846)		
27	Actinopterygii Klein, 1885	Apogonidae	<i>Ostorhinchus victoriae</i> Günther, 1859		
28	Actinopterygii Klein, 1885	Apogonidae	<i>Vincentia badia</i> Allen, 1987		
29	Actinopterygii Klein, 1885	Apogonidae	<i>Vincentia punctata</i> (Klunzinger, 1879)		
30	Actinopterygii Klein, 1885	Aracanidae	<i>Aracana aurita</i> (Shaw, 1798)		
31	Actinopterygii Klein, 1885	Blenniidae	<i>Istiblennius meleagris</i> (Valenciennes, 1836)		
32	Actinopterygii Klein, 1885	Blenniidae	<i>Laiphognathus multimaculatus</i> Smith, 1955		
33	Actinopterygii Klein, 1885	Blenniidae	<i>Omobranchus germaini</i> (Sauvage, 1883)		
34	Actinopterygii Klein, 1885	Blenniidae	<i>Parablennius postoculomaculatus</i> Hutchins & Bath, 1986		
35	Actinopterygii Klein, 1885	Chaetodontidae	<i>Chelmonops curiosus</i> Kuitert, 1986		
36	Actinopterygii Klein, 1885	Clinidae	<i>Heteroclinus Castelnau</i> , 1872		
37	Actinopterygii Klein, 1885	Clinidae	<i>Heteroclinus roseus</i> Günther, 1861		
38	Actinopterygii Klein, 1885	Congridae	<i>Conger wilsoni</i> (Bloch & Schneider, 1801)		
39	Actinopterygii Klein, 1885	Dinematichthyidae	<i>Dipulus caecus</i> Waite, 1905		
40	Actinopterygii Klein, 1885	Gobiesocidae	<i>Aspasmogaster occidentalis</i> Hutchins, 1984		
41	Actinopterygii Klein, 1885	Gobiidae	<i>Callogobius bleeker</i> , 1874		
42	Actinopterygii Klein, 1885	Gobiidae	<i>Eviota bimaculata</i> Lachner & Karnella, 1980		
43	Actinopterygii Klein, 1885	Labridae	<i>Austrolabrus maculatus</i> (Macleay, 1881)		
44	Actinopterygii Klein, 1885	Labridae	<i>Bodianus frenchii</i> (Klunzinger, 1880)		
45	Actinopterygii Klein, 1885	Labridae	<i>Choerodon rubescens</i> Günther, 1862		
46	Actinopterygii Klein,	Labridae	<i>Coris auricularis</i> (Valenciennes, 1839) ( <i>King Wrasse</i> ,		

	1885		<i>Western King Wrasse</i> )		
47	Actinopterygii Klein, 1885	Labridae	Halichoeres brownfieldi (Whitley, 1945)		
48	Actinopterygii Klein, 1885	Labridae	Siphonognathus caninis (Scott, 1976)		
49	Actinopterygii Klein, 1885	Microcanthidae	Neatypus obliquus Waite, 1905		
50	Actinopterygii Klein, 1885	Monacanthidae	Cantheschia longipinnis (Fraser-Brunner, 1941)		
51	Actinopterygii Klein, 1885	Monacanthidae	Chaetodermis penicilligerus (Cuvier, 1817)		
52	Actinopterygii Klein, 1885	Monacanthidae	Colurodontis paxmani Hutchins, 1977		
53	Actinopterygii Klein, 1885	Monacanthidae	Eubalichthys Whitley, 1930		
54	Actinopterygii Klein, 1885	Monacanthidae	Meuschenia flavolineata Hutchins, 1977		
55	Actinopterygii Klein, 1885	Monacanthidae	Meuschenia galii (Waite, 1905)		
56	Actinopterygii Klein, 1885	Monacanthidae	Scobinichthys granulatus (Shaw, 1790)		
57	Actinopterygii Klein, 1885	Moridae	Lotella rhacina (Forster, 1801)		
58	Actinopterygii Klein, 1885	Mugilidae	Mugil cephalus Linnaeus, 1758		
59	Actinopterygii Klein, 1885	Muraenidae	Gymnothorax prasinus (Richardson, 1848)		
60	Actinopterygii Klein, 1885	Ophichthidae	Muraenichthys Bleeker, 1853		
61	Actinopterygii Klein, 1885	Pataecidae	Neopataecus waterhousii (Castelnau, 1872)		
62	Actinopterygii Klein, 1885	Pinguipedidae	Parapercis haackei (Steindachner, 1884)		
63	Actinopterygii Klein, 1885	Platycephalidae	Thysanophrys cirronasus (Richardson, 1848)		
64	Actinopterygii Klein, 1885	Pomacentridae Bonaparte, 1831	Chromis klunzingeri Whitley, 1929		
65	Actinopterygii Klein, 1885	Pomacentridae Bonaparte, 1831	Parma mccullochi Whitley, 1929		
66	Actinopterygii Klein, 1885	Pomacentridae Bonaparte, 1831	Parma occidentalis Allen & Hoese, 1975		
67	Actinopterygii Klein, 1885	Pomacentridae Bonaparte, 1831	Pomacentrus milleri Taylor, 1964		
68	Actinopterygii Klein, 1885	Pseudochromidae	Labracinus lineatus (Castelnau, 1875)		
69	Actinopterygii Klein, 1885	Pseudochromidae	Pseudochromis wilsoni (Whitley, 1929)		
70	Actinopterygii Klein, 1885	Scorpaenidae	Scorpaena sumptuosa Castelnau, 1875		
71	Actinopterygii Klein, 1885	Scorpaenidae	Scorpaenodes steenei Allen, 1977		
72	Actinopterygii Klein, 1885	Serranidae	Epinephelides armatus (Castelnau, 1875)		
73	Actinopterygii Klein, 1885	Serranidae	Hypoplectrodes nigroruber (Cuvier, 1828)		
74	Actinopterygii Klein, 1885	Serranidae	Hypoplectrodes wilsoni (Allen & Moyer, 1980)		
75	Actinopterygii Klein, 1885	Syngnathidae	Halicampus brocki (Herald, 1953)		
76	Actinopterygii Klein, 1885	Syngnathidae	Halicampus grayi Kaup, 1856		
77	Actinopterygii Klein, 1885	Syngnathidae	Hippocampus subelongatus Castelnau, 1873		
78	Actinopterygii Klein, 1885	Syngnathidae	Nannocampus subosseus Günther, 1870		

79	Actinopterygii Klein, 1885	Syngnathidae	Stigmatopora nigra Kaup, 1856		
80	Actinopterygii Klein, 1885	Syngnathidae	Syngnathidae		
81	Actinopterygii Klein, 1885	Trachichthyidae	Trachichthys australis Shaw, 1799		
82	Actinopterygii Klein, 1885	Tripterygiidae	Helcogramma decurrens McCulloch & Waite, 1918		
83	Amphibia	Limnodynastidae	Heleioporus albopunctatus Gray, 1841 ( <i>Western Spotted Frog</i> )	native	
84	Amphibia	Limnodynastidae	Heleioporus eyrei (Gray, 1845) ( <i>Moaning Frog</i> )	native	
85	Amphibia	Limnodynastidae	Heleioporus psammophilus (Lee & Main, 1954) ( <i>Sand Frog</i> )	native	
86	Amphibia	Limnodynastidae	Limnodynastes dorsalis (Gray, 1841)	native	
87	Amphibia	Limnodynastidae	Neobatrachus pelobatoides (Werner, 1914) ( <i>Humming Frog</i> )	native	
88	Amphibia	Myobatrachidae	Crinia pseudinsignifera (Main, 1957) ( <i>Bleating Froglet</i> )	native	
89	Amphibia	Pelodyadidae	Litoria caerulea	native	
90	Amphibia	Pelodyadidae GÄ¼nther, 1858	Litoria moorei (Copland, 1957)	native	
91	Arachnida	None	Acariformes		
92	Arachnida	Anamidae Simon, 1889	Aname L. Koch, 1873		
93	Arachnida	Araneidae Clerck, 1757	Austracantha minax (Thorell, 1859)		
94	Arachnida	Bothriuridae	Cercophonius Peters, 1861		
95	Arachnida	Buthidae C.L. Koch, 1837	Buthidae C.L. Koch, 1837		
96	Arachnida	Buthidae C.L. Koch, 1837	Lychas C.L. Koch, 1845		
97	Arachnida	Gnaphosidae Banks, 1892	Gnaphosidae Banks, 1892		
98	Arachnida	Idiopidae Simon, 1889	Idiosoma Ausserer, 1871		Parent of conservation listed taxa
99	Arachnida	Lycosidae	Tasmanicosa godeffroyi (L. Koch, 1865)		
100	Arachnida	Lycosidae	Tetrallycosa oraria (L. Koch, 1876)		
101	Arachnida	Lycosidae	Venator Hogg, 1833		
102	Arachnida	Lycosidae	Venator immansuetus (Simon, 1909)		
103	Arachnida	Nephilidae Simon, 1894	Trichonephila edulis (Labillardiere, 1799)		
104	Arachnida	Nicodamidae Simon, 1897	Ambicodamus kochi Harvey, 1995		
105	Arachnida	Nicodamidae Simon, 1897	Nicodamus mainae Harvey, 1995		
106	Arachnida	Oecobiidae Blackwall, 1862	Oecobius navus Blackwall, 1859		
107	Arachnida	Sparassidae Bertkau, 1872	Delena Walckenaer, 1833		
108	Arachnida	Sparassidae Bertkau, 1872	Neosparassus Hogg, 1903		
109	Arachnida	Theridiidae Sundevall, 1833	Latrodectus hasselti Thorell, 1870		
110	Arachnida	Thomisidae Sundevall, 1833	Australomisidia Szymkowiak, 2014		
111	Arachnida	Urodacidae	Urodacus Peters, 1861		
112	Arachnida	Urodacidae	Urodacus hartmeyeri Kraepelin, 1908		
113	Arachnida	Urodacidae	Urodacus novaehollandiae Peters, 1861		
114	Aves	Acanthizidae	Acanthiza chrysorrhoa chrysorrhoa (Quoy & Gaimard, 1830)	native	
115	Aves	Acanthizidae	Gerygone fusca (Gould, 1838) ( <i>Western Gerygone</i> )	native	
116	Aves	Acanthizidae	Smicronis brevirostris (Gould, 1838) ( <i>Weebill</i> )	native	
117	Aves	Anatidae	Chenonetta jubata (Latham, 1802) ( <i>Australian Wood Duck</i> )	native	
118	Aves	Anatidae	Cygnus atratus (Latham, 1790) ( <i>Black Swan</i> )	native	
119	Aves	Anatidae	Oxyura australis Gould, 1836	native	P4
120	Aves	Ardeidae	Egretta novaehollandiae (Latham, 1790) ( <i>White-faced Heron</i> )		
121	Aves	Cacatuidae	Cacatua pastinator (Gould, 1841) ( <i>Western Long-billed Corella</i> )	native	
122	Aves	Cacatuidae	Cacatua sanguinea westralensis (Mathews, 1917)	native	
			Calyptorhynchus banksii (Latham, 1790) ( <i>Red-tailed</i>		

123	Aves	Cacatuidae	<i>Black-Cockatoo</i>	native	
124	Aves	Cacatuidae	<i>Eolophus roseicapilla</i> (Vieillot, 1817) ( <i>Galah</i> )		
125	Aves	Cacatuidae	<i>Zanda latirostris</i> Carnaby, 1948 ( <i>Carnaby's Cockatoo</i> )	native	EN
126	Aves	Campephagidae	<i>Coracina novaehollandiae</i> (Gmelin, 1789)	native	
127	Aves	Campephagidae	<i>Lalage tricolor</i> (Swainson, 1825)	native	
128	Aves	Corvidae	<i>Corvus coronoides coronoides</i> Vigors & Horsfield, 1827	mixed	
129	Aves	Corvidae	<i>Corvus coronoides perplexus</i> Mathews, 1912 ( <i>Australian Raven</i> )	native	
130	Aves	Cuculidae	<i>Chalcites lucidus plagosus</i> (Latham, 1802)		
131	Aves	Dicaeidae	<i>Dicaeum hirundinaceum</i> (Shaw, 1792) ( <i>Mistletoebird</i> )	native	
132	Aves	Falconidae	<i>Falco peregrinus macropus</i> Swainson, 1837 ( <i>Australian Peregrine Falcon</i> )	native	Cons code inherited from parent
133	Aves	Hirundinidae	<i>Hirundo neoxena</i> Gould, 1842 ( <i>Welcome Swallow</i> )	native	
134	Aves	Laridae	<i>Anous tenuirostris melanops</i> Gould, 1846	native	EN
135	Aves	Locustellidae Bonaparte, 1854	<i>Cincloramphus cruralis</i> (Vigors & Horsfield, 1827)	native	
136	Aves	Meliphagidae	<i>Gavicalis virescens</i> (Vieillot, 1817) ( <i>Singing Honeyeater</i> )	native	
137	Aves	Monarchidae Bonaparte, 1854	<i>Grallina cyanoleuca</i> (Latham, 1802) ( <i>Magpie-lark</i> )	native	
138	Aves	Pachycephalidae	<i>Colluricincla harmonica rufiventris</i> Gould, 1841 ( <i>Grey Shrike-thrush</i> )	native	
139	Aves	Pachycephalidae	<i>Pachycephala rufiventris</i> (Latham, 1802) ( <i>Rufous Whistler</i> )	native	
140	Aves	Pardalotidae	<i>Pardalotus striatus</i> (Gmelin, 1789) ( <i>Striated Pardalote</i> )	native	
141	Aves	Pardalotidae	<i>Pardalotus striatus ornatus</i> Temminck, 1826	mixed	
142	Aves	Psittaculidae	<i>Barnardius zonarius</i> (Shaw, 1805)		
143	Aves	Rallidae	<i>Hypotaenidia philippensis mellori</i> (Mathews, 1912)		
144	Aves	Rhipiduridae	<i>Rhipidura albiscapa</i> Gould, 1840 ( <i>Grey Fantail</i> )	native	
145	Bivalvia	Carditidae F&Circumflex;ussac, 1822	<i>Cardita aviculina</i> Lamarck, 1819		
146	Bivalvia	Carditidae F&Circumflex;ussac, 1822	<i>Cardita crassicosta</i> Lamarck, 1819		
147	Bivalvia	Carditidae F&Circumflex;ussac, 1822	<i>Megacardita turgida</i> (Lamarck, 1819)		
148	Bivalvia	Donacidae Fleming, 1828	<i>Latona columbella</i> (Lamarck, 1818)		
149	Bivalvia	Gryphaeidae Vialov, 1936	<i>Hytissa Stenzel</i> , 1971		
150	Bivalvia	Lucinidae	<i>Wallucina assimilis</i> (Angas, 1868)		
151	Bivalvia	Mactridae Lamarck, 1809	<i>Mactra</i> Linnaeus, 1767		
152	Bivalvia	Mytilidae Rafinesque, 1815	<i>Brachidontes erosus</i> (Lamarck, 1819)		
153	Bivalvia	Veneridae Rafinesque, 1815	<i>Petricola divergens</i> (Gmelin, 1791)		
154	Bivalvia	Vulsellidae Gray, 1854	<i>Vulsella</i> R&Auml;ding, 1798		
155	Calcarea Bowerbank, 1862	None	<i>Leucosolenida</i> sp.		
156	Cephalopoda	Octopodidae A. d'Orbigny, 1839	<i>Callistoctopus ornatus</i> (A. Gould, 1852)		
157	Cephalopoda	Octopodidae A. d'Orbigny, 1839	<i>Hapalochlaena</i> G. C. Robson, 1929		
158	Chilopoda Latreille, 1817	Scolopendridae	<i>Cormocephalus turneri</i> Pocock, 1901		
159	Chilopoda Latreille, 1817	Scolopendridae	<i>Scolopendra laeta</i> Haase, 1887		
160	Chilopoda Latreille, 1817	Scolopendridae	<i>Scolopendra morsitans</i> Linnaeus, 1758		
161	Chondrichthyes Huxley, 1880	Parascylliidae Gill, 1862	<i>Parascyllium variolatum</i> (Dum&Auml;ril, 1853)		
162	Chondrichthyes Huxley, 1880	Scyliorhinidae	<i>Aulohaelurus labiosus</i> (Waite, 1905)		
163	Copepoda H, Milne Edwards, 1840	Hatschekiidae Kabata, 1979	<i>Hatschekia</i> sp.		
164	Demospongiae	Aplysinellidae Bergquist, 1980	<i>Narrabeena</i> Cook & Bergquist, 2002		
165	Demospongiae	Axinellidae Carter, 1875	<i>Axinella</i> Schmidt, 1862		

166	Demospongiae	Axinellidae Carter, 1875	Cymbastela marshae Hooper & Bergquist, 1992		
167	Demospongiae	Biemnidae Hentschel, 1923	Biemna Gray, 1867		
168	Demospongiae	Callyspongiidae Laubenfels, 1936	Callyspongia Duchassaing & Michelotti, 1864		
169	Demospongiae	Chondrillidae Gray, 1872	Chondrilla australiensis Carter, 1873		
170	Demospongiae	Chondropsidae Carter, 1886	Chondropsis Carter, 1886		
171	Demospongiae	Chondropsidae Carter, 1886	Psammoclema Marshall, 1880		
172	Demospongiae	Coelosphaeridae Dendy, 1922	Coelosphaera (Coelosphaera) Thomson, 1873		
173	Demospongiae	Coelosphaeridae Dendy, 1922	Coelosphaera Thomson, 1873		
174	Demospongiae	Dictyodendrillidae Bergquist, 1980	Acanthodendrilla Bergquist, 1995		
175	Demospongiae	Dictyodendrillidae Bergquist, 1980	Dictyodendrilla Bergquist, 1980		
176	Demospongiae	Halichondriidae Gray, 1867	Halichondria Fleming, 1828		
177	Demospongiae	Halichondriidae Gray, 1867	Spongisorites sp.		
178	Demospongiae	Irciniidae Gray, 1867	Psammocinia Lendenfeld, 1889		
179	Demospongiae	Irciniidae Gray, 1867	Sarcotragus		
180	Demospongiae	Microcionidae	Echinoclathria Carter, 1885		
181	Demospongiae	Microcionidae	Holopsamma favus		
182	Demospongiae	Microcionidae	Microcionidae sp.		
183	Demospongiae	Mycalidae Lundbeck, 1905	Mycale (Arenochalina) mirabilis (Lendenfeld, 1887)		
184	Demospongiae	Phloeodictyidae Carter, 1882	Oceanapia sp.		
185	Demospongiae	Raspailiidae Nardo, 1833	Raspailia		
186	Demospongiae	Spongiidae Gray, 1867	Spongia sp.		
187	Demospongiae	Suberitidae	Suberites Nardo, 1833		
188	Demospongiae	Tedaniidae Ridley & Dendy, 1886	Tedania (Tedania) Gray, 1867		
189	Demospongiae	Tedaniidae Ridley & Dendy, 1886	Trachytedania sp.		
190	Demospongiae	Tethyidae Gray, 1848	Tethya ingalli Bowerbank, 1859		
191	Demospongiae	Tethyidae Gray, 1848	Tethya robusta Bowerbank, 1859		
192	Demospongiae	Tetillidae Sollas, 1886	Cinachyrella Wilson, 1925		
193	Demospongiae	Tetillidae Sollas, 1886	Tetilla Schmidt, 1868		
194	Echinoidea	Fibulariidae Gray, 1855	Fibularia		
195	Gastropoda	None	Heterobranchia Burmeister, 1837		
196	Gastropoda	Bothriembryontidae Iredale, 1937	Bothriembryon Pilsbry, 1894		
197	Gastropoda	Bothriembryontidae Iredale, 1937	Bothriembryon perobesus Iredale, 1939	native	P1
198	Gastropoda	Bothriembryontidae Iredale, 1937	Bothriembryon whitleyi Iredale, 1939	native	EX
199	Gastropoda	Bullidae Gray, 1827	Bulla ampulla Linnaeus, 1758		
200	Gastropoda	Bullidae Gray, 1827	Bulla quoyii Gray & Dieffenbach, 1843		
201	Gastropoda	Campanillidae	Campanile symbolicum Iredale, 1917		
202	Gastropoda	Capulidae Fleming, 1822	Capulus Montfort, 1810		
203	Gastropoda	Cerithiidae Fleming, 1822	Bittium J. E. Gray, 1847		
204	Gastropoda	Chilodontaidae Wenz, 1938	Herpetopoma aspersum (R. A. Philippi, 1846)		
205	Gastropoda	Chromodorididae Bergh, 1891	Chromodorididae Bergh, 1891		
206	Gastropoda	Chromodorididae Bergh, 1891	Chromodoris westraliensis O'Donoghue, 1924		
207	Gastropoda	Clathurellidae H. Adams & A. Adams, 1858	Lienardia Jousseume, 1883		
208	Gastropoda	Columbellidae Swainson, 1840	Mitrella austrina (Gaskoin, 1852)		
209	Gastropoda	Columbellidae Swainson, 1840	Mitrella lincolnsis (Reeve, 1859)		
210	Gastropoda	Columbellidae Swainson, 1840	Mitrella menkeana (Reeve, 1858)		
211	Gastropoda	Conidae Fleming, 1822	Conus anemone Lamarck, 1810		

212	Gastropoda	Conidae Fleming, 1822	Conus dorreensis PÅ©ron, 1807		
213	Gastropoda	Costellariidae MacDonald, 1860	Pusia marrowi (Cernohorsky, 1973)		
214	Gastropoda	Costellariidae MacDonald, 1860	Pusia voluta Marrow, 2017		
215	Gastropoda	Cymatiidae	Cymatiella sexcostata (Tate, 1888)		
216	Gastropoda	Cypraeidae Rafinesque, 1815	Austrocypraea reevei (Sowerby, 1832)		
217	Gastropoda	Eatoniellidae Ponder, 1965	Eatoniella australiensis (Thiele, 1930)		
218	Gastropoda	Ellobiidae Pfeffer, 1854	Allochroa layardi (H. & A. Adams, 1855)		
219	Gastropoda	Fascioliidae Gray, 1853	Microcolus dunkeri (Jonas, 1846)		
220	Gastropoda	Haliotidae Rafinesque, 1815	Haliotis scalaris scalaris (Leach, 1814)		
221	Gastropoda	Liotiidae Gray, 1850	Austroliotia pulcherrima (A. Adams, 1850)		
222	Gastropoda	Liotiidae Gray, 1850	Liotinaria peronii (Kiener, 1838)		
223	Gastropoda	Littorinidae Children, 1834	Echinolittorina australis (Gray, 1826)		
224	Gastropoda	Lottiidae	Patelloida alticostata (Angas, 1865)		
225	Gastropoda	Lottiidae	Patelloida insignis (Menke, 1843)		
226	Gastropoda	Muricidae Rafinesque, 1815	Dicathais orbita (Gmelin, 1791)		
227	Gastropoda	Nassariidae	Nassarius celebensis (Schepman, 1907)		
228	Gastropoda	Nassariidae	Nassarius pauperatus (Lamarck, 1822)		
229	Gastropoda	Nassariidae	Nassarius pyrrhus (Menke, 1843)		
230	Gastropoda	Phasianellidae Swainson, 1840	Phasianella Lamarck, 1804		
231	Gastropoda	Phasianellidae Swainson, 1840	Phasianella australis (Gmelin, 1788)		
232	Gastropoda	Phasianellidae Swainson, 1840	Tricolia tomlini (Gatliff & Gabriel, 1921)		
233	Gastropoda	Plakobranchidae Gray, 1840	Elysia brycei (F. E. Wells & K. R. Jensen, 1990)		
234	Gastropoda	Raphitomidae Bellardi, 1875	Paramontana rufozonata (Angas, 1877)		
235	Gastropoda	Rissoellidae Gray, 1850	Rissoella vitrea Ponder & Yoo, 1977		
236	Gastropoda	Rissoidae Gray, 1847	Alvania hedleyi Thiele, 1930		
237	Gastropoda	Rissoidae Gray, 1847	Alvania novarensis Frauenfeld, 1867		
238	Gastropoda	Rissoinidae W. Stimpson, 1865	Rissoina A. d'Orbigny, 1841		
239	Gastropoda	Rissoinidae W. Stimpson, 1865	Rissoina ambigua (Gould, 1849)		
240	Gastropoda	Rissoinidae W. Stimpson, 1865	Rissoina crassa Angas, 1871		
241	Gastropoda	Strombidae Rafinesque, 1815	Canarium mutabile (Swainson, 1821)		
242	Gastropoda	Succineidae Beck, 1837	Succinea Draparnaud, 1801		
243	Gastropoda	Tonnidae Suter, 1913	Tonna variegata (Lamarck, 1822)		
244	Gastropoda	Trochidae Rafinesque, 1815	Austrocochlea rudis (Gray, 1826)		
245	Gastropoda	Trochidae Rafinesque, 1815	Austrocochlea zeus (Fischer, 1874)		
246	Gastropoda	Trochidae Rafinesque, 1815	Cantharidus lepidus (Philippi, 1849)		
247	Gastropoda	Turbinidae	Angaria tyria (Reeve, 1842)		
248	Gastropoda	Turbinidae	Lunella torquata (Gmelin, 1791)		
249	Gastropoda	Turbinidae	Turbo kenwilliamsi Williams, 2008		
250	Hexacorallia	Acroporidae	Montipora mollis		
251	Hexacorallia	Acroporidae	Montipora spongodes Bernard, 1897		
252	Hexacorallia	Dendrophylliidae Gray, 1847	Turbinaria conspicua		
253	Hexacorallia	Dendrophylliidae Gray, 1847	Turbinaria frondens		
254	Hexacorallia	Lobophylliidae	Symphyllia wilsoni		
255	Hexacorallia	Merulinidae Milne Edwards & Haime, 1857	Favites abdita (Solander & Ellis, 1786)		
256	Hexacorallia	Merulinidae Milne Edwards & Haime, 1857	Paragoniastrea australensis		
257	Hexacorallia	Pocilloporidae	Pocillopora damicornis (Linnaeus, 1758)		
258	Hydrozoa	None	Hydroidolina		

259	Insecta	None	Hymenoptera		
260	Insecta	Aeshnidae	Aeshnidae		
261	Insecta	Alydidae	Melanacanthus Stål, 1873		
262	Insecta	Apidae	Thyreus		
263	Insecta	Ascalaphidae	Acmonotus McLachlan, 1871		
264	Insecta	Baetidae	Baetidae		
265	Insecta	Bittacidae	Harpobittacus similis Esben-Petersen, 1935		
266	Insecta	Blattidae	Platyzosteria armata Tepper, 1893		
267	Insecta	Blattidae	Platyzosteria invisus (Walker, 1868)		
268	Insecta	Blattidae	Platyzosteria similis Princis, 1954		
269	Insecta	Braconidae	Cheloninae		
270	Insecta	Buprestidae Leach, 1815	Astraeus (Astraeus) prothoracicus van de Poll, 1889		
271	Insecta	Buprestidae Leach, 1815	Castiarina Gory & Laporte, 1838		
272	Insecta	Buprestidae Leach, 1815	Castiarina audax (Saunders, 1869)		
273	Insecta	Buprestidae Leach, 1815	Castiarina balthasari (Obenberger, 1928)		
274	Insecta	Buprestidae Leach, 1815	Castiarina chamelauci (Barker, 1987)		
275	Insecta	Buprestidae Leach, 1815	Castiarina cupreoflava (Saunders, 1869)		
276	Insecta	Buprestidae Leach, 1815	Castiarina picta (Gory & Laporte, 1838)		
277	Insecta	Buprestidae Leach, 1815	Diphucrania cyanea (Barker, 2001)		
278	Insecta	Buprestidae Leach, 1815	Stigmodera gratiosa Chevrolat, 1843		
279	Insecta	Caenidae	Caenidae		
280	Insecta	Callipappidae	Callipappus Guérin Ménéville, 1841		
281	Insecta	Callipappidae	Callipappus farinosus Fuller, 1897		
282	Insecta	Carabidae Latreille, 1802	Carabidae Latreille, 1802		
283	Insecta	Cerambycidae	Phoracantha elegans Blackburn, 1894		
284	Insecta	Cerambycidae	Phoracantha guttata (Blackburn, 1892)		
285	Insecta	Ceratopogonidae Newman, 1834	Ceratopogonidae Newman, 1834		
286	Insecta	Chironomidae Newman, 1834	Chironominae		
287	Insecta	Chironomidae Newman, 1834	Orthocladinae		
288	Insecta	Chironomidae Newman, 1834	Tanypodinae		
289	Insecta	Cleridae	Necrobia rufipes (DeGeer, 1775)		
290	Insecta	Coccinellidae	Orcus australasiae (Boisduval, 1835)		
291	Insecta	Coenagrionidae	Coenagrionidae		
292	Insecta	Coenagrionidae	Ischnura aurora aurora Brauer, 1865		
293	Insecta	Colletidae	Euhesma (Euhesma) undulata (Cockerell, 1914)		
294	Insecta	Colletidae	Hylaeus (Euprosopoides) obtusatus (Smith, 1879)		
295	Insecta	Colletidae	Hylaeus (Euprosopoides) ruficeps kalamundae (Cockerell, 1915)		
296	Insecta	Colletidae	Hylaeus (Gnathoprosopis) Perkins, 1912	mixed	
297	Insecta	Colletidae	Hyleoides zonalis Smith, 1853		
298	Insecta	Colletidae	Leioproctus (Leioproctus) Smith, 1853		
299	Insecta	Colletidae	Phenacolletes mimus Cockerell, 1905		
300	Insecta	Corduliidae	Corduliidae		
301	Insecta	Corduliidae	Hemicordulia tau (Selys, 1871)		
302	Insecta	Corixidae	Agraptocorixa parvipunctata (Hale, 1922)		
303	Insecta	Corixidae	Corixidae		
304	Insecta	Crambidae	Hednota longipalpella (Meyrick, 1879)		
305	Insecta	Culicidae Meigen, 1818	Culicidae Meigen, 1818		
306	Insecta	Curculionidae	Sitona discoideus Gyllenhal, 1834		
307	Insecta	Cylindrachetidae	Cylindraustralia Günther, 1992		
308	Insecta	Dermestidae	Dermestes (Dermestes) ater De Geer, 1774		
309	Insecta	Dytiscidae	Cybister tripunctatus (Olivier, 1795)		
310	Insecta	Dytiscidae	Dytiscidae		
311	Insecta	Dytiscidae	Eretes australis (Erichson, 1842)		

312	Insecta	Dytiscidae	Rhantus suturalis (W. S. Macleay, 1825)		
313	Insecta	Formicidae Latreille, 1809	Aphaenogaster poultoni Crawley, 1922		
314	Insecta	Formicidae Latreille, 1809	Chelaner rufonigrum (Heterick, 2001)		
315	Insecta	Formicidae Latreille, 1809	Dolichoderus nigricornis Clark, 1930		
316	Insecta	Formicidae Latreille, 1809	Iridomyrmex bicknelli Emery, 1898		
317	Insecta	Formicidae Latreille, 1809	Iridomyrmex chasei Forel, 1902		
318	Insecta	Formicidae Latreille, 1809	Iridomyrmex difficilis Heterick & Shattuck, 2011		
319	Insecta	Formicidae Latreille, 1809	Iridomyrmex dromus Clark, 1938		
320	Insecta	Formicidae Latreille, 1809	Iridomyrmex mirabilis Heterick & Shattuck, 2011		
321	Insecta	Formicidae Latreille, 1809	Iridomyrmex purpureus (Smith, 1858)		
322	Insecta	Formicidae Latreille, 1809	Iridomyrmex suchieri Forel, 1907		
323	Insecta	Formicidae Latreille, 1809	Monomorium laeve Mayr, 1876		
324	Insecta	Formicidae Latreille, 1809	Myrmecia desertorum Wheeler, 1915		
325	Insecta	Formicidae Latreille, 1809	Myrmecia urens Lowne, 1865		
326	Insecta	Formicidae Latreille, 1809	Myrmecia vindex Smith, 1858		
327	Insecta	Formicidae Latreille, 1809	Onychomyrmex glauerti (Clark, 1928)		
328	Insecta	Gyrinidae	Aulonogyus strigosus (Fabricius, 1801)		
329	Insecta	Gyrinidae	Gyrinidae		
330	Insecta	Halictidae	Lasioglossum (Chilalictus) castor Walker, 1995		
331	Insecta	Halictidae	Lasioglossum (Chilalictus) seminitens (Cockerell, 1929)		
332	Insecta	Hydrophilidae Latreille, 1802	Hydrophilidae Latreille, 1802		
333	Insecta	Hydrophilidae Latreille, 1802	Hydrophilus (Hydrophilus) albipes Castelnau, 1840		
334	Insecta	Hydrophilidae Latreille, 1802	Limnoxenus zealandicus (Broun, 1880)		
335	Insecta	Hydrophilidae Latreille, 1802	Sternolophus marginicollis (Hope, 1841)		
336	Insecta	Lasiocampidae	Genduara fola (Swinhoe, 1902)		
337	Insecta	Leptoceridae	Leptoceridae		
338	Insecta	Libellulidae	Diplacodes haematodes (Burmeister, 1839)		
339	Insecta	Lycaenidae	Erina hyacinthina simplex (Tepper, 1882)		
340	Insecta	Lycaenidae	Hypochrysops halyaetus Hewitson, 1874		
341	Insecta	Lycaenidae	Ogyris amaryllis meridionalis Bethune-Baker, 1905		
342	Insecta	Lycaenidae	Ogyris idmo Hewitson, 1862		
343	Insecta	Lycaenidae	Ogyris otaes (C. Felder & R. Felder, 1865)		
344	Insecta	Lycaenidae	Ogyris otaes sublustris Williams & Hay, 2001		
345	Insecta	Lycaenidae	Theclines thes miskini (T.P. Lucas, 1889)		
346	Insecta	Lycaenidae	Theclines thes serpentatus serpentatus (Herrich-Schäffer, 1869)		
347	Insecta	Megachilidae	Megachile (Hackeriapis) oblonga Smith, 1879		
348	Insecta	Megachilidae	Megachile Latreille, 1802		
349	Insecta	Mesoveliidae	Mesoveliidae		
350	Insecta	Nemopteridae	Chasmodon Kirby, 1900		
351	Insecta	Noctuidae Latreille, 1809	Helicoverpa punctigera (Wallengren, 1860)		
352	Insecta	Nolidae	Uraba lugens Walker, 1863		
353	Insecta	Notonectidae	Anisops gratus Hale, 1923		
354	Insecta	Notonectidae	Anisops hyperion Kirkaldy, 1898		
355	Insecta	Notonectidae	Anisops thienemanni Lundblad, 1933		
356	Insecta	Notonectidae	Notonectidae		
357	Insecta	Pentatomidae	Oechalia schellenbergii (Guérin, 1831)		
358	Insecta	Pergidae	Neoeurys trochilus Benson, 1938		
359	Insecta	Pergidae	Neoeurys turneri Benson, 1938		
360	Insecta	Pseudococcidae Heymons, 1915	Sphaerococcus Maskell, 1892		
361	Insecta	Ptinidae	Ptinus albomaculatus W.J. Macleay, 1872		
362	Insecta	Reduviidae	Coranus Curtis, 1833		
363	Insecta	Reduviidae	Havinthus rufovarius Bergroth, 1895		
364	Insecta	Reduviidae	Oncocephalus Klug, 1830		

365	Insecta	Rhinotermitidae	Coptotermes acinaciformis		
366	Insecta	Rhinotermitidae	Coptotermes acinaciformis raffrayi Wasmann, 1900		
367	Insecta	Scarabaeidae	Mentophilus hollandiae Castelnau, 1840		
368	Insecta	Scarabaeidae	Mentophilus subsulcatus Sharp, 1873		
369	Insecta	Scarabaeidae	Onthophagus ferox Harold, 1867		
370	Insecta	Scarabaeidae	Onthophagus flavaopicalis Lea, 1923		
371	Insecta	Scirtidae Fleming, 1821	Scirtidae Fleming, 1821		
372	Insecta	Sphingidae	Hippotion celerio (Linnaeus, 1758)		
373	Insecta	Stratiomyidae Latreille, 1802	Stratiomyidae Latreille, 1802		
374	Insecta	Syrphidae Latreille, 1802	Eristalinus (Lathyrrophthalmus) punctulatus (Macquart, 1847)		
375	Insecta	Tabanidae	Scaptia		
376	Insecta	Termitidae	Ahamitermes hillii Nicholls, 1929		
377	Insecta	Termitidae	Amitermes neogermanus (Hill, 1922)		
378	Insecta	Termitidae	Amitermes westraliensis (Hill, 1929)		
379	Insecta	Termitidae	Drepanotermes perniger (Froggatt, 1898)		
380	Insecta	Termitidae	Hesperotermes infrequens (Hill, 1927)		
381	Insecta	Termitidae	Microcerotermes distinctus Silvestri, 1909		
382	Insecta	Termitidae	Xylochomitermes tomentosus (Gay, 1971)		
383	Insecta	Tettigoniidae	Hemisaga denticulata (White, 1841)		
384	Insecta	Tettigoniidae	Kawanaphila nartee Rentz, 1993		
385	Insecta	Tettigoniidae	Metaballus litus Rentz, 1985		
386	Insecta	Tettigoniidae	Metaballus mucronatus Rentz, 1985		
387	Insecta	Tettigoniidae	Phasmodes jeeba Rentz, 1993 ( <i>cricket, springtime corroboree stick katydid (Eneabba)</i> )	native	P3
388	Insecta	Tingidae	Diplocysta trilobata Drake & Poor, 1939		
389	Insecta	Tipulidae Latreille, 1802	Tipulidae Latreille, 1802		
390	Insecta	Tortricidae	Crociosema plebejana Zeller, 1847		
391	Insecta	Tortricidae	Cryptophlebia ombrodelta (Lower, 1898)		
392	Insecta	Veliidae	Nesidovelia herberti (Andersen & Weir, 2003)		
393	Insecta	Veliidae	Veliidae		
394	Malacostraca	Ampithoidae Boeck, 1871	Ampithoe boiana Peart, 2007		
395	Malacostraca	Ampithoidae Boeck, 1871	Ampithoe ulladulla Peart, 2007		
396	Malacostraca	Ampithoidae Boeck, 1871	Cymadusa tattersalli Peart, 2004		
397	Malacostraca	Anthuridae Leach, 1814	Chelanthura ajuga Poore & Bardsley, 1990		
398	Malacostraca	Aoridae	Bemlos quadrimanus (Sivaprakasam, 1971)		
399	Malacostraca	Aoridae	Bemlos strigilis Myers, 1988		
400	Malacostraca	Armadillidae Brandt, 1831	Buddelundia Michaelson, 1912		
401	Malacostraca	Ceinidae J. L. Barnard, None	Ceinidae J. L. Barnard, None		
402	Malacostraca	Diogenidae Ortmann, 1892	Dardanus australis Forest & Morgan, 1991		
403	Malacostraca	Diogenidae Ortmann, 1892	Paguristes purpureantennatus Morgan, 1987		
404	Malacostraca	Diogenidae Ortmann, 1892	Paguristes sulcatus Baker, 1905		
405	Malacostraca	Gynodiastylidae	Dicoides brevidactylum (Hale, 1937)		
406	Malacostraca	Gynodiastylidae	Gynodiastylis blax Gerken, 2001		
407	Malacostraca	Gynodiastylidae	Zimmeriana lasiodactyla (Zimmer, 1914)		
408	Malacostraca	Gynodiastylidae	Zimmeriana longirostris Hale, 1946		
409	Malacostraca	Hippolytidae Spence Bate, 1888	Hippolyte australiensis (Stimpson, 1860)		
410	Malacostraca	Hippolytidae Spence Bate, 1888	Hippolyte caradina Holthuis, 1947		
411	Malacostraca	Holognathidae	Cleantioides albaniensis Poore & Lew Ton, 1990		
412	Malacostraca	Homolidae De Haan, 1839	Homola orientalis		
413	Malacostraca	Idoteidae Samouelle, 1819	Euidotea halei Poore & Lew Ton, 1993		
414	Malacostraca	Inachidae MacLeay, 1838	Dumea latipes (Haswell, 1880)		
415	Malacostraca	Maeridae Krapp-Schickel, 2008	Ceradocus (Denticeradocus) serratus (Spence Bate, 1863)		

416	Malacostraca	Maeridae Krapp-Schickel, 2008	Hoho carteta (J. L. Barnard, 1972)		
417	Malacostraca	Maeridae Krapp-Schickel, 2008	Hoho kalbarri Hughes, 2011		
418	Malacostraca	Maeridae Krapp-Schickel, 2008	Hoho lowryi Hughes, 2011		
419	Malacostraca	Maeridae Krapp-Schickel, 2008	Hoho marilla (J. L. Barnard, 1972)		
420	Malacostraca	Maeridae Krapp-Schickel, 2008	Linguimaera leo Krapp-Schickel, 2003		
421	Malacostraca	Maeridae Krapp-Schickel, 2008	Mallacoota kameruka Lowry & Springthorpe, 2005		
422	Malacostraca	Maeridae Krapp-Schickel, 2008	Mallacoota subcarinata (Haswell, 1879)		
423	Malacostraca	Majidae Samouelle, 1819	Majidae		
424	Malacostraca	Palaemonidae Rafinesque, 1815	Ancylomenes aesopius (Spence Bate, 1864)		
425	Malacostraca	Palaemonidae Rafinesque, 1815	Palaemon litoreus (McCulloch, 1909)		
426	Malacostraca	Parastacidae	Cherax destructor Clark, 1936		
427	Malacostraca	Sphaeromatidae Latreille, 1825	Austrasphaera berentsae Bruce, 2003		
428	Malacostraca	Sphaeromatidae Latreille, 1825	Cercosphaera dilkera Bruce, 1994		
429	Malacostraca	Tanaididae Nobili, 1906	Zeuxo kirkmani Edgar, 2008		
430	Mammalia	Dasyuridae	Dasyurus geoffroi Gould, 1841 ( <i>Chuditch, Western Quoll</i> )	native	VU
431	Mammalia	Muridae	Hydromys chrysogaster Geoffroy, 1804 ( <i>Water-rat</i> )	native	P4
432	Mammalia	Pteropodidae	Pteropus scapulatus Peters, 1862 ( <i>Little Red Flying-fox</i> )	native	
433	Ophiuroidea Gray, 1840	Amphiuridae Ljungman, 1867	Amphioplus Verrill, 1899		
434	Ophiuroidea Gray, 1840	Amphiuridae Ljungman, 1867	Amphipholis squamata (Delle Chiaje, 1828)		
435	Ophiuroidea Gray, 1840	Amphiuridae Ljungman, 1867	Amphiura (Amphiura) constricta Lyman, 1879		
436	Ophiuroidea Gray, 1840	Amphiuridae Ljungman, 1867	Amphiura (Amphiura) micra H.L. Clark, 1938		
437	Ophiuroidea Gray, 1840	Ophiactidae	Ophiactis sp.		
438	Ophiuroidea Gray, 1840	Ophiactidae	Ophiactis savignyi		
439	Ophiuroidea Gray, 1840	Ophiactidae	Ophiactis tricolor		
440	Ophiuroidea Gray, 1840	Ophionereididae	Ophionereis porrecta		
441	Ophiuroidea Gray, 1840	Ophionereididae	Ophionereis semoni		
442	Polychaeta Grube, 1850	Nereididae	Neanthes bassi Wilson, 1984		
443	Polychaeta Grube, 1850	Nereididae	Platynereis antipoda Hartman, 1954		
444	Polychaeta Grube, 1850	Syllidae Grube, 1850	Erinaceusyllis horrockensis (Hartmann-Schröder, 1981)		
445	Polychaeta Grube, 1850	Syllidae Grube, 1850	Erinaceusyllis serratosetosa (Hartmann-Schröder, 1982)		
446	Polychaeta Grube, 1850	Syllidae Grube, 1850	Perkinsyllis hartmannschroederiae (San Martín & Hutchings, 2006)		
447	Polyplacophora	None	Neoloricata		
448	Polyplacophora	Acanthochitonidae	Acanthochitona J. E. Gray, 1821		
449	Polyplacophora	Chitonidae Rafinesque, 1815	Liolophura hirtosa (Blainville, 1825)		
450	Polyplacophora	Chitonidae Rafinesque, 1815	Onithochiton quercinus (Gould, 1846)		
451	Polyplacophora	Chitonidae Rafinesque, 1815	Rhysoplax bednalli (Pilsbry, 1895)		

452	Polyplacaphora	Ischnochitonidae Dall, 1889	Ischnochiton cariosus Carpenter & Pillsbry, 1892		
453	Polyplacaphora	Ischnochitonidae Dall, 1889	Ischnochiton elongatus crispus		
454	Polyplacaphora	Ischnochitonidae Dall, 1889	Ischnochiton lineolatus (Blainville, 1825)		
455	Polyplacaphora	Ischnochitonidae Dall, 1889	Stenochiton Angas & H. Adams, 1864		
456	Polyplacaphora	Ischnochitonidae Dall, 1889	Stenochiton cymodocealis Ashby, 1918		
457	Polyplacaphora	Loricidae	Loricella angasi (H. Adams, 1864)		
458	Pycnogonida	None	Pantopoda		
459	Pycnogonida	Callipallenidae Hilton, 1942	Pallenella watsonae (Staples, 2005)		
460	Reptilia	Agamidae	Ctenophorus adelaidensis (Gray, 1841) ( <i>Southern Heath Dragon</i> )	native	
461	Reptilia	Agamidae	Ctenophorus maculatus (Gray, 1831) ( <i>Spotted Sand Dragon</i> )	native	
462	Reptilia	Agamidae	Ctenophorus scutulatus (Stirling & Zietz, 1893) ( <i>Lozenge-marked Dragon</i> )	native	
463	Reptilia	Chelidae	Chelodina steindachneri Siebenrock, 1901	native	
464	Reptilia	Diplodactylidae	Strophurus spinigerus spinigerus (Gray, 1842) ( <i>Soft spiny-tailed gecko</i> )	native	
465	Reptilia	Elapidae	Demansia reticulata (Gray, 1842) ( <i>Reticulated Whipsnake</i> )		
466	Reptilia	Elapidae	Elapognathus coronatus (Schlegel, 1837) ( <i>Crowned Snake</i> )	native	
467	Reptilia	Elapidae	Neelaps calonotos (A.M.C. Duméril, Bibron & A. Duméril, 1854) ( <i>Black-striped Snake</i> )	native	P3
468	Reptilia	Elapidae	Pseudonaja mengdeni Wells & Wellington, 1985 ( <i>Western Brown Snake</i> )	native	
469	Reptilia	Elapidae	Pseudonaja nuchalis	native	
470	Reptilia	Elapidae	Simoselaps littoralis Storr, 1968 ( <i>West Coast Banded Snake</i> )	native	
471	Reptilia	Elapidae	Suta gouldii (Gray, 1841) ( <i>Gould's Hooded Snake</i> )		
472	Reptilia	Gekkonidae	Gehyra variegata (Duméril & Bibron, 1836) ( <i>Variiegated Gehyra</i> )	native	
473	Reptilia	Pygopodidae	Aprasia clairae Maryan, How & Adams, 2013 ( <i>Batavia Coast Worm Lizard</i> )	native	
474	Reptilia	Pygopodidae	Delma fraseri Gray, 1831 ( <i>Fraser's Delma, Fraser's Legless Lizard</i> )	native	
475	Reptilia	Pygopodidae	Lialis burtonis Gray, 1835 ( <i>Burton's Snake-lizard</i> )	native	
476	Reptilia	Pygopodidae	Pletholax gracilis Cope, 1864 ( <i>West Coast Keeled Legless Gecko</i> )	native	
477	Reptilia	Scincidae	Lerista elegans (Gray, 1845) ( <i>Elegant Slider</i> )	native	
478	Reptilia	Scincidae	Lerista kingi Smith & Adams, 2007 ( <i>King's Lerista</i> )	native	
479	Reptilia	Scincidae	Lerista miopus (Günther, 1867) ( <i>Northern Dotted-line Robust Slider</i> )	native	
480	Reptilia	Scincidae	Lerista planiventralis (Lucas & Frost, 1902)	native	
481	Reptilia	Scincidae	Lerista planiventralis decora Storr, 1978 ( <i>Keeled Slider</i> )	native	
482	Reptilia	Scincidae	Lerista praepedita (Boulenger, 1987) ( <i>West Coast Worm-slider</i> )	native	
483	Reptilia	Scincidae	Menetia greyii Gray, 1845 ( <i>Common Dwarf Skink</i> )	native	
484	Reptilia	Scincidae	Tiliqua occipitalis (Peters, 1863) ( <i>Western Blue-tongue Skink</i> )	native	
485	Reptilia	Scincidae	Tiliqua rugosa (Gray, 1825)	native	
486	Reptilia	Scincidae	Tiliqua rugosa rugosa (Gray, 1825)	native	
487	Reptilia	Typhlopidae Merrem, 1820	Anilius australis Gray, 1845 ( <i>Southern Blind Snake</i> )	native	
488	Thecostraca Gruvel, 1905	Poecilasmataidae Annandale, 1909	Octolasmis Gray, 1825		

## Plantae

489	Basidiomycetes	Agaricaceae Chevall.	Acetabularia J.V.Lamour.		
490	Basidiomycetes	Agaricaceae Chevall.	Acetabularia caliculus J.V.Lamour.	native	
491	Bryopsida	Funariaceae	Entosthodon muhlenbergii (Turner) Fife	native	

492	Bryopsida	Grimmiaceae	Grimmia laevigata (Brid.) Brid.	native
493	Bryopsida	Pottiaceae Schimp.	Barbula calycina Schw.Ägr.	native
494	Florideophyceae	Acrotyleaceae F.Schmitz	Hennedyia crispa Harv.	native
495	Florideophyceae	Areschougiaceae J.Agardh	Areschougia congesta (Turner) J.Agardh	native
496	Florideophyceae	Areschougiaceae J.Agardh	Erythroclonium Sond.	
497	Florideophyceae	Areschougiaceae J.Agardh	Erythroclonium muelleri Sond.	native
498	Florideophyceae	Areschougiaceae J.Agardh	Erythroclonium sedoides (Harv.) Kylin	native
499	Florideophyceae	Areschougiaceae J.Agardh	Erythroclonium sonderi Harv.	native
500	Florideophyceae	Bonnemaisoniaceae F.Schmitz	Asparagopsis taxiformis (Delile) Trevis.	native
501	Florideophyceae	Bonnemaisoniaceae F.Schmitz	Delisea pulchra (Grev.) Mont.	native
502	Florideophyceae	Callithamniaceae KÄ¼tz.	Euptilocladia spongiosa E.M.Woll.	native
503	Florideophyceae	Callithamniaceae KÄ¼tz.	Euptilota (KÄ¼tz.) KÄ¼tz.	
504	Florideophyceae	Callithamniaceae KÄ¼tz.	Euptilota articulata (J.Agardh) F.Schmitz	native
505	Florideophyceae	Callithamniaceae KÄ¼tz.	Hirsutithallia tincta E.M.Woll. & Womersley	native
506	Florideophyceae	Ceramiaceae Dumort.	Acrothamnion preissii (Sond.) E.M.Woll.	native
507	Florideophyceae	Ceramiaceae Dumort.	Amoenothamnion planktonicum E.M.Woll.	native
508	Florideophyceae	Ceramiaceae Dumort.	Antithamnion armatum (J.Agardh) G.De Toni	native
509	Florideophyceae	Ceramiaceae Dumort.	Antithamnion hanovioides (Sond.) G.De Toni	native
510	Florideophyceae	Ceramiaceae Dumort.	Centroceras clavulatum (C.Agardh) Mont.	native
511	Florideophyceae	Ceramiaceae Dumort.	Ceramium macilentum J.Agardh	native
512	Florideophyceae	Ceramiaceae Dumort.	Ceramium puberulum Sond.	native
513	Florideophyceae	Ceramiaceae Dumort.	Ceramium shepherdii Womersley	native
514	Florideophyceae	Ceramiaceae Dumort.	Dasyphila preissii Sond.	native
515	Florideophyceae	Ceramiaceae Dumort.	Lejolisia aegagropila (J.Agardh) J.Agardh	native
516	Florideophyceae	Ceramiaceae Dumort.	Lomathamnion epicodii Gordon-Mills	native
517	Florideophyceae	Ceramiaceae Dumort.	Perischelia glomulifera (J.Agardh) Kylin	native
518	Florideophyceae	Ceramiaceae Dumort.	Wollastoniella myriophylloides (Harv.) Gordon-Mills	native
519	Florideophyceae	Champiaceae KÄ¼tz.	Champia Desv.	
520	Florideophyceae	Champiaceae KÄ¼tz.	Champia parvula (C.Agardh) Harv.	native
521	Florideophyceae	Champiaceae KÄ¼tz.	Champia zostericola (Harv.) Reedman & Womersley	native
522	Florideophyceae	Clavicioniaceae Kraft & G.W.Saunders	Antrocentrum Kraft & Min-Thein	
523	Florideophyceae	Clavicioniaceae Kraft & G.W.Saunders	Antrocentrum nigrescens (Harv.) Kraft & Min-Thein	native
524	Florideophyceae	Clavicioniaceae Kraft & G.W.Saunders	Clavicionium ovatum (J.V.Lamour.) Kraft & Min-Thein	native
525	Florideophyceae	Colaconemataceae J.T.Harper & G.W.Saunders	Colaconema daviesii (Dillwyn) Stegenga	native
526	Florideophyceae	Corallinaceae J.V.Lamour.	Corallina L.	
527	Florideophyceae	Corallinaceae J.V.Lamour.	Jania micrarthrodia J.V.Lamour.	native
528	Florideophyceae	Corallinaceae J.V.Lamour.	Jania rosea (Lam.) Decne.	native
529	Florideophyceae	Cystocloniaceae KÄ¼tz.	Craspedocarpus blepharicarpus (Harv.) Min-Thein & Womersley	native
530	Florideophyceae	Cystocloniaceae KÄ¼tz.	Hypnea J.V.Lamour.	
531	Florideophyceae	Cystocloniaceae KÄ¼tz.	Hypnea charoides J.V.Lamour.	native
532	Florideophyceae	Cystocloniaceae KÄ¼tz.	Hypnea musciformis (Wulfen) J.V.Lamour.	native
533	Florideophyceae	Cystocloniaceae KÄ¼tz.	Hypnea ramentacea (C.Agardh) J.Agardh	native
534	Florideophyceae	Cystocloniaceae KÄ¼tz.	Hypnea valentiae (Turner) Mont.	native
535	Florideophyceae	Dasyaceae KÄ¼tz.	Dasya ceramioides Harv.	native
536	Florideophyceae	Dasyaceae KÄ¼tz.	Dasya cliftonii Harv.	native
537	Florideophyceae	Dasyaceae KÄ¼tz.	Dasya elongata Sond.	native
538	Florideophyceae	Dasyaceae KÄ¼tz.	Dasya extensa KÄ¼tz.	native
539	Florideophyceae	Dasyaceae KÄ¼tz.	Dasya frutescens Harv.	native
540	Florideophyceae	Dasyaceae KÄ¼tz.	Thuretia quercifolia Decne.	native
541	Florideophyceae	Delesseriaceae Bory	Chauviniella coriifolia (Harv.) Papenf.	native

542	Florideophyceae	Delesseriaceae Bory	Heterodoxia denticulata (Kuntze) J.Agardh	native
543	Florideophyceae	Delesseriaceae Bory	Hypoglossum heterocystideum (J.Agardh) J.Agardh	native
544	Florideophyceae	Delesseriaceae Bory	Membranoptera spinulosa (Ruprecht) Kuntze	uncertain
545	Florideophyceae	Delesseriaceae Bory	Neoharaldiodiophyllum erosum (Harvey) J.C.Kang & M.S.Kim	
546	Florideophyceae	Dicranemataceae	Dicranema revolutum (C.Agardh) J.Agardh	native
547	Florideophyceae	Dicranemataceae	Tylotus obtusatus (Sond.) J.Agardh	native
548	Florideophyceae	Dumontiaceae Bory	Kraftia dichotoma Shepley & Womersley	native
549	Florideophyceae	Dumontiaceae Bory	Rhodopeltis australis (Harv.) Harv.	native
550	Florideophyceae	Galaxauraceae P.G.Parkinson	Dichotomaria obtusata (J.Ellis & Sol.) Lam.	native
551	Florideophyceae	Gelidiaceae K�tz.	Gelidium J.V.Lamour.	
552	Florideophyceae	Gigartinaceae	Gigartina disticha Sond.	native
553	Florideophyceae	Gracilariaceae N�geli	Curdiea Harv.	
554	Florideophyceae	Gracilariaceae N�geli	Curdiea irvineae J.Agardh	native
555	Florideophyceae	Gracilariaceae N�geli	Curdiea obesa (Harv.) Kylin	native
556	Florideophyceae	Gracilariaceae N�geli	Gracilaria Greville	uncertain
557	Florideophyceae	Gracilariaceae N�geli	Gracilaria cliftonii Withell, A.Millar & Kraft	native
558	Florideophyceae	Gracilariaceae N�geli	Gracilaria comosa Withell, A.Millar & Kraft	native
559	Florideophyceae	Gracilariaceae N�geli	Gracilaria flagelliformis (Sond.) Womersley	native
560	Florideophyceae	Gracilariaceae N�geli	Gracilaria preissiana (Sond.) Womersley	native
561	Florideophyceae	Halymeniaceae Bory	Carpopeltis elata (Harv.) G.De Toni	native
562	Florideophyceae	Halymeniaceae Bory	Cryptonemia kallymenioides (Harv.) Kraft	native
563	Florideophyceae	Hapalidiaceae J.E.Gray	Melobesia membranacea (Esper) J.V.Lamour.	native
564	Florideophyceae	Hymenocladaceae L.Le Gall, Dalen & G.W.Saunders	Hymenocladia chondricola (Sond.) J.A.Lewis	native
565	Florideophyceae	Hymenocladaceae L.Le Gall, Dalen & G.W.Saunders	Hymenocladia conspersa (Harv.) J.Agardh	native
566	Florideophyceae	Hymenocladaceae L.Le Gall, Dalen & G.W.Saunders	Hymenocladia usnea (Turner) J.Agardh	native
567	Florideophyceae	Kallymeniaceae Kylin	Callophyllis lambertii (Turner) K�tzing	
568	Florideophyceae	Liagoraceae K�tz.	Helminthocladia australis Harv.	native
569	Florideophyceae	Liagoraceae K�tz.	Liagora australasica Sond.	native
570	Florideophyceae	Lithophyllaceae Athanas.	Amphiroa J.V.Lamour.	
571	Florideophyceae	Lithophyllaceae Athanas.	Amphiroa anceps (Lam.) Decne.	native
572	Florideophyceae	Lithophyllaceae Athanas.	Amphiroa gracilis Harv.	native
573	Florideophyceae	Mastophoraceae (Setch.) R.A.Towns. & Huisman	Metamastophora flabellata (Sond.) Setch.	native
574	Florideophyceae	Mychodeaceae Kylin	Mychodea disticha Harv.	native
575	Florideophyceae	Mychodeaceae Kylin	Mychodea marginifera (Aresch.) Kraft	native
576	Florideophyceae	Mychodeaceae Kylin	Mychodea membranacea Hook.f. & Harv.	native
577	Florideophyceae	Mychodeaceae Kylin	Mychodea pusilla (Harv.) J.Agardh	native
578	Florideophyceae	Mychodeophyllidaceae	Mychodeophyllum papillitectum Kraft	native
579	Florideophyceae	Nizymeniaceae	Nizymenia conferta (Harv.) Chiovitti, G.W.Saunders & Kraft	native
580	Florideophyceae	Phacelocarpaceae	Phacelocarpus Endlicher & Diesing	
581	Florideophyceae	Phacelocarpaceae	Phacelocarpus sessilis J.Agardh	native
582	Florideophyceae	Placentophoraceae Dumilag, W.A.Nelson & Kraft	Callophycus Trevis.	
583	Florideophyceae	Placentophoraceae Dumilag, W.A.Nelson & Kraft	Callophycus costatus (Harv.) P.C.Silva	native
584	Florideophyceae	Placentophoraceae Dumilag, W.A.Nelson & Kraft	Callophycus dorsifer (C.Agardh) P.C.Silva	native
585	Florideophyceae	Placentophoraceae Dumilag, W.A.Nelson & Kraft	Callophycus harveyanus (J.Agardh) P.C.Silva	native
586	Florideophyceae	Placentophoraceae Dumilag, W.A.Nelson & Kraft	Callophycus oppositifolius (C.Agardh) P.C.Silva	native
587	Florideophyceae	Plocamiaceae K�tz.	Plocamium mertensii (Grev.) Harv.	native
588	Florideophyceae	Plocamiaceae K�tz.	Plocamium preissianum Sond.	native

589	Florideophyceae	Porolithaceae (A.Kato & M.Baba) R.A.Towns, & Huisman	Metagoniolithon Weber Bosse		
590	Florideophyceae	Pterocladaceae G.P.Felicini & C.Perrone	Pterocladia lucida (Turner) J.Agardh	native	
591	Florideophyceae	Pterocladaceae G.P.Felicini & C.Perrone	Pterocladia capillacea (J.F.Gmelin) Santelices & Hommersand	native	
592	Florideophyceae	Rhodomelaceae Horan.	Acanthophora dendroides Harv.	native	
593	Florideophyceae	Rhodomelaceae Horan.	Acanthophora spicifera (Vahl) BÅ,rgesen	native	
594	Florideophyceae	Rhodomelaceae Horan.	Amansia mamillaris C.Agardh	native	
595	Florideophyceae	Rhodomelaceae Horan.	Amansia serrata (Harv.) Womersley	native	
596	Florideophyceae	Rhodomelaceae Horan.	Aneurianna dentata L.E. Phillips	native	
597	Florideophyceae	Rhodomelaceae Horan.	Chondria C.Agardh		
598	Florideophyceae	Rhodomelaceae Horan.	Cladurus elatus (Sond.) Falkenb.	native	
599	Florideophyceae	Rhodomelaceae Horan.	Coeloclonium tasmanicum (Harv.) Womersley	native	
600	Florideophyceae	Rhodomelaceae Horan.	Corynecladia clavata (Sond.) J.Agardh	native	
601	Florideophyceae	Rhodomelaceae Horan.	Corynecladia elata (C.Agardh) Cassano, M.C.Oliveira & M.T.Fujii	native	
602	Florideophyceae	Rhodomelaceae Horan.	Dasyclonium J.G. Agardh		
603	Florideophyceae	Rhodomelaceae Horan.	Dasyclonium flaccidum (Harv.) Kylin	native	
604	Florideophyceae	Rhodomelaceae Horan.	Dasyclonium incisum (J.Agardh) Kylin	native	
605	Florideophyceae	Rhodomelaceae Horan.	Dictyomenia Greville		
606	Florideophyceae	Rhodomelaceae Horan.	Dictyomenia harveyana Sond.	native	
607	Florideophyceae	Rhodomelaceae Horan.	Dictyomenia sonderi Harv.	native	
608	Florideophyceae	Rhodomelaceae Horan.	Dictyomenia tridens (Turner) Grev.	native	
609	Florideophyceae	Rhodomelaceae Horan.	Doxodasya bolbochaete (Harv.) Falkenb.	native	
610	Florideophyceae	Rhodomelaceae Horan.	Echinothamnion hystrix (Hook.f. & Harv.) Kylin	native	
611	Florideophyceae	Rhodomelaceae Horan.	Halydictyon australe (Sond.) Harv.	native	
612	Florideophyceae	Rhodomelaceae Horan.	Heterocladia Decne.		
613	Florideophyceae	Rhodomelaceae Horan.	Heterocladia australis Decne.	native	
614	Florideophyceae	Rhodomelaceae Horan.	Heterocladia caudata L.E.Phillips, Choi, G.W.Saunders & Kraft	native	
615	Florideophyceae	Rhodomelaceae Horan.	Kuetzingia Sonder		
616	Florideophyceae	Rhodomelaceae Horan.	Kuetzingia canaliculata (Grev.) Sond.	native	
617	Florideophyceae	Rhodomelaceae Horan.	Laurencia J.V.Lamour.		
618	Florideophyceae	Rhodomelaceae Horan.	Laurencia dendroidea J.Agardh	native	
619	Florideophyceae	Rhodomelaceae Horan.	Laurencia filiformis (C.Agardh) Mont.	native	
620	Florideophyceae	Rhodomelaceae Horan.	Laurencia obtusa (Huds.) J.V.Lamour.	native	
621	Florideophyceae	Rhodomelaceae Horan.	Lenormandia Sonder		
622	Florideophyceae	Rhodomelaceae Horan.	Lenormandia latifolia Harv. & Grev.	native	
623	Florideophyceae	Rhodomelaceae Horan.	Lenormandia muelleri Sond.	native	
624	Florideophyceae	Rhodomelaceae Horan.	Lenormandia spectabilis Sond.	native	
625	Florideophyceae	Rhodomelaceae Horan.	Leveillea jungermannioides (E.Hering & G.Martens) Harv.	native	
626	Florideophyceae	Rhodomelaceae Horan.	Lophocladia kuetzingii (Kuntze) P.C.Silva	native	
627	Florideophyceae	Rhodomelaceae Horan.	Neurymenia fraxinifolia (Turner) J.Agardh	native	
628	Florideophyceae	Rhodomelaceae Horan.	Osmundaria prolifera J.V.Lamour.	native	
629	Florideophyceae	Rhodomelaceae Horan.	Pollexfenia lobata (Hook.f. & Harv.) Falkenb.	native	
630	Florideophyceae	Rhodomelaceae Horan.	Polysiphonia sertularioides (Gratel.) J.Agardh	native	
631	Florideophyceae	Rhodomelaceae Horan.	Protokuetzingia australasica (Mont.) Falkenb.	native	
632	Florideophyceae	Rhodomelaceae Horan.	Vertebrata decipiens (Mont.) Kuntze	native	
633	Florideophyceae	Rhodomelaceae Horan.	Vidalia J.Agardh		
634	Florideophyceae	Rhodomelaceae Horan.	Vidalia spiralis (J.V.Lamour.) J.Agardh	native	
635	Florideophyceae	Rhodomelaceae Horan.	Xiphosiphonia pennata (C.Agardh) Savoie & G.W.Saunders	alien	
636	Florideophyceae	Rhodymeniaceae Harv.	Botryocladia sonderi P.C.Silva	native	
637	Florideophyceae	Rhodymeniaceae Harv.	Coelarthrum opuntia (Endl.) BÅ,rgesen	native	

638	Florideophyceae	Solieriaceae J.Agardh	Betaphycus speciosus (Sond.) P.C.Silva	native	
639	Florideophyceae	Solieriaceae J.Agardh	Eucheuma J.Agardh		
640	Florideophyceae	Solieriaceae J.Agardh	Solieria robusta (Grev.) Kylin	native	
641	Florideophyceae	Spyridiaceae J.Agardh	Spyridia dasyoides Sond.	native	
642	Florideophyceae	Spyridiaceae J.Agardh	Spyridia filamentosa (Wulfen) Harv.	native	
643	Florideophyceae	Wrangeliaceae J.Agardh	Anotrichium elongatum (Harv.) Baldock	native	
644	Florideophyceae	Wrangeliaceae J.Agardh	Haloplegma preissii (Harv.) Mont.	native	
645	Isoetopsida	Selaginellaceae Willk.	Selaginella gracillima (Kunze) Salomon	native	
646	Liliopsida	Anarthriaceae D.F.Cutler & Airy Shaw	Anarthria polyphylla Nees	native	
647	Liliopsida	Anarthriaceae D.F.Cutler & Airy Shaw	Lyginia imberbis R.Br.	native	
648	Liliopsida	Arecaceae Bercht. & J.Presl	Phoenix L.		
649	Liliopsida	Arecaceae Bercht. & J.Presl	Phoenix canariensis Chabaud ( <i>Canary Islands Date Palm</i> )	alien	
650	Liliopsida	Asparagaceae Juss.	Acanthocarpus preissii Lehm.	native	
651	Liliopsida	Asparagaceae Juss.	Agave americana L. ( <i>Century Plant</i> )	alien	
652	Liliopsida	Asparagaceae Juss.	Arthropodium dyeri (Domin) Brittan	native	
653	Liliopsida	Asparagaceae Juss.	Laxmannia omnifertilis Keighery	native	
654	Liliopsida	Asparagaceae Juss.	Laxmannia sessiliflora subsp. drummondii Keighery	native	
655	Liliopsida	Asparagaceae Juss.	Lomandra hastilis (R.Br.) Ewart	native	
656	Liliopsida	Asparagaceae Juss.	Lomandra micrantha (Endl.) Ewart subsp. micrantha ( <i>Small-flower Mat Rush</i> )	native	
657	Liliopsida	Asparagaceae Juss.	Thysanotus arenarius Brittan ( <i>Sand-dune Fringed Lily</i> )	native	
658	Liliopsida	Asparagaceae Juss.	Thysanotus teretifolius Brittan	native	
659	Liliopsida	Asparagaceae Juss.	Thysanotus triandrus (Labill.) R.Br. ( <i>Three-stamened Fringe Lily</i> )	native	
660	Liliopsida	Centrolepidaceae Endl.	Aphelia cyperoides R.Br.	native	
661	Liliopsida	Centrolepidaceae Endl.	Centrolepis aristata (R.Br.) Poir.	native	
662	Liliopsida	Centrolepidaceae Endl.	Centrolepis polygyna (R.Br.) Hieron. ( <i>Wiry Centrolepis</i> )	native	
663	Liliopsida	Colchicaceae DC.	Wurmbea dioica subsp. alba T.Macfarlane	native	
664	Liliopsida	Colchicaceae DC.	Wurmbea tubulosa Benth. ( <i>Long-flowered Nancy</i> )	native	VU
665	Liliopsida	Cymodoceaceae Vines	Amphibolis antarctica (Labill.) Asch. ( <i>Sea Nymph</i> )	native	
666	Liliopsida	Cymodoceaceae Vines	Amphibolis griffithii (J.M.Black) Hartog	native	
667	Liliopsida	Cymodoceaceae Vines	Halodule uninervis (Forssk.) Asch.	native	
668	Liliopsida	Cymodoceaceae Vines	Syringodium isoetifolium (Asch.) Dandy	native	
669	Liliopsida	Cymodoceaceae Vines	Thalassodendron pachyrhizum Hartog	native	
670	Liliopsida	Cyperaceae Juss.	Caustis dioica R.Br.	native	
671	Liliopsida	Cyperaceae Juss.	Chorizandra enodis Nees	native	
672	Liliopsida	Cyperaceae Juss.	Cyperus alterniflorus R.Br.	native	
673	Liliopsida	Cyperaceae Juss.	Eleocharis acuta R.Br. ( <i>Common Spikerush</i> )	native	
674	Liliopsida	Cyperaceae Juss.	Ficinia nodosa (Rottb.) Goetgh., Muasya & D.A.Simpson	native	
675	Liliopsida	Cyperaceae Juss.	Gahnia sp. South West (K.L. Wilson & K. Frank KLW 9266) ( <i>Little Sedge</i> )	native	
676	Liliopsida	Cyperaceae Juss.	Isolepis congrua Nees	native	
677	Liliopsida	Cyperaceae Juss.	Lepidosperma Labill.		
678	Liliopsida	Cyperaceae Juss.	Lepidosperma tenue Benth.	native	
679	Liliopsida	Cyperaceae Juss.	Machaerina juncea (R.Br.) T.Koyama ( <i>Bare Twigrush</i> )	native	
680	Liliopsida	Cyperaceae Juss.	Mesomelaena stygia subsp. deflexa (K&#247;k.) K.L.Wilson	native	P3
681	Liliopsida	Cyperaceae Juss.	Mesomelaena tetragona (R.Br.) Benth. ( <i>Semaphore Sedge</i> )	native	
682	Liliopsida	Cyperaceae Juss.	Schoenus armeria Boeckeler	native	
683	Liliopsida	Cyperaceae Juss.	Schoenus badius Rye	native	P2
684	Liliopsida	Cyperaceae Juss.	Schoenus brevisetis (R.Br.) Poir.	native	
685	Liliopsida	Cyperaceae Juss.	Schoenus griffinianus K.L.Wilson	native	P4
686	Liliopsida	Cyperaceae Juss.	Schoenus humilis Benth.	native	

687	Liliopsida	Cyperaceae Juss.	Schoenus pleiostemoneus F.Muell.	native	
688	Liliopsida	Cyperaceae Juss.	Schoenus sp. Eneabba (F. Obbens & C. Godden 1154)	native	P2
689	Liliopsida	Cyperaceae Juss.	Schoenus sp. G Broad Sheath (K,L, Wilson 2633)	native	
690	Liliopsida	Cyperaceae Juss.	Schoenus unispiculatus Benth.	native	
691	Liliopsida	Dasypogonaceae Dumort.	Calectasia hispida R.L.Barrett & K.W.Dixon	native	
692	Liliopsida	Dasypogonaceae Dumort.	Calectasia narragara R.L.Barrett & K.W.Dixon	native	
693	Liliopsida	Dioscoreaceae R.Br.	Dioscorea hastifolia Nees	native	
694	Liliopsida	Ecdeiocoleaceae D.F.Cutler & Airy Shaw	Ecdeiocolea monostachya F.Muell.	native	
695	Liliopsida	Haemodoraceae R.Br.	Anigozanthos humilis Lindl. subsp. humilis ( <i>Catspaw</i> )	native	
696	Liliopsida	Haemodoraceae R.Br.	Blancoa canescens Lindl. ( <i>Winter Bell</i> )	native	
697	Liliopsida	Haemodoraceae R.Br.	Conostylis aculeata subsp. rhipidion J.W.Green	native	
698	Liliopsida	Haemodoraceae R.Br.	Conostylis androstemma F.Muell.	native	
699	Liliopsida	Haemodoraceae R.Br.	Conostylis aurea Lindl.	native	
700	Liliopsida	Haemodoraceae R.Br.	Conostylis candicans Endl. subsp. candicans	native	
701	Liliopsida	Haemodoraceae R.Br.	Conostylis candicans subsp. calcicola Hopper	native	
702	Liliopsida	Haemodoraceae R.Br.	Conostylis candicans subsp. procumbens Hopper	native	
703	Liliopsida	Haemodoraceae R.Br.	Conostylis canteriata Hopper	native	
704	Liliopsida	Haemodoraceae R.Br.	Conostylis crassinerva J.W.Green	native	
705	Liliopsida	Haemodoraceae R.Br.	Conostylis dielsii W.Fitzg. subsp. dielsii	native	
706	Liliopsida	Haemodoraceae R.Br.	Conostylis dielsii subsp. teres Hopper	native	VU
707	Liliopsida	Haemodoraceae R.Br.	Conostylis hiemalis Hopper	native	
708	Liliopsida	Haemodoraceae R.Br.	Conostylis micrantha Hopper ( <i>Small-flowered Conostylis</i> )	native	VU
709	Liliopsida	Haemodoraceae R.Br.	Conostylis neocymosa Hopper	native	
710	Liliopsida	Haemodoraceae R.Br.	Conostylis prolifera Benth.	native	
711	Liliopsida	Haemodoraceae R.Br.	Conostylis resinosa Hopper	native	
712	Liliopsida	Haemodoraceae R.Br.	Conostylis robusta Diels	native	
713	Liliopsida	Haemodoraceae R.Br.	Conostylis stylioides F.Muell.	native	
714	Liliopsida	Haemodoraceae R.Br.	Conostylis teretifolia J.W.Green subsp. teretifolia	native	
715	Liliopsida	Haemodoraceae R.Br.	Conostylis tomentosa Hopper	native	
716	Liliopsida	Haemodoraceae R.Br.	Haemodorum discolor T.Macfarlane	native	
717	Liliopsida	Haemodoraceae R.Br.	Haemodorum simulans F.Muell.	native	
718	Liliopsida	Haemodoraceae R.Br.	Macropidia fuliginosa (Hook.) Druce	native	
719	Liliopsida	Haemodoraceae R.Br.	Tribonanthes australis Endl.	native	
720	Liliopsida	Hemerocallidaceae R.Br.	Arnocrinum preissii Endl.	native	
721	Liliopsida	Hemerocallidaceae R.Br.	Chamaescilla versicolor (Lindl.) Ostenf.	native	
722	Liliopsida	Hemerocallidaceae R.Br.	Corynotheca micrantha (Lindl.) Druce	native	
723	Liliopsida	Hemerocallidaceae R.Br.	Dianella revoluta R.Br.	native	
724	Liliopsida	Hemerocallidaceae R.Br.	Johnsonia pubescens Lindl. subsp. pubescens	native	
725	Liliopsida	Hemerocallidaceae R.Br.	Stawellia dimorphantha F.Muell. ( <i>Arrowsmith Stilt-lily</i> )	native	P4
726	Liliopsida	Hemerocallidaceae R.Br.	Tricoryne elatior R.Br. ( <i>Yellow Autumn Lily</i> )	native	
727	Liliopsida	Hemerocallidaceae R.Br.	Tricoryne sp. Eneabba (E.A. Griffin 1200)	native	
728	Liliopsida	Hemerocallidaceae R.Br.	Tricoryne tenella R.Br.	native	
729	Liliopsida	Hydrocharitaceae Juss.	Halophila Thouars		
730	Liliopsida	Hydrocharitaceae Juss.	Halophila australis Doty & B.C.Stone	native	
731	Liliopsida	Hydrocharitaceae Juss.	Halophila ovalis (R.Br.) Hook.f.	native	
732	Liliopsida	Iridaceae Juss.	Patersonia occidentalis R.Br.	native	
733	Liliopsida	Juncaceae Juss.	Juncus bufonius L.	alien	
734	Liliopsida	Juncaceae Juss.	Juncus caespiticius E.Mey.	native	
735	Liliopsida	Juncaceae Juss.	Juncus radula Buchenau	native	
736	Liliopsida	Orchidaceae Juss.	Caladenia bicallata R.S.Rogers	native	
737	Liliopsida	Orchidaceae Juss.	Caladenia bicallata R.S.Rogers subsp. bicallata ( <i>Limestone Spider Orchid</i> )	native	
738	Liliopsida	Orchidaceae Juss.	Caladenia crebra A.S.George ( <i>Arrowsmith Spider Orchid</i> )	native	

739	Liliopsida	Orchidaceae Juss.	Caladenia denticulata Lindl.	native	
740	Liliopsida	Orchidaceae Juss.	Caladenia drummondii Benth. ( <i>Winter Spider Orchid</i> )	native	
741	Liliopsida	Orchidaceae Juss.	Caladenia filamentosa R.Br. ( <i>Red Spider Orchid</i> )	native	
742	Liliopsida	Orchidaceae Juss.	Caladenia flava R.Br. ( <i>Cowslip Orchid</i> )	native	
743	Liliopsida	Orchidaceae Juss.	Caladenia flava R.Br. subsp. flava ( <i>Cowslip Orchid</i> )	native	
744	Liliopsida	Orchidaceae Juss.	Caladenia flava subsp. maculata Hopper & A.P.Br. ( <i>Kalbarri Cowslip Orchid</i> )	native	
745	Liliopsida	Orchidaceae Juss.	Caladenia footeana Hopper & A.P.Br. ( <i>Crimson Spider Orchid</i> )	native	
746	Liliopsida	Orchidaceae Juss.	Caladenia latifolia R.Br. ( <i>Pink Fairies, Pink Fairy Orchid</i> )	native	
747	Liliopsida	Orchidaceae Juss.	Caladenia longicauda Lindl. ( <i>Common White Spider Orchid</i> )	native	
748	Liliopsida	Orchidaceae Juss.	Caladenia longicauda Lindl. subsp. longicauda	native	
749	Liliopsida	Orchidaceae Juss.	Caladenia longicauda subsp. borealis Hopper & A.P.Br. ( <i>Daddy-long-legs Spider Orchid</i> )	native	
750	Liliopsida	Orchidaceae Juss.	Caladenia nobilis Hopper & A.P.Br. ( <i>Noble Spider Orchid</i> )	native	
751	Liliopsida	Orchidaceae Juss.	Caladenia occidentalis Hopper & A.P.Br. ( <i>Ruby Spider Orchid</i> )	native	
752	Liliopsida	Orchidaceae Juss.	Caladenia varians Hopper & A.P.Br. ( <i>Common Spider Orchid</i> )	native	
753	Liliopsida	Orchidaceae Juss.	Caladenia x spectabilis Hopper & A.P.Br.	native	
754	Liliopsida	Orchidaceae Juss.	Cyrtostylis huegelii Endl.	native	
755	Liliopsida	Orchidaceae Juss.	Diuris carectum D.L.Jones & C.J.French		
756	Liliopsida	Orchidaceae Juss.	Diuris perialla D.L.Jones & C.J.French	native	
757	Liliopsida	Orchidaceae Juss.	Paracaleana dixonii Hopper & A.P.Br.	native	VU
758	Liliopsida	Orchidaceae Juss.	Pheladenia deformis (R.Br.) D.L.Jones & M.A.Clem.	native	
759	Liliopsida	Orchidaceae Juss.	Prasophyllum calcicola R.J.Bates	native	
760	Liliopsida	Orchidaceae Juss.	Prasophyllum gracile Lindl. ( <i>Little Laughing Leek Orchid</i> )	native	
761	Liliopsida	Orchidaceae Juss.	Pterostylis sanguinea D.L.Jones & M.A.Clem. ( <i>Dark Banded Greenhood</i> )	native	
762	Liliopsida	Orchidaceae Juss.	Pterostylis scabra Lindl. ( <i>Green-veined Shell Orchid</i> )	native	
763	Liliopsida	Orchidaceae Juss.	Pterostylis vittata Lindl.	native	
764	Liliopsida	Orchidaceae Juss.	Pyrorchis nigricans (R.Br.) D.L.Jones & M.A.Clem. ( <i>Elephants ears, Red beaks</i> )	native	
765	Liliopsida	Orchidaceae Juss.	Thelymitra stellata Lindl. ( <i>Star Orchid</i> )	native	EN
766	Liliopsida	Poaceae Barnhart	Amphibromus nervosus (Hook.f.) Baill.	native	
767	Liliopsida	Poaceae Barnhart	Amphipogon carcinus F.Muell. ( <i>Long Greybeard Grass</i> )	native	
768	Liliopsida	Poaceae Barnhart	Austrostipa elegantissima (Labill.) S.W.L.Jacobs & J.Everett	native	
769	Liliopsida	Poaceae Barnhart	Austrostipa flavescens (Labill.) S.W.L.Jacobs & J.Everett	native	
770	Liliopsida	Poaceae Barnhart	Austrostipa nunaginensis A,R,Williams	native	P3
771	Liliopsida	Poaceae Barnhart	Cenchrus ciliaris L. ( <i>Buffel Grass</i> )	alien	
772	Liliopsida	Poaceae Barnhart	Cenchrus echinatus L. ( <i>Burrgrass</i> )	alien	
773	Liliopsida	Poaceae Barnhart	Cenchrus setaceus (Forssk.) Morrone ( <i>Fountain Grass</i> )	alien	
774	Liliopsida	Poaceae Barnhart	Dactyloctenium radulans (R.Br.) P.Beauv. ( <i>Button Grass</i> )	native	
775	Liliopsida	Poaceae Barnhart	Ehrharta villosa Schult.f.	alien	
776	Liliopsida	Poaceae Barnhart	Eragrostis cilianensis (All.) Janch. ( <i>Stinkgrass</i> )	alien	
777	Liliopsida	Poaceae Barnhart	Eragrostis curvula (Schrad.) Nees ( <i>African Lovegrass</i> )	alien	
778	Liliopsida	Poaceae Barnhart	Eulalia aurea (Bory) Kunth	native	
779	Liliopsida	Poaceae Barnhart	Hyparrhenia hirta (L.) Stapf	alien	
780	Liliopsida	Poaceae Barnhart	Lachnagrostis filiformis (G.Forst.) Trin.	native	
781	Liliopsida	Poaceae Barnhart	Oloptum miliaceum (L.) M.RÅqser & H.R.Hamasha	alien	
782	Liliopsida	Poaceae Barnhart	Phalaris paradoxa L. ( <i>Paradoxa Grass</i> )	alien	
783	Liliopsida	Poaceae Barnhart	Polypogon tenellus R.Br.	native	
784	Liliopsida	Poaceae Barnhart	Rostraria cristata (L.) Tzvelev	alien	

785	Liliopsida	Poaceae Barnhart	Rytidosperma occidentale (Vickery) Connor & Edgar	native	
786	Liliopsida	Poaceae Barnhart	Schismus barbatus (L.) Thell. ( <i>Kelch Grass</i> )	alien	
787	Liliopsida	Poaceae Barnhart	Spinifex longifolius R.Br.	native	
788	Liliopsida	Poaceae Barnhart	Triodia danthonioides (F.Muell.) Lazarides	native	
789	Liliopsida	Posidoniaceae Vines	Posidonia angustifolia Cambridge & J.Kuo	native	
790	Liliopsida	Restionaceae R.Br.	Alexgeorgea nitens (Nees) L.A.S.Johnson & B.G.Briggs	native	
791	Liliopsida	Restionaceae R.Br.	Chordifex ornatus (Steud.) B.G.Briggs & L.A.S.Johnson	native	P2
792	Liliopsida	Restionaceae R.Br.	Chordifex sinuosus B.G.Briggs & L.A.S.Johnson	native	
793	Liliopsida	Restionaceae R.Br.	Chordifex sphacelatus (R.Br.) B.G.Briggs & L.A.S.Johnson	native	
794	Liliopsida	Restionaceae R.Br.	Desmocladus asper (Nees) B.G.Briggs & L.A.S.Johnson	native	
795	Liliopsida	Restionaceae R.Br.	Desmocladus lateriticus B.G.Briggs & L.A.S.Johnson	native	
796	Liliopsida	Restionaceae R.Br.	Desmocladus parthenicus B.G.Briggs & L.A.S.Johnson	native	
797	Liliopsida	Restionaceae R.Br.	Lepidobolus preissianus Nees subsp. preissianus	native	
798	Liliopsida	Restionaceae R.Br.	Lepidobolus preissianus subsp. volubilis (Nees) B.G.Briggs & L.A.S.Johnson	native	
799	Magnoliopsida	Aizoaceae Martinov	Carpobrotus virescens (Haw.) Schwantes ( <i>Coastal Pigface</i> )	native	
800	Magnoliopsida	Aizoaceae Martinov	Tetragonia decumbens Mill. ( <i>Sea Spinach</i> )	alien	
801	Magnoliopsida	Amaranthaceae Juss.	Alternanthera pungens Kunth ( <i>Khaki Weed</i> )	alien	
802	Magnoliopsida	Amaranthaceae Juss.	Ptilotus divaricatus (Gaudich.) F.Muell. ( <i>Climbing Mulla Mulla</i> )	native	
803	Magnoliopsida	Amaranthaceae Juss.	Ptilotus manglesii (Lindl.) F.Muell. ( <i>Pom Poms</i> )	native	
804	Magnoliopsida	Amaranthaceae Juss.	Ptilotus polystachyus (Gaudich.) F.Muell. ( <i>Prince of Wales Feather</i> )	native	
805	Magnoliopsida	Amaranthaceae Juss.	Ptilotus stirlingii (Lindl.) F.Muell. subsp. stirlingii	native	
806	Magnoliopsida	Anacardiaceae R.Br.	Schinus molle L.	alien	
807	Magnoliopsida	Apiaceae Lindl.	Carum carvi L.	alien	
808	Magnoliopsida	Apiaceae Lindl.	Conium maculatum L.	alien	
809	Magnoliopsida	Apiaceae Lindl.	Daucus glochidiatus (Labill.) Fisch., C.A.Mey. & Ave-Lall. ( <i>Australian Carrot</i> )	native	
810	Magnoliopsida	Apiaceae Lindl.	Homalosciadium homalocarpum (F.Muell.) H.Eichler	native	
811	Magnoliopsida	Apiaceae Lindl.	Platysace juncea (Bunge) C.Norman	native	
812	Magnoliopsida	Apiaceae Lindl.	Platysace xerophila (E.Pritz.) L.A.S.Johnson	native	
813	Magnoliopsida	Apiaceae Lindl.	Xanthosia huegelii (Benth.) Steud.	native	
814	Magnoliopsida	Apocynaceae Juss.	Alyxia buxifolia R.Br.	native	
815	Magnoliopsida	Araliaceae Juss.	Hydrocotyle hispidula Bunge	native	
816	Magnoliopsida	Araliaceae Juss.	Hydrocotyle scutellifera Benth.	native	
817	Magnoliopsida	Araliaceae Juss.	Trachymene cyanopetala (F.Muell.) Benth.	native	
818	Magnoliopsida	Araliaceae Juss.	Trachymene ornata (Endl.) Druce ( <i>Spongefruit</i> )	native	
819	Magnoliopsida	Araliaceae Juss.	Trachymene pilosa Sm. ( <i>Native Parsnip</i> )	native	
820	Magnoliopsida	Asteraceae Bercht. & J.Presl	Actinobole uliginosum (A.Gray) H.Eichler	native	
821	Magnoliopsida	Asteraceae Bercht. & J.Presl	Angianthus cunninghamii (DC.) Benth. ( <i>Coast Angianthus</i> )	native	
822	Magnoliopsida	Asteraceae Bercht. & J.Presl	Asteridea nivea (Steetz) Kroner	native	
823	Magnoliopsida	Asteraceae Bercht. & J.Presl	Brachyscome iberidifolia Benth. ( <i>Swan River Daisy</i> )	native	
824	Magnoliopsida	Asteraceae Bercht. & J.Presl	Chondrilla juncea L. ( <i>Skeleton Weed</i> )	alien	
825	Magnoliopsida	Asteraceae Bercht. & J.Presl	Erigeron bonariensis L.	alien	
826	Magnoliopsida	Asteraceae Bercht. & J.Presl	Erymophyllum ramosum subsp. involucreatum (F.Muell.) Paul G.Wilson	native	
827	Magnoliopsida	Asteraceae Bercht. & J.Presl	Gilberta tenuifolia Turcz.	native	
828	Magnoliopsida	Asteraceae Bercht. & J.Presl	Glebionis coronaria (L.) Spach ( <i>Summer Chrysanthemum</i> )	alien	
829	Magnoliopsida	Asteraceae Bercht. & J.Presl	Gnaphalium indutum Hook.f. ( <i>Tiny Cudweed</i> )	native	
830	Magnoliopsida	Asteraceae Bercht. & J.Presl	Gnephosis macrocephala Turcz.	native	
831	Magnoliopsida	Asteraceae Bercht. & J.Presl	Gnephosis tenuissima Cass.	native	
832	Magnoliopsida	Asteraceae Bercht. & J.Presl	Hyalosperma cotula (Benth.) Paul G.Wilson	native	

833	Magnoliopsida	Asteraceae Bercht. & J.Presl	Hyalosperma demissum (A.Gray) Paul G.Wilson	native
834	Magnoliopsida	Asteraceae Bercht. & J.Presl	Leontodon rhagadioloides (L.) Enke & Zidorn ( <i>Cretan Weed</i> )	alien
835	Magnoliopsida	Asteraceae Bercht. & J.Presl	Millotia myosotidifolia (Benth.) Steetz	native
836	Magnoliopsida	Asteraceae Bercht. & J.Presl	Myriocephalus oldfieldii (F.Muell.) Paul G.Wilson	native
837	Magnoliopsida	Asteraceae Bercht. & J.Presl	Olearia axillaris (DC.) Benth.	native
838	Magnoliopsida	Asteraceae Bercht. & J.Presl	Olearia sp. Kennedy Range (G. Byrne 66)	native
839	Magnoliopsida	Asteraceae Bercht. & J.Presl	Podolepis aristata Benth. subsp. aristata	native
840	Magnoliopsida	Asteraceae Bercht. & J.Presl	Podotheca angustifolia (Labill.) Less. ( <i>Sticky Longheads</i> )	native
841	Magnoliopsida	Asteraceae Bercht. & J.Presl	Podotheca gnaphalioides Graham ( <i>Golden Long-heads</i> )	native
842	Magnoliopsida	Asteraceae Bercht. & J.Presl	Pseudognaphalium luteoalbum (L.) Hilliard & B.L.Burt ( <i>Jersey Cudweed</i> )	mixed
843	Magnoliopsida	Asteraceae Bercht. & J.Presl	Reichardia picroides (L.) Roth	alien
844	Magnoliopsida	Asteraceae Bercht. & J.Presl	Reichardia tingitana (L.) Roth ( <i>False Sowthistle</i> )	alien
845	Magnoliopsida	Asteraceae Bercht. & J.Presl	Rhodanthe citrina (Benth.) Paul G.Wilson	native
846	Magnoliopsida	Asteraceae Bercht. & J.Presl	Rhodanthe manglesii Lindl.	native
847	Magnoliopsida	Asteraceae Bercht. & J.Presl	Schoenia cassiniana (Gaudich.) Steetz ( <i>Schoenia</i> )	native
848	Magnoliopsida	Asteraceae Bercht. & J.Presl	Senecio pinnatifolius A.Rich.	native
849	Magnoliopsida	Asteraceae Bercht. & J.Presl	Senecio pinnatifolius var. latilobus (Steetz) I.Thomps.	native
850	Magnoliopsida	Asteraceae Bercht. & J.Presl	Sonchus oleraceus L. ( <i>Common Sowthistle</i> )	alien
851	Magnoliopsida	Asteraceae Bercht. & J.Presl	Symphotrichum squamatum (Spreng.) G.L.Nesom ( <i>Bushy Starwort</i> )	alien
852	Magnoliopsida	Asteraceae Bercht. & J.Presl	Urospermum picroides (L.) F.W.Schmidt	alien
853	Magnoliopsida	Asteraceae Bercht. & J.Presl	Verbesina encelioides (Cav.) A.Gray var. encelioides	alien
854	Magnoliopsida	Asteraceae Bercht. & J.Presl	Waitzia acuminata Steetz var. acuminata	native
855	Magnoliopsida	Asteraceae Bercht. & J.Presl	Waitzia acuminata var. albicans Paul G.Wilson	native
856	Magnoliopsida	Asteraceae Bercht. & J.Presl	Waitzia podolepis (Gaudich.) Benth.	native
857	Magnoliopsida	Asteraceae Bercht. & J.Presl	Xerochrysum bracteatum (Vent.) Tzvelev	mixed
858	Magnoliopsida	Boraginaceae Juss.	Buglossoides arvensis (L.) I.M.Johnst. ( <i>Corn Gromwell</i> )	alien
859	Magnoliopsida	Boraginaceae Juss.	Echium plantagineum L.	alien
860	Magnoliopsida	Boraginaceae Juss.	Halgania argyrophylla Diels	native
861	Magnoliopsida	Boraginaceae Juss.	Trichodesma zeylanicum var. grandiflorum Randell	native
862	Magnoliopsida	Brassicaceae Burnett	Cakile maritima Scop. ( <i>Sea Rocket</i> )	alien
863	Magnoliopsida	Brassicaceae Burnett	Lepidium linifolium (Desv.) Steud.	native
864	Magnoliopsida	Brassicaceae Burnett	Lepidium lyratogynum Hewson	native
865	Magnoliopsida	Brassicaceae Burnett	Sinapis arvensis L. ( <i>Charlock</i> )	alien
866	Magnoliopsida	Brassicaceae Burnett	Stenopetalum filifolium Benth.	native
867	Magnoliopsida	Byblidaceae Domin	Byblis lamellata Conran & Lowrie	native
868	Magnoliopsida	Campanulaceae Juss.	Isotoma hypocrateriformis (R.Br.) Druce ( <i>Woodbridge Poison</i> )	native
869	Magnoliopsida	Campanulaceae Juss.	Lobelia cleistogamoides N.G.Walsh & Albr.	native
870	Magnoliopsida	Campanulaceae Juss.	Lobelia heterophylla Labill. ( <i>Wing-seeded Lobelia</i> )	native
871	Magnoliopsida	Campanulaceae Juss.	Wahlenbergia preissii de Vriese	native
872	Magnoliopsida	Caryophyllaceae Juss.	Gypsophila vaccaria (L.) Sm.	alien
873	Magnoliopsida	Casuarinaceae R.Br.	Allocauarina campestris (Diels) L.A.S.Johnson	native
874	Magnoliopsida	Casuarinaceae R.Br.	Allocauarina huegeliana (Miq.) L.A.S.Johnson ( <i>Rock Sheoak</i> )	mixed
875	Magnoliopsida	Casuarinaceae R.Br.	Allocauarina lehmanniana (Miq.) L.A.S.Johnson subsp. lehmanniana ( <i>Dune Sheoak</i> )	native
876	Magnoliopsida	Casuarinaceae R.Br.	Allocauarina microstachya (Miq.) L.A.S.Johnson	native
877	Magnoliopsida	Casuarinaceae R.Br.	Allocauarina thuyoides (Miq.) L.A.S.Johnson ( <i>Horned Sheoak</i> )	native
878	Magnoliopsida	Casuarinaceae R.Br.	Casuarina obesa Miq. ( <i>Kuli, Swamp Sheoak</i> )	native
879	Magnoliopsida	Celastraceae R.Br.	Stackhousia dielsii Pamp.	native
880	Magnoliopsida	Celastraceae R.Br.	Stackhousia pubescens A.Rich. ( <i>Downy Stackhousia</i> )	native
881	Magnoliopsida	Celastraceae R.Br.	Tripterococcus brunonis Endl. ( <i>Winged Stackhousia</i> )	native
882	Magnoliopsida	Chenopodiaceae Vent.	Atriplex amnicola Paul G.Wilson	native

883	Magnoliopsida	Chenopodiaceae Vent.	Atriplex cinerea Poir. ( <i>Grey Saltbush</i> )	native	
884	Magnoliopsida	Chenopodiaceae Vent.	Atriplex semibaccata R.Br. ( <i>Berry Saltbush</i> )	mixed	
885	Magnoliopsida	Chenopodiaceae Vent.	Atriplex semilunaris Aellen ( <i>Annual Saltbush</i> )	native	
886	Magnoliopsida	Chenopodiaceae Vent.	Chenopodium murale L. ( <i>Nettle-leaf Goosefoot</i> )	alien	
887	Magnoliopsida	Chenopodiaceae Vent.	Enchylaena tomentosa R.Br. var. tomentosa	native	
888	Magnoliopsida	Chenopodiaceae Vent.	Maireana brevifolia (R.Br.) Paul G.Wilson ( <i>Small Leaf Bluebush</i> )	native	
889	Magnoliopsida	Chenopodiaceae Vent.	Rhagodia baccata subsp. dioica (Nees) Paul G.Wilson ( <i>Sea Berry Saltbush</i> )	native	
890	Magnoliopsida	Chenopodiaceae Vent.	Rhagodia latifolia subsp. recta Paul G.Wilson	native	
891	Magnoliopsida	Chenopodiaceae Vent.	Rhagodia preissii Moq.	native	
892	Magnoliopsida	Chenopodiaceae Vent.	Rhagodia preissii subsp. obovata (Moq.) Paul G.Wilson	native	
893	Magnoliopsida	Chenopodiaceae Vent.	Salicornia quinqueflora Ung.-Sternb. ( <i>Beaded Samphire</i> )	native	
894	Magnoliopsida	Chenopodiaceae Vent.	Salsola australis R.Br.	native	
895	Magnoliopsida	Chenopodiaceae Vent.	Tecticornia halocnemoides (Nees) K.A.Sheph. & Paul G.Wilson ( <i>Shrubby Samphire</i> )	native	
896	Magnoliopsida	Convolvulaceae Juss.	Convolvulus remotus R.Br.	native	
897	Magnoliopsida	Convolvulaceae Juss.	Ipomoea cairica (L.) Sweet	alien	
898	Magnoliopsida	Crassulaceae J.St.-Hil.	Crassula natans Thunb.	alien	
899	Magnoliopsida	Crassulaceae J.St.-Hil.	Crassula natans var. minor (Eckl. & Zeyh.) G.D.Rowley	alien	
900	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia acerosa (DC.) Benth.	native	
901	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia hypericoides (DC.) Benth. ( <i>Yellow Buttercups</i> )	native	
902	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia hypericoides (DC.) Benth. subsp. hypericoides ( <i>Yellow Buttercups</i> )	native	
903	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia hypericoides subsp. septentrionalis K.R.Thiele & Cockerton	native	
904	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia racemosa (Endl.) Gilg ( <i>Stalked Guinea Flower</i> )	native	
905	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia subvaginata (Steud.) F.Muell.	native	
906	Magnoliopsida	Dilleniaceae Salisb.	Hibbertia subvillosa (Domin) K.R.Thiele & T.Hammer	native	P3
907	Magnoliopsida	Droseraceae Salisb.	Drosera glanduligera Lehm.	native	
908	Magnoliopsida	Droseraceae Salisb.	Drosera magna (N.G.Marchant & Lowrie) Lowrie	native	
909	Magnoliopsida	Droseraceae Salisb.	Drosera neesii Lehm.	native	
910	Magnoliopsida	Elaeocarpaceae Juss.	Tetratheca confertifolia Steetz	native	
911	Magnoliopsida	Elatinaceae Dumort.	Elatine gratiolooides A.Cunn. ( <i>Waterwort</i> )	native	
912	Magnoliopsida	Ericaceae Juss.	Andersonia heterophylla Sond.	native	
913	Magnoliopsida	Ericaceae Juss.	Andersonia lehmanniana Sond. subsp. lehmanniana	native	
914	Magnoliopsida	Ericaceae Juss.	Leucopogon grammatus Hislop	native	P3
915	Magnoliopsida	Ericaceae Juss.	Leucopogon navicularis Hislop	native	P1
916	Magnoliopsida	Ericaceae Juss.	Leucopogon obtusatus Sond.	native	
917	Magnoliopsida	Ericaceae Juss.	Leucopogon ozothamnoides Benth.	native	P1
918	Magnoliopsida	Ericaceae Juss.	Leucopogon parviflorus (Andrews) Lindl. ( <i>Coast Beard-heath</i> )	native	
919	Magnoliopsida	Ericaceae Juss.	Leucopogon polymorphus Sond.	native	
920	Magnoliopsida	Ericaceae Juss.	Leucopogon psammophilus E.Pritz.	native	P1
921	Magnoliopsida	Ericaceae Juss.	Leucopogon sp. Northern ciliate (R. Davis 3393)	native	
922	Magnoliopsida	Ericaceae Juss.	Lysinema pentapetalum R.Br. ( <i>Curry Flower</i> )	native	
923	Magnoliopsida	Ericaceae Juss.	Styphelia allittii (F.Muell.) F.Muell.	native	P3
924	Magnoliopsida	Ericaceae Juss.	Styphelia conostephioides (DC.) F.Muell.	native	
925	Magnoliopsida	Ericaceae Juss.	Styphelia hamulosa (E.Pritz.) Sleumer	native	
926	Magnoliopsida	Ericaceae Juss.	Styphelia insularis (DC.) Hislop, Crayn & Puente-Lel.	native	
927	Magnoliopsida	Ericaceae Juss.	Styphelia leptantha (Benth.) F.Muell.	native	
928	Magnoliopsida	Ericaceae Juss.	Styphelia marginata (W.Fitzg.) Hislop, Crayn & Puente-Lel.	native	EN
929	Magnoliopsida	Ericaceae Juss.	Styphelia microdonta (Benth.) F.Muell.	native	
930	Magnoliopsida	Ericaceae Juss.	Styphelia planifolia (Sond.) Sleumer	native	
931	Magnoliopsida	Ericaceae Juss.	Styphelia serratifolia (DC.) Hislop, Crayn & Puente-Lel.	native	

932	Magnoliopsida	Ericaceae Juss.	Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)	native	
933	Magnoliopsida	Ericaceae Juss.	Styphelia sp. Mid West (J.S. Beard 7388)	native	
934	Magnoliopsida	Ericaceae Juss.	Styphelia stomarrhena (Sond.) Sleumer ( <i>Red Swamp Cranberry</i> )	native	
935	Magnoliopsida	Ericaceae Juss.	Styphelia tortifolia Hislop, Crayn & Puente-Lel.	native	
936	Magnoliopsida	Ericaceae Juss.	Styphelia xerophylla (DC.) F.Muell.	native	
937	Magnoliopsida	Euphorbiaceae Juss.	Adriana quadripartita (Labill.) MÃ¼ll.Arg. ( <i>Bitter Bush</i> )	native	
938	Magnoliopsida	Euphorbiaceae Juss.	Euphorbia tannensis subsp. eremophila (A.Cunn.) Hassall ( <i>Desert Spurge</i> )	native	
939	Magnoliopsida	Euphorbiaceae Juss.	Euphorbia terracina L. ( <i>Geraldton Carnation Weed</i> )	alien	
940	Magnoliopsida	Euphorbiaceae Juss.	Monotaxis bracteata Nees	native	
941	Magnoliopsida	Euphorbiaceae Juss.	Monotaxis grandiflora Endl. var. grandiflora	native	
942	Magnoliopsida	Euphorbiaceae Juss.	Ricinocarpos psilocladus (MÃ¼ll.Arg.) Benth.	native	
943	Magnoliopsida	Euphorbiaceae Juss.	Stachystemon axillaris A.S.George ( <i>Leafy Stachystemon</i> )	native	
944	Magnoliopsida	Fabaceae	Acacia sp.		
945	Magnoliopsida	Fabaceae Lindl.	Acacia acuaria W.Fitzg.	native	
946	Magnoliopsida	Fabaceae Lindl.	Acacia adnata F.Muell.	native	
947	Magnoliopsida	Fabaceae Lindl.	Acacia auronitens Lindl.	native	
948	Magnoliopsida	Fabaceae Lindl.	Acacia bidentata Benth.	native	
949	Magnoliopsida	Fabaceae Lindl.	Acacia blakelyi Maiden	mixed	
950	Magnoliopsida	Fabaceae Lindl.	Acacia daphnifolia Meisn.	native	
951	Magnoliopsida	Fabaceae Lindl.	Acacia ericifolia Benth.	native	
952	Magnoliopsida	Fabaceae Lindl.	Acacia erinacea Benth.	native	
953	Magnoliopsida	Fabaceae Lindl.	Acacia filifolia Benth.	native	P3
954	Magnoliopsida	Fabaceae Lindl.	Acacia flabellifolia W.Fitzg.	native	P3
955	Magnoliopsida	Fabaceae Lindl.	Acacia idiomorpha Benth.	native	
956	Magnoliopsida	Fabaceae Lindl.	Acacia isoneura Maslin & A.R.Chapm. subsp. isoneura	native	P3
957	Magnoliopsida	Fabaceae Lindl.	Acacia lanceolata Maslin	native	P3
958	Magnoliopsida	Fabaceae Lindl.	Acacia lasiocarpa Benth. var. lasiocarpa ( <i>Panjang</i> )	mixed	
959	Magnoliopsida	Fabaceae Lindl.	Acacia lasiocarpa var. lasiocarpa Cockleshell Gully variant (E.A. Griffin 2039)	native	P2
960	Magnoliopsida	Fabaceae Lindl.	Acacia lineolata Benth. subsp. lineolata	native	
961	Magnoliopsida	Fabaceae Lindl.	Acacia megacephala Maslin	native	P3
962	Magnoliopsida	Fabaceae Lindl.	Acacia microbotrya Benth.	mixed	
963	Magnoliopsida	Fabaceae Lindl.	Acacia pulchella var. glaberrima Meisn. ( <i>Prickly Moses</i> )	native	
964	Magnoliopsida	Fabaceae Lindl.	Acacia rostellifera Benth.	native	
965	Magnoliopsida	Fabaceae Lindl.	Acacia saligna (Labill.) H.L.Wendl.	native	
966	Magnoliopsida	Fabaceae Lindl.	Acacia saligna subsp. Wheatbelt (B.R. Maslin 8602)	native	
967	Magnoliopsida	Fabaceae Lindl.	Acacia scirpifolia Meisn.	native	
968	Magnoliopsida	Fabaceae Lindl.	Acacia sessilis Benth.	native	
969	Magnoliopsida	Fabaceae Lindl.	Acacia spathulifolia Maslin	native	
970	Magnoliopsida	Fabaceae Lindl.	Acacia stenoptera Benth. ( <i>Narrow Winged Wattle</i> )	native	
971	Magnoliopsida	Fabaceae Lindl.	Acacia telmica A.R.Chapm. & Maslin	native	P3
972	Magnoliopsida	Fabaceae Lindl.	Acacia tetragonophylla F.Muell. ( <i>Kurara</i> )	native	
973	Magnoliopsida	Fabaceae Lindl.	Acacia ulicina Meisn.	native	
974	Magnoliopsida	Fabaceae Lindl.	Acacia xanthina Benth.	native	
975	Magnoliopsida	Fabaceae Lindl.	Bossiaea eriocarpa Benth. ( <i>Common Brown Pea</i> )	native	
976	Magnoliopsida	Fabaceae Lindl.	Bossiaea spinescens Meisn.	native	
977	Magnoliopsida	Fabaceae Lindl.	Chorizema aciculare subsp. laxum J.M.Taylor & Crisp	native	
978	Magnoliopsida	Fabaceae Lindl.	Chorizema humile Turcz.	native	CR
979	Magnoliopsida	Fabaceae Lindl.	Cicer arietinum L. ( <i>Chickpea</i> )	alien	
980	Magnoliopsida	Fabaceae Lindl.	Cristonia stenophylla (Meisn.) I.Thomps.	native	
981	Magnoliopsida	Fabaceae Lindl.	Cullen cinereum (Lindl.) J.W.Grimes	native	
982	Magnoliopsida	Fabaceae Lindl.	Daviesia daphnoides Meisn.	native	

983	Magnoliopsida	Fabaceae Lindl.	Daviesia decurrens Meisn. subsp. decurrens	native	
984	Magnoliopsida	Fabaceae Lindl.	Daviesia divaricata Benth. subsp. divaricata	native	
985	Magnoliopsida	Fabaceae Lindl.	Daviesia hakeoides Meisn.	native	
986	Magnoliopsida	Fabaceae Lindl.	Daviesia podophylla Crisp	native	
987	Magnoliopsida	Fabaceae Lindl.	Daviesia quadrilata Lindl.	native	
988	Magnoliopsida	Fabaceae Lindl.	Daviesia ramosissima Crisp	native	
989	Magnoliopsida	Fabaceae Lindl.	Daviesia speciosa Crisp	native	EN
990	Magnoliopsida	Fabaceae Lindl.	Daviesia umbonata Crisp & G.Chandler	native	
991	Magnoliopsida	Fabaceae Lindl.	Gastrolobium calycinum Benth. ( <i>York Road Poison</i> )	native	
992	Magnoliopsida	Fabaceae Lindl.	Gastrolobium nervosum G.Chandler & Crisp	native	
993	Magnoliopsida	Fabaceae Lindl.	Gastrolobium oxylobioides Benth.	native	
994	Magnoliopsida	Fabaceae Lindl.	Gastrolobium plicatum Turcz.	native	
995	Magnoliopsida	Fabaceae Lindl.	Gastrolobium rotundifolium Meisn.	native	P3
996	Magnoliopsida	Fabaceae Lindl.	Gompholobium knightianum Lindl.	native	
997	Magnoliopsida	Fabaceae Lindl.	Gompholobium tomentosum Labill. ( <i>Hairy Yellow Pea</i> )	native	
998	Magnoliopsida	Fabaceae Lindl.	Hardenbergia comptoniana (Andrews) Benth.	native	
999	Magnoliopsida	Fabaceae Lindl.	Hovea pungens Benth. ( <i>Devil's Pins</i> )	native	
1000	Magnoliopsida	Fabaceae Lindl.	Hovea stricta Meisn.	native	
1001	Magnoliopsida	Fabaceae Lindl.	Isotropis cuneifolia (Sm.) Heynh. ( <i>Granny Bonnets</i> )	native	
1002	Magnoliopsida	Fabaceae Lindl.	Jacksonia angulata Benth.	native	
1003	Magnoliopsida	Fabaceae Lindl.	Jacksonia calcicola Chappill	native	
1004	Magnoliopsida	Fabaceae Lindl.	Jacksonia floribunda Endl. ( <i>Holly Pea</i> )	native	
1005	Magnoliopsida	Fabaceae Lindl.	Jacksonia hakeoides Meisn.	native	
1006	Magnoliopsida	Fabaceae Lindl.	Jacksonia macrocalyx Meisn.	native	
1007	Magnoliopsida	Fabaceae Lindl.	Jacksonia nutans Chappill	native	
1008	Magnoliopsida	Fabaceae Lindl.	Jacksonia sternbergiana Huegel ( <i>Kapur, Stinkwood</i> )	native	
1009	Magnoliopsida	Fabaceae Lindl.	Kennedia prostrata R.Br.	native	
1010	Magnoliopsida	Fabaceae Lindl.	Labichea lanceolata Benth. subsp. lanceolata	mixed	
1011	Magnoliopsida	Fabaceae Lindl.	Leptosema aphyllum (Hook.) Crisp	native	
1012	Magnoliopsida	Fabaceae Lindl.	Lotus australis Andrews ( <i>Austral Trefoil</i> )	native	
1013	Magnoliopsida	Fabaceae Lindl.	Lupinus cosentinii Guss.	alien	
1014	Magnoliopsida	Fabaceae Lindl.	Medicago polymorpha L. ( <i>Burr Medic</i> )	alien	
1015	Magnoliopsida	Fabaceae Lindl.	Mirbelia floribunda Benth. ( <i>Purple Mirbelia</i> )	native	
1016	Magnoliopsida	Fabaceae Lindl.	Mirbelia spinosa Benth.	native	
1017	Magnoliopsida	Fabaceae Lindl.	Mirbelia trichocalyx Domin	native	
1018	Magnoliopsida	Fabaceae Lindl.	Sphaerolobium drummondii Turcz.	native	
1019	Magnoliopsida	Fabaceae Lindl.	Templetonia retusa (Vent.) R.Br. ( <i>Cockies Tongues</i> )	native	
1020	Magnoliopsida	Fabaceae Lindl.	Trifolium campestre Schreb. ( <i>Hop Clover</i> )	alien	
1021	Magnoliopsida	Fabaceae Lindl.	Trifolium tomentosum L. var. tomentosum	alien	
1022	Magnoliopsida	Fabaceae Lindl.	Vicia faba L.	alien	
1023	Magnoliopsida	Gentianaceae Juss.	Centaurium tenuiflorum (Hoffmanns. & Link) Fritsch	alien	
1024	Magnoliopsida	Geraniaceae Juss.	Erodium cygnorum Nees	native	
1025	Magnoliopsida	Goodeniaceae R.Br.	Dampiera R.Br.		
1026	Magnoliopsida	Goodeniaceae R.Br.	Dampiera lindleyi de Vriese	native	
1027	Magnoliopsida	Goodeniaceae R.Br.	Dampiera oligophylla Benth. ( <i>Sparse-leaved Dampiera</i> )	native	
1028	Magnoliopsida	Goodeniaceae R.Br.	Dampiera spicigera Benth. ( <i>Spiked Dampiera</i> )	native	
1029	Magnoliopsida	Goodeniaceae R.Br.	Dampiera tephrea Rajput & Carolin	native	P3
1030	Magnoliopsida	Goodeniaceae R.Br.	Goodenia berardiana (Gaudich.) Carolin	native	
1031	Magnoliopsida	Goodeniaceae R.Br.	Goodenia caerulea R.Br.	native	
1032	Magnoliopsida	Goodeniaceae R.Br.	Goodenia micrantha Carolin	native	
1033	Magnoliopsida	Goodeniaceae R.Br.	Goodenia reinwardtii (de Vriese) K.A.Sheph. ( <i>Common Verreauxia</i> )	native	
1034	Magnoliopsida	Goodeniaceae R.Br.	Goodenia trichophylla Benth.	native	
1035	Magnoliopsida	Goodeniaceae R.Br.	Lechenaultia hirsuta F.Muell.	native	
1036	Magnoliopsida	Goodeniaceae R.Br.	Lechenaultia linarioides DC. ( <i>Yellow Leschenaultia</i> )	native	

1037	Magnoliopsida	Goodeniaceae R.Br.	Lechenaultia longiloba F.Muell. ( <i>Irwin Leschenaultia</i> )	native	P4
1038	Magnoliopsida	Goodeniaceae R.Br.	Scaevola crassifolia Labill. ( <i>Thick-leaved Fan-flower, Thick-leaved Scaevola</i> )	native	
1039	Magnoliopsida	Goodeniaceae R.Br.	Scaevola glandulifera DC. ( <i>Viscid Hand-flower</i> )	native	
1040	Magnoliopsida	Goodeniaceae R.Br.	Scaevola globulifera Labill.	native	
1041	Magnoliopsida	Goodeniaceae R.Br.	Scaevola hamiltonii K.Krause	native	
1042	Magnoliopsida	Goodeniaceae R.Br.	Scaevola phlebopetala F.Muell. ( <i>Velvet Fanflower</i> )	native	
1043	Magnoliopsida	Goodeniaceae R.Br.	Scaevola repens subsp. Northern Sandplains (R.J. Cranfield & P.J. Spencer 8445)	native	
1044	Magnoliopsida	Goodeniaceae R.Br.	Scaevola thesioides Benth.	native	
1045	Magnoliopsida	Goodeniaceae R.Br.	Scaevola thesioides Benth. subsp. thesioides	native	
1046	Magnoliopsida	Goodeniaceae R.Br.	Scaevola virgata Carolin	native	
1047	Magnoliopsida	Gyrostemonaceae A.Juss.	Gyrostemon ramulosus Desf.	native	
1048	Magnoliopsida	Gyrostemonaceae A.Juss.	Gyrostemon reticulatus A.S.George	native	CR
1049	Magnoliopsida	Gyrostemonaceae A.Juss.	Tersonia cyathiflora (Fenzl) J.W.Green	native	
1050	Magnoliopsida	Haloragaceae R.Br.	Glischrocaryon aureum (Lindl.) Orchard ( <i>Common Popflower</i> )	native	
1051	Magnoliopsida	Haloragaceae R.Br.	Haloragis foliosa Benth.	native	P3
1052	Magnoliopsida	Lamiaceae Martinov	Hemiandra R.Br.		
1053	Magnoliopsida	Lamiaceae Martinov	Hemiandra incana Bartl.	native	
1054	Magnoliopsida	Lamiaceae Martinov	Hemiandra rubriflora O.H.Sarg.	native	
1055	Magnoliopsida	Lamiaceae Martinov	Hemiandra sp. Eneabba (H. Demarz 3687)	native	P3
1056	Magnoliopsida	Lamiaceae Martinov	Hemigenia barbata Bartl.	native	
1057	Magnoliopsida	Lamiaceae Martinov	Hemigenia saligna Diels	native	P3
1058	Magnoliopsida	Lamiaceae Martinov	Hemiphora bartlingii (Lehm.) B.J.Conn & Henwood ( <i>Woolly Dragon</i> )	native	
1059	Magnoliopsida	Lamiaceae Martinov	Prostanthera grylloana F.Muell.	native	
1060	Magnoliopsida	Lamiaceae Martinov	Prostanthera magnifica C.A.Gardner ( <i>Magnificent Prostanthera</i> )	native	
1061	Magnoliopsida	Lamiaceae Martinov	Quoya oldfieldii (F.Muell.) B.J.Conn & Henwood ( <i>Oldfields Foxglove</i> )	native	
1062	Magnoliopsida	Lamiaceae Martinov	Quoya verbascina (F.Muell.) B.J.Conn & Henwood ( <i>Golden Bush</i> )	native	
1063	Magnoliopsida	Lauraceae Juss.	Cassytha aurea J.Z.Weber	native	
1064	Magnoliopsida	Lauraceae Juss.	Cassytha aurea J.Z.Weber var. aurea	native	
1065	Magnoliopsida	Lauraceae Juss.	Cassytha flava Nees ( <i>Dodder Laurel</i> )	native	
1066	Magnoliopsida	Lauraceae Juss.	Cassytha pomiformis Nees ( <i>Dodder Laurel</i> )	native	
1067	Magnoliopsida	Lauraceae Juss.	Cassytha racemosa Nees ( <i>Dodder Laurel</i> )	native	
1068	Magnoliopsida	Lauraceae Juss.	Cassytha racemosa Nees forma racemosa	native	
1069	Magnoliopsida	Loganiaceae Mart.	Orianthera spermacocea (F.Muell.) C.S.P.Foster & B.J.Conn	native	
1070	Magnoliopsida	Loranthaceae Juss.	Amyema miquelii (Miq.) Tiegh. ( <i>Stalked Mistletoe</i> )	native	
1071	Magnoliopsida	Loranthaceae Juss.	Amyema miraculosa (Miq.) Tiegh. subsp. miraculosa	native	
1072	Magnoliopsida	Loranthaceae Juss.	Amyema preissii (Miq.) Tiegh. ( <i>Wireleaf Mistletoe</i> )	native	
1073	Magnoliopsida	Loranthaceae Juss.	Nuytsia floribunda (Labill.) G.Don ( <i>Christmas Tree</i> )	native	
1074	Magnoliopsida	Macarthuriaceae Christenh.	Macarthuria australis Endl.	native	
1075	Magnoliopsida	Malvaceae Juss.	Alyogyne Alef.		
1076	Magnoliopsida	Malvaceae Juss.	Alyogyne huegelii (Endl.) Fryxell ( <i>Lilac Hibiscus</i> )	native	
1077	Magnoliopsida	Malvaceae Juss.	Commersonia borealis (E.Pritz.) C.F.Wilkins & Whitlock	native	
1078	Magnoliopsida	Malvaceae Juss.	Guichenotia alba Keighery	native	P3
1079	Magnoliopsida	Malvaceae Juss.	Guichenotia angustifolia (Turcz.) Druce	native	
1080	Magnoliopsida	Malvaceae Juss.	Guichenotia ledifolia Gay	native	
1081	Magnoliopsida	Malvaceae Juss.	Guichenotia macrantha Turcz. ( <i>Large-flowered Guichenotia</i> )	native	
1082	Magnoliopsida	Malvaceae Juss.	Guichenotia micrantha (Steetz) Benth.	native	
1083	Magnoliopsida	Malvaceae Juss.	Guichenotia sarotes Benth.	native	
1084	Magnoliopsida	Malvaceae Juss.	Lasiopetalum angustifolium W.Fitzg.	native	

1085	Magnoliopsida	Malvaceae Juss.	Lasiopetalum drummondii Benth.	native	
1086	Magnoliopsida	Malvaceae Juss.	Lasiopetalum erectifolium K.A.Sheph. & C.F.Wilkins	native	
1087	Magnoliopsida	Malvaceae Juss.	Lasiopetalum indutum Steud.	native	
1088	Magnoliopsida	Malvaceae Juss.	Lasiopetalum lineare Paust	native	
1089	Magnoliopsida	Malvaceae Juss.	Lasiopetalum ogilvieanum F.Muell.	native	P1
1090	Magnoliopsida	Malvaceae Juss.	Lasiopetalum oppositifolium F.Muell.	native	P3
1091	Magnoliopsida	Malvaceae Juss.	Lawrenia diffusa (Benth.) Melville	native	
1092	Magnoliopsida	Malvaceae Juss.	Malva parviflora L. ( <i>Marshmallow</i> )	alien	
1093	Magnoliopsida	Malvaceae Juss.	Seringia hermannifolia (J.Gay) F.Muell. ( <i>Crinkle-leaved firebush</i> )	native	
1094	Magnoliopsida	Malvaceae Juss.	Thomasia grandiflora Lindl. ( <i>Large Flowered Thomasia</i> )	native	
1095	Magnoliopsida	Menyanthaceae Dumort.	Liparophyllum congestiflorum (F.Muell.) Tippet & Les	native	P4
1096	Magnoliopsida	Montiaceae Raf.	Calandrinia liniflora Fenzl	native	
1097	Magnoliopsida	Montiaceae Raf.	Calandrinia sp. Shark Bay (A. Markey 1405)	native	
1098	Magnoliopsida	Myrtaceae Juss.	Apectospermum spinescens (Endl.) Peter G.Wilson	native	
1099	Magnoliopsida	Myrtaceae Juss.	Babingtonia erecta Rye & Trudgen	native	
1100	Magnoliopsida	Myrtaceae Juss.	Baeckea sp. Dudawa (M.E. Trudgen MET 5369)	native	
1101	Magnoliopsida	Myrtaceae Juss.	Baeckea sp. Walkaway (A.S. George 11249)	native	P3
1102	Magnoliopsida	Myrtaceae Juss.	Callistemon phoeniceus Lindl. ( <i>Dubarda, Lesser Bottlebrush</i> )	mixed	
1103	Magnoliopsida	Myrtaceae Juss.	Calothamnus glaber (Benth.) A.S.George	native	
1104	Magnoliopsida	Myrtaceae Juss.	Calothamnus hirsutus Hawkeswood	native	
1105	Magnoliopsida	Myrtaceae Juss.	Calothamnus longissimus F.Muell.	native	
1106	Magnoliopsida	Myrtaceae Juss.	Calothamnus quadrifidus R.Br. ( <i>Kwojdard, One-sided Bottlebrush</i> )	mixed	
1107	Magnoliopsida	Myrtaceae Juss.	Calothamnus quadrifidus subsp. angustifolius (Ewart) A.S.George & N.Gibson	native	
1108	Magnoliopsida	Myrtaceae Juss.	Calothamnus quadrifidus subsp. homalophyllus (F.Muell.) A.S.George & N.Gibson	mixed	
1109	Magnoliopsida	Myrtaceae Juss.	Calothamnus sanguineus Labill. ( <i>Silky-leaved Blood flower</i> )	native	
1110	Magnoliopsida	Myrtaceae Juss.	Calytrix depressa (Turcz.) Benth.	native	
1111	Magnoliopsida	Myrtaceae Juss.	Calytrix eneabensis Craven	native	P4
1112	Magnoliopsida	Myrtaceae Juss.	Calytrix flavescens A.Cunn. ( <i>Summer Starflower</i> )	native	
1113	Magnoliopsida	Myrtaceae Juss.	Calytrix gracilis Benth.	native	
1114	Magnoliopsida	Myrtaceae Juss.	Calytrix platycheiridius Craven		P2
1115	Magnoliopsida	Myrtaceae Juss.	Calytrix sapphirina Lindl.	native	
1116	Magnoliopsida	Myrtaceae Juss.	Calytrix strigosa A.Cunn.	native	
1117	Magnoliopsida	Myrtaceae Juss.	Chamaelucium uncinatum Schauer ( <i>Geraldton Wax, Wembley Wax</i> )	mixed	
1118	Magnoliopsida	Myrtaceae Juss.	Darwinia neildiana F.Muell.	native	
1119	Magnoliopsida	Myrtaceae Juss.	Darwinia sanguinea (Meisn.) Benth.	native	
1120	Magnoliopsida	Myrtaceae Juss.	Darwinia sp. Strawberry (M.G. Corrick 8279)	native	P2
1121	Magnoliopsida	Myrtaceae Juss.	Eremaea acutifolia F.Muell. ( <i>Rusty Eremaea</i> )	native	P3
1122	Magnoliopsida	Myrtaceae Juss.	Eremaea beaufortoides Benth.	native	
1123	Magnoliopsida	Myrtaceae Juss.	Eremaea beaufortoides Benth. var. beaufortoides	native	
1124	Magnoliopsida	Myrtaceae Juss.	Eremaea beaufortoides var. microphylla Hnatiuk	native	
1125	Magnoliopsida	Myrtaceae Juss.	Eremaea ebracteata var. brachyphylla Hnatiuk	native	
1126	Magnoliopsida	Myrtaceae Juss.	Eremaea ectadioclada Hnatiuk	native	
1127	Magnoliopsida	Myrtaceae Juss.	Eremaea hadra Hnatiuk	native	
1128	Magnoliopsida	Myrtaceae Juss.	Eremaea pauciflora (Endl.) Druce	native	
1129	Magnoliopsida	Myrtaceae Juss.	Eremaea pauciflora (Endl.) Druce var. pauciflora	native	
1130	Magnoliopsida	Myrtaceae Juss.	Eremaea violacea F.Muell. ( <i>Violet Eremaea</i> )	native	
1131	Magnoliopsida	Myrtaceae Juss.	Eremaea violacea F.Muell. subsp. violacea	native	
1132	Magnoliopsida	Myrtaceae Juss.	Eucalyptus L'Her.		
1133	Magnoliopsida	Myrtaceae Juss.	Eucalyptus accedens W.Fitzg.	native	
			Eucalyptus arachnaea Brooker & Hopper subsp.		

1134	Magnoliopsida	Myrtaceae Juss.	arachnaea ( <i>Black-stemmed Mallee</i> )	native	
1135	Magnoliopsida	Myrtaceae Juss.	Eucalyptus baudiniana D.J.Carr & S.G.M.Carr	native	
1136	Magnoliopsida	Myrtaceae Juss.	Eucalyptus camaldulensis Dehnh. ( <i>River Gum</i> )	mixed	
1137	Magnoliopsida	Myrtaceae Juss.	Eucalyptus camaldulensis subsp. obtusa (Blakely) Brooker & M.W.McDonald	mixed	
1138	Magnoliopsida	Myrtaceae Juss.	Eucalyptus crispata Brooker & Hopper	native	EN
1139	Magnoliopsida	Myrtaceae Juss.	Eucalyptus dolichocera L.A.S.Johnson & K.D.Hill ( <i>Kalbarri Red Mallee</i> )	native	
1140	Magnoliopsida	Myrtaceae Juss.	Eucalyptus ebbanoensis subsp. photina Brooker & Hopper ( <i>Glossy-leaved Sandplain Mallee</i> )	native	P4
1141	Magnoliopsida	Myrtaceae Juss.	Eucalyptus erythrocorys F.Muell.	mixed	
1142	Magnoliopsida	Myrtaceae Juss.	Eucalyptus flocktoniae (Maiden) Maiden	native	
1143	Magnoliopsida	Myrtaceae Juss.	Eucalyptus flocktoniae (Maiden) Maiden subsp. flocktoniae	native	
1144	Magnoliopsida	Myrtaceae Juss.	Eucalyptus foecunda Schauer ( <i>Fremantle Mallee, Narrow-leaved Red Mallee</i> )	native	
1145	Magnoliopsida	Myrtaceae Juss.	Eucalyptus gittinsii Brooker & Blaxell ( <i>Northern Sandplain Mallee</i> )	native	
1146	Magnoliopsida	Myrtaceae Juss.	Eucalyptus gittinsii Brooker & Blaxell subsp. gittinsii ( <i>Northern Sandplain Mallee</i> )	native	
1147	Magnoliopsida	Myrtaceae Juss.	Eucalyptus horistes L.A.S.Johnson & K.D.Hill ( <i>Pointed-Bud Mallee</i> )	native	
1148	Magnoliopsida	Myrtaceae Juss.	Eucalyptus incrassata Labill.	native	
1149	Magnoliopsida	Myrtaceae Juss.	Eucalyptus jucunda C.A.Gardner ( <i>Yuna Mallee</i> )	native	
1150	Magnoliopsida	Myrtaceae Juss.	Eucalyptus leprophloia Brooker & Hopper ( <i>Scaly Butt Mallee</i> )	native	EN
1151	Magnoliopsida	Myrtaceae Juss.	Eucalyptus loxophleba Benth. subsp. loxophleba	native	
1152	Magnoliopsida	Myrtaceae Juss.	Eucalyptus loxophleba subsp. supralaevis L.A.S.Johnson & K.D.Hill ( <i>Blackbutt York Gum, York Gum</i> )	native	
1153	Magnoliopsida	Myrtaceae Juss.	Eucalyptus macrocarpa Hook. subsp. macrocarpa ( <i>Mottlecah, Rose of the West</i> )	native	
1154	Magnoliopsida	Myrtaceae Juss.	Eucalyptus macrocarpa subsp. elachantha Brooker & Hopper ( <i>Small-leaved Mottlecah</i> )	native	P4
1155	Magnoliopsida	Myrtaceae Juss.	Eucalyptus macrocarpa x pyriformis	native	P3
1156	Magnoliopsida	Myrtaceae Juss.	Eucalyptus obtusiflora DC.	native	
1157	Magnoliopsida	Myrtaceae Juss.	Eucalyptus obtusiflora DC. subsp. obtusiflora	native	
1158	Magnoliopsida	Myrtaceae Juss.	Eucalyptus obtusiflora subsp. dongarraensis (Maiden & Blakely) L.A.S.Johnson & K.D.Hill ( <i>Dongara Mallee</i> )	native	
1159	Magnoliopsida	Myrtaceae Juss.	Eucalyptus oraria L.A.S.Johnson	native	
1160	Magnoliopsida	Myrtaceae Juss.	Eucalyptus rigidula Maiden subsp. rigidula	native	
1161	Magnoliopsida	Myrtaceae Juss.	Eucalyptus rudis Endl.	native	
1162	Magnoliopsida	Myrtaceae Juss.	Eucalyptus rudis Endl. subsp. rudis ( <i>Flooded Gum</i> )	native	
1163	Magnoliopsida	Myrtaceae Juss.	Eucalyptus subangusta (Blakely) Brooker & Hopper	native	
1164	Magnoliopsida	Myrtaceae Juss.	Eucalyptus subangusta (Blakely) Brooker & Hopper subsp. subangusta ( <i>Grey Mallee</i> )	native	
1165	Magnoliopsida	Myrtaceae Juss.	Eucalyptus todiana F.Muell. ( <i>Coastal Blackbutt, Pricklybark</i> )	native	
1166	Magnoliopsida	Myrtaceae Juss.	Eucalyptus virella (Brooker) D.Nicolle & M.E.French	native	
1167	Magnoliopsida	Myrtaceae Juss.	Eucalyptus wandoo Blakely ( <i>Wandoo, Wonda</i> )	native	
1168	Magnoliopsida	Myrtaceae Juss.	Eucalyptus zopherophloia Brooker & Hopper ( <i>Blackbutt Mallee</i> )	native	P4
1169	Magnoliopsida	Myrtaceae Juss.	Hypocalymma xanthopetalum F.Muell. ( <i>Yellow Myrtle</i> )	native	
1170	Magnoliopsida	Myrtaceae Juss.	Leptospermopsis oligandra (Turcz.) Peter G.Wilson	native	
1171	Magnoliopsida	Myrtaceae Juss.	Melaleuca amydra Craven	native	
1172	Magnoliopsida	Myrtaceae Juss.	Melaleuca aspalathoides Schauer	native	
1173	Magnoliopsida	Myrtaceae Juss.	Melaleuca campanae Craven	native	
1174	Magnoliopsida	Myrtaceae Juss.	Melaleuca cardiophylla F.Muell. ( <i>Tangling Melaleuca</i> )	native	
1175	Magnoliopsida	Myrtaceae Juss.	Melaleuca carrii Craven	native	
1176	Magnoliopsida	Myrtaceae Juss.	Melaleuca concreta F.Muell.	native	

1177	Magnoliopsida	Myrtaceae Juss.	Melaleuca depressa Diels	native	
1178	Magnoliopsida	Myrtaceae Juss.	Melaleuca fulgens subsp. steedmanii (C.A.Gardner) K.J.Cowley	native	
1179	Magnoliopsida	Myrtaceae Juss.	Melaleuca holosericea Schauer	native	
1180	Magnoliopsida	Myrtaceae Juss.	Melaleuca huegelii Endl. subsp. huegelii ( <i>Chenille Honeymyrtle</i> )	native	
1181	Magnoliopsida	Myrtaceae Juss.	Melaleuca lanceolata Otto ( <i>Rottnest Teatree</i> )	mixed	
1182	Magnoliopsida	Myrtaceae Juss.	Melaleuca leiopyxis Benth.	native	
1183	Magnoliopsida	Myrtaceae Juss.	Melaleuca leuropoma Craven	native	
1184	Magnoliopsida	Myrtaceae Juss.	Melaleuca longistaminea (F.Muell.) Craven	native	
1185	Magnoliopsida	Myrtaceae Juss.	Melaleuca marginata (Sond.) Hislop, Lepschi & Craven	native	
1186	Magnoliopsida	Myrtaceae Juss.	Melaleuca megacephala F.Muell.	mixed	
1187	Magnoliopsida	Myrtaceae Juss.	Melaleuca radula Lindl. ( <i>Graceful Honeymyrtle</i> )	native	
1188	Magnoliopsida	Myrtaceae Juss.	Melaleuca ryeae Craven	native	
1189	Magnoliopsida	Myrtaceae Juss.	Melaleuca systema Craven ( <i>Coastal Honeymyrtle</i> )	native	
1190	Magnoliopsida	Myrtaceae Juss.	Melaleuca tinkeri Craven	native	
1191	Magnoliopsida	Myrtaceae Juss.	Melaleuca urceolaris Benth.	native	
1192	Magnoliopsida	Myrtaceae Juss.	Pileanthus filifolius Meisn. ( <i>Summer Coppercups</i> )	native	
1193	Magnoliopsida	Myrtaceae Juss.	Scholtzia Schauer		
1194	Magnoliopsida	Myrtaceae Juss.	Scholtzia calcicola Rye ( <i>Tiny-flowered Scholtzia</i> )	native	P2
1195	Magnoliopsida	Myrtaceae Juss.	Scholtzia ciliata F.Muell.	native	
1196	Magnoliopsida	Myrtaceae Juss.	Scholtzia multiflora Rye	native	P1
1197	Magnoliopsida	Myrtaceae Juss.	Scholtzia trilocularis Rye	native	
1198	Magnoliopsida	Myrtaceae Juss.	Scholtzia umbellifera F.Muell.	native	
1199	Magnoliopsida	Myrtaceae Juss.	Scholtzia uniovulata Rye ( <i>Common Scholtzia</i> )	native	
1200	Magnoliopsida	Myrtaceae Juss.	Thryptomene Endl.		
1201	Magnoliopsida	Myrtaceae Juss.	Thryptomene australis subsp. brachyandra Rye & Trudgen	native	
1202	Magnoliopsida	Myrtaceae Juss.	Thryptomene butleri Rye	native	P3
1203	Magnoliopsida	Myrtaceae Juss.	Thryptomene nitida Rye & Trudgen	native	P3
1204	Magnoliopsida	Myrtaceae Juss.	Thryptomene racemulosa Turcz.	native	
1205	Magnoliopsida	Myrtaceae Juss.	Thryptomene spicata Rye & Trudgen	native	P2
1206	Magnoliopsida	Myrtaceae Juss.	Verticordia brachypoda Turcz.	native	
1207	Magnoliopsida	Myrtaceae Juss.	Verticordia chrysanthella A.S.George	native	
1208	Magnoliopsida	Myrtaceae Juss.	Verticordia densiflora Lindl.	native	
1209	Magnoliopsida	Myrtaceae Juss.	Verticordia densiflora Lindl. var. densiflora ( <i>Compacted Featherflower</i> )	native	
1210	Magnoliopsida	Myrtaceae Juss.	Verticordia densiflora var. cespitosa (Turcz.) A.S.George	native	
1211	Magnoliopsida	Myrtaceae Juss.	Verticordia densiflora var. roseostella A.S.George	native	P3
1212	Magnoliopsida	Myrtaceae Juss.	Verticordia densiflora var. stelluligera (Meisn.) A.S.George	native	
1213	Magnoliopsida	Myrtaceae Juss.	Verticordia endlicheriana var. manicula A.S.George	native	
1214	Magnoliopsida	Myrtaceae Juss.	Verticordia grandis J.Drumm.	native	
1215	Magnoliopsida	Myrtaceae Juss.	Verticordia huegelii Endl. var. huegelii	native	
1216	Magnoliopsida	Myrtaceae Juss.	Verticordia laciniata A.S.George	native	
1217	Magnoliopsida	Myrtaceae Juss.	Verticordia luteola A.S.George var. luteola	native	P3
1218	Magnoliopsida	Myrtaceae Juss.	Verticordia monadelpha Turcz. var. monadelpha	mixed	
1219	Magnoliopsida	Myrtaceae Juss.	Verticordia nobilis Meisn.	native	
1220	Magnoliopsida	Myrtaceae Juss.	Verticordia pennigera Endl.	native	
1221	Magnoliopsida	Myrtaceae Juss.	Verticordia picta Endl. ( <i>Painted Featherflower</i> )	native	
1222	Magnoliopsida	Myrtaceae Juss.	Verticordia roei Endl. subsp. roei	native	
1223	Magnoliopsida	Nitrariaceae Lindl.	Nitraria billardierei DC. ( <i>Nitre Bush</i> )	native	
1224	Magnoliopsida	Onagraceae Juss.	Oenothera drummondii Hook. subsp. drummondii	alien	
1225	Magnoliopsida	Onagraceae Juss.	Oenothera stricta Link subsp. stricta	alien	
1226	Magnoliopsida	Orobanchaceae Vent.	Orobanche minor Sm. ( <i>Lesser Broomrape</i> )	alien	
1227	Magnoliopsida	Oxalidaceae R.Br.	Oxalis pes-caprae L.	alien	

1228	Magnoliopsida	Papaveraceae Juss.	<i>Glaucium corniculatum</i> (L.) Rudolph ( <i>Horned Poppy</i> )	alien	
1229	Magnoliopsida	Phyllanthaceae Martinov	<i>Lysiandra calycina</i> (Labill.) R.W.Bouman ( <i>False Boronia</i> )	native	
1230	Magnoliopsida	Phyllanthaceae Martinov	<i>Lysiandra scabra</i> (Klotzsch) R.W.Bouman	native	
1231	Magnoliopsida	Pittosporaceae R.Br.	<i>Pittosporum ligustrifolium</i> Putt.	native	
1232	Magnoliopsida	Polygalaceae Hoffmanns. & Link	<i>Comesperma acerosum</i> Steetz	native	
1233	Magnoliopsida	Polygalaceae Hoffmanns. & Link	<i>Comesperma calymega</i> Labill. ( <i>Blue-spike Milkwort</i> )	native	
1234	Magnoliopsida	Polygalaceae Hoffmanns. & Link	<i>Comesperma confertum</i> Labill.	native	
1235	Magnoliopsida	Polygalaceae Hoffmanns. & Link	<i>Comesperma griffinii</i> Keighery	native	P2
1236	Magnoliopsida	Polygalaceae Hoffmanns. & Link	<i>Comesperma volubile</i> Labill. ( <i>Love Creeper</i> )	native	
1237	Magnoliopsida	Polygonaceae Juss.	<i>Muehlenbeckia adpressa</i> (Labill.) Meisn.	native	
1238	Magnoliopsida	Polygonaceae Juss.	<i>Rumex spinosus</i> L. ( <i>Lesser Jack(s)</i> )	alien	
1239	Magnoliopsida	Primulaceae Borkh.	<i>Samolus repens</i> (J.R.Forst. & G.Forst.) Pers. ( <i>Creeping Brookweed</i> )	native	
1240	Magnoliopsida	Primulaceae Borkh.	<i>Samolus repens</i> (J.R.Forst. & G.Forst.) Pers. var. <i>repens</i>	native	
1241	Magnoliopsida	Proteaceae Juss.	<i>Banksia attenuata</i> R.Br. ( <i>Slender Banksia</i> )	native	
1242	Magnoliopsida	Proteaceae Juss.	<i>Banksia carlinoides</i> (Meisn.) A.R.Mast & K.R.Thiele	native	
1243	Magnoliopsida	Proteaceae Juss.	<i>Banksia dallanneyi</i> subsp. <i>media</i> (A.S.George) A.R.Mast & K.R.Thiele	native	
1244	Magnoliopsida	Proteaceae Juss.	<i>Banksia elegans</i> Meisn. ( <i>Elegant Banksia</i> )	native	P4
1245	Magnoliopsida	Proteaceae Juss.	<i>Banksia fraseri</i> (R.Br.) A.R.Mast & K.R.Thiele var. <i>fraseri</i>	native	
1246	Magnoliopsida	Proteaceae Juss.	<i>Banksia fraseri</i> var. <i>ashbyi</i> (B.L.Burtt) A.R.Mast & K.R.Thiele	native	
1247	Magnoliopsida	Proteaceae Juss.	<i>Banksia fraseri</i> var. <i>crebra</i> (A.S.George) A.R.Mast & K.R.Thiele	native	P3
1248	Magnoliopsida	Proteaceae Juss.	<i>Banksia hookeriana</i> Meisn. ( <i>Hooker's Banksia</i> )	native	
1249	Magnoliopsida	Proteaceae Juss.	<i>Banksia leptophylla</i> A.S.George	native	
1250	Magnoliopsida	Proteaceae Juss.	<i>Banksia leptophylla</i> var. <i>melletica</i> A.S.George	native	
1251	Magnoliopsida	Proteaceae Juss.	<i>Banksia menziesii</i> R.Br.	native	
1252	Magnoliopsida	Proteaceae Juss.	<i>Banksia nivea</i> Labill.	native	
1253	Magnoliopsida	Proteaceae Juss.	<i>Banksia nutans</i> R.Br.	native	
1254	Magnoliopsida	Proteaceae Juss.	<i>Banksia scabrella</i> A.S.George ( <i>Burma Road Banksia</i> )	native	P4
1255	Magnoliopsida	Proteaceae Juss.	<i>Banksia sessilis</i> (Knight) A.R.Mast & K.R.Thiele	native	
1256	Magnoliopsida	Proteaceae Juss.	<i>Banksia sessilis</i> var. <i>cygnorum</i> (Gand.) A.R.Mast & K.R.Thiele	native	
1257	Magnoliopsida	Proteaceae Juss.	<i>Banksia sessilis</i> var. <i>flabellifolia</i> (A.S.George) A.R.Mast & K.R.Thiele	native	
1258	Magnoliopsida	Proteaceae Juss.	<i>Banksia shuttleworthiana</i> (Meisn.) A.R.Mast & K.R.Thiele ( <i>Bearded Dryandra</i> )	native	
1259	Magnoliopsida	Proteaceae Juss.	<i>Banksia sphaerocarpa</i> R.Br. var. <i>sphaerocarpa</i> ( <i>Fox Banksia</i> )	native	
1260	Magnoliopsida	Proteaceae Juss.	<i>Conospermum acerosum</i> Lindl. subsp. <i>acerosum</i>	native	
1261	Magnoliopsida	Proteaceae Juss.	<i>Conospermum boreale</i> E.M.Benn. subsp. <i>boreale</i>	native	
1262	Magnoliopsida	Proteaceae Juss.	<i>Conospermum boreale</i> subsp. <i>ascendens</i> E.M.Benn.	native	
1263	Magnoliopsida	Proteaceae Juss.	<i>Conospermum brachyphyllum</i> Lindl.	native	
1264	Magnoliopsida	Proteaceae Juss.	<i>Conospermum canaliculatum</i> Meisn. subsp. <i>canaliculatum</i>	native	
1265	Magnoliopsida	Proteaceae Juss.	<i>Conospermum stoechadis</i> Endl. ( <i>Common Smokebush</i> )	native	
1266	Magnoliopsida	Proteaceae Juss.	<i>Conospermum stoechadis</i> Endl. subsp. <i>stoechadis</i> ( <i>Common Smokebush</i> )	native	
1267	Magnoliopsida	Proteaceae Juss.	<i>Grevillea argyrophylla</i> Meisn. ( <i>Silvery-leaved Grevillea</i> )	native	
1268	Magnoliopsida	Proteaceae Juss.	<i>Grevillea candelabroides</i> C.A.Gardner	native	
1269	Magnoliopsida	Proteaceae Juss.	<i>Grevillea commutata</i> F.Muell. subsp. <i>commutata</i>	native	
1270	Magnoliopsida	Proteaceae Juss.	<i>Grevillea erinacea</i> Meisn.	native	P3
			<i>Grevillea eriostachya</i> Lindl. ( <i>Flame Grevillea, Kaliny-</i>		

1271	Magnoliopsida	Proteaceae Juss.	<i>kalinypa</i> )	native	
1272	Magnoliopsida	Proteaceae Juss.	Grevillea hirtella (Benth.) Olde & Marriott	native	P3
1273	Magnoliopsida	Proteaceae Juss.	Grevillea leucopteris Meisn. ( <i>White Plume Grevillea</i> )	mixed	
1274	Magnoliopsida	Proteaceae Juss.	Grevillea polybotrya Meisn.	native	
1275	Magnoliopsida	Proteaceae Juss.	Grevillea thelemanniana Endl. ( <i>Spider Net Grevillea</i> )	native	CR
1276	Magnoliopsida	Proteaceae Juss.	Grevillea umbellulata Meisn.	native	
1277	Magnoliopsida	Proteaceae Juss.	Hakea auriculata Meisn.	native	
1278	Magnoliopsida	Proteaceae Juss.	Hakea bucculenta C.A.Gardner	native	
1279	Magnoliopsida	Proteaceae Juss.	Hakea circumalata Meisn.	native	
1280	Magnoliopsida	Proteaceae Juss.	Hakea costata Meisn. ( <i>Ribbed Hakea</i> )	mixed	
1281	Magnoliopsida	Proteaceae Juss.	Hakea cygnus Lamont subsp. cygnus ( <i>Swan Fruit Hakea</i> )	native	
1282	Magnoliopsida	Proteaceae Juss.	Hakea lissocarpha R.Br. ( <i>Honey Bush</i> )	native	
1283	Magnoliopsida	Proteaceae Juss.	Hakea platysperma Hook. ( <i>Cricket Ball Hakea</i> )	native	
1284	Magnoliopsida	Proteaceae Juss.	Hakea polyanthema Diels	native	
1285	Magnoliopsida	Proteaceae Juss.	Hakea pycnoneura Meisn.	mixed	
1286	Magnoliopsida	Proteaceae Juss.	Hakea smilacifolia Meisn.	native	
1287	Magnoliopsida	Proteaceae Juss.	Hakea stenocarpa R.Br. ( <i>Narrow-fruited Hakea</i> )	native	
1288	Magnoliopsida	Proteaceae Juss.	Hakea trifurcata (Sm.) R.Br. ( <i>Two-leaf Hakea</i> )	native	
1289	Magnoliopsida	Proteaceae Juss.	Isopogon adenantoides Meisn.	native	
1290	Magnoliopsida	Proteaceae Juss.	Isopogon divergens R.Br.	native	
1291	Magnoliopsida	Proteaceae Juss.	Isopogon linearis Meisn.	native	
1292	Magnoliopsida	Proteaceae Juss.	Persoonia rudis Meisn.	native	P3
1293	Magnoliopsida	Proteaceae Juss.	Petrophile axillaris Meisn.	native	
1294	Magnoliopsida	Proteaceae Juss.	Petrophile chrysantha Meisn.	native	
1295	Magnoliopsida	Proteaceae Juss.	Petrophile drummondii Meisn.	native	
1296	Magnoliopsida	Proteaceae Juss.	Petrophile macrostachya R.Br.	native	
1297	Magnoliopsida	Proteaceae Juss.	Petrophile media R.Br.	native	
1298	Magnoliopsida	Proteaceae Juss.	Petrophile megalostegia F.Muell.	native	
1299	Magnoliopsida	Proteaceae Juss.	Petrophile scabriuscula Meisn.	native	
1300	Magnoliopsida	Proteaceae Juss.	Stirlingia latifolia (R.Br.) Steud.	native	
1301	Magnoliopsida	Proteaceae Juss.	Synaphea sparsiflora A.S.George	native	P2
1302	Magnoliopsida	Proteaceae Juss.	Synaphea spinulosa (Burm.f.) Merr. subsp. spinulosa	native	
1303	Magnoliopsida	Ranunculaceae Juss.	Clematis linearifolia Steud.	native	
1304	Magnoliopsida	Rhamnaceae Juss.	Cryptandra myriantha Diels	native	
1305	Magnoliopsida	Rhamnaceae Juss.	Cryptandra nutans Steud.	native	
1306	Magnoliopsida	Rhamnaceae Juss.	Cryptandra pendula Rye	native	P1
1307	Magnoliopsida	Rhamnaceae Juss.	Cryptandra pungens Steud.	native	
1308	Magnoliopsida	Rhamnaceae Juss.	Spyridium globulosum (Labill.) Benth. ( <i>Basket Bush</i> )	native	
1309	Magnoliopsida	Rhamnaceae Juss.	Stenanthemum notiale Rye subsp. notiale	native	
1310	Magnoliopsida	Rhamnaceae Juss.	Stenanthemum notiale subsp. chamelum Rye	native	
1311	Magnoliopsida	Rubiaceae Juss.	Opercularia spermacoceae Juss.	native	
1312	Magnoliopsida	Rutaceae Juss.	Boronia cymosa Endl. ( <i>Granite Boronia</i> )	native	
1313	Magnoliopsida	Rutaceae Juss.	Cyanothamnus coerulescens (F.Muell.) Duretto & Heslewood	native	
1314	Magnoliopsida	Rutaceae Juss.	Cyanothamnus coerulescens subsp. spinescens (Benth.) Duretto & Heslewood	native	
1315	Magnoliopsida	Rutaceae Juss.	Cyanothamnus ramosus Lindl.	native	
1316	Magnoliopsida	Rutaceae Juss.	Diplolaena drummondii (Benth.) Ostenf.	native	
1317	Magnoliopsida	Rutaceae Juss.	Diplolaena eneabensis Paul G.Wilson	native	
1318	Magnoliopsida	Rutaceae Juss.	Diplolaena ferruginea Paul G.Wilson	native	
1319	Magnoliopsida	Rutaceae Juss.	Diplolaena geraldtonensis Paul G.Wilson	native	
1320	Magnoliopsida	Rutaceae Juss.	Diplolaena leemaniana Paul G.Wilson	native	
1321	Magnoliopsida	Rutaceae Juss.	Diplolaena microcephala Bartl.	native	
1322	Magnoliopsida	Rutaceae Juss.	Geleznowia Turcz.		

1323	Magnoliopsida	Rutaceae Juss.	Geleznovia calycina (Harv.) Benth.	native	
1324	Magnoliopsida	Rutaceae Juss.	Geleznovia uberiflora K.A.Sheph. & A.D.Crawford	native	
1325	Magnoliopsida	Rutaceae Juss.	Geleznovia verrucosa Turcz.	native	
1326	Magnoliopsida	Santalaceae R.Br.	Anthobolus foveolatus F.Muell.	native	
1327	Magnoliopsida	Santalaceae R.Br.	Exocarpos sparteus R.Br. ( <i>Broom Ballart</i> )	native	
1328	Magnoliopsida	Santalaceae R.Br.	Santalum acuminatum (R.Br.) A.D.C. ( <i>Quandong</i> )	native	
1329	Magnoliopsida	Sapindaceae Juss.	Diplopeltis huegelii Endl. subsp. huegelii	native	
1330	Magnoliopsida	Sapindaceae Juss.	Diplopeltis huegelii subsp. subintegra (A.S.George) Keighery	native	
1331	Magnoliopsida	Sapindaceae Juss.	Diplopeltis petiolaris Benth.	mixed	
1332	Magnoliopsida	Sapindaceae Juss.	Dodonaea ericoides Miq.	native	
1333	Magnoliopsida	Scrophulariaceae Juss.	Eremophila glabra (R.Br.) Ostenf. ( <i>Tar Bush</i> )	native	
1334	Magnoliopsida	Scrophulariaceae Juss.	Eremophila oldfieldii F.Muell. subsp. oldfieldii	native	
1335	Magnoliopsida	Scrophulariaceae Juss.	Myoporum caprarioides Benth.	native	
1336	Magnoliopsida	Scrophulariaceae Juss.	Myoporum insulare R.Br.	native	
1337	Magnoliopsida	Scrophulariaceae Juss.	Myoporum montanum R.Br.	native	
1338	Magnoliopsida	Scrophulariaceae Juss.	Myoporum tetrandrum (Labill.) Domin	native	
1339	Magnoliopsida	Scrophulariaceae Juss.	Zaluzianskya divaricata (Thunb.) Walp. ( <i>Spreading Night Phlox</i> )	alien	
1340	Magnoliopsida	Solanaceae Juss.	Anthocercis genistoides Miers	native	
1341	Magnoliopsida	Solanaceae Juss.	Anthocercis ilicifolia Hook. subsp. ilicifolia	native	
1342	Magnoliopsida	Solanaceae Juss.	Anthocercis intricata F.Muell.	native	P3
1343	Magnoliopsida	Solanaceae Juss.	Anthocercis littorea Labill.	native	
1344	Magnoliopsida	Solanaceae Juss.	Anthotroche walcottii F.Muell.	native	
1345	Magnoliopsida	Solanaceae Juss.	Lycium ferocissimum Miers ( <i>African Boxthorn</i> )	alien	
1346	Magnoliopsida	Solanaceae Juss.	Nicotiana glauca Graham ( <i>Tree Tobacco</i> )	alien	
1347	Magnoliopsida	Solanaceae Juss.	Nicotiana hesperis N.T.Burb.	native	
1348	Magnoliopsida	Solanaceae Juss.	Solanum laciniatum Aiton ( <i>Kangaroo Apple</i> )	alien	
1349	Magnoliopsida	Solanaceae Juss.	Solanum nigrum L. ( <i>Black Berry Nightshade</i> )	alien	
1350	Magnoliopsida	Solanaceae Juss.	Solanum oldfieldii F.Muell.	native	
1351	Magnoliopsida	Solanaceae Juss.	Solanum symonii H.Eichler	native	
1352	Magnoliopsida	Stylidiaceae R.Br.	Stylidium adpressum Benth. ( <i>Trigger-on-stilts</i> )	native	
1353	Magnoliopsida	Stylidiaceae R.Br.	Stylidium caricifolium Lindl. ( <i>Milkmaids</i> )	native	
1354	Magnoliopsida	Stylidiaceae R.Br.	Stylidium crossocephalum F.Muell.	native	
1355	Magnoliopsida	Stylidiaceae R.Br.	Stylidium dichotomum DC. ( <i>Pins-and-needles</i> )	native	
1356	Magnoliopsida	Stylidiaceae R.Br.	Stylidium diuroides subsp. paucifolium Lowrie & Carlquist	native	
1357	Magnoliopsida	Stylidiaceae R.Br.	Stylidium drummondianum Lowrie & Carlquist	native	P3
1358	Magnoliopsida	Stylidiaceae R.Br.	Stylidium elongatum Benth. ( <i>Tall Triggerplant</i> )	native	
1359	Magnoliopsida	Stylidiaceae R.Br.	Stylidium maitlandianum E.Pritz. ( <i>Fountain Triggerplant</i> )	native	
1360	Magnoliopsida	Stylidiaceae R.Br.	Stylidium miniatum Mildbr.	native	
1361	Magnoliopsida	Stylidiaceae R.Br.	Stylidium piliferum R.Br. ( <i>Common Butterfly Triggerplant</i> )	native	
1362	Magnoliopsida	Stylidiaceae R.Br.	Stylidium pseudocaespitosum Mildbr.	native	P2
1363	Magnoliopsida	Stylidiaceae R.Br.	Stylidium purpureum Wege ( <i>Purple Fountain Triggerplant</i> )	native	
1364	Magnoliopsida	Stylidiaceae R.Br.	Stylidium repens R.Br. ( <i>Matted Triggerplant</i> )	native	
1365	Magnoliopsida	Stylidiaceae R.Br.	Stylidium rigidulum Sond. ( <i>Flagon Triggerplant</i> )	native	
1366	Magnoliopsida	Stylidiaceae R.Br.	Stylidium torticarpum Lowrie & Kenneally	native	P3
1367	Magnoliopsida	Surianaceae Arn.	Stylobasium australe (Hook.) Prance	native	
1368	Magnoliopsida	Surianaceae Arn.	Stylobasium spathulatum Desf. ( <i>Pebble Bush</i> )	native	
1369	Magnoliopsida	Thymelaeaceae Juss.	Pimelea floribunda Meisn.	native	
1370	Magnoliopsida	Thymelaeaceae Juss.	Pimelea gilgiana E.Pritz.	native	
1371	Magnoliopsida	Thymelaeaceae Juss.	Pimelea imbricata var. piligera (Benth.) Diels	native	
1372	Magnoliopsida	Thymelaeaceae Juss.	Pimelea microcephala R.Br. subsp. microcephala	native	
1373	Magnoliopsida	Violaceae Batsch	Pigea calycina DC. ( <i>Wild Violet</i> )	native	

1374	Magnoliopsida	Violaceae Batsch	Pigea floribunda Lindl.		
1375	Magnoliopsida	Vitaceae Juss.	Clematicissus angustissima (F.Muell.) Planch.	native	
1376	Magnoliopsida	Zygophyllaceae R.Br.	Roepera fruticulosa (DC.) G.Don	native	
1377	Phaeophyceae	Dictyotaceae Dumort.	Padina fraseri (Greville) Greville		
1378	Pteridopsida	Marsileaceae Mirb.	Marsilea drummondii A.Braun ( <i>Common Nardoo</i> )	native	
1379	Pteridopsida	Thelypteridaceae Pic.Serm.	Cyclosorus interruptus (Willd.) H.Ito	native	
1380	Ulvophyceae K.R.Mattox & K.D.Stewart	Anadyomenaceae K&Auml;tzt.	Anadyomene plicata C.Agardh	native	
1381	Ulvophyceae K.R.Mattox & K.D.Stewart	Boodleaceae B&Auml;rgeresen	Struvea plumosa Sond.	native	
1382	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa brownii (C.Agardh) Endl.	native	
1383	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa cactoides (Turner) C.Agardh	native	
1384	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa cliftonii Harv.	native	
1385	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa cupressoides (Vahl) C.Agardh var. cupressoides	native	
1386	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa cupressoides var. lycopodium Weber Bosse	native	
1387	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa cylindracea Sond.	native	
1388	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa fergusonii Murray	native	
1389	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa flexilis J.V.Lamour.	native	
1390	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa geminata Harv.	native	
1391	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa longifolia C.Agardh	native	
1392	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa obscura Sond.	native	
1393	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa papillosa J.Agardh	native	
1394	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa racemosa (Forssk.) J.Agardh	native	
1395	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa scalpelliformis (Turner) C.Agardh	native	
1396	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa simpliciuscula (Turner) C.Agardh	native	
1397	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa taxifolia (Vahl) C.Agardh	native	
1398	Ulvophyceae K.R.Mattox & K.D.Stewart	Caulerpaceae K&Auml;tzt.	Caulerpa taxifolia var. distichophylla (Sond.) M.Verlaque, Huisman & Procaccini	native	
1399	Ulvophyceae K.R.Mattox & K.D.Stewart	Cladophoraceae Wille	Cladophora K&Auml;tzt.		
	Ulvophyceae				

1400	K.R.Mattox & K.D.Stewart	Cladophoraceae Wille	Cladophora valonioides Sond.	native	
1401	Ulvophyceae K.R.Mattox & K.D.Stewart	Codiaceae K&Auml;tzt.	Codium duthieae P.C.Silva	native	
1402	Ulvophyceae K.R.Mattox & K.D.Stewart	Codiaceae K&Auml;tzt.	Codium galeatum J,Agardh	native	
1403	Ulvophyceae K.R.Mattox & K.D.Stewart	Codiaceae K&Auml;tzt.	Codium laminarioides Harv.	native	
1404	Ulvophyceae K.R.Mattox & K.D.Stewart	Codiaceae K&Auml;tzt.	Codium lucasii Setch.	native	
1405	Ulvophyceae K.R.Mattox & K.D.Stewart	Codiaceae K&Auml;tzt.	Codium mamillosum Harv.	native	
1406	Ulvophyceae K.R.Mattox & K.D.Stewart	Codiaceae K&Auml;tzt.	Codium spongiosum Harv.	native	
1407	Ulvophyceae K.R.Mattox & K.D.Stewart	Dictyosphaeriaceae K&Auml;tzt.	Dictyosphaeria cavernosa (Forssk.) B&Auml;rgesen	native	
1408	Ulvophyceae K.R.Mattox & K.D.Stewart	Halimedaceae Link	Halimeda J,V.Lamour.		
1409	Ulvophyceae K.R.Mattox & K.D.Stewart	Halimedaceae Link	Halimeda versatilis J,Agardh	native	
1410	Ulvophyceae K.R.Mattox & K.D.Stewart	Udoteaceae J,Agardh	Penicillus nodulosus (J.V.Lamour.) Blainv.	native	

# Conservation status definitions

## Threatened 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

## Priority 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

## Dandjoo specific codes

- Parent of conservation listed taxa
- Cons code inherited from parent, X

Read full definitions at <https://bio.wa.gov.au/guide/conservation-status-definitions>

## Disclaimer

The production and usage of this report is deemed acceptance of Dandjoo's conditions of use. Details available via our web - [Dandjoo Conditions of Use | Biodiversity Information Office](#)

Further note, precise locations of [conservation listed species](#) are considered sensitive. To protect this information, [obfuscation](#) has been applied to conservation-listed species records. For these species, the true location is  $\pm 10$ km from the search area used to generate this species list.


# Appendix D

Flora data

## Flora species recorded within the survey area

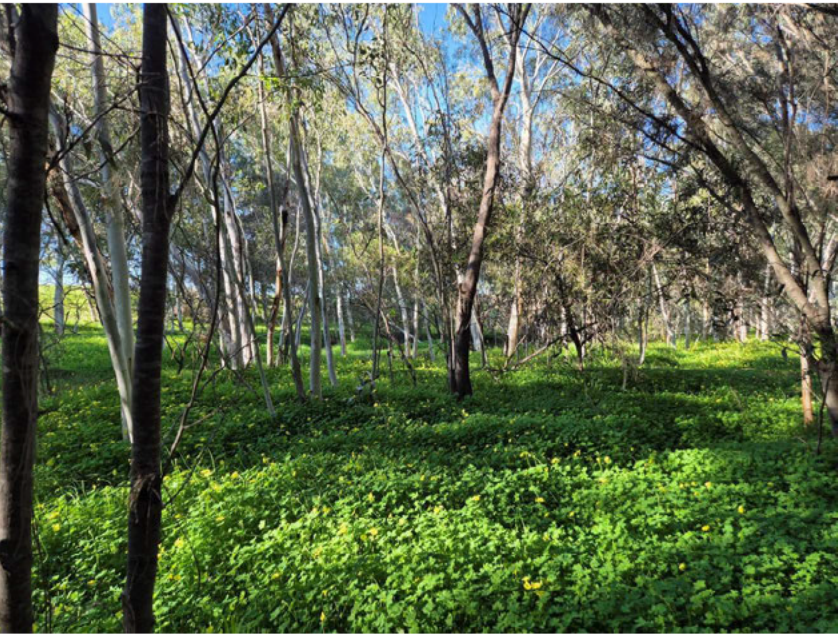
Family	Taxa	Status
Anacardiaceae	<i>Schinus terebinthifolia</i>	*
Asteraceae	<i>Sonchus oleraceus</i>	*
Asteraceae	<i>Symphotrichum squamatum</i>	*
Asteraceae	<i>Urospermum picroides</i>	*
Brassicaceae	<i>Brassica tournefortii</i>	*
Casuarinaceae	<i>Casuarina obesa</i>	
Chenopodiaceae	<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	
Chenopodiaceae	<i>Tecticornia ?halocnemoides</i>	
Convolvulaceae	<i>Convolvulus remotus</i>	
Cyperaceae	<i>Cyperus gymnocaulos</i>	
Droseraceae	<i>Drosera erythrorhiza</i>	
Fabaceae	<i>Acacia ? rostellifera</i>	
Fabaceae	<i>Acacia acuminata</i>	
Fabaceae	<i>Acacia microbotrya</i>	
Fabaceae	<i>Acacia saligna</i>	
Fabaceae	<i>Lupinus cosentinii</i>	*
Fabaceae	<i>Medicago polymorpha</i>	*
Loranthaceae	<i>Amyema preissii</i>	
Myrtaceae	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	
Myrtaceae	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	
Myrtaceae	<i>Eucalyptus</i> sp. (insufficient material)	
Myrtaceae	<i>Melaleuca raphiophylla</i>	
Oleaceae	<i>Olea europaea</i>	*
Oxalidaceae	<i>Oxalis pes-caprae</i>	*
Poaceae	<i>Avena barbata</i>	*
Poaceae	<i>Cenchrus clandestinus</i>	*
Poaceae	<i>Cenchrus setaceus</i>	*
Poaceae	<i>Cynodon dactylon</i>	*
Poaceae	<i>Hyparrhenia hirta</i>	*
Poaceae	<i>Lolium</i> sp.	*
Poaceae	<i>Melinis repens</i>	*
Proteaceae	<i>Hakea preissii</i>	
Santalaceae	<i>Anthobolus foveolatus</i>	
Solanaceae	<i>Solanum lasiophyllum</i>	
Solanaceae	<i>Solanum nigrum</i>	*
Thymelaeaceae	<i>Pimelea microcephala</i>	
Typhaceae	<i>Typha domingensis</i>	
Vitaceae	<i>Clematicissus angustissima</i>	*

## Relevé Site Data

Relevé Name: R1		Date: 18/08/2025	Surveyed: <span style="background-color: black; color: black;">██████</span>
Type:		Relevé	
Co-ordinates		Easting: 314021.407	Northing: 6765711.252
Vegetation condition:	Degraded		
Disturbances	weeds		
Fire:	Old (6+ yr)		
Landform:	Riverbank		
Slope:	Gentle		
Aspect:	South		
Drainage:	Good		
Soil:	Brown loamy sand		
Bare Ground	11-30%		
Litter	11-30%		
Notes	Lacks structure, understorey completely dominated by weed species		

### Releve 1 species list

Species	Status	% cover	Height (m)
<i>Casuarina obesa</i>		10-30	4
<i>Acacia saligna</i>		10-30	3
<i>Eucalyptus camaldulensis subsp. arida</i>		30-70	10
<i>Oxalis pes-caprae</i>	*	>70	0.3
<i>Cynodon dactylon</i>	*	10-30	0.3
<i>Tecticornia ?halocnemoides</i>		<2	0.2
<i>Symphotrichum squamatum</i>	*	<2	0.4
<i>Cenchrus clandestinus</i>	*	10-30	0.5
<i>Cyperus gymnocaulos</i>		2-10	0.7
<i>Avena barbata</i>	*	<2	1.0
<i>Sonchus oleraceus</i>	*	<2	0.4
<i>Melaleuca raphiophylla</i>		<2	2.5

<b>Relevé Name: R2</b>		<b>Date: 18/08/2025</b>	<b>Surveyed:</b> <span style="background-color: black; color: black;">██████</span>
<b>Type:</b>		<b>Relevé</b>	
<b>Co-ordinates</b>		<i>Easting:</i>	<i>Northing:</i>
Vegetation condition:	Degraded		
Disturbances	weeds		
Fire:	Old (6+ yr)		
Landform:	Floodplain		
Slope:	Gentle		
Aspect:	Flat		
Drainage:	Good		
Soil:	Brown Loamy sand		
Bare Ground	<2%		
Litter	11-30%		

*Relevé Species list*

<b>Species</b>	<b>Status</b>	<b>% cover</b>	<b>Height (m)</b>
<i>Eucalyptus camaldulensis subsp. arida</i>		30-70	8
<i>Melaleuca raphiophylla</i>		<2	3
<i>Casuarina obesa</i>		10-30	4
<i>Hakea preissii</i>		<2	2
<i>Acacia saligna</i>		<2	3
<i>Oxalis pes-caprae</i>	*	>70	0.3
<i>Avena barbata</i>	*	<2	1.0
<i>Sonchus oleraceus</i>	*	<2	0.4
<i>Cynodon dactylon</i>	*	<2	0.3

### Flora likelihood of occurrence assessment guidelines

Likelihood of occurrence	Guideline
Recorded	Species recorded in current survey
Likely	Species previously recorded within the study area and large areas of suitable habitat occur in the project area, recorded within survey area during previous surveys / desktop review
Possible	Species previously recorded within the study area and areas of suitable habitat occur/may occur in the project area.
Unlikely	Species previously recorded within the study area, but suitable habitat does not occur in the project area. Species not previously recorded within the study area, suitable habitat does not occur in the project area and/or the project area is outside the natural distribution of the species. Targeted searches completed in suitable time and intensity across all areas of suitable habitat and species not recorded (noting for some species this may require multiple seasons)
Other considerations	Intensity of survey, availability of access, growth form type, recorded flowering times, cryptic nature of species

### Source information – desktop searches

PMST – DCCEEW Protected Matters Search Tool (PMST to identify flora listed under the EPBC Act potentially occurring within the study area)

DBCA – DBCA (2025) Threatened and Priority flora dataset search within the study area

NM – DBCA *Dandjoo* (formally *Naturemap*) accessed August 2025

### Flora likelihood of occurrence assessment for significant flora identified in the desktop assessment

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
Colchicaceae	<i>Wurmbea tubulosa</i>	VU	EN	Cormous, perennial, herb, 0.01-0.03 m high, dioecious or sometimes andromonoecious. Fl. white-pink, Jun to Aug. Clay, loam. River banks, seasonally-wet places.	Likely There are two DBCA records (from 1991) within the survey area (intersection of Milo Rd and Midlands Rd). Targeted searches did not record this species during the current survey however given the small size of this species and perennial nature there is possibility to be overlooked.	PMST NM DBCA
Cyperaceae	<i>Mesomelaena stygia</i> subsp. <i>deflexa</i>	P3	-	Tufted perennial, grass-like or herb (sedge), 0.1-0.5 m high. Fl. brown-black, Mar to Oct. White, grey or lateritic sand, clay, gravel.	Unlikely No suitable habitat present. DBCA records are located more	DBCA

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
					than 15 km south of the survey area.	
Cyperaceae	<i>Schoenus badius</i>	P2	-	Slender annual, grass-like or herb (sedge), 0.05-0.12 m high. Fl. brown-green, Sep to Oct. Grey sand. Moist areas.	Unlikely Closest known record is from more than 15 km south of the survey area.	NM
Cyperaceae	<i>Schoenus griffinianus</i>	P4	-	Small, tufted perennial, grass-like or herb (sedge), to 0.1 m high. Fl. Sep to Oct. White sand.	Unlikely No suitable habitat present. Closest known record is from more than 15 km north-east of the survey area.	NM DBCA
Cyperaceae	<i>Schoenus sp. Eneabba</i>	P2	-	Erect, clumped rhizomatous, perennial, grass-like or herb (sedge), to 0.75 m high. Grey, yellow or white sand. Undulating sandplains, mid slopes, tops of rises.	Unlikely No suitable habitat present. Closest known record is from more than 15 km south of the survey area.	NM DBCA
Dilleniaceae	<i>Hibbertia subvillosa</i>	P3	-	Erect shrub. Known to occur in brown loam and grey sandy loam, on hillsides, roadsides and disturbed areas.	Unlikely Closest known record is from more than 15 km east of the survey area.	NM
Elaeocarpaceae	<i>Tetradlea nephelioides</i>	EN	CR	Caespitose, dwarf shrub, to 0.3 m high. Fl. purple, Sep. White-grey sand, yellow-brown clayey sand, gravel, laterite. Outcrops, undulating hills, ridges.	Highly unlikely No suitable habitat present. Species is only known from South Eneabba Nature Reserve.	PMST
Ericaceae	<i>Leucopogon grammatus</i>	P3	-	Erect shrub with white flowers. Known to occur in rocky, lateritic slopes and ridges, base of breakaways.	Unlikely No suitable habitat present. Closest DBCA records are located more than 10 km north, north-east of the survey area.	NM DBCA
Ericaceae	<i>Styphelia marginata</i>	EN	EN	Shrub, ca 40 – 60 cm. smooth, young growth and erect, smooth stems. Known over a range of 100 km from east of Geraldton, south to the Arrino Sandplain. The species is found on white, pale yellow or grey-brown sand over laterite, in open scrub and dense	Unlikely No suitable habitat present. Closest known records are more than 20 km north of the survey area.	PMST

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
				low heath with <i>Allocasuarina humilis</i> , <i>Jacksonia nutans</i> , <i>Daviesia daphnoides</i> , <i>Hakea prostrata</i> , <i>H. trifurcata</i> , <i>Acacia blakelyi</i> , <i>Hibbertia hypericoides</i> , <i>Eremaea beaufortioides</i> , <i>Banksia scabrella</i> , <i>B. prionotes</i> , <i>Grevillea candelabroides</i> and <i>Melaleuca</i> sp. (Department of Environment and Conservation, 2009).		
Ericaceae	<i>Leucopogon navicularis</i>	P1	-	Florabase specimens previously recorded on ridges and lateritic rises.	Unlikely No suitable habitat present. Closest known records are more than 20 km north of the survey area.	NM
Ericaceae	<i>Styphelia obtectus</i>	EN	EN	Erect, open shrub, ca 1.5 m high. Creamy yellow flowers. Grows mainly on crest and upper slopes of relictual dunes comprised of grey-white or pale yellow sands (Brown, Thomson-Dans, & Marchant, 1998).	Highly unlikely No suitable habitat present. Closest known records are more than 50 km south of the survey area.	PMST
Ericaceae	<i>Leucopogon ozothamnoides</i>	P1	-	Shrub, ca 0.2 m high. Fl. white, Oct. Gravelly soils, sandy clay loam.	Highly unlikely This species is known to occur south-east of Perth near Kojonup.	NM
Ericaceae	<i>Leucopogon psammophilus</i>	P1	-	Shrub, ca 0.45 m high. Breakaways.	Unlikely No suitable habitat present. Closest DBCA record is more than 15 km north of the survey area.	NM DBCA
Ericaceae	<i>Styphelia allittii</i>	P3	-	Erect shrub, ca 1.9 m high. Florabase specimens previously recorded in sandy soils on gentle slopes, creek lines and plains.	Unlikely There are no known records within 50 km of the survey area.	NM
Ericaceae	<i>Styphelia marginata</i>	EN	-	Compact, perennial shrub, ca 0.8 m high. Florabase specimens previously recorded on breakaways, ridges and hillside.	Unlikely No suitable habitat present. Closest DBCA record is more than 15 km north of the survey area.	NM DBCA

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
Euphorbiaceae	<i>Beyeria gardneri</i>	P3	-	Shrub, 0.25-0.5 m high. Fl. yellow, Aug to Sep. Yellow sand.	Unlikely No suitable habitat present. Closest DBCA record is more than 20 km south of the survey area.	DBCA
Fabaceae	<i>Acacia fillifolia</i>	P3	-	Wispy, spindly, single-stemmed shrub or tree, 1.2-3 m high. Fl. yellow, May to Sep. Yellow sand, gravelly lateritic sand. Sandplains.	Unlikely No suitable habitat present. Known records are more than 100 km south-east of the survey area.	NM
Fabaceae	<i>Acacia flabellifolia</i>	P3	-	Erect, spreading, pungent shrub, 0.4-1 m high. Rocky loam, lateritic gravelly soils. Low hills & ridges.	Unlikely No suitable habitat present. Closest DBCA record is more than 15 km north-east of the survey area.	NM DBCA
Fabaceae	<i>Acacia isoneura</i> subsp. <i>isoneura</i>	P3	-	Erect, open shrub, 0.5-3 m high. Fl. yellow, Aug to Sep. Yellow/brown sand. Flats, low rises.	Unlikely Closest DBCA record is approximately 7 km north-east of the survey area. Potentially suitable habitat however unlikely due to survey efficacy and non-cryptic nature of the species.	NM DBCA
Fabaceae	<i>Acacia lanceolata</i>	P3	-	Open, pungent shrub, 0.3-1.2(-1.5) m high. Fl. yellow. Lateritic hills & breakaways.	Unlikely No suitable habitat present.	NM
Fabaceae	<i>Acacia lasiocarpa</i> Cockleshell Gully variant	P2	-	Shrub, 0.35-0.5 m high. Fl. yellow, Aug. Grey-yellow sand with laterite. Low open heath.	Unlikely No suitable habitat present.	NM
Fabaceae	<i>Acacia megacephala</i>	P3	-	Erect, often spindly, spinose shrub, 0.9-2 m high. Fl. yellow, Jul to Sep. White/yellow sand. Sandplains.	Unlikely No suitable habitat present. Closest DBCA record is more than 15 km north of the survey area.	NM DBCA
Fabaceae	<i>Acacia telmica</i>	P3	-	Dense, rounded shrub, 1-3 m high, 1.5-5 m wide. Fl. yellow, Jul to Sep. Sand,	Unlikely Closest DBCA record is less than 100 m north of the survey area.	NM DBCA

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
				loam or loamy clay. Low-lying seasonally moist areas.	Suitable habitat is present however unlikely due to survey efficacy and non-cryptic nature of the species.	
Fabaceae	<i>Chorizema humile</i>	CR	EN	Sprawling, prostrate or decumbent shrub. Fl. yellow and red/brown, Jul to Sep. Sandy clay or loam. Plains.	Unlikely Closest DBCA record is more than 15 km east of the survey area. Potentially suitable habitat however unlikely due to survey efficacy and non-cryptic nature of the species.	NM DBCA
Fabaceae	<i>Daviesia speciosa</i>	EN	EN	Many-stemmed shrub, 0.3-0.8 m high. Fl. red, Apr to May. Gravelly lateritic soils. Undulating plains, rises.	Unlikely Closest records are more than 20 km east/south-east of the survey area. No suitable habitat present.	PMST NM
Fabaceae	<i>Gastrolobium rotundifolium</i>	P3	-	Erect, bushy shrub, to 0.8 m high. Fl. orange and yellow and red, Aug to Sep. Heavy clay or loam soils, granite, sandstone, quartzite. Low rises, breakaways.	Unlikely No suitable habitat present. Closest known records are more than 20 km east of the survey area.	NM
Goodeniaceae	<i>Dampiera tephrea</i>	P3		Ascending to erect perennial, herb or shrub, 0.3-0.6 m high, with grey or yellowish hairs on abaxial surface of leaves. Fl. blue, Jul. Sand, gravelly loam.	Unlikely No suitable habitat present. Closest DBCA records are located more than 10 km north-west and south-west of the survey area.	NM DBCA
Goodeniaceae	<i>Lechenaultia longiloba</i>	P4	-	Straggling, procumbent shrub, 0.08-0.3 m high. Fl. red/green/yellow/pink, Jul to Oct. Sand with lateritic gravel. Undulating plains.	Unlikely No suitable habitat present. Closest DBCA records are more than 15 km north-east of the survey area.	NM DBCA
Goodeniaceae	<i>Scaevola</i> sp. Golden hairs	P1	-	Erect, branching shrub, ca 0.5 m high. Florabase specimens previously recorded on sandplains and yellow sands.	Unlikely No suitable habitat present. Closest DBCA records are more than 15 km north of the survey area.	DBCA

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
Gyrostemonaceae	<i>Gyrostemon reticulatus</i>	CR	CR	Shrub, ca 1 m high. Florabase specimens previously recorded on plains and laterite flats.	Unlikely There are no records within 50 km of the survey area.	NM
Haemodoraceae	<i>Conostylis dielsii</i> subsp. <i>teres</i>	VU	EN	Shortly rhizomatous, tufted perennial, grass-like or herb, 0.07-0.33 m high. Fl. cream-yellow, Jun to Sep. White, grey or yellow sand, gravel. Winter-wet flats.	Possible The closest DBCA record is immediately north of the survey area (dated 1970). Given the degraded nature of the ground cover within the survey area and efficacy of the survey it is unlikely to be present however due to its small size and density of grasses/herbs in the ground layer there is possibility to be present.	PMST NM DBCA
Haemodoraceae	<i>Conostylis micrantha</i>	VU	EN	Rhizomatous, tufted perennial, grass-like or herb, 0.13-0.24 m high. Fl. yellow-cream/red, Jul to Aug. White or grey sand. Sandplains.	Unlikely No suitable habitat present. Closest DBCA record is approximately 8 km east of the survey area.	PMST NM DBCA
Haloragaceae	<i>Halragis foliosa</i>	P3	-	Perennial, herb or shrub, 0.2-0.5 m high. White/grey sand over limestone.	Unlikely No suitable habitat is present. Closest record is more than 10 km west of the survey area.	NM
Hemerocallidaceae	<i>Stawellia dimorphantha</i>	P4	-	Stilt-rooted perennial, herb, 0.05-0.2 m high. Fl. purple/cream, Jun to Nov. White, grey, yellow sand.	Unlikely Closest DBCA record is approximately 5 km south of the survey area. No suitable habitat is present within the survey area.	NM DBCA
Lamiaceae	<i>Hemiandra gerdneri</i>	CR	EN	Prostrate, pungent shrub, 0.1-0.2 m high, to 1 m wide. Fl. red/pink-red, Aug to Oct. Grey or yellow sand, clayey sand. Sandplains.	Highly unlikely There are no records within 100 km of the survey area.	PMST
Lamiaceae	<i>Hemiandra</i> sp. Eneabba	P3	-	Straggly, erect shrub, 0.5-0.9 m high, to 0.4 m wide. Fl. blue/violet, Feb. Sand. Disturbed sites.	Unlikely The closest known records are approximately 20 km south of the survey area.	NM DBCA

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
Lamiaceae	<i>Hemigenia saligna</i>	P3	-	Shrub, 0.3-1 m high. Fl. blue-purple/violet, Jul to Oct. Lateritic & sandy soils.	Unlikely The closest known records are more than 20 km from the survey area.	NM DBCA
Malvaceae	<i>Guichenotia alba</i>	P3	-	Slender, lax, few-branched shrub, 0.1-0.45 m high. Fl. white, Jul to Aug. Sandy & gravelly soils. Low-lying flats, depressions.	Unlikely The closest known records are more than 20 km from the survey area.	NM DBCA
Malvaceae	<i>Lasiopetalum ogilvieanum</i>	P1	-	Shrub, 0.45-1.5 m high. Fl. pink-white, Jul to Oct. White/grey or yellow sand, stony loam. Undulating plains, lateritic rises.	Unlikely No suitable habitat present. Closest records are more than 15 km from the survey area.	NM DBCA
Malvaceae	<i>Lasiopetalum oppositifolium</i>	P3	-	Multi-stemmed shrub, 0.3-1 m high. Fl. pink, Jul to Sep. Sandy soils over sandstone or limestone. Sandstone cliffs & crevices.	Unlikely No suitable habitat present. Closest records are more than 100 km north of the survey area.	NM
Malvaceae	<i>Thomasia rulingioides</i>	P2	-	Erect, open shrub, 0.15-0.45 m high. Fl. pink-purple, May to Oct. White/grey sand over limestone.	Unlikely No suitable habitat present. Closest record is more than 15 km west of the survey area.	DBCA
Menyanthaceae	<i>Liparophyllum congestiflorum</i>	P4	-	Herb, ca 0.3 m high. Florabase specimens previously recorded on claypans and creek beds.	Possible Suitable habitat is present and the closest record is less than 2 km east of the survey area. Targeted searches did not record this species during the survey.	NM DBCA
Myrtaceae	<i>Baeckea</i> sp. Walkaway	P3	-	Dense, multi-stemmed shrub, 0.5-2 m high. Fl. white, Dec or Jan. Yellow/brown or white sand. Undulating plains, hillslopes.	Unlikely No suitable habitat present. The closest known record is less than 10 km east of the survey area.	NM DBCA
Myrtaceae	<i>Calytrix eneabensis</i>	P4	-	Shrub, 0.3-1 m high. Fl. purple & pink & yellow, Jul to Oct. White, grey or yellow sand over laterite. Sandplains.	Unlikely Closest known record is less than 2 km west of the survey area however there is no suitable habitat within the survey area.	NM DBCA

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
Myrtaceae	<i>Calytrix platycheiridius</i>	P2		Shrub, ca 0.3 m high. Florabase specimens previously recorded on low ridges.	Highly unlikely Closest known records are more than 100 km south of the survey area. No suitable habitat is present in the survey area.	NM
Myrtaceae	<i>Darwinia</i> sp. Strawberry	P2		Shrub, ca 0.4 m high. Florabase specimens previously recorded on breakaways and sands.	Unlikely No suitable habitat present. Closest record is more than 15 km north of the survey area.	NM DBCA
Myrtaceae	<i>Eremea acutifolia</i>	P3	-	Spreading, dense shrub, 0.4-0.7(-1) m high. Fl. orange/pink, Aug to Nov. Grey or yellow sand. Sandplains.	Unlikely No suitable habitat is present. Closest known record is approximately 10 km south of the survey area.	NM DBCA
Myrtaceae	<i>Eucalyptus arachnaea</i> subsp. <i>arrecta</i>	P3	-	Tree, 5-10(-15) m high, bark rough. Fl. white-cream. Clay loam on granite, gravelly loam. Breakaway slopes, gullies.	Unlikely No suitable habitat is present. Closest known record is more than 15 km east of the survey area.	DBCA
Myrtaceae	<i>Eucalyptus crispata</i>	EN	VU	(Mallee), 3-7 m high, bark rough on the trunk, in partly decorticated curls. Fl. yellow-cream, Mar to Jun. Sand, loam with lateritic gravel. Lateritic breakaways.	Unlikely No suitable habitat present within the survey area. Closest known record is more than 50 km south of the survey area.	PMST NM
Myrtaceae	<i>Eucalyptus cuprea</i>	EN	EN	(Mallee), 2.5-5 m high, bark rough to 1.5 m, box-type. Fl. white, Aug to Nov. Shallow soils over granite.	Unlikely No suitable habitat present. Closest records are north of Geraldton.	PMST
Myrtaceae	<i>Eucalyptus ebbanoensis</i> subsp. <i>photina</i>	P4	-	(Mallee), 2-6 m high, adult leaves glossy. Fl. white-cream, Sep to Dec or Jan to Mar. Sandy clay, red sand. Lateritic breakaways, sandplains.	Unlikely The closest record is less than 8 km north-east of the survey area however there is no suitable habitat within the survey area.	NM DBCA
Myrtaceae	<i>Eucalyptus leprophloia</i>	EN	EN	(Mallee), 2-5(-8) m high, bark rough loose & flaky to 1 m. Fl. cream-white,	Unlikely	PMST NM

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
				Aug to Oct. White or grey sand over laterite. Valley slopes.	No suitable habitat within the survey area.	DBCA
Myrtaceae	<i>Eucalyptus macrocarpa</i> subsp. <i>elachantha</i>	P4	-	(Spreading or sprawling mallee), 0.8-4 m high, bark smooth, grey over salmon pink. Fl. red-pink, Aug to Sep or Nov to Dec. White or grey sand over laterite. Hillslopes, ridges, sandplains.	Unlikely No suitable habitat within the survey area.	NM DBCA
Myrtaceae	<i>Eucalyptus macrocarpa</i> x <i>pyriformis</i>	P3	-	Erect, open mallee tree, 1.2-6 m high. Fl. red, Apr or Aug to Oct. Sand, lateritic sandy soils. Hills, rocky ironstone ridges, sandplains.	Unlikely No suitable habitat within the survey area.	NM
Myrtaceae	<i>Eucalyptus zopherophloia</i>	P4	-	(Spreading mallee), 2.5-4(-6) m high, bark rough, fibrous. Fl. cream-white, Oct to Dec or Jan. Grey/white sand with limestone rubble. Coastal areas.	Unlikely No suitable habitat within the survey area.	NM DBCA
Myrtaceae	<i>Scholtzia calcicola</i>	P2	-	Shrub, ca 1.1 m high. Florabase specimens previously recorded on sandy slopes.	Unlikely Closest known record is less than 5 km south-west of the survey area. Potentially suitable habitat however unlikely due to survey efficacy and non-cryptic nature of the species.	NM DBCA
Myrtaceae	<i>Scholtzia multiflora</i>	P1		Perennial shrub, ca 1.6m high. Florabase specimens previously recorded on lateritic ridges, swales and gentle slopes with white to yellow sands.	Unlikely No suitable habitat within the survey area.	NM
Myrtaceae	<i>Thryptomene butleri</i>	P3	-	Shrub, ca 0.7 m high. Florabase specimens previously recorded on dunes.	Unlikely No suitable habitat within the survey area.	NM
Myrtaceae	<i>Thryptomene nitida</i>	P3	-	Shrub, ca 0.6 m high. Florabase specimens previously recorded on hillslopes, river flats and creek lines.	Unlikely Suitable habitat is present however the closest known records are approximately 15 km south-east of the survey area. Based on survey efficacy and	NM DBCA

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
					non-cryptic nature of the species it is considered unlikely.	
Myrtaceae	<i>Thryptomene spicata</i>	P2	-	Perennial shrub, ca 1.5 m high. Fl pink. Florabase specimens previously recorded on lateritic sands over ironstone.	Highly unlikely No suitable habitat present. Closest records are more than 50 km south of the survey area.	NM
Myrtaceae	<i>Verticordia densiflora</i> var. <i>roseostella</i>	P3	-	Open shrub, 0.4-1.3 m high. Fl. pink-white, Sep to Dec. Sandy gravelly soils.	Unlikely There are records less than 10 km of the survey area. Based on survey efficacy and non-cryptic nature of the species it is considered unlikely.	NM DBCA
Myrtaceae	<i>Verticordia luteola</i> var. <i>luteola</i>	P3		Slender shrub, 0.5-1.4 m high. Fl. white-yellow, Nov to Dec. Grey sand over gravel. Flats.	Unlikely Survey area is not considered suitable habitat. Records are more than 15 km south of the survey area.	NM DBCA
Orchidaceae	<i>Caladenia hoffmanii</i>	EN	EN	Tuberous, perennial, herb, 0.13-0.3 m high. Fl. green & yellow & red, Aug to Oct. Clay, loam, laterite, granite. Rocky outcrops and hillsides, ridges, swamps and gullies.	Highly unlikely Records of this species are from north of Geraldton.	PMST
Orchidaceae	<i>Paracaleana dixonii</i>	VU	EN	Tuberous, perennial, herb, 0.09-0.2 m high. Fl. yellow-brown, Oct to Dec or Jan. Grey sand over granite.	Unlikely No suitable habitat present. Record more than 20 km south of the survey area.	PMST NM
Orchidaceae	<i>Thelymitra stellata</i>	EN	EN	Tuberous, perennial, herb, 0.15-0.25 m high. Fl. yellow & brown, Oct to Nov. Sand, gravel, lateritic loam.	Unlikely No suitable habitat present. Records more than 20 km south-east of the survey area.	PMST NM
Poaceae	<i>Austrostipa nunaginensis</i>	P3	-	Florabase specimens previously recorded on white-grey sandy soils on gentle hillslopes	Unlikely No suitable habitat within the survey area.	NM
Polygalaceae	<i>Comesperma griffinii</i>	P2		Annual or perennial, herb, to 0.15 m high. Fl. white, Oct. Yellow or grey sand. Plains.	Unlikely	NM DBCA

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
					No suitable habitat within the survey area.	
Proteaceae	<i>Banksia elegans</i>	P4	-	Shrub (with fire-tolerant rootstock, often suckering), 1-4 m high. Fl. yellow/green-yellow, Oct to Nov. Yellow, white or red sand. Sandplains, low consolidated dunes.	Unlikely Closest record is less than 7 km east of the survey however no suitable habitat is present within the survey area.	NM DBCA
Proteaceae	<i>Banksia fraseri</i> var. <i>crebra</i>	P3	-	Shrub, ca 4 m high. Florabase specimens previously recorded on sandplains, shallow valleys, and lateritic hillslopes	Unlikely Closest record is less than 7 km east of the survey however no suitable habitat is present within the survey area.	NM DBCA
Proteaceae	<i>Banksia scabrella</i>	P4	-	Much-branched, lignotuberous shrub, 0.6-2 m high. Fl. yellow & cream & purple, Sep to Dec or Jan. White, grey or yellow sand, sometimes with lateritic gravel. Sandplains, lateritic ridges.	Unlikely Records more than 15 km from the survey area. No suitable habitat present.	NM DBCA
Proteaceae	<i>Grevillea erinacea</i>	P3	-	Spindly, prickly, sparingly branched shrub, (0.3-)0.6-1.8 m high. Fl. green-white-cream, Jul to Dec. White, grey or yellow sand, often with lateritic gravel.	Unlikely No suitable habitat present. Record more than 10 km north of the survey area.	NM DBCA
Proteaceae	<i>Grevillea hirtella</i>	P3	-	Spreading shrub, 0.3-0.9 m high. Fl. red/red-pink, Aug to Oct. Sand or loam over laterite, often with gravel.	Unlikely There is a record less than 500 m north of the survey area. Based on survey efficacy and non-cryptic nature of the species it is considered unlikely.	NM DBCA
Proteaceae	<i>Grevillea thelemanniana</i>	CR	CR	Spreading, lignotuberous shrub, 0.3-1.5 m high. Fl. pink-red, May to Nov. Sand, sandy clay. Winter-wet low-lying flats.	Highly unlikely This species is only known from the Perth metropolitan area.	NM
Proteaceae	<i>Persoonia filiformis</i>	P3	-	Erect, spreading, lignotuberous shrub, 0.07-0.4 m high. Fl. yellow, Nov to Dec. Yellow or white sand over laterite.	Unlikely No suitable habitat present. Records are more than 20 km south of the survey area.	DBCA
Proteaceae	<i>Persoonia rudis</i>	P3	-	Erect, often spreading shrub, 0.2-1 m high. Fl. yellow, Sep to Dec or Jan.	Unlikely	NM

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
				White, grey or yellow sand, often over laterite.	Records are approximately 20 km south of the survey area. No suitable habitat present.	DBCA
Proteaceae	<i>Synaphea sparsiflora</i>	P2		Shrub, to 0.6 m high, to 1 m wide. Fl. yellow, Aug to Sep. Sandy loam over laterite.	Unlikely No suitable habitat present. Records are more than 20 km south-east of the survey area.	NM
Restionaceae	<i>Chordifex ornatus</i>	P2	-	Rhizomatous, perennial, herb. Fl. brown, Oct. Grey-white sand, sandy clay. Sandy rises.	Highly unlikely Records are located south-east of Perth.	NM
Rhamnaceae	<i>Cryptandra pendula</i>	P1	-	Shrub, to 0.75 m high. Light brown sandy loam, red laterite gravel. Upper hillslopes.	Unlikely Records known from more than 20 km north of the survey area. No suitable habitat present.	NM DBCA
Rutaceae	<i>Drummondita ericoides</i>	VU	EN	Divaricately branched shrub, 0.3-1 m high. Fl. yellow & white & violet/purple, Sep to Oct. Rocky places.	Highly unlikely Records are from north of Geraldton. No suitable habitat present.	PMST
Solanaceae	<i>Anthocercis intricata</i>	P3		Dense, spinescent shrub, 0.9-3 m high. Fl. white-cream, Jun to Sep. Sand or loam over limestone. Consolidated sand dunes.	Unlikely No suitable habitat present. Records are from the coastal area near Dongara.	NM DBCA
Stylidiaceae	<i>Stylidium drummondianum</i>	P3	-	Rosetted perennial, herb, 0.05-0.22 m high, Leaves narrowly oblanceolate, 0.5-3 cm long, 0.8-2 mm wide, apex mucronate, margin hyaline and serrulate, glabrous. Scape hoary. Inflorescence paniculate. Fl. pink, Aug to Oct. Sand or clayey sand over laterite. Upper hillslopes, breakaways. Low heath, mallee shrubland.	Unlikely No suitable habitat. Records are from more than 20 km south of the survey area.	NM
Stylidiaceae	<i>Stylidium pseudocaespitosum</i>	P2	-	Rosetted perennial, herb, 0.1-0.3 m high, leaves tufted, linear, 2-7 cm long, 0.5-2 mm wide, apex subacute, margin entire, scabrous. Scape glabrous. Inflorescence racemose. Fl. yellow, Sep	Unlikely No suitable habitat present. Records from more than 15 km north of the survey area.	NM DBCA

Family	Taxon	Status		Description (WA Herbarium 1998, DAWE 2021)	Likelihood of occurrence	Source
		BC Act/DBCA	EPBC Act			
				to Nov. White, grey or yellow sand over laterite. Breakaways and hillslopes.		
Stylidiaceae	<i>Stylidium</i> sp. Three Springs	P2	-	Creeping herb, ca 0.2 m high. Fl. pink. Florabase specimens previously recorded on rocky red-orange soils, road verges, loamy soils and low-lying areas.	Unlikely Closest known record is more than 15 km south-west of the survey area.	DBCA
Stylidiaceae	<i>Stylidium torticarpum</i>	P3		Caespitose perennial, herb, 0.12-0.27 m high. Leaves tufted, broadly linear, (2-) 5-13 cm long, 0.6-1.5 mm wide, apex mucronate, margin hyaline and serrulate, glabrous. Scape glandular throughout. Inflorescence paniculate. Capsule twisted. Fl. pink, Sep to Nov. Sandy clay and clay loam over laterite. Adjacent to creeklines, depressions, and beneath breakaways. Heath or mallee shrubland.	Unlikely Suitable habitat is possible however the closest record is approximately 19 km north of the survey area.	NM DBCA

# Appendix E

**Fauna data**

**Fauna survey results – Black Cockatoo breeding habitat tree data**

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
3	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	650	1	6	Too low to ground	-29.2235	115.0868
4	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	1140	2	6	No	-29.2235	115.0867
5	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	550	0	7		-29.2235	115.0867
6	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	600	1	6	No	-29.2236	115.0861
7	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	840	0	7		-29.2236	115.0862
8	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	700	2	6		-29.2236	115.0858
9	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	540	4	5	Possible	-29.2236	115.086
10	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	550	1	4	Yes	-29.2232	115.0862
11	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	560	0	7		-29.2233	115.0868
12	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	510	0	7		-29.2232	115.0869
13	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	520	0	7		-29.2233	115.087
14	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	800	0	7		-29.219	115.0832
15	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	740	0	7		-29.2191	115.0829
16	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	550	0	7		-29.2191	115.0828
17	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	720	0	7		-29.2191	115.0828
18	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	690	0	7		-29.2192	115.0823
19	18/08/2025	<i>Eucalyptus loxophleba subsp. loxophleba</i>	600	0	7		-29.2192	115.0822

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
20	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	880	0	7		-29.2192	115.0821
21	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	740	0	7		-29.2184	115.0835
22	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	850	0	7		-29.2185	115.0834
23	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	700	0	7		-29.2185	115.0835
24	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	960	3	6	No	-29.2186	115.0835
25	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	790	0	7		-29.2186	115.0837
26	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1180	0	7		-29.2185	115.0837
27	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	740	0	7		-29.2184	115.084
29	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	510	0	7		-29.2184	115.0844
30	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	560	0	7		-29.2183	115.0855
31	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	670	0	7		-29.2183	115.0856
32	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	550	1	6	No	-29.2186	115.0865
33	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	810	0	7		-29.2185	115.0837
34	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	1060	0	7		-29.2188	115.083
35	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	540	0	7		-29.2187	115.0829

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
36	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	650	0	7		-29.2188	115.0827
37	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	730	0	7		-29.2188	115.0826
38	18/08/2025	<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	710	0	7		-29.2198	115.0837
39	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1030	0	7		-29.2205	115.0837
40	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1350	0	7		-29.2205	115.0837
41	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	610	0	7		-29.2206	115.0837
42	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1800	0	7		-29.2206	115.0837
43	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	940	0	7		-29.2207	115.0837
44	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1180	0	7		-29.2208	115.0837
45	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	630	0	7		-29.2246	115.088
46	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	790	0	7		-29.2247	115.0881
47	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	630	0	7		-29.2247	115.0882
48	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	560	0	7		-29.2248	115.0882
49	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	750	0	7		-29.2248	115.0883
50	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	660	0	7		-29.2249	115.0884
51	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1280	0	7		-29.2251	115.0886
52	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1269	0	7		-29.225	115.0882

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
53	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	600	4	4	2 Potential 2 Too small	-29.2251	115.0878
54	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	610	0	7		-29.2248	115.088
55	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	540	0	7		-29.2233	115.0874
56	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	540	0	7		-29.2233	115.0874
57	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	520	0	7		-29.2237	115.0871
58	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	540	0	7		-29.2237	115.0869
59	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	530	0	7		-29.2237	115.0868
60	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	700	0	7		-29.2239	115.0866
61	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	580	0	7		-29.224	115.0865
62	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	750	0	7		-29.2238	115.0864
63	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	1000	1	6	No	-29.2239	115.0861
64	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	500	0	7		-29.2238	115.0861
65	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	850	0	7		-29.2237	115.086
66	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	1000	2	4	1 Suitable other small and beehive	-29.2237	115.0859
67	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	910	2	6	No	-29.224	115.0862
68	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	650	0	7		-29.2238	115.0871
69	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	850	0	7		-29.2239	115.0871

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
70	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	980	0	7		-29.2239	115.0871
71	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	600	0	7		-29.2222	115.0868
72	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1330	0	7		-29.2222	115.0861
73	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	530	0	7		-29.2221	115.0857
74	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	570	0	7		-29.2217	115.0849
76	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	820	0	7		-29.2222	115.0844
77	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1300	0	7		-29.2223	115.0845
78	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	900	0	7		-29.2223	115.0845
79	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	800	0	7		-29.2223	115.0846
80	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	570	0	7		-29.2223	115.0847
81	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	770	0	7		-29.2224	115.0847
82	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	640	0	7		-29.2225	115.0847
83	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	580	0	7		-29.2225	115.0846
84	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	850	0	7		-29.2226	115.0848
85	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	900	0	7		-29.2223	115.0848
86	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	820	0	7		-29.2223	115.0847
87	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	750	0	7		-29.2223	115.0848

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
88	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	600	0	7		-29.2223	115.0848
89	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	770	0	7		-29.2223	115.0849
90	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	830	0	7		-29.2223	115.085
91	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	540	0	7		-29.2223	115.085
92	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	700	0	7		-29.2223	115.0851
93	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	750	0	7		-29.2223	115.0851
94	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	600	0	7		-29.2223	115.0851
95	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	840	0	7		-29.2223	115.0851
96	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	630	0	7		-29.2223	115.0851
97	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	900	0	7		-29.2223	115.0851
98	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	730	0	7		-29.2223	115.0851
99	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	800	0	7		-29.2224	115.0851
100	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	620	0	7		-29.2225	115.0853
101	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	610	0	7		-29.2225	115.0853
102	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	660	0	7		-29.2224	115.0855
103	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	610	0	7		-29.2225	115.0856
104	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	530	0	7		-29.2225	115.0857

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
105	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	700	0	7		-29.2223	115.0858
106	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	750	0	7		-29.2224	115.0859
107	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	670	0	7		-29.2223	115.0859
108	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	620	0	7		-29.2223	115.0859
109	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	540	1	6	No	-29.2224	115.0863
110	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	600	0	7		-29.2224	115.0863
111	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	630	0	7		-29.2224	115.0864
112	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	530	0	7		-29.2224	115.0866
113	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	780	0	7		-29.2224	115.0867
114	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	630	0	7		-29.2224	115.0867
115	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	630	0	7		-29.2223	115.0868
116	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	600	0	7		-29.2228	115.0867
117	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	700	0	7		-29.2228	115.0865
118	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	700	0	7		-29.2228	115.0863
119	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	550	0	7		-29.2228	115.0863
120	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	600	0	7		-29.2229	115.0862
121	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	650	0	7		-29.2229	115.086

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
122	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	600	0	7		-29.2228	115.0861
123	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	650	0	7		-29.2227	115.0858
124	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	1000	0	7		-29.2228	115.0857
125	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	630	0	7		-29.2228	115.0857
126	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	800	0	7		-29.2228	115.0857
127	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	650	0	7		-29.2227	115.0856
128	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	600	0	7		-29.2227	115.0853
129	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	600	0	7		-29.2228	115.0851
130	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	800	2	6	No	-29.2227	115.0849
131	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	730	0	7		-29.2229	115.0848
132	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	750	0	7		-29.2223	115.0851
133	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	700	0	7		-29.2231	115.085
134	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	850	0	7		-29.2231	115.0851
135	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	620	0	7		-29.2232	115.0852
136	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	550	0	7		-29.2232	115.0854
137	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	600	0	7		-29.2232	115.0856
138	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	600	0	7		-29.2234	115.0858

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
139	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	530	0	7		-29.2233	115.0858
140	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	560	0	7		-29.2232	115.0859
141	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	650	0	7		-29.2231	115.086
142	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	780	0	7		-29.2231	115.0859
143	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	840	0	7		-29.223	115.0859
144	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	700	0	7		-29.2231	115.0858
145	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	850	0	7		-29.2231	115.0858
146	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	650	0	7		-29.2231	115.0858
147	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	620	0	7		-29.223	115.0857
148	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	609	0	7		-29.223	115.0856
149	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	900	0	7		-29.223	115.0853
150	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	609	0	7		-29.2229	115.0859
151	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	700	0	7		-29.2229	115.086
152	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	550	0	7		-29.223	115.0861
153	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	600	0	7		-29.2231	115.0862
154	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	559	0	7		-29.223	115.0863
155	18/08/2025	<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i>	680	0	7		-29.223	115.0864

Object ID #	Date	Tree species	DBH (mm)	Number of Suitable Hollows	Tree category (1-7)	Notes	Latitude	Longitude
156	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	650	0	7		-29.2229	115.0864
157	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	550	0	7		-29.2231	115.0865
158	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	800	0	7		-29.2232	115.0868
160	18/08/2025	<i>Eucalyptus camaldulensis subsp. arida</i>	650	0	7		-29.2222	115.0853

#### Fauna species recorded in the survey area.

Family	Taxa	Common name	Status
<b>Birds</b>			
Acanthizidae	<i>Sericornis maculatus</i>	White-browed scrubwren	-
Acanthizidae	<i>Smicrornis brevirostris</i>	Weebill	-
Accipitridae	<i>Haliastur sphenurus</i>	Whistling kite	-
Alcedinidae	<i>Dacelo novaeguineae</i>	Laughing kookaburra	-
Anatidae	<i>Anas superciliosa</i>	Pacific black duck	-
Ardeidae	<i>Ardea alba modesta</i>	Great Egret	MI
Artamidae	<i>Cracticus nigrogularis</i>	Pied butcherbird	-
Artamidae	<i>Gymnorhina tibicen</i>	Australian magpie	-
Artamidae	<i>Strepera versicolor</i>	Grey currawong	-
Cacatuidae	<i>Cacatua sanguinea</i>	Little corella	-
Cacatuidae	<i>Calyptorhynchus banksii</i>	Red-tailed black cockatoo	-
Cacatuidae	<i>Eolophus roseicapilla</i>	Galah	-
Campephagidae	<i>Coracina novaehollandiae</i>	Black-faced cuckoo-shrike	-
Corvidae	<i>Corvus coronoides</i>	Australian raven	-
Hirundinidae	<i>Petrochelidon nigricans</i>	Tree martin	-
Locustellidae	<i>Cincloramphus mathewsi</i>	Rufous songlark	-
Meliphagidae	<i>Lichmera indistincta</i>	Brown honeyeater	-
Monarchidae	<i>Grallina cyanoleuca</i>	Magpie-lark	-
Pachycephalidae	<i>Pachycephala rufiventris</i>	Rufous whistler	-
Petroicidae	<i>Petroica goodenovii</i>	Red-capped robin	-
Psittaculidae	<i>Barnardius zonarius</i>	Australian ringneck	-
Rhipiduridae	<i>Rhipidura albiscapa</i>	Grey fantail	-

Family	Taxa	Common name	Status
Rhipiduridae	<i>Rhipidura leucophrys</i>	Willie wagtail	-
<b>Reptiles</b>			
Scincidae	<i>Cryptoblepharus buchananii</i>	Buchanan's snake-eyed skink	-
<b>Mammals</b>			
Canidae	<i>Canis familiaris</i>	Dog	*
Canidae	<i>Vulpes vulpes</i>	Red Fox	*
Felidae	<i>Felis catus</i>	Cat	*
Macropodidae	<i>Macropus fuliginosus melanops</i>	Western Grey	
<b>Amphibians</b>			
Limnodynastidae	<i>Limnodynastes dorsalis</i>	Western Banjo frog	-
Myobatrachidae	<i>Crinia pseudoinsignifera</i>	Bleating froglet	-
Pelodyadidae	<i>Litoria moorei</i>	Motorbike frog	-

### Fauna likelihood of occurrence assessment guidelines

Likelihood of occurrence	Guideline
Recorded	Species recorded in current survey
Likely	Species previously recorded within the study area and large areas of suitable habitat occur in the project area, recorded within survey area during previous surveys / desktop review
Possible	Species previously recorded within the study area and areas of suitable habitat occur/may occur in the project area.
Unlikely	Species previously recorded within the study area, but suitable habitat does not occur in the project area. Species not previously recorded within the study area, suitable habitat does not occur in the project area and/or the project area is outside the natural distribution of the species. Targeted searches completed in suitable time and intensity across all areas of suitable habitat and species not recorded (noting for some species this may require multiple seasons)
Other considerations	Intensity of survey, availability of access, growth form type, recorded flowering times, cryptic nature of species

### Source information – desktop searches

PMST – DCCEE Protected Matters Search Tool (PMST to identify flora listed under the EPBC Act potentially occurring within the study area)

DBCA – DBCA (2025) Threatened and Priority flora dataset search within the study area

NM – DBCA *Dandjoo* (formally *Naturemap*) accessed August 2025

### Fauna likelihood of occurrence assessment for significant fauna identified in the desktop assessment

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<b>Birds</b>						
<i>Actitis hypoleucos</i>	Common Sandpiper	MI	MI	Habitat for the Common Sandpiper is varied: coastal and interior wetlands – narrow muddy edges of billabongs, river pools, mangroves, among rocks and snags, reefs or rocky beaches. Avoids wide open mudflats. This species is widespread and scattered, common on the north and west coasts and uncommon in the south-east and interior (Morcombe, 2004).	<b>Unlikely.</b> While there are 29 confirmed DBCA records within the study area, the nearest is approximately 15km west of the survey area, and suitable habitat in the form of coastal and interior mudflats, wetlands and temporary pools and streams is not present within the survey area.	PMST DBCA

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Anous stolidus</i>	Common Noddy	MI	MI	The Common Noddy is found in tropical and sub-tropical seas off the west, north and east coasts of Australia, from the Abrolhos Islands in WA to the islands of the Great Barrier Reef in Qld, as well as Norfolk and Lord Howe Islands. Some are seen almost annually in NSW as far south as Sydney. It also ranges across tropical parts of the Pacific, Indian and Atlantic Oceans (DCCEEW, 2022)	<b>Highly Unlikely.</b> This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution.	PMST
<i>Anous tenuirostris melanops</i>	Australian Lesser Noddy	VU	EN	The Australian subspecies of the Australian lesser noddy <i>A. t. melanops</i> breeds only on three islands in the Houtman Abrolhos, off Western Australia, where it nests in mangroves. The birds remain near the breeding islands all year (Higgins & Davies, 1996).	<b>Unlikely.</b> This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, while there are only two current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution.	PMST NM DBCA
<i>Aphelocephala leucopsis</i>	Southern Whiteface	VU	-	The Southern Whiteface is found in the semi-arid woodlands of mallee and mulga within Southern Australia. It was listed in 2023 due to the species decline in Queensland and New South Wales (DCCEEW, 2025b). In Western Australia the species is still abundant and not listed under the BC Act.	<b>Unlikely.</b> There are no current records of the species within 20km of the current survey area and suitable habitat for the species is not present.	PMST
<i>Apus pacificus</i>	Fork-tailed Swift	MI	MI	In south-west WA there are sparsely scattered records along the south coast, ranging from the Eyre Bird Observatory and west to Denmark. They are widespread in coastal and sub-coastal areas between Augusta and Carnarvon, including some on nearshore and offshore islands. This species is almost exclusively aerial, flying less than 1 m to at least 300 m above ground. This species is considered rare in the south-west region (DCCEEW, 2013).	<b>Unlikely.</b> While there are eight confirmed DBCA records just outside the study area, the closest is approximately 34 km north-west of the survey area, and suitable habitat in the form of coastal, well-vegetated foraging grounds is not present within the survey area.	PMST DBCA

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Ardenna carneipes</i>	Flesh-footed Shearwater	MI	VU & MI	The Flesh-footed Shearwater is a large (length 40–47 cm; wingspan 99–107 cm; weight 510–750 g), broad-winged, blackish-brown shearwater with dark brown irides, a pale-horn bill (tipped black) and flesh-pink legs and feet (Johnstone & Storr 1998; Marchant & Higgins 1990). Individuals are typically solitary at sea, although flocks of hundreds of birds can form around sources of food, and at dusk when individuals raft together offshore from their breeding islands (Bartle 1974; Johnstone & Storr 1998; Marchant & Higgins 1990; Warham 1958). The Flesh-footed Shearwater mainly occurs in the subtropics over continental shelves and slopes and occasionally inshore waters. Individuals also pass through the tropics and over deeper waters when on migration (Brooke 2004; Marchant & Higgins 1990;). Pairs breed on islands in burrows on sloping ground in coastal forest, scrubland, shrubland or grassland (Marchant & Higgins 1990).	Highly Unlikely. This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution.	PMST
<i>Arenaria interpres</i>	Ruddy Turnstone	MI	MI	In Australia, Ruddy Turnstones are widespread around the coast of the mainland and off-shore islands. They breed on the northern coasts of Europe, Asia and North America. They are found on coastlines around the world, when not breeding or on passage. They are found singly or in small groups along the coastline and only occasionally inland. They are mainly found on exposed rocks or reefs, often with shallow pools, and on beaches. In the north, they are found in a wider range of habitats, including mudflats (DCCEE, 2019c).	Unlikely. While there are 19 confirmed DBCA records within the study area, the nearest is approximately 16km west of the survey area, and suitable habitat in the form of coastal and interior mudflats, wetlands and temporary pools and streams is not present within the survey area.	DBCA
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	VU & MI	MI	In Australasia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline saltlakes inland. They also occur in saltworks and sewage farms. They use flooded paddocks, sedgeland and other ephemeral wetlands, but leave when they dry. They use intertidal mudflats in sheltered bays, inlets, estuaries or seashores, and also swamps and creeks lined with mangroves. They tend to occupy coastal mudflats mainly after ephemeral terrestrial wetlands have dried out, moving back during the wet season. They may be attracted to mats of algae and water weed either floating or	Unlikely. While there are two confirmed DBCA records within the study area, the nearest is approximately 17km west of the survey area, and suitable habitat in the form of coastal and interior mudflats, wetlands and temporary pools and streams is not present within the survey area.	PMST DBCA

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
				washed up around terrestrial wetlands, and coastal areas with much beach cast seaweed. Sometimes they occur on rocky shores and rarely on exposed reefs (Birdlife Australia 2025).		
<i>Calidris canutus</i>	Red Knot	VU & MI	EN	In Australasia, the Red Knot mainly inhabits 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. They are occasionally seen on terrestrial saline wetlands near the coast, such as lakes, lagoons, pools and pans, and recorded on sewage ponds and saltworks, but rarely use freshwater swamps. They rarely use inland lakes or swamps (DCCEEW 2022). They are found near mudflats and estuaries from Murchison to Bunbury but are then uncommon from Wilson Inlet to Esperance. In the Perth region they are mainly found in Alfred Cove and Peel Inlet (Nevill 2013).	Unlikely. There are no current records of the species within 20km of the current survey area and suitable habitat for the species is not present.	PMST
<i>Calidris ferruginea</i>	Curlew Sandpiper	CR & MI	CR	Curlew Sandpipers mainly occur in areas with soft mud conditions, including 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. They are found inland less often, including around ephemeral and permanent lakes, dams, waterholes and bore drains, usually with bare edges of mud or sand. They occur in both fresh and brackish waters. In WA, they are widespread around coastal and subcoastal plains from Cape Arid to south-west Kimberley Division, but are more sparsely distributed between Carnarvon and Dampier Archipelago (DotE 2025b).	Unlikely. There are no current records of the species within 20km of the current survey area and suitable habitat for the species is not present.	PMST
<i>Calidris melanotos</i>	Pectoral Sandpiper	MI	MI	In Australasia, the Pectoral Sandpiper prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands. The species is usually found in coastal or near coastal habitat but occasionally found further inland. It prefers wetlands that have open fringing mudflats and low, emergent or fringing vegetation, such as grass or samphire. The species has also been recorded in swamp overgrown with lignum. They forage in shallow water or soft mud at the edge of wetlands (Higgins & Davies 1996).	Unlikely. There are no current records of the species within 20km of the current survey area and suitable habitat for the species is not present.	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Calidris ruficollis</i>	Red-necked Stint	MI	MI	The Red-necked Stint can be found in fresh and saline water, but primarily in coastal regions (Nevill 2013). It is mostly found in areas including sheltered inlets, bays, lagoons and estuaries with intertidal mudflats, often near spits, islets and banks and, sometimes, on protected sandy or coralline shores. Occasionally they have been recorded on exposed or ocean beaches, and on stony or rocky shores, reefs or shoals. They also occur in saltworks and sewage farms; saltmarsh; ephemeral or permanent shallow wetlands near the coast or inland, including lagoons, lakes, swamps, riverbanks, waterholes, bore drains, dams, soaks and pools in saltflats. They have occasionally been recorded on dry gibber plains, with little or no perennial vegetation (DotE 2016). They are common in many parts of the southwest, and can be found in the Murchison down to Busselton and Augusta to Cape Arid, and on islands, particularly Rottnest (Nevill 2013).	Unlikely. While there are 10 confirmed DBCA records within the study area, the nearest is approximately 17km north-west of the survey area, and suitable habitat in the form of coastal and interior mudflats, wetlands and temporary pools and streams is not present within the survey area.	DBCA
<i>Diomedea amsterdamensis</i>	Amsterdam Albatross	EN & MI	CR	The Amsterdam Albatross is a huge, full-bodied albatross with extremely long wings (wing span 2.5–3.5 m) and a short, wedge-shaped tail. The bill is very large and pink, with a bulbous tip (Marchant & Higgins 1990). The subspecies is similar in appearance to the Wandering Albatross with uniform dark brown plumage, and a contrasting clown-like white mask extending from the top of the bill, behind the eyes, around the cheeks and under the chin, and white underwings (Pizzey & Knight 1999). The Amsterdam Albatross is a marine, pelagic seabird. It nests in open patchy vegetation (among tussocks, ferns or shrubs) near exposed ridges or hillocks (Weimerskirch et al. 1985). It sleeps and rests on ocean waters when not breeding (Marchant & Higgins 1990). The Amsterdam Albatross is a non-resident visitor to Australia, and may occur in south-west and south Australian waters (Pizzey & Knight 1999). The similarity of the Amsterdam Albatross to juvenile Wandering Albatross makes identification at sea difficult, and may obscure distribution information of this subspecies. There are a few records of this subspecies off New Zealand, and one bird was captured on a longline fishing vessel operating south of Tasmania (Gales 1998).	Highly Unlikely. This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution.	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Diomedea epomophora</i>	Southern Royal Albatross	VU & MI	VU	Originally considered a polytypic species, the Royal Albatross was split into <i>D. epomophora</i> (Southern Royal Albatross) and <i>D. sanfordi</i> (Northern Royal Albatross) in 1998 by Robertson and Nunn based on several key morphological differences between the two taxa. The Southern Royal Albatross is a New Zealand endemic breeder, breeding only on Campbell Island (99% of the population) and in the Auckland Islands. However, migratory and foraging individuals have been sighted across both coasts of Southern Australia due to the species' wide-ranging feeding behaviour over wide open seas (DCCEEW 2022)..	Highly Unlikely. This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution.	PMST
<i>Diomedea exulans</i>	Wandering Albatross	VU & MI	VU	The Wandering Albatross has the longest wing-span of any ocean bird, spanning 2.5 - 3.5 m. In flight, the Wandering Albatross may appear somewhat humpbacked, and with pink toes visible. Adults have a white or pale back, extending along the dorsal surface of the wings near the body, and white underwings. Except in fully mature old males, the white tail will have black edges. Up close, the bill is large, shapely, and pale-flesh coloured; and the white plumage of the head and body have very fine grey barring (Pizzey & Knight 1999). The Wandering Albatross is solitary or gregarious at sea. It breeds in colonies (Marchant & Higgins 1990). On breeding islands, the Wandering Albatross nests on coastal or inland ridges, slopes, plateaux and plains, often on marshy ground (Falla 1937; Warham & Bell 1979). Nests of the Wandering Albatross are sited on moss terraces, in dense tussocks, and often in loose aggregations on the west (windward) side of islands. It prefers open or patchy vegetation (tussocks, ferns or shrubs), and it requires nesting areas that are near exposed ridges or hillocks so that it can take off (Warham & Bell 1979). The Wandering Albatross breeds on Macquarie Island (Environment Australia 1999; Marchant & Higgins 1990). A single breeding pair has also been recorded on Heard Island (Woehler 1991). It feeds in Australian portions of the Southern Ocean (Nicholls et al. 1995, 1997).	Highly Unlikely. This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution.	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Falco hypoleucos</i>	Grey Falcon	VU	VU	The Grey Falcon inhabits lightly timbered country, especially stony, inland plains and Acacia scrub, gibber deserts, sandridges, pastoral lands, and timbered watercourses, but seldom in driest deserts. Its distribution is centred on inland drainage systems. It also hunts in treeless areas and frequents tussock grassland and open woodland, especially in winter (Morcombe 2004; Pizzey & Knight 2012). It can mostly be seen on the northwest coast from Shark Bay to east Kimberley, and in the Pilbara and desert regions (Pizzey and Knight 2012, Nevill 2013).	<b>Highly Unlikely.</b> This species has a high preference for semi-arid open shrubland and drainage lines, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution.	PMST
<i>Falco peregrinus</i>	Peregrine Falcon	-	OS	The Peregrine Falcon is found on and near cliffs, gorges, timbered watercourses, riverine environments, wetlands, plains, open woodlands, and pylons and spires of buildings, though less frequently in desert regions (Morcombe 2004, Pizzey and Knight 2012). They are not common but can be found almost anywhere throughout WA and in the southwest, including particularly at Fitzgerald River, Stirling Range, Porongurup National Parks, Kondinin, and Peak Charles, with many more locations north of Perth (Nevill 2013).	<b>Possible.</b> There are three confirmed DBCA records within the study area, the nearest is approximately 15 km south-west of the survey area. Suitable habitat in the form of open woodlands and drainage lines is present in the survey area that allow for temporary perching and opportunistic foraging or fly-over activity.	PMST DBCA
<i>Hydroprogne caspia</i>	Caspian Tern	MI	MI	The Caspian Tern is mostly associated with sheltered coasts such as harbours, bays, estuaries, etc. They can also be found in inland terrestrial wetlands (saline or fresh) or man-made bodies of water (lakes or reservoirs). (DCCEE, 2020).	<b>Unlikely.</b> While there are 13 confirmed DBCA records within the study area, the nearest is approximately 15km north-west of the survey area, and suitable habitat in the form of coastal bays and estuaries or inland lakes is not present within the survey area.	PMST DBCA

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Limosa lapponica</i>	Bar-tailed Godwit	MI	MI	The Bar-tailed godwit occurs mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays. It has also been recorded in coastal sewage farms and saltworks, saltlakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats. It is widespread around the coast, from Eyre to Derby (TSSC 2016b). They are uncommon in the south west, but can be sighted from Geraldton to Bunbury, at Alfred Cove, and then at a few estuaries on the south coast including Kalgan River Mouth and Oyster Harbour (Nevill 2013).	<b>Unlikely.</b> There are no confirmed DBCA records within the study area, the nearest is approximately 30km north-west of the survey area, and suitable habitat in the form of coastal bays, mudflats and estuaries is not present within the survey area.	PMST
<i>Limosa lapponica menzbieri</i>	Northern Siberian Bar-tailed Godwit	EN	CR	This sub-species of Bar-tailed godwit shares numerous physical, range and habitat similarities with <i>L. lapponica</i> in that it occurs mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays. It has also been recorded in coastal sewage farms and saltworks, salt-lakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats. It is widespread around the coast, from Eyre to Derby (TSSC 2016b). They are uncommon in the south west, but can be sighted from Geraldton to Bunbury, at Alfred Cove, and then at a few estuaries on the south coast including Kalgan River Mouth and Oyster Harbour (Nevill 2013).	<b>Unlikely.</b> There are no current records of the species within 40km of the current survey area and suitable habitat for the species is not present.	PMST
<i>Macronectes giganteus</i>	Southern Giant-Petrel	EN & MI	MI	The Southern Giant Petrel is the largest petrel, and has been described as looking like a small, ungainly brown albatross with a massive greenish-tipped straw coloured bill, surmounted by a large single nostril-tube (Pizzey & Knight 1999). Mature adults are grey-brown with a faded and mottled-white head, neck and breast. The underwing has a pale leading edge, near the body, which should aid in discrimination from the Northern Giant Petrel, in which this area is dark brown (Pizzey & Knight 1999). The Southern Giant-Petrel is marine bird that occurs in Antarctic to subtropical waters. In summer, it mainly occurs over Antarctic waters, and it is widespread south as far as the pack-ice and onto the Antarctic continent (Marchant & Higgins 1990). The Southern Giant-Petrel breeds on the Antarctic Continent, Peninsula and islands, and on subantarctic islands and South America. The large nests are normally built in exposed areas of open vegetation (Voisin 1988) or, in Antarctic colonies, of no vegetation (E.J. Woehler, AAD 2002, pers. comm.). In the	<b>Highly Unlikely.</b> This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution, suggesting that any occurrence would most likely be vagrant or from storm-related displacement.	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
				southern Antarctic zone, it nests in exposed snow- and ice-free coastal areas, open gravel areas rocky bluffs, outcrops, ridges, slopes, mounds, raised beaches, open flats, edges of plateaux or offshore rocks from five to 120 m above sea level. Colonies often nest near a steep drop or on slope. The Southern Giant-Petrel breeds on six subantarctic and Antarctic islands in Australian territory, Macquarie Island, Heard Island and McDonald Island in the Southern Ocean, and Giganteus Island, Hawker Island, and Frazier Island in the Australian Antarctic Territories (EABG 2001, Woehler et al. 2001; Woehler et al. in press).		
<i>Macronectes halli</i>	Northern Giant Petrel	VU & MI	MI	The range of the Northern Giant-Petrel is circumpolar, encompassing all southern oceans and coastal waters around the southern continents. Northern Giant-Petrels reach the Australian coastline anywhere up to a few hundred km South of the tropic of Capricorn on both the East coast and the West coast. Northern Giant-Petrels breed on numerous offshore islands.	<b>Highly Unlikely.</b> This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution, suggesting that any occurrence would most likely be vagrant or from storm-related displacement.	PMST
<i>Motacilla cinerea</i>	Grey Wagtail	MI	MI	A European and Asian species. Migrates in winter south to Indonesia and New Guinea. Rarely reaches Australia. Occurs usually near fresh streams, but also on mown grass, ploughed land or near sewerage ponds. The Grey Wagtail is an opportunistic migrant to Australia. The species typically migrates to Indonesia occasionally landing in Australia. Most records for the species are from Northern Australia and South Australia (Morcombe 2004). The non-breeding habitat only of the Grey Wagtail has a strong association with water, particularly rocky substrates along water courses but also lakes and marshes (DAWE 2021e). It can be found mainly in banks and rocks in fast-running freshwater habitats: rivers, creeks, streams, and around waterfalls, both in forest and open country; but occurs almost anywhere during migration (Johnstone & Storr 2004).	<b>Unlikely.</b> There are no current records of the species within 40km of the current survey area and suitable habitat for the species is not present.	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Numenius madagascariensis</i>	Eastern Curlew	CR & MI	CR	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. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, sometimes within the mangroves, and in coastal saltworks and sewage farms. In the South-West, Eastern Curlews are recorded from Eyre, and there are scattered records from Stokes Inlet to Peel Inlet (Marchant & Higgins 1993). They are uncommon further south of Geraldton, but can be spotted in Alfred Cove, Peel Inlet and the Albany region (Nevill 2013).	Unlikely. There are no current records of the species within 40km of the current survey area and suitable habitat for the species is not present, especially with regards to coastal mudflats, bays, estuaries and mangroves.	PMST
<i>Oxyura australis</i>	Blue-billed duck	-	P4	The blue-billed duck is a small Australian almost entirely aquatic duck, with both the male and female growing to a length of 40 cm. The male has a slate-blue bill which changes to bright blue during the breeding season (Morcombe 2004). The blue-billed duck is endemic to Australia's temperate regions, ranging from the southwest of Western Australia, extending to southern Queensland, through New South Wales and Victoria, to Tasmania. The species is readily seen on freshwater lakes and billabongs where deep fresh water is present (Morcombe 2004).	Unlikely. While there are five confirmed DBCA records within the study area, the nearest is approximately 18km north-east of the survey area, and suitable habitat in the form of freshwater lakes, rivers and billabongs with significant native riparian vegetation is not present within the survey area.	NM DBCA
<i>Pandion haliaetus</i>	Osprey	MI	MI	Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands. They are mostly found in coastal areas but occasionally travel inland along major rivers, particularly in northern Australia. They require extensive areas of open fresh, brackish or saline water for foraging (Marchant & Higgins 1993). They frequent a variety of wetland habitats including inshore waters, reefs, bays, coastal cliffs, beaches, estuaries, mangrove swamps, broad rivers, reservoirs and large lakes and waterholes. They exhibit a preference for coastal cliffs and elevated islands in some parts of their range, but may also occur on low sandy, muddy or rocky shores and over coral cays.	Unlikely. There are 26 confirmed DBCA records within the study area, however the nearest record is approximately 15km west of the survey area and this species prefers coastal marine and freshwater habitats for its hunting and nesting behaviour, which are not present within the current survey area and too far to potentially involved temporary fly-over activity from one suitable habitat to the next.	PMST DBCA
<i>Phaethon lepturus</i>	White-tailed Tropicbird	MI	MI	The species is primarily oceanic in tropical waters, rarely inshore, and only is near land when breeding. Nests are	Highly Unlikely. This species has a high preference for	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
				located on islands and atolls utilising a variety of habitats from closed canopy rainforest to bare sandy ground and rugged rocky terrain (Commonwealth of Australia, 2020).	oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution, suggesting that any occurrence would most likely be vagrant or from storm-related displacement.	
<i>Phaethon rubricauda</i> <i>Westralia</i>	Red-tailed Tropic bird (Indian Ocean)	MI	P4 & MI	In Australia, it nests on Queensland's coral islands (including Raine Island and Lady Elliot Island), and Ashmore Reef and Rottnest Island off Western Australia, as well as Sugarloaf Rock at Cape Naturaliste and Busselton on the Western Australian coastline itself, and the offshore territories of the Cocos (Keeling) Islands, Norfolk and Lord Howe islands. In New Zealand territory it breeds on the Kermadec Islands. It frequents areas of ocean with water temperatures from 24 to 30 °C (75 to 86 °F) and salinity under 35‰ in the southern hemisphere and 33.5‰ in the northern hemisphere. In the Pacific Ocean, the southern boundary of its range runs along the 22 °C (72 °F) summer surface isotherm. The warm waters of the Leeuwin Current facilitate the species nesting at Cape Leeuwin in southwestern Australia, yet is only a rare visitor to New South Wales at corresponding latitudes on the Australian east coast (Higgins et al 1990).	<b>Highly Unlikely.</b> This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution, suggesting that any occurrence would most likely be vagrant or from storm-related displacement.	PMST
<i>Pterodroma mollis</i>	Soft-plumaged Petrel	MI	MI	The Soft-plumaged Petrel is generally found over temperate and subantarctic waters in the South Atlantic, southern Indian and western South Pacific Oceans. The species is a regular and quite common visitor to southern Australian seas but is more common in the west than in the south and south-east (Marchant & Higgins 1990). In the southern Indian Ocean, the species is most numerous between 30° and 50°S from the South African to the west Australian coasts. The species is possibly common in seas south-west of Australia.	<b>Highly Unlikely.</b> This species has a high preference for oceanic and offshore island breeding and feeding behaviours, which are not present within the current survey area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution, suggesting that any occurrence would most likely be	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
					vagrant or from storm-related displacement.	
<i>Rostratula australis</i>	Australian Painted Snipe	EN	EN	The Australian Painted Snipe generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. They also use inundated or waterlogged grassland or saltmarsh, dams, rice crops, sewage farms and bore drains. Typical sites include those with rank emergent tussocks of grass, sedges, rushes or reeds, or samphire; often with scattered clumps of lignum Muehlenbeckia, canegrass, or sometimes tea-tree. It sometimes uses areas that are lined with trees, or that have some scattered fallen or washed-up timber (DotE 2025b). In the south west it can be found around Carnarvon and wetlands north of Perth, particularly those west of Moora and Gin Gin (Nevill 2013).	Unlikely. There are no current records of the species within 40km of the current survey area and suitable habitat for the species is not present, especially with regards to coastal mudflats, bays, estuaries and mangroves.	PMST
<i>Sternula albigrons</i>	Little Tern	MI	MI	In Australia, Little Terns inhabit sheltered coastal environments, including lagoons, estuaries, river mouths and deltas, lakes, bays, harbours and inlets, especially those with exposed sandbanks or sand-spits, and also on exposed ocean beaches (DCCEEW 2022).	Unlikely. There are no current records of the species within 40km of the current survey area and suitable habitat for the species is not present, especially with regards to coastal mudflats, bays, estuaries and rivers.	PMST
<i>Sternula nereis nereis</i>	Australian Fairy Tern	VU	VU	The Fairy Tern is approximately 22–27 cm in length, 70 g in weight and has a wingspan of 44–53 cm (Higgins & Davies 1996). The Fairy Tern is bulky and round bodied (Simpson & Day 2004). The breeding plumage of both sexes is pale grey-white, with a black crown, nape, ear coverts and patch in front of the eyes (square to round in shape). The forehead is white and the bill is orange-yellow (Higgins & Davies 1996). Legs are dull yellow and the iris is dark brown (Lindsey 1986a). The species is gregarious and often found in flocks of 50–150 birds. However the bird is also seen singularly or in pairs (Higgins & Davies 1996). The Fairy Tern (Australian) nests on sheltered sandy beaches, spits and banks above the high tide line and below vegetation. The subspecies has been found in embayments of a variety of habitats including offshore, estuarine or lacustrine (lake) islands, wetlands and mainland coastline (Higgins & Davies 1996; Lindsey 1986a). The bird roosts on beaches at night (Higgins & Davies 1996). Within Australia, the Fairy Tern occurs along the coasts of Victoria,	Unlikely. There are no current records of the species within 40km of the current survey area and suitable habitat for the species is not present, especially with regards to coastal mudflats, bays, estuaries and mangroves.	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
				Tasmania, South Australia and Western Australia; occurring as far north as the Dampier Archipelago near Karratha.		
<i>Thalassarche carteri</i>	Indian Yellow-nosed Albatross	VU & MI	EN	<p><i>Thalassarche carteri</i> breeds on Amsterdam, Crozet Islands, Kerguelen Islands, and St Paul Islands (French Southern Territories) and on Prince Edward Island (South Africa). Breeding It breeds on slopes or cliffs, typically in bare, rocky areas but sometimes in tussock-grass and ferns (Brooke 2004). Foraging range Satellite-tracking of birds from Amsterdam Island has shown that breeding birds forage up to 1,500 km from the colony (Pinaud and Weimerskirch 2007). (Birdlife 2020).</p> <p>In Australian territory, Grey-headed Albatross breed on the southern and western flanks of Petrel Peak, Macquarie Island (Copson 1988). The Grey-headed Albatross has bred in this same restricted area on Macquarie Island for at least the past 30 years (Terauds et al. 2005).</p>	Highly Unlikely. This species has a high preference for oceanic and offshore island breeding and feeding behaviours area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution, suggesting that any occurrence would most likely be vagrant or from storm-related displacement, which are not present within the current survey	PMST
<i>Thalassarche impavida</i>	Campbell Albatross	VU & MI	VU	<p>The Campbell Albatross is a medium sized albatross, with a wingspan of 210–250 cm. Like the Black-browed Albatross (<i>Thalassarche melanophris</i>), adult Campbell Albatross have a white head with a distinctive black brow, bright yellow-orange bill and broad black leading edge on the underwing. The Campbell Albatross differs from the Black-browed Albatross in having a heavier black brow (more extensive in front of the eye); a honey coloured (not dark-brown) iris; slightly broader black leading edge on underwing; and a series of bold streaks running from the elbow and extending inwards to the base of the wing, creating an isolated white patch in the centre of the wing-pit (Marchant &amp; Higgins 1990). The Campbell Albatross is a marine sea bird inhabiting sub-Antarctic and subtropical waters from pelagic to shelf-break water habitats (Marchant &amp; Higgins 1990). The Campbell Albatross breed on Campbell Island (Marchant &amp; Higgins 1990). They make their nests on tussock-covered ledges and terraces of cliffs, slopes and hills, overlooking the sea or valleys, and on the summits of rocky islets (Bailey &amp; Sorenson 1962; Downes et al. 1959; Weimerskirch et al. 1986). The Campbell Albatross is a non-breeding visitor to Australian waters. After breeding, birds move north and may enter Australia's temperate shelf waters (Marchant &amp; Higgins 1990).</p>	Highly Unlikely. This species has a high preference for oceanic and offshore island breeding and feeding behaviours area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution, suggesting that any occurrence would most likely be vagrant or from storm-related displacement, which are not present within the current survey.	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Thalassarche melanophrys</i>	Black-browed Albatross	VU & MI	EN	<p>The Black-browed Albatross is 80–95 cm in length, has a mass of 3–5 kg and a wingspan of 210–250 cm (Marchant &amp; Higgins 1990). Adults of either gender are white with dark-brown irides; an orange-yellow bill; a black brow, back, upperwing and tail; broad black edges to the underwing; and bluish-grey legs and feet (Brooke 2004; Marchant &amp; Higgins 1990). Juvenile and immature birds can be distinguished from the adults by the colour and pattern of the plumage and by the darker bill which has a black tip (Brooke 2004; Marchant &amp; Higgins 1990). The Black-browed Albatross is a marine species that inhabits Antarctic, subantarctic and temperate waters and occasionally enters the tropics (Brooke 2004; Marchant &amp; Higgins 1990; Tickell 2000; Woehler et al. 1991). It can tolerate a broad range of sea-surface temperatures from 0–24° C (Ainley et al. 1984; Bierman &amp; Voous 1950; Brown et al. 1975; Grindley 1981; Reid et al. 2002), and it forages around the breaks of continental and island shelves and across nearby underwater banks (Prince et al. 1998; Reid et al. 2002; Terauds et al. 2006; Weimerskirch et al. 1988, 1997), but also frequents other marine habitats, such as oceanic waters (Reid et al. 2002; Terauds et al. 2006; Woehler et al. 1991) and the iceberg belt at the limit of the Antarctic pack ice (Falla 1937; Hicks 1973; Murphy 1936; Raymond &amp; Woehler 2003; Woehler et al. 2003).</p> <p>The Black-browed Albatross breeds on subantarctic and peri-antarctic islands (Marchant &amp; Higgins 1990) in colonies located on terraces of coastal cliffs, slopes of nearby hills, summits of rocky islets or on flat or gently-sloping ground. The Black-browed Albatross breeds within Australian jurisdiction on Heard Island (Kirkwood &amp; Mitchell 1992; Woehler 2006; Woehler et al. 2002), McDonald Islands (Gales 1998; Woehler 2006; Woehler et al. 2002), Macquarie Island (Copson 1988; Gales 1998; Scott 1994c) and Bishop and Clerk Islets (Scott 1994c; Gales 1998).</p>	Highly Unlikely. This species has a high preference for oceanic and offshore island breeding and feeding behaviours area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution, suggesting that any occurrence would most likely be vagrant or from storm-related displacement, which are not present within the current survey	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Thalassarche steadi</i>	White-capped Albatross	VU & MI	VU	The White-capped Albatross has a grey back and wings; faint or absent greyish wash on cheeks; and a white head, neck and rump. The underwing is mostly white with a narrow black margin and a small dark notch at the wing-pit. The bill is pale greyish straw colour, with a yellowish tip (Pizzey & Knight 1999). There is also a thin black eyebrow and a delicate, grey wash over the face.	<b>Highly Unlikely.</b> This species has a high preference for oceanic and offshore island breeding and feeding behaviours area, no current records exist within 20km of the survey area and the current survey area is at the very outer limit of the species' range and distribution, suggesting that any occurrence would most likely be vagrant or from storm-related displacement, which are not present within the current survey	PMST
<i>Thalasseus bergii</i>	Crested Tern	MI	MI	This species inhabits tropical and subtropical coastlines, foraging in the shallow waters of lagoons, coral reefs, estuaries, bays, harbours and inlets, along sandy, rocky, coral or muddy shores, on rocky outcrops in open sea, in mangrove swamps and also far out to sea on open water. It shows a preference for nesting on offshore islands, low-lying coral reefs, sandy or rocky coastal islets, coastal spits, lagoon mudflats, and artificial islets in saltpans and sewage works within 3 km of the coast. (Birdlife International, 2023).	<b>Unlikely.</b> While there are 77 confirmed DBCA records within the study area and just outside the study area, the nearest of these is approximately 15km to the west, and suitable habitat for this species in the form of coastal bays, rivers, estuaries and shallow lagoons is not present, nor does the survey area have connectivity to such habitats that may facilitate brief perching or fly-over activity.	DBCA
<i>Tringa brevipes</i>	Grey-tailed Tattler	MI	MI & P4	Within Australia, the Grey-tailed Tattler has a primarily northern coastal distribution and is found in most coastal regions. It is found in the south-west between Augusta and Cervantes (DAWE 2021d).	<b>Unlikely.</b> There is only one current record of the species within 20km of the current survey area and suitable habitat for the species is not present, especially with regards to coastal mudflats, bays, estuaries and mangroves.	DBCA

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Tringa nebularia</i>	Common Greenshank	EN & MI	MI	The Common Greenshank does not breed in Australia; however, the species occurs in all types of wetlands and has the widest distribution of any shorebird in Australia (DSEWPac 2013).	Unlikely. There are only four confirmed records of the species within 20km of the current survey area and suitable habitat for the species is not present, especially with regards to coastal mudflats, bays, estuaries and mangroves.	PMST DBCA
<i>Tringa stagnatilis</i>	Marsh Sandpiper	MI	MI	The Marsh Sandpiper lives in permanent or ephemeral wetlands of varying salinity, including swamps, lagoons, billabongs, salt pans, saltmarshes, estuaries, pools on inundated floodplains, and intertidal mudflats and also regularly at sewage farms and saltworks. They are recorded less often at reservoirs, waterholes, soaks, bore-drain swamps and flooded inland lakes. In north Australia they prefer intertidal mudflats (Higgins & Davies 1996), although surveys in Kakadu National Park recorded more birds around shallow freshwater lakes than in areas influenced by tide. At the Top End they often use ephemeral pools on inundated freshwater and tidal floodplains (Higgins & Davies 1996). They are found infrequently around mangroves (Higgins & Davies 1996).	Unlikely. There is only one confirmed record of the species within 20km of the current survey area and suitable habitat for the species is not present, especially with regards to coastal mudflats, bays, estuaries and mangroves.	DBCA
<i>Zanda latirostris</i>	Carnaby's Black Cockatoo	EN	EN	Carnaby's Black Cockatoo occurs in uncleared or remnant native eucalypt woodlands, especially those that contain salmon gum, wandoo, marri, jarrah and karri, and in shrubland or kwongan heathland dominated by Hakea, Dryandra, Banksia and Grevillea species. Breeding activity is restricted to eucalypt woodlands mainly in the semiarid and subhumid interior, from Kalbarri in the north, Three Springs District south to the Stirling Range, west to Cockleshell Gully and east to Manmanning. The species has expanded its breeding range westward and south into the jarrah-marri forests of the Darling Scarp and into the tuart forests of the Swan Coastal Plain, including the Yanchep area, Lake Clifton and near Bunbury. It nests in trees older than 120-150 years (DotE 2025c).	Likely. There are 14 confirmed DBCA records within the study area, with the nearest record being approximately 9km to the south-east of the survey area, and a number of potential breeding trees with hollows and small sections of suitable foraging and feeding habitat including <i>Hakea</i> species are present.	PMST NM DBCA
<b>Mammals</b>						

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Dasyurus geoffroii</i>	Chuditch, Western Quoll	VU	VU	The Chuditch inhabits eucalypt forest (especially Jarrah, <i>E. marginata</i> ), dry woodland, mallee shrublands, heaths, and desert, particularly in the south coast of WA. They also occur at lower densities in drier woodland and mallee shrubland in the goldfields and wheatbelt, as well as in Kalbarri National Park (translocated). Chuditch require adequate numbers of suitable den and refuge sites (horizontal hollow logs or earth burrows) to survive (DBCA 2017b). In Jarrah forest, Chuditch populations occur in both moist, densely vegetated, steeply sloping forest and drier, open, gently sloping forest (Van Dyck and Strahan 2008). The species can travel large distances, and for this reason requires habitats that are of a suitable size and not excessively fragmented (DBCA 2017b).	<b>Unlikely.</b> There is only one DBCA record within the study area located approximately 14km west of the survey area, and suitable habitat for breeding and foraging in the form of well vegetated, remnant, native woodlands and mallee shrublands and closed <i>Eucalyptus</i> forest is not present in the survey area.	PMST NM DBCA
<i>Hydromys chrysogaster</i>	Water Rat	-	P4	Water-rats live primarily in a wide variety of freshwater habitats, from sub-alpine streams and other inland waterways to lakes, swamps, farm dams and irrigation channels and are thought to be one of the few native species to have at least partially benefited from human encroachment (Gardner and Serena, 1995).	<b>Unlikely.</b> There is only one DBCA record within the study area, approximately 10km south of the survey area. The record was moderately certain and recorded in 2013. The survey area is considered to be outside of their current known distribution and is generally only known to occur as far north as Moora area (in the South-West).	NM DBCA
<i>Macroderma gigas</i>	Ghost Bat	VU	VU	In WA, the Ghost Bats' current range is discontinuous, with geographically disjunct colonies occurring in the Pilbara and Kimberley (including several islands). At the time of European settlement, arid zone subpopulations remained. Since then, ghost bats have contracted further northwards, with much of their arid zone distribution disappearing in the past few decades. They currently occupy habitats ranging from the arid Pilbara to tropical savanna woodlands and rainforests. During the daytime they roost in caves, rock crevices and old mines. Roost sites used permanently are generally deep natural caves or disused mines with a relatively stable temperature of 23°–28°C and a moderate to high relative humidity of 50–100 % (TSSC, 2016).	<b>Highly Unlikely.</b> There are no records of this species within 40km of the current survey area, no suitable foraging or cave-based roosting and breeding sites are present, and the current survey area is outside of the currently known range and distribution for this bat species.	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
<i>Notamacropus Ima</i>	Western Brush Wallaby	-	P4	The Western Brush Wallaby is found primarily in open forest or woodland, particularly favouring open, seasonally wet flats with low grasses and open scrubby thickets. It is also found in some areas of mallee and heathland, and is uncommon in karri forest (DEC, 2012b; Van Dyck & Strahan, 2008).	<b>Unlikely.</b> While there are three confirmed DBCA records within the study area, the nearest is approximately 20km south of the survey area and suitable habitat for the species in the form of open woodlands and forests with well-covered thicket vegetation is not present in the survey area.	DBCA
<i>Parantechinus apicalis</i>	Dibbler	EN	EN	Dibblers seem to prefer vegetation with a dense canopy greater than 1 m high which has been unburnt for at least 10 years or more (Baczocho and Start 1997). Dibblers are currently restricted to three small offshore islands (Boullanger, Whitlock and Escape Islands), Fitzgerald River National Park, and at three more reintroduction sites (Peniup Nature Reserve, Stirling Range National Park, and Waychinicup National Park). Given the record of disappearances and rediscoveries, dibblers may be present in other WA locations. Additional locations could include western coastal areas between Lancelin and Dongara and, more likely, the south coast between Denmark and Israelite Bay. Typically, captures have been on sandy substrates although occasional records are on laterite soils (TSSC, 2015)	<b>Highly Unlikely.</b> This species is now restricted to a small number of offshore islands such as Bald, Dirk Hartog, Escape and Boullanger as well as small isolated protected national parks in the South West and South Coast of Western Australia, far away from the current survey area. Furthermore, no suitable habitat is present in the survey area.	PMST
<b>Reptiles</b>						
<i>Egernia stokesii badia</i>	Western Spiny-tailed Skink	EN	VU	The Western Spiny-tailed Skink is one of the larger subspecies of <i>Egernia stokesii</i> , growing to 194 mm (snout to vent length). Its skin is coloured with heavily keeled scales. It has a short, flattish, distinctively spiny tail (Chapple 2003; Wilson & Swan 2003) which it uses as anchorage within crevices when defending itself (Chapple, 2003).  The Western Spiny-tailed Skink is known to occur in a broad semi-arid area in south-west WA, between Shark Bay and Minnivale and east to Cue, with three colour forms located across three broad regions of Central Wheatbelt, Shark Bay and Murchison respectively, with a recent increase in known sub-populations through the North-East Murchison region (Ecologia Environment, 2010).	<b>Unlikely.</b> There are no confirmed records for this species within 40km of the current survey area and no suitable woodland and rocky outcrop habitat is present within the current survey area.	PMST

Taxon	Common name	Status		Description and Habitat Requirements	Likelihood of occurrence	Source
		EPBC Act	BC Act /DBCA			
				Hollow logs are used as refuge sites in woodland habitat (Smith pers. comm. cited in Cogger et al. 1993; How et al. undated). Preferred refuges consist of piles of several, overlapping, hollow logs providing a combination of basking and shelter sites (How et al. undated). An increasing number of skinks are being located in altered habitat under piles of wood, scrap metal or under buildings on private property (Hartley 2008). Other critical habitat locations range from small, isolated stands of granite containing suitable habitat to larger, more extensive clusters of rock (Ecologia Environment, 2010)		
<i>Neelaps calonotos</i>	Black-striped Snake	-	P3	This Black-striped Snake is restricted to the sandy coastal strip near Perth, between Mandurah and Lancelin. It occurs on dunes and sandplains vegetated with heaths and eucalypt/banksia woodlands. This species is seriously threatened by increasing development within its restricted distribution (Wilson & Swan, 2013)	<b>Unlikely.</b> While there are five confirmed DBCA records within the study area, the nearest record is approximately 17.15 km southwest of the survey area, and suitable habitat in the form of coastal, sandy dunes and well-vegetated sandplains with <i>Banksia</i> and <i>Eucalyptus</i> communities is not present within the survey area.	PMST DBCA



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# **Appendix D**

**Assessment against the Ten Clearing Principles**

Table D.1 Assessment against the Ten Clearing Principles

Principle	Assessment	Outcome
A	<p>Native vegetation should not be cleared if it comprises a high level of biological diversity.</p> <p>The 3.36 ha Project area includes approximately 1.80 ha of native vegetation, comprised of three vegetation units (Figure 3, Appendix A), in Degraded or Completely Degraded condition (Figure 4, Appendix A), as described in the Detailed and Targeted vegetation and flora survey and Basic fauna survey (GHD, 2025). The remainder of the Project area, approximately 1.56 ha, consists of cleared paddocks, roads and tracks (Cleared).</p> <p>Vegetation units identified as native vegetation within the Project area include:</p> <ul style="list-style-type: none"> <li>– <i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>Casuarina obesa</i> Woodland (1.45 ha) – Degraded Condition</li> <li>– <i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>E. loxophleba</i> subsp. <i>loxophleba</i> Open Woodland (0.06 ha) – Degraded Condition.</li> <li>– Isolated Paddock Trees (0.29 ha) – Completely Degraded Condition</li> </ul> <p>A search of the <i>Dandjoo</i> database (DBCA 2025a) identified the presence/ potential presence of 922 flora species (including vascular and non-vascular flora) within 20 km of the Project area. Dominant families included Myrtaceae (125 species), Fabaceae (79 species) and Proteaceae (62 species).</p> <p>A total of 38 flora taxa were recorded within the survey area. The total comprised of 22 native flora and 17 introduced flora taxa (GHD,2025).</p> <p>A search of the <i>Dandjoo</i> database (DBCA 2025a) identified 70 terrestrial vertebrate fauna species within 20 km of the Project area. This comprised of eight species of amphibian, 31 species of bird, three species of mammal and 28 species of reptile.</p> <p>The Basic fauna survey (GHD, 2025) identified 31 species of fauna, including 23 species of bird, four species of mammal, three amphibian species and one reptile species. Of these, three mammal species are introduced (Dog (<i>Canis familiaris</i>), Red Fox (<i>Vulpes vulpes</i>) and Cat (<i>Felis catus</i>)).</p> <p>The native vegetation proposed to be cleared within the Project area comprises 1.80ha (approximately 11 %) of the total 16.71 ha covered by the field survey. It is expected that only a portion of the total biological diversity described above will occur within the proposed clearing area.</p> <p>Based on the relatively low biodiversity within the Project area compared to the study area (approximately 4 % of flora and 44 % of fauna taxa) it is considered that the proposed clearing is not likely to be at variance to this principle.</p>	<p>The proposed clearing is not likely to be at variance to this principle.</p>
B	<p>Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.</p> <p><b>Fauna habitat</b></p> <p>The Project area includes the following fauna habitat types as described in the Basic fauna survey (GHD 2025a) and are shown in Figure 5 (Appendix A):</p> <ul style="list-style-type: none"> <li>– Riverine Woodland (1.45 ha)</li> <li>– <i>Eucalyptus</i> Open Woodland (0.06 ha)</li> <li>– Isolated Paddock Trees (0.29 ha).</li> </ul> <p>The remaining 1.56 ha of the Project area comprises cleared roads, tracks and paddocks.</p> <p><b>Significant fauna</b></p> <p>The EPBC Act PMST, <i>Dandjoo</i>, and DBCA Threatened and Priority Fauna databases identified the presence/ potential presence of 48 significant fauna taxa within 20 km of the Project area.</p>	<p>The proposed clearing may be at variance to this principle.</p>

Principle	Assessment	Outcome
	<p>A total of 31 fauna taxa were recorded during the Basic fauna survey, undertaken in September 2025, including 23 birds, four mammals, three amphibians and one reptile. Of these, three species are introduced (Dog (<i>Canis familiaris</i>), Red Fox (<i>Vulpes vulpes</i>) and Cat (<i>Felis catus</i>)) (GHD 2025a).</p> <p>No threatened fauna listed under the EPBC Act or the BC Act were recorded during the field survey, with the exception of one bird species, Great Egret (<i>Ardea alba</i>), listed as Marine Migratory under the EPBC Act (GHD, 2025).</p> <p>A post survey likelihood of occurrence (LoO), based on the fauna habitat requirements, species' biology and quality of suitable habitat, identified that of the 48 species identified in the desktop assessment one species is considered likely to occur and one is considered to possibly occur within the survey area (GHD, 2025), including:</p> <ul style="list-style-type: none"> <li>– <i>Zanda latirostris</i> (Carnaby's Cockatoo), listed as EN under the BC Act and the EPBC Act – likely to occur</li> <li>– <i>Falco peregrinus</i> (Peregrine Falcon), listed as Other Specially Protected Fauna (OS) under the BC Act – possibly occurs.</li> </ul> <p>The rationale for the likelihood of occurrence of these species is discussed below:</p> <p><b>Carnaby's Cockatoo (<i>Zanda latirostris</i>)</b></p> <p>The Project area is located within the modelled distribution (and northern extent of its breeding range) of the Carnaby's Cockatoo (DAWE 2022). The closest confirmed Carnaby's Cockatoo breeding area (DBCA-054) is located more than 50 km south-east and the closest confirmed roost site for Black Cockatoos (DBCA-064) is approximately 10 km south of the Project area (GoWA 2025).</p> <p>No foraging, roosting or breeding evidence of the Carnaby's cockatoo was observed during the survey. Suitable foraging habitat for Carnaby's Cockatoo is sparse within the survey area and comprises of scattered/ isolated trees and shrubs of <i>Eucalyptus loxophleba</i> (York Gum), <i>Hakea preissii</i> and <i>Acacia saligna</i>. Based on the foraging quality scoring tool (DAWE 2022) the survey area habitats are considered to have a foraging score of 5 for the Carnaby's Cockatoo.</p> <p>River Red Gums are listed as a less important food source and low priority for roosting and breeding by Carnaby's Cockatoo however it is considered that this species may utilise all three habitat types in the Project area. There is some anecdotal evidence of this cockatoo species using River Red Gum for breeding and roosting on the northern edge of the Carnaby's Cockatoo extent. Using the precautionary principle, under the <i>Environmental Protection Act 1986</i> (EP Act), River Red Gum trees have been recorded within the survey area as potential habitat trees, noting that this species is naturalised in the region.</p> <p>A total of 56 (55 River Red Gum and one York Gum) potential habitat trees (DBH &gt;500 mm) were recorded in the Project area. Of the potential habitat trees recorded, three trees had hollows, one of which contained suitable nest hollows for Black Cockatoos.</p> <p>The woodland habitats containing York Gum and River Red Gum (1.80 ha within the Project area) provide suitable roosting habitat for Carnaby's Cockatoo. The trees are large and mature and provide connectivity to nearby food resources (however fragmented). The Irwin River is moderately saline (Xanthe Mayer, 2005), and there were no farm dams (DPIRD-083) or other freshwater sources identified within 2 km of the survey area (GoWA 2025).</p> <p><b>Peregrine Falcon (<i>Falco peregrinus</i>)</b></p> <p>No individuals were observed during the survey however Peregrine Falcon are considered likely to utilise the Riverine Woodland habitat for foraging and potential nesting in suitable hollows in large, mature trees. They may also use the Eucalyptus Open Woodland habitat type and open paddocks surrounding the Isolated Paddock Trees opportunistically for foraging. The closest known record is more than 10 km west of the survey area near Dongara.</p>	

Principle	Assessment	Outcome
	<p><b><u>Conclusion</u></b></p> <p>Prior to clearing, pre-clearance fauna searches will be undertaken within the area to be cleared and a suitably qualified fauna spotter will be on site during all native vegetation clearing activities.</p> <p>The Project area is considered to have low to moderate value for Carnaby's Cockatoo and Peregrine Falcon, there is some anecdotal evidence of this cockatoo species using River Red Gum for breeding and roosting on the northern edge of the Carnaby's Cockatoo extent (GHD 2025a). The woodland habitats containing York Gum and River Red Gum provide suitable roosting habitat for Carnaby's Cockatoo and large, mature Eucalypts may provide connectivity to nearby food resources given the Project's location in a largely cleared landscape.</p> <p>The Project area does not comprise known or active breeding or roosting habitat; however, it does contain vegetation that provides potential albeit low quality foraging resources. The presence of large areas of intact foraging habitat to the west and east of the Project area along the Irwin River, the lack of High-quality foraging habitat, and acknowledging the location of the habitat within the Project area is not preferred breeding habitat indicates that the Project area is unlikely to include habitat critical to the survival of Carnaby's Cockatoo. However, it is considered, based on presence of potential habitat trees, that the proposed clearing may be at variance to this principle.</p>	
C	<p>Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.</p> <p>The EPBC Act PMST, <i>Dandjoo</i>, and DBCA TPFL databases identified the presence/ potential presence of 84 significant flora taxa within 20 km of the proposed clearing area.</p> <p>No threatened flora listed under the EPBC Act and/or BC Act or Priority flora listed by the DBCA were recorded during the field survey (GHD, 2025).</p> <p>A post survey likelihood of occurrence (LoO) assessment for rare flora identified during the desktop determined that one taxa is likely to occur and one possibly occurs within the survey area associated with the vegetation types. These taxa include:</p> <ul style="list-style-type: none"> <li>- <i>Wurmbea tubulosa</i> listed as VU under the BC Act and EN under the EPBC Act (Likely to occur). This has previously been recorded in the survey area (recorded 2009 and 2014) in the roadside vegetation on the northern side of Midlands Road at the intersection of Milo Road. Targeted searches undertaken during the survey did not record this species.</li> <li>- <i>Conostylis dielsii</i> subsp. <i>teres</i> listed as VU under the BC Act and EN under the EPBC Act (Possibly occurs). The closest DBCA record for this species lies immediately north of the survey area (recorded 1970). Targeted searches undertaken during the survey did not record this species.</li> </ul> <p>Targeted searches were undertaken for both species during the field survey however were not recorded within the survey area. Given the degraded nature of the area, dominance of weed species within the ground layer and avoidance of clearing to the north of Midlands Road for the Project it is considered that the proposed clearing is unlikely to be at variance to this principle.</p>	The proposed clearing is not likely to be at variance to this principle
D	<p>Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for, the maintenance of a threatened ecological community.</p> <p>The proposed clearing area is not located within the mapped extent / buffer of any TECs listed under the EPBC Act and/or BC Act or PECs listed by the DBCA. Additionally, the vegetation recorded during the vegetation survey is not representative of any TECs or PECs (GHD 2025a).</p> <p>It is considered that the proposed clearing area is not likely to be at variance to this principle.</p>	The proposed clearing is not likely to be at variance to this principle

Principle	Assessment	Outcome																																
<p>E Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.</p>	<p>The Project is located in the Geraldton Sandplains Bioregion and the Geraldton Hills Subregion (GES01) as described by the Interim Biogeographic Regionalisation for Australia (IBRA) (DAWE 2012). The Geraldton Hills Subregions is characterised by areas of exposed Permian/Silurian siltstone and Jurassic sandstones overlain by sandplains, alluvial plains and coastal limestones. Sandplains support emergent <i>Banksia</i> and <i>Actinostrobus</i>, alluvial plains support York Gum woodlands and limestones support proteaceous heaths and <i>Acacia</i> scrubs (Desmond and Chant 2001).</p> <p>Broad scale (1:250,000) pre-European vegetation mapping has been completed at an association level (Beard 1979). This mapping indicates that the survey area is located within vegetation association 352 (Irwin). This vegetation association is described by DBCA (2019) as 'Medium woodland; York Gum'.</p> <p>The pre-European mapping has been adapted and digitised by Sheperd et al. (2002). The extent of vegetation associations has been determined by the statewide vegetation remaining extent calculations maintained by DBCA (2019). The Environmental Protection Authority (EPA) states that a vegetation association is at risk of decline if it has less than 30 % of the pre-European extent remaining (EPA, 2016).</p> <table border="1" data-bbox="539 608 1854 986"> <thead> <tr> <th>Vegetation association</th> <th>Scale</th> <th>Pre-European extent (ha)</th> <th>Current extent (ha)</th> <th>Remaining (%)</th> <th>% Current extent in all DBCA managed lands</th> <th>Reduction of current extent due to the proposed clearing (%)</th> </tr> </thead> <tbody> <tr> <td rowspan="4">352</td> <td>State: WA</td> <td>724,268.73</td> <td>142,012.22</td> <td>19.61</td> <td>8.92</td> <td>&lt;0.01</td> </tr> <tr> <td>IBRA region: GES</td> <td>19,711.46</td> <td>4,080.13</td> <td>20.70</td> <td>12.34</td> <td>0.05</td> </tr> <tr> <td>IBRA subregion</td> <td>14,589.42</td> <td>2,102.45</td> <td>14.41</td> <td>2.58</td> <td>0.09</td> </tr> <tr> <td>LGA: Shire of Irwin</td> <td>10,140.25</td> <td>1,536.34</td> <td>15.15</td> <td>1.26</td> <td>0.12</td> </tr> </tbody> </table> <p>Note: Orange shading indicates that less than 30%, and red indicates less than 10%, of the pre-European extent remains.</p> <p>The proposed clearing will result in 0.05 % reduction in the current extent of this vegetation association within the Geraldton Sandplains and 0.12 % reduction within the Shire of Irwin.</p> <p>The current extent of vegetation association 352 is below the 30 % threshold at all scales. The extent of the mapped vegetation is inconsistent with the national objectives and targets for biodiversity conservation in Australia.</p> <p>Based on the above assessment, the proposed clearing will result in the loss of an additional 1.80 ha of native vegetation that is significant as a remnant within an extensively cleared landscape (&lt; 30% remaining) and is therefore at variance to this principle.</p>	Vegetation association	Scale	Pre-European extent (ha)	Current extent (ha)	Remaining (%)	% Current extent in all DBCA managed lands	Reduction of current extent due to the proposed clearing (%)	352	State: WA	724,268.73	142,012.22	19.61	8.92	<0.01	IBRA region: GES	19,711.46	4,080.13	20.70	12.34	0.05	IBRA subregion	14,589.42	2,102.45	14.41	2.58	0.09	LGA: Shire of Irwin	10,140.25	1,536.34	15.15	1.26	0.12	<p>The proposed clearing is at variance to this principle</p>
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Principle	Assessment	Outcome
<p>F Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.</p>	<p>The Project area does not intercept any watercourses or wetlands categorised as per the following accessed from Data WA (GoWA 2025):</p> <ul style="list-style-type: none"> <li>– DBCA’s Directory of Important Wetlands in Australia (DBCA-045) – the closest Nationally Important Wetland is the Lake Logue – Indoon System located approximately 60 km south of the Project area.</li> <li>– Ramsar Sites (DBCA-010) – the closest Ramsar site is the Forrestdale and Thomsons Lakes, located approximately 330 km south of the Project area.</li> <li>– RIWI Act Rivers (DBCA-036) – the closest RIWI Act river is the Canning River and tributaries, located approximately 320 km south of the Project area.</li> </ul> <p>The Project intercepts the Irwin River. Headwaters of the Irwin River are located approximately 100 km north-east of the Project area and flow for approximately 140 km, ultimately discharging into the Indian Ocean approximately 17 km south-west of the Project area (south of Dongara) (DWER 2025).</p> <p>One vegetation type, <i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>Casuarina obesa</i> Woodland, was identified within the Project area along the banks of the Irwin River and is considered to be representative of riparian vegetation.</p> <p>A site-specific CEMP will be developed and implemented by the Shire appointed construction contractor. Mitigation measures will be implemented during construction works to limit the extent of clearing and minimise impacts to riparian vegetation where possible. However, it is considered that the proposed clearing of up to 1.45 ha of riparian vegetation is at variance to this principle.</p>	<p>The proposed clearing is at variance to this principle.</p>
<p>G Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.</p>	<p>The part of the Project area associated with the Irwin River is mapped as having a High Probability of Occurrence of Acid Sulfate Soils (ASS) and the remainder of the Project area is mapped as Low to Extremely Probability of Occurrence of ASS (CSIRO 2025).</p> <p>DWER groundwater salinity mapping indicates the proposed clearing area is located in an area with a total dissolved solids (TDS) concentration of 500-1000 which indicates fresh groundwater.</p> <p>DPIRD soil salinity risk mapping (DPIRD-009) indicates that the soil salinity risk within the proposed clearing area is mapped as Level 1 “&lt;3% of map unit has a moderate to high salinity risk or is presently saline”.</p> <p>The Project area intersects an area mapped as having a high risk of water erosion (associated with Irwin River) (DPIRD 2017).</p> <p>Due to the high risk of water erosion within the Project area, the proposed construction works will be scheduled outside of the wet winter period when the Irwin River is at its lowest and surface water flows will be maintained throughout the construction period.</p> <p>A site-specific CEMP will be developed and implemented by the Shire appointed construction contractor. Standard construction measures will be implemented during construction works including dust management through wetting of tracks, sediment fencing, erosion control, and spill kits to minimise impacts to surface water and groundwater quality.</p> <p>In addition, if ASS are identified during geotechnical investigations, an ASS and Dewatering Management Plan shall be developed and implemented during the construction works. It is considered that if mitigation measures are implemented during construction works the proposed clearing is not likely to be at variance to this principle.</p>	<p>The proposed clearing is not likely to be at variance to this principle</p>

Principle	Assessment	Outcome
<p>H Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.</p>	<p>The Project area does not intercept any DBCA-legislated lands or conservation areas (DBCA 2025b). Three DBCA-legislated Nature Reserves are located within 20 km of the proposed clearing area including:</p> <ul style="list-style-type: none"> <li>– Dongara Nature Reserve (R23600) located approximately 15.9 km west of the proposed clearing area.</li> <li>– Beekeepers Nature Reserve (R24496) located approximately 15.2 km south-west of the proposed clearing area.</li> <li>– Yardanogo Nature Reserve (R36203) located approximately 13.0 km south of the proposed clearing area.</li> </ul> <p>One environmentally sensitive area (ESA) is located directly to the north of the Project area on the northern side of Midlands Road (DWER 2020). This ESA is associated with a previous record of <i>Wurmbia tubulosa</i> () that was not observed during the vegetation survey. There are another 11 ESAs are located within 20 km of the Project area.</p> <p>Due to the distance to conservation areas from the Project area, it is considered that the proposed clearing is not likely to be at variance to this principle.</p>	<p>The proposed clearing is not likely to be at variance to this principle.</p>
<p>I Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.</p>	<p>The Project area lies within the Arrowsmith groundwater area proclaimed under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act) (DWER, 2018c).</p> <p>The Project area does not intersect any RIWI Act proclaimed rivers (DWER 2018c), surface water or irrigation areas (DWER 2018b), Public Drinking Water Source Areas (PDWSAs) (DWER 2018a) or waterways management areas (DWER 2018d).</p> <p>The Irwin River flows through the Project area. The proposed construction works will be scheduled outside of the wet winter period when the Irwin River is at its lowest to avoid dewatering where practicable.</p> <p>A site-specific CEMP will be developed and implemented by the Shire appointed construction contractor. Standard construction measures will be implemented during construction works including sediment fencing, erosion control, and spill kits to minimise impacts to surface water and groundwater quality. It is considered that if mitigation measures are implemented during construction works the proposed clearing is not likely to be at variance to this principle.</p>	<p>The proposed clearing is not likely to be at variance to this principle.</p>
<p>J Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.</p>	<p>DPIRD Flood Risk Mapping (DPIRD-007) indicates that the Project area, associated with the Irwin River (<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>Casuarina obesa</i> Woodland), is mapped as having a “&gt;70% of map unit has a moderate to high flood risk” and the remainder of the Project area is mapped as having a “10-30% of map unit has a moderate to high flood risk”.</p> <p>A site-specific CEMP will be developed and implemented by the Shire appointed construction contractor. The proposed construction works will be scheduled outside of the wet winter period when the Irwin River is at its lowest and surface water flows will be maintained during construction and operation of the upgraded crossing infrastructure. It is therefore considered, as drainage lines will be maintained, that the proposed clearing is not expected to be likely to cause or exacerbate the incidence or intensity of flooding. It is considered that the proposed clearing is not likely to be at variance to this principle.</p>	<p>The proposed clearing is not likely to be at variance to this principle.</p>

# **Appendix E**

**EPBC Act Significance Self Assessment**

# Report

30 March 2026

<b>To</b>		<b>Contact No.</b>	
<b>Copy to</b>		<b>Email</b>	
<b>From</b>		<b>Project No.</b>	
<b>Project Name</b>	Shire of Irwin – Milo Road Crossing Upgrade		
<b>Subject</b>	<i>Environment Protection, Biodiversity and Conservation Act 1999 Significance Self-Assessment</i>		

## 1. Introduction

The Shire of Irwin (the Shire) is planning to realign Milo Road and upgrade the floodway structure, referred to as Milo Crossing, which crosses the Irwin River, located approximately 15 km north-east of the Dongara townsite (the Project). During medium to heavy rain events the Milo Road Irwin River crossing is often inundated with water causing the crossing to be closed periodically. In very large events water flows over both the concrete bridge culvert and concrete floodway. Additionally, the road often remains closed for a significant period post medium and heavy rainfall events due to debris and silt being deposited on the road as the river slows and water levels fall. Closing this crossing results in road users requiring to detour approximately 19 km east along the Midlands Road to access the end terminus of Milo Road.

The Shire proposes to re-align Milo Road and construct the new floodway infrastructure to accommodate up to category 7 Restricted Access Vehicles.

### 1.1 Purpose of this report

GHD Pty Ltd (GHD) was engaged by the Shire to prepare a Native Vegetation Clearing Permit (NVCP) application for proposed clearing for the construction of the Project. An *Environment Protection, Biodiversity and Conservation Act 1999* (EPBC Act) Significance Assessment (this report) has been undertaken against the *Significant Impact Guidelines 1.1* (DoE, 2013) to provide supporting information for the NVCP application with regard to potential impacts to Matters of National Environmental Significance (MNES) listed under the EPBC Act as a result of construction of the Project.

### 1.2 Potential impacts to Matters of National Environmental Significance

A search of the Department of Climate Change, Energy, the Environment and Water (DCCEEW) Protected Matters Search Tool (PMST), included in Attachment 1, indicates that there is the potential presence of 26 flora and fauna species listed under the Commonwealth EPBC Act within the study area (20 km buffer of the survey area), excluding exclusively marine species and ecological communities.

A Biological Assessment, including a Detailed and Targeted vegetation and flora survey, Basic fauna survey and Black Cockatoo habitat assessment was undertaken by GHD ecologists in September 2025.

No threatened flora taxa listed under the EPBC Act or the State *Biodiversity Conservation Act 2016* (BC Act) were recorded during the field survey. However a post survey likelihood of occurrence (LoO) assessment identified that one significant flora taxa, Long-flowered Nancy (*Wurmbea tubulosa*) listed as Endangered (EN) under the EPBC Act and Vulnerable (VU) under the BC Act, is considered Likely to occur and Irwin's Conostylis (*Conostylis dielsii*

subsp. *teres*) EN under the EPBC Act and VU under the BC Act is considered Possible to occur within the survey area (GHD, 2025).

No threatened fauna listed under the EPBC Act or the BC Act were recorded during the field survey, with the exception of one bird species, Great Egret (*Ardea alba*), listed as Marine Migratory under the EPBC Act (GHD, 2025). A post survey LoO identified that Carnaby's Cockatoo (*Zanda latirostris*), listed as EN under the EPBC Act and BC Act, is considered Likely to occur (GHD, 2025).

Although no primary or secondary evidence of Carnaby's Cockatoo were recorded during the field survey, habitat identified within the Project area is considered to be suitable for Carnaby's Cockatoo based on presence of Potential Nesting Trees<sup>1</sup>, Suitable Nesting Trees<sup>2</sup> and potential foraging habitat (GHD, 2025).

As clearing of native vegetation due to the construction of Project may impact MNES listed under the EPBC Act, an EPBC Act self-assessment has been undertaken in Section 3.

## 2. Limitations

*This report: has been prepared by GHD for Shire of Irwin and may only be used and relied on by Shire of Irwin for the purpose agreed between GHD and Shire of Irwin as set out in section 1.1 of this report.*

*GHD otherwise disclaims responsibility to any person other than Shire of Irwin arising in connection with this report. GHD also excludes implied warranties and conditions, to the extent legally permissible.*

*The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.*

*The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.*

*The opinions, conclusions and any recommendations in this report are based on assumptions made by GHD described in this report. GHD disclaims liability arising from any of the assumptions being incorrect.*

*If this report is required to be accessible in any other format, this can be provided by GHD upon request and at an additional cost if necessary.*

*GHD has prepared this report on the basis of information provided by Shire of Irwin and others who provided information to GHD (including Government authorities)], which GHD has not independently verified or checked beyond the agreed scope of work. GHD does not accept liability in connection with such unverified information, including errors and omissions in the report which were caused by errors or omissions in that information.*

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<sup>1</sup> Potential nesting trees: Trees that have a suitable DBH to develop a nest hollow, but do not currently have hollows.

<sup>2</sup> Suitable nesting trees: Trees with suitable nesting hollows present, although no evidence of use.

### 3. Self-assessment against the EPBC Act Significant Impact Guidelines 1.1

A self-assessment under the EPBC Act helps project proponents understand their responsibilities and determine whether their project might impact MNES. This process involves identifying protected matters and assessing the likely impacts of the proposed action against the *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* based on the conservation status of a given species or ecological community i.e. Critically Endangered, Endangered or Vulnerable (DoE, 2013).

This assessment has been undertaken based on the Endangered status of each of Long-flowered Nancy (*Wurmbea tubulosa*), Irwin's Conostylis (*Conostylis dielsii* subsp. *teres*) and Carnaby's Cockatoo (*Zanda latirostris*).

The significant impact criteria for an Endangered species if there is a real chance or possibility that it will:

- Lead to a long-term decrease in the size of a population
- Reduce the area of occupancy of the species
- Fragment an existing population into two or more populations
- Adversely affect habitat critical to the survival of a species
- Disrupt the breeding cycle of a population
- Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline
- Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species' habitat
- Introduce disease that may cause the species to decline, or
- Interfere with the recovery of the species.

The criteria in the *Significant Impact Guidelines 1.1 – Matters of National Environmental Significance* refer to 'populations' and 'important populations'. The 'population of a species' is defined under the EPBC Act as an occurrence of the species in a particular area (DoE, 2013). An 'important population' is defined as population that is necessary for the species' long-term survival and recovery (DoE, 2013).

'Populations' and 'important populations' have not been defined for Black Cockatoos, due to the mobile and widely-distributed nature of these species, and the variation in flock compositions (for example, between breeding and non-breeding seasons). For Black Cockatoos, it is more appropriate to consider significance in terms of impacts on habitat rather than a resident population (DAWE, 2022).

#### 3.1 Long-flowered Nancy (*Wurmbea tubulosa*)

Long-flowered Nancy (*Wurmbea tubulosa*) is listed as Endangered under the EPBC Act and Vulnerable under the BC Act.

Targeted searches undertaken during the field survey did not record this species, however it is considered Likely to occur due to two previous DBCA records (recorded 2009 and 2014) immediately to the north of the Project area at the intersection of Milo Road and Midlands Road (GHD, 2025).

These records occur within the vegetation type, *Eucalyptus camaldulensis* subsp. *arida* and *Eucalyptus loxophleba* subsp. *loxophleba* Open Woodland, within the survey area. Approximately 0.06 ha of this vegetation type is located within the Project area to the south of Midlands Road and is in Degraded condition (GHD, 2025).

Given the degraded nature of the area, dominance of weed species within the ground layer and avoidance of clearing to the north of Midlands Road for the Project it is considered that the proposed clearing is unlikely to be significant.

Table 1 outlines the assessment of potential impact of clearing of native vegetation for construction of the Project against the *Significant Impact Guidelines 1.1* (DoE, 2013) for Long-flowered Nancy.

Table 1 Assessment against Significant Impact Guidelines 1.1 for *Wurmbea tubulosa* (Long-flowered Nancy)

Criteria	Assessment	Significance
Lead to a long-term decrease in the size of a population	The targeted survey in August (optimal time for this species) did not record any plants within the survey area. The Project area has been selected to avoid previous locations of <i>Wurmbea tubulosa</i> to the north of the intersection of Midlands Road and Milo Road.	Unlikely to be significant
Reduce the area of occupancy of the species		Unlikely to be significant
Fragment an existing population into two or more populations	DBCAs records of <i>Wurmbea tubulosa</i> have previously been recorded on the northern side of Midlands Road. It is considered given that the Project area is located to the south of these records, no individuals were located within the survey, and the Degraded condition of vegetation to the south of Midlands Road, that impact of proposed clearing is unlikely to be significant.	Unlikely to be significant
Adversely affect habitat critical to the survival of a species	<p>Critical habitat for the survival of <i>Wurmbea tubulosa</i> includes (DEC, 2005a):</p> <ul style="list-style-type: none"> <li>– The area of occupancy of important populations</li> <li>– Similar habitat within 200 m of those populations</li> <li>– Remnant vegetation that links the populations</li> <li>– Similar vegetation on nearby lands on conservation estate that may have contained the species in the past.</li> </ul> <p>Clearing for the Project will result in the loss of up to 0.06 ha of (<i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> Open Woodland) within 200 m of known populations. The clearing area of this vegetation type in the Project area has been altered through ongoing roadside vegetation maintenance and is in Degraded condition and this altered habitat is unlikely to meet the (DEC, 2005a) definition for critical habitat of <i>Wurmbea tubulosa</i>.</p>	Unlikely to be significant
Disrupt the breeding cycle of a population	The species flowers June to August and is dependent on rainfall. No individuals were recorded during the targeted survey, the proposed clearing for construction of the Project is not expected to disrupt the breeding cycle of this species.	Unlikely to be significant
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	Previous DBCA records of <i>Wurmbea tubulosa</i> are located within vegetation type <i>Eucalyptus camaldulensis</i> subsp. <i>arida</i> and <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> Open Woodland, which may be suitable habitat for this species. No individuals were recorded during the targeted survey (GHD, 2025). The proposed clearing will result in the loss of up to 0.06 ha of this vegetation type mapped on the southern side of Midlands Road. Given the Degraded condition of this vegetation and lack of individuals recorded during the Targeted flora survey it not expected that the loss of the 0.06 ha of this vegetation type would result in a decline in the species.	Unlikely to be significant
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species habitat	<p>The Project area has existing weed infestation associated with rural and existing land uses. Clearing for construction of the Project is not expected to result in the introduction or spread of weeds that will result in significant impacts to <i>Wurmbea tubulosa</i> habitat, as the construction contractor will implement a site-specific Construction Environmental Management Plan (CEMP) including hygiene management measures to mitigate and reduced the spread of the weeds/ disease within the Project area.</p> <p>The Project is not expected to introduce any predator species (e.g., foxes, feral cats or rabbits). Feral cats and foxes may be vagrant visitors to the area; however the Project will not create a destination or facilitate access for predator species into surrounding areas of native vegetation.</p>	Unlikely to be significant

Criteria	Assessment	Significance
Introduce disease that may cause the species to decline	The Project is not expected to introduce or spread disease that could cause <i>Wurmbea tubulosa</i> to decline, and the recovery plan does not identify dieback as a threat to the species. The construction contractor will implement a site-specific CEMP including hygiene management measures to mitigate and reduced the spread of the weeds/ disease within the Project area.	Unlikely to be significant
Interfere with the recovery of the species	The objective of the <i>Wurmbea tubulosa</i> Recovery Plan (DEC, 2005a) is to abate identified threats and maintain or enhance in situ populations to ensure the long-term preservation of the species in the wild. Construction of the Project is considered unlikely to interfere with the recovery plan.	Unlikely to be significant
Conclusion	Based on the above assessment against the <i>Significant Impact Guidelines 1.1</i> (DoE, 2013), clearing for construction of the Project is considered unlikely to result in a significant impact to <i>Wurmbea tubulosa</i> .	

### 3.2 Irwin's Conostylis (*Conostylis dielsii* subsp. *teres*)

Irwin's Conostylis (*Conostylis dielsii* subsp. *teres*) is listed as Endangered under the EPBC Act and Vulnerable under the BC Act.

This species was not recorded during targeted searches undertaken during the field survey, however it is considered Possible to occur due to one previous DBCA record (recorded 1970) located 210 m to the north of the Project area (GHD, 2025).

Table 1 outlines the assessment of potential impact of clearing of native vegetation for construction of the Project against the *Significant Impact Guidelines 1.1* (DoE, 2013) for Irwin's Conostylis.

Table 2 Assessment against Significant Impact Guidelines 1.1 for Irwin's Conostylis (*Conostylis dielsii* subsp. *teres*)

Criteria	Assessment	Significance
Lead to a long-term decrease in the size of a population	<i>Conostylis dielsii</i> subsp. <i>teres</i> is listed as Endangered under the EPBC Act due to its restricted range, small number of locations, and ongoing threats. Only one record exists near the Project area (recorded 1970, 210 m north), with none found in the survey. The Project is unlikely to directly impact a known population, however undetected individuals cannot be entirely ruled out.	Unlikely to be significant
Reduce the area of occupancy of the species	The Project does not overlap with any known extant populations. The only record is historical and outside the Project area and it is considered that the area of occupancy is unlikely to be reduced as a result of the proposed clearing.	Unlikely to be significant
Fragment an existing population into two or more populations	No extant population is known within or immediately adjacent to the Project. The Project is not expected to fragment an existing population.	Unlikely to be significant
Adversely affect habitat critical to the survival of a species	The critical habitat for <i>Conostylis dielsii</i> subsp. <i>teres</i> comprises (DEC, 2005b): <ul style="list-style-type: none"> <li>– The area of occupancy of important populations</li> <li>– Areas of similar habitat within 200 m of important populations</li> <li>– Areas of remnant vegetation that link important populations</li> <li>– Additional occurrences of similar habitat on conservation estate near important populations that do not currently contain the species but may have done so in the past</li> </ul> The Project area is not known to contain critical habitat for the species, given the absence of recent records, the historical record being 210 m north of the Project area and remnant vegetation not linking important populations.	Unlikely to be significant

Criteria	Assessment	Significance
Disrupt the breeding cycle of a population	No individuals were recorded in the current survey, and the nearest DBCA record is from 1970. Proposed clearing for construction of the Project is not expected to disrupt the breeding cycle.	Unlikely to be significant
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	The Project area does not contain any known populations or critical habitat. Indirect impacts to potentially suitable habitat (e.g., weed invasion, altered fire regimes) will be managed during construction works via implementation of a CEMP.	Unlikely to be significant
Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species habitat	The Project area has existing weed infestation associated with rural and existing land uses. Clearing for construction of the Project is not expected to result in the introduction or spread of weeds that will result in significant impacts to <i>Conostylis dielsii</i> subsp. <i>teres</i> habitat, as the construction contractor will implement a site-specific CEMP including hygiene management measures to mitigate and reduced the spread of the weeds/ disease within the Project area.  The Project is not expected to introduce any predator species (e.g., foxes, feral cats or rabbits). Feral cats and foxes may be vagrant visitors to the area, however the Project will not create a destination or facilitate access for predator species into surrounding areas of native vegetation.	Unlikely to be significant
Introduce disease that may cause the species to decline	The Project is not expected to introduce or spread disease that could cause <i>Conostylis dielsii</i> subsp. <i>teres</i> to decline, and the recovery plan does not identify dieback as a threat to the species.  The construction contractor will implement a site-specific CEMP including hygiene management measures to mitigate and reduced the spread of the weeds/ disease within the Project area.	Unlikely to be significant
Interfere with the recovery of the species	The objective of the <i>Conostylis dielsii</i> subsp. <i>teres</i> Recovery Plan (DEC, 2005b) is to maintain or enhance viable in situ populations to ensure the long-term preservation of the subspecies in the wild. The Conservation Advice (TSSC, 2016) recommends local-scale actions (weed and feral animal control, habitat protection). The Project is not expected to interfere with recovery, provided best practice management is implemented.	Unlikely to be significant
Conclusion	Based on the above assessment against the <i>Significant Impact Guidelines 1.1</i> (DoE, 2013), clearing for construction of the Project is considered unlikely to result in a significant impact to <i>Conostylis dielsii</i> subsp. <i>teres</i> .	

### 3.3 Carnaby's Cockatoo (*Zanda latirostris*)

Carnaby's Cockatoo (*Zanda latirostris*) is listed as Endangered under the EPBC Act and Vulnerable under the BC Act.

The Project area is located within the modelled distribution (and northern extent of its breeding range) of the Carnaby's Cockatoo (DAWE, 2022). The closest confirmed Carnaby's Cockatoo breeding area (DBCA-054) is located more than 50 km south-east and the closest confirmed roost site for Black Cockatoos (DBCA-064) is approximately 10 km south of the Project area (GoWA, 2025).

No foraging, roosting or breeding evidence of the Carnaby's cockatoo was observed during the survey. Suitable foraging habitat for Carnaby's Cockatoo is sparse within the survey area and comprises of scattered/ isolated trees and shrubs of *Eucalyptus loxophleba* (York Gum), *Hakea preissii* and *Acacia saligna*. Based on the foraging quality scoring tool (DAWE 2022), 1.80 ha of habitat identified within the Project area is considered to have a foraging score of 5 for Carnaby's Cockatoo.

River Red Gums are listed as a less important food source and low priority for roosting and breeding by Carnaby's Cockatoo however it is considered that this species may utilise all three habitat types in the Project area. There is

some anecdotal evidence of this cockatoo species using River Red Gum for breeding and roosting on the northern edge of the Carnaby's Cockatoo extent. Using the precautionary principle, under the *Environmental Protection Act 1986* (EP Act), River Red Gum trees have been recorded within the Project area as potential habitat trees, noting that this species is naturalised in the region.

A total of 56 (55 River Red Gum and one York Gum) potential habitat trees (DBH >500 mm) were recorded in the Project area. Of the potential habitat trees recorded, three trees had hollows, one of which contained suitable nest hollows (with no evidence of use) for black cockatoos.

The woodland habitats containing York Gum and River Red Gum provide suitable roosting habitat for Carnaby's Cockatoo. The trees are large and mature and provide connectivity to nearby food resources (however fragmented). The Irwin River is moderately saline (Xanthe Mayer, 2005), and there were no farm dams (DPIRD-083) or other freshwater sources identified within 2 km of the survey area (GoWA, 2025).

Table 3 outlines the assessment of potential impact of clearing of native vegetation for construction of the Project against the *Significant Impact Guidelines 1.1* (DoE, 2013) for Carnaby's Cockatoo.

**Table 3** Assessment against Significant Impact Guidelines 1.1 for Black Cockatoos

Criteria	Assessment	Significance
Lead to a long-term decrease in the size of a population	The Project is not expected to lead to a long-term decrease in the size of a Black Cockatoo population as there was no evidence of Carnaby's Cockatoo was recorded within the Project area and the closest confirmed Carnaby's Cockatoo breeding area (DBCA-054) is located more than 50 km south-east. Carnaby's Cockatoo are highly mobile species and are expected to forage outside of the Project area given the low quality foraging habitat present and is considered unlikely to be dependent on a particular patch of foraging habitat within the Project area.	Unlikely to be significant
Reduce the area of occupancy of the species	Black Cockatoos are highly mobile species and are expected to forage outside the Project area. On this basis the Project is unlikely to significantly reduce the area of occupancy of this species, which are expected to utilise the areas along the Irwin River.	Unlikely to be significant
Fragment an existing population into two or more populations	Black Cockatoos are highly mobile, and for this species fragmentation is considered when gaps between habitat patches exceed 4 km. The Project is linear infrastructure approximately 40 m wide and will not fragment Black Cockatoo populations.	Unlikely to be significant
Adversely affect habitat critical to the survival of a species	Habitat critical to the survival of Carnaby's Cockatoo is summarised by DPaW (2013) as: <ul style="list-style-type: none"> <li>– The Eucalypt woodlands that provide nest hollows used for breeding, together with nearby vegetation that provides feeding, roosting and watering habitat that supports successful breeding</li> <li>– Woodland sites known to have supported breeding in the past and which could be used in the future, provided adequate nearby food and/or water resources are available or are re-established</li> <li>– In the non-breeding season, the vegetation that provides food resources as well as the sites for nearby watering and night roosting that enable the cockatoos to effectively utilise the available food resources.</li> </ul> The Project will result in the direct impact to the following: <ul style="list-style-type: none"> <li>– Breeding: <ul style="list-style-type: none"> <li>• The Project will not result in the clearing of any Known Nesting Trees</li> <li>• There are 56 Potential Nesting Trees (&gt;500 mm DBH), three with hollows, of which one tree has a suitable nest hollow (no evidence of use).</li> </ul> </li> </ul>	Unlikely to be significant

Criteria	Assessment	Significance
	<ul style="list-style-type: none"> <li>• The nearest confirmed Carnaby's Cockatoo breeding area (DBCA, 2018) is over 50 km to the southeast of the Project area.</li> </ul> <p>– Roosting:</p> <ul style="list-style-type: none"> <li>• No night roosting sites were observed during the survey (GHD, 2025).</li> <li>• The Irwin River intersects the Project area, however this river is saline (DoE, 2005) and sparse freshwater resources occur within 2 km. This likely makes the site unsuitable as a roosting habitat.</li> </ul> <p>– Foraging:</p> <ul style="list-style-type: none"> <li>• Foraging habitat within the indicative clearing footprint represents approximately 0.03% of the available foraging resources within a 12 km radius of the Project (estimated at 6,783 ha) – the 12 km radius represents the distance Black Cockatoos will generally forage while breeding)</li> </ul> <p>While the Project does not comprise known or active breeding or roosting habitat; it does contain vegetation that provides potential albeit low-quality foraging resources. However, the presence of large areas of intact foraging habitat to the west and east of the Project area along the Irwin River, the lack of High-quality foraging habitat, and acknowledging the location of the habitat within the Project area is not preferred breeding habitat, it is considered unlikely to be habitat critical to the survival of Carnaby's Cockatoo.</p>	
Disrupt the breeding cycle of a population	<p>The Project is not expected to disrupt the breeding cycle of a population of Black Cockatoos as no known breeding of Black Cockatoos occurs within the clearing footprint.</p> <ul style="list-style-type: none"> <li>– The Project will not result in the clearing of any Known Nesting Trees</li> <li>– There are 56 Potential Nesting Trees (&gt;500 mm DBH), three with hollows, of which one tree has a suitable nest hollow (no evidence of use).</li> <li>– The nearest confirmed Carnaby's Cockatoo breeding area (DBCA, 2018) is over 50 km to the southeast of the Project area.</li> </ul>	Unlikely to be significant
Modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline	<p>The Project is not expected to impact the availability or quality of habitat to the extent that Black Cockatoos are likely to decline, as:</p> <ul style="list-style-type: none"> <li>– The Project will not result in the clearing of known roosting or breeding habitat nor does the Project lie adjacent to known breeding habitat.</li> <li>– The Project area has existing weed disturbance throughout due to previous disturbances such as agriculture and roads (GHD, 2025). A CEMP will be implemented during construction work to mitigate and reduced the spread of the weeds/ disease within the Project area.</li> <li>– The Project will incorporate construction management to protect the integrity of Black Cockatoo habitat adjacent to the Project area. This includes erosion control, stormwater runoff and contaminant control measures.</li> <li>– The clearing of potential foraging habitat required for the Project is not considered significant, as the proposed clearing of native vegetation is estimated to represent approximately 0.03 % of approximately 6,783 ha of potential foraging habitat located within 12 km.</li> </ul>	Unlikely to be significant

Criteria	Assessment	Significance
<p>Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species habitat</p>	<p>The Project is not expected to introduce or spread invasive species into Black Cockatoo habitat.</p> <p>DPaW (2013), DEWHA (2009) and TSSC (2018) identify the potential threats to the survival of Black Cockatoo species as nest competition from feral bees (such as <i>Apis mellifera</i> [European honeybee]) and other native invasive species. Continued loss of Black Cockatoo nesting hollows in general will increase the competition for remaining hollows by a variety of invasive species. Black Cockatoos are generally less resilient to these pressures and can be displaced by other native and invasive species. The Project does not involve any actions which could potentially introduce the European honeybee into the Project area or surrounds.</p> <p>The Project area has existing weed infestation associated with rural and existing land uses. The Project is not expected to result in the introduction or spread of weeds that will result in significant impacts to Black Cockatoo habitat, as the Project will implement management measures to mitigate and reduced the spread of the weeds within the Project area.</p> <p>The Project is not expected to introduce any predator species (e.g., foxes, feral cats or rabbits). Feral cats and foxes may be vagrant visitors to the area, however the Project will not create a destination or facilitate access for predator species into surrounding areas of native vegetation.</p>	<p>Unlikely to be significant</p>
<p>Introduce disease that may cause the species to decline</p>	<p>The Project is not expected to introduce or spread disease that could cause Black Cockatoo populations to decline.</p> <p>The disease status of Black Cockatoos in the wild remains unknown, although infectious diseases such as beak and feather disease, avian polyomavirus and chlamyphilosis may pose a threat, as they are significant in other captive and free-living psittacine species. The Project does not involve any actions which could potentially introduce infectious diseases within Black Cockatoo populations which could cause the species to decline.</p> <p>A site-specific CEMP will be implemented during the construction work to mitigated impacts of weeds/ disease within the Project area.</p> <p>The Project is not expected to spread Dieback through sediment in stormwater runoff, as stormwater runoff is managed as per the mitigation measures and will not discharge into Black Cockatoo habitat adjacent to the Project.</p>	<p>Unlikely to be significant</p>
<p>Interfere with the recovery of the species</p>	<p>The Project is unlikely to significantly interfere with the recovery of the Black Cockatoos.</p> <p>Carnaby's Cockatoo recovery, as defined by the Recovery Plan (DPaW, 2013), is dependent upon stopping the further decline in the distribution and abundance of Carnaby's Cockatoo by protecting the species throughout their life stages and enhancing habitat critical for survival throughout their breeding and non-breeding range.</p> <p>The Project is consistent with the Black Cockatoo recovery, as it does not involve clearing of known breeding or roosting habitat. The Project will result in clearing 1.80 ha of low quality Carnaby's Cockatoo foraging habitat and potential breeding habitat, however, this loss is unlikely to interfere with the recovery of the species in the local area.</p>	<p>Unlikely to be significant</p>
<p>Conclusion</p>	<p>Based on the above assessment against the <i>Significant Impact Guidelines 1.1</i> (DoE, 2013), proposed clearing of native vegetation for construction of the Project is considered unlikely to result in a significant impact to Carnaby's Cockatoo.</p>	

## 4. Conclusion

Based on the self-assessment against the EPBC Act Significant Impact Guidelines 1.1, the proposed Milo Road Crossing Upgrade is considered unlikely to result in a significant impact on MNES. Targeted surveys and LoO assessments indicate that:

- Long-flowered Nancy (*Wurmbea tubulosa*) and Irwin's Conostylis (*Conostylis dielsii* subsp. *teres*) were not recorded within the Project area, and the limited extent of Degraded vegetation proposed for clearing does not meet the definition of critical habitat for these species.
- Carnaby's Cockatoo (*Zanda latirostris*) was not observed during surveys, and while potential habitat trees and low-quality foraging habitat occur within the Project area, the clearing footprint represents a negligible proportion of available habitat in the local landscape and does not include known breeding or roosting sites.

The implementation of a site-specific Construction Environmental Management Plan (CEMP), including hygiene and weed management measures, will further reduce potential indirect impacts. On this basis, the Project is considered unlikely to be a significant impact under the EPBC Act. However, the decision to refer the Project remains at the discretion of the proponent.

## 5. References

- DAWE. (2022). *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)*. Canberra: Commonwealth of Australia.
- DBCA. (2018). *Carnaby's Cockatoo Confirmed Roost Sites Buffered 6km (DBCA-052)*. Spatial data set provided by the Department of Biodiversity, Conservation and Attractions.
- DEC. (2005a). *Long-flowered nancy (Wurmbea tubulosa) Interim Recovery Plan 2004-2009*. Department of Environment and Conservation.
- DEC. (2005b). *Irwin's Conostylis (Conostylis dielsii subsp. teres) Interim Recovery Plan 2005–2009*. Department of Environment and Conservation.
- DEWHA. (2009). *Approved Conservation Advice for Calyptorhynchus banksii naso (Forest Red-tailed Black Cockatoo)*. Department of the Environment, Water, Heritage and the Arts.
- DoE. (2005). *Stream salinity status and trends in south-west Western Australia*. Department of Environment. Government of Western Australia.
- DoE. (2013). *Matters of National Environmental Significance, Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999*. Canberra: Department of Environment.
- DPaW. (2013). *Carnaby's Cockatoo (Calyptorhynchus latirostris) Recovery Plan*. Perth: Department of Parks and Wildlife.
- GHD. (2025). *Milo Crossing Biological Assessment*. Unpublished report prepared by GHD Pty Ltd for the Shire of Irwin.
- GoWA. (2025). *DataWA*. Perth: Government of Western Australian. Retrieved from <https://data.wa.gov.au/>
- TSSC. (2016). *Conostylis dielsii subsp. teres (Irwin's conostylis) Conservation Advice*. Threatened Species Scientific Committee. Australian Government.
- TSSC. (2018). *Conservation Advice Calyptorhynchus baudinii Baudin's cockatoo*. Canberra: Threatened Species Scientific Committee, Department of the Environment and Energy.

# **Attachment 1**

**Protected Matters Search Tool results**



Australian Government

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: 06-Aug-2025

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

# Summary

## Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may 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 a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

<a href="#">World Heritage Properties:</a>	None
<a href="#">National Heritage Places:</a>	None
<a href="#">Wetlands of International Importance (Ramsar)</a>	None
<a href="#">Great Barrier Reef Marine Park:</a>	None
<a href="#">Commonwealth Marine Area:</a>	None
<a href="#">Listed Threatened Ecological Communities:</a>	1
<a href="#">Listed Threatened Species:</a>	59
<a href="#">Listed Migratory Species:</a>	44

## 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.

<a href="#">Commonwealth Lands:</a>	1
<a href="#">Commonwealth Heritage Places:</a>	None
<a href="#">Listed Marine Species:</a>	67
<a href="#">Whales and Other Cetaceans:</a>	11
<a href="#">Critical Habitats:</a>	None
<a href="#">Commonwealth Reserves Terrestrial:</a>	None
<a href="#">Australian Marine Parks:</a>	None
<a href="#">Habitat Critical to the Survival of Marine Turtles:</a>	None

## Extra Information

This part of the report provides information that may also be relevant to the area you have

<a href="#">State and Territory Reserves:</a>	3
<a href="#">Regional Forest Agreements:</a>	None
<a href="#">Nationally Important Wetlands:</a>	None
<a href="#">EPBC Act Referrals:</a>	12
<a href="#">Key Ecological Features (Marine):</a>	None
<a href="#">Biologically Important Areas:</a>	7
<a href="#">Bioregional Assessments:</a>	None
<a href="#">Geological and Bioregional Assessments:</a>	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
<a href="#">Subtropical and Temperate Coastal Saltmarsh</a>	Vulnerable	Community likely to occur within area	In buffer area only

### 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
<b>BIRD</b>			
<a href="#">Anous tenuirostris melanops</a> Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Aphelocephala leucopsis</a> Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
<a href="#">Diomedea amsterdamensis</a> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Falco hypoleucos</a> Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Leipoa ocellata</a> Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<a href="#">Limosa lapponica menzbieri</a> Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Phaethon rubricauda westralis</a> Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Pterodroma mollis</a> Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Rostratula australis</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Sternula albifrons</a> Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Sternula nereis nereis</a> Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Thalassarche carteri</a> Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche cauta</a> Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Zanda latirostris listed as Calyptorhynchus latirostris</a> Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to occur within area	In feature area
<b>MAMMAL</b>			
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Dasyurus geoffroii</a> Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Eubalaena australis</a> Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Macroderma gigas</a> Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area	In feature area
<a href="#">Neophoca cinerea</a> Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat known to occur within area	In buffer area only
<a href="#">Parantechinus apicalis</a> Dibbler [313]	Endangered	Species or species habitat may occur within area	In feature area
<b>PLANT</b>			
<a href="#">Caladenia hoffmanii</a> Hoffman's Spider-orchid [56719]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Caleana dixonii listed as Paracaleana dixonii</a> Sandplain Duck Orchid [87944]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Chorizema humile</a> Prostrate Flame Pea [32573]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Conostylis dielsii subsp. teres</a> Irwin's Conostylis [3614]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Conostylis micrantha</a> Small-flowered Conostylis [17635]	Endangered	Species or species habitat known to occur within area	In feature area
<a href="#">Daviesia speciosa</a> Beautiful Daviesia [56698]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Drummondita ericoides</a> Morseby Range Drummondita [9193]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Eucalyptus crispata</a> Yandanooka Mallee [24268]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Eucalyptus cuprea</a> Mallee Box [56773]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Eucalyptus leprophloia</a> Scaly Butt Mallee, Scaly-butt Mallee [56712]	Endangered	Species or species habitat likely to occur within area	In feature area
<a href="#">Hemiandra gardneri</a> Red Snakebush [7945]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Leucopogon marginatus</a> Thick-margined Leucopogon [12527]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Leucopogon obtectus</a> Hidden Beard-heath [19614]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Tetratheca nephelioides</a> [83217]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Thelymitra stellata</a> Star Sun-orchid [7060]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Wurmbea tubulosa</a> Long-flowered Nancy [12739]	Endangered	Species or species habitat known to occur within area	In feature area
<b>REPTILE</b>			
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Egernia stokesii badia</a> Western Spiny-tailed Skink, Baudin Island Spiny-tailed Skink [64483]	Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Natator depressus</a> Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<b>SHARK</b>			
<a href="#">Carcharias taurus (west coast population)</a> Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Carcharodon carcharias</a> White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<a href="#">Pristis pristis</a> Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Rhincodon typus</a> Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Sphyrna lewini</a> Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only
<b>SPIDER</b>			
<a href="#">Idiosoma nigrum</a> Shield-backed Trapdoor Spider, Black Rugose Trapdoor Spider [66798]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<b>Listed Migratory Species</b>			<b>[ Resource Information ]</b>
Scientific Name	Threatened Category	Presence Text	Buffer Status
<b>Migratory Marine Birds</b>			
<a href="#">Anous stolidus</a> Common Noddy [825]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
<a href="#">Ardenna carneipes</a> Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
<a href="#">Diomedea amsterdamensis</a> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Hydroprogne caspia</a> Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Phaethon lepturus</a> White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
<a href="#">Phaethon rubricauda</a> Red-tailed Tropicbird [994]		Species or species habitat may occur within area	In buffer area only
<a href="#">Sternula albifrons</a> Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Thalassarche carteri</a> Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche cauta</a> Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<b>Migratory Marine Species</b>			
<a href="#">Balaenoptera edeni</a> Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Carcharhinus longimanus</a> Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only
<a href="#">Carcharias taurus</a> Grey Nurse Shark [64469]		Species or species habitat likely to occur within area	In buffer area only
<a href="#">Carcharodon carcharias</a> White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Eubalaena australis as Balaena glacialis australis</a> Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Lamna nasus</a> Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In buffer area only
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
<a href="#">Mobula alfredi as Manta alfredi</a> Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat known to occur within area	In buffer area only
<a href="#">Mobula birostris as Manta birostris</a> Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
<a href="#">Natator depressus</a> Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
<a href="#">Pristis pristis</a> Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Rhincodon typus</a> Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<b>Migratory Terrestrial Species</b>			
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
<b>Migratory Wetlands Species</b>			
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat likely to occur within area	In buffer area only
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Pandion haliaetus</a> Osprey [952]		Breeding known to occur within area	In feature area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area	In buffer area only

## 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 to 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 - [50381]	WA	In buffer area only

### Listed Marine Species

[ [Resource Information](#) ]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
<a href="#">Anous stolidus</a> Common Noddy [825]		Species or species habitat may occur within area	In buffer area only
<a href="#">Anous tenuirostris melanops</a> Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
<a href="#">Ardenna carneipes as Puffinus carneipes</a> Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
<a href="#">Bubulcus ibis as Ardea ibis</a> Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area overfly marine area	In buffer area only
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Chalcites osculans as Chrysococcyx osculans</a> Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
<a href="#">Diomedea amsterdamensis</a> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Haliaeetus leucogaster</a> White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
<a href="#">Hydroprogne caspia as Sterna caspia</a> Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Larus pacificus</a> Pacific Gull [811]		Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat likely to occur within area	In buffer area only
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Merops ornatus</a> Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<a href="#">Pandion haliaetus</a> Osprey [952]		Breeding known to occur within area	In feature area
<a href="#">Phaethon lepturus</a> White-tailed Tropicbird [1014]		Species or species habitat may occur within area	In buffer area only
<a href="#">Phaethon rubricauda</a> Red-tailed Tropicbird [994]		Species or species habitat may occur within area	In buffer area only
<a href="#">Pterodroma mollis</a> Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Puffinus assimilis</a> Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Rostratula australis as Rostratula benghalensis (sensu lato)</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area
<a href="#">Stercorarius antarcticus as Catharacta skua</a> Brown Skua [85039]		Species or species habitat may occur within area	In buffer area only
<a href="#">Sternula albifrons as Sterna albifrons</a> Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche carteri</a> Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche cauta</a> Shy Albatross [89224]	Endangered	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<a href="#">Thinornis cucullatus as Thinornis rubricollis</a> Hooded Plover, Hooded Dotterel [87735]		Species or species habitat may occur within area overfly marine area	In buffer area only
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area	In buffer area only

Fish

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Acentronura australe</a> Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only
<a href="#">Campichthys galei</a> Gale's Pipefish [66191]		Species or species habitat may occur within area	In buffer area only
<a href="#">Choeroichthys suillus</a> Pig-snouted Pipefish [66198]		Species or species habitat may occur within area	In buffer area only
<a href="#">Halicampus brocki</a> Brock's Pipefish [66219]		Species or species habitat may occur within area	In buffer area only
<a href="#">Hippocampus angustus</a> Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area	In buffer area only
<a href="#">Hippocampus breviceps</a> Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In buffer area only
<a href="#">Hippocampus subelongatus</a> West Australian Seahorse [66722]		Species or species habitat may occur within area	In buffer area only
<a href="#">Lissocampus fatiloquus</a> Prophet's Pipefish [66250]		Species or species habitat may occur within area	In buffer area only
<a href="#">Maroubra perserrata</a> Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
<a href="#">Mitotichthys meraculus</a> Western Crested Pipefish [66259]		Species or species habitat may occur within area	In buffer area only
<a href="#">Nannocampus subosseus</a> Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Phycodurus eques</a> Leafy Seadragon [66267]		Species or species habitat may occur within area	In buffer area only
<a href="#">Phyllopteryx taeniolatus</a> Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
<a href="#">Pugnaso curtirostris</a> Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only
<a href="#">Solegnathus lettiensis</a> Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In buffer area only
<a href="#">Stigmatopora argus</a> Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
<a href="#">Stigmatopora nigra</a> Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
<a href="#">Syngnathoides biaculeatus</a> Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In buffer area only
<a href="#">Urocampus carinirostris</a> Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
<a href="#">Vanacampus margaritifer</a> Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
<b>Mammal</b>			
<a href="#">Arctocephalus forsteri</a> Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
<a href="#">Neophoca cinerea</a> Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat known to occur within area	In buffer area only
<b>Reptile</b>			

Scientific Name	Threatened Category	Presence Text	Buffer Status
<a href="#">Aipysurus pooleorum</a> Shark Bay Sea Snake [66061]		Species or species habitat may occur within area	In buffer area only
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
<a href="#">Hydrophis kingii as Disteira kingii</a> Spectacled Sea Snake [93511]		Species or species habitat may occur within area	In buffer area only
<a href="#">Hydrophis platura as Pelamis platurus</a> Yellow-bellied Sea Snake [93746]		Species or species habitat may occur within area	In buffer area only
<a href="#">Natator depressus</a> Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour 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			
<a href="#">Balaenoptera acutorostrata</a> Minke Whale [33]		Species or species habitat may occur within area	In buffer area only
<a href="#">Balaenoptera edeni</a> Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
<a href="#">Delphinus delphis</a> Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
<a href="#">Eubalaena australis</a> Southern Right Whale [40]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<a href="#">Grampus griseus</a> Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]		Species or species habitat known to occur within area	In buffer area only
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
<a href="#">Stenella attenuata</a> Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In buffer area only
<a href="#">Tursiops aduncus</a> Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
<a href="#">Tursiops truncatus s. str.</a> 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
Beekeepers	Nature Reserve	WA	In buffer area only
Dongara	Nature Reserve	WA	In buffer area only
Yardanogo	Nature Reserve	WA	In buffer area only

EPBC Act Referrals				[ Resource Information ]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
<a href="#">BEHARRA SILICA SAND PROJECT</a>	2022/09308		Completed	In buffer area only
<a href="#">Zemira 3D Seismic Survey</a>	2020/8658		Completed	In buffer area only
<b>Controlled action</b>				
<a href="#">construction and operation of a unmanned platform at the Cliff Head oil field, a</a>	2003/1300	Controlled Action	Post-Approval	In buffer area only
<a href="#">Karara Magnetite Project</a>	2006/3017	Controlled Action	Post-Approval	In buffer area only
<a href="#">Mount Gibson Iron Ore Pellet Project</a>	2000/95	Controlled Action	Completed	In buffer area only
<a href="#">Natta 3D Seismic Acquisition Survey, 36 km east of Dongara</a>	2021/8992	Controlled Action	Referral Decision	In buffer area only
<a href="#">open cut mine &amp; assoc infrastructure</a>	2005/2381	Controlled Action	Post-Approval	In buffer area only
<a href="#">Tiwest Dongara Project, mineral sands mining and concentrating operation, 25km</a>	2009/5032	Controlled Action	Post-Approval	In buffer area only
<b>Not controlled action</b>				
<a href="#">Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia</a>	2015/7522	Not Controlled Action	Completed	In feature area
<a href="#">Waitsia Gas Project Stage 2, Yardarino WA</a>	2020/8633	Not Controlled Action	Completed	In buffer area only
<b>Not controlled action (particular manner)</b>				
<a href="#">Marine Seismic Survey for oil and gas in Commonwealth waters off the WA coast.</a>	2004/1802	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
<b>Referral decision</b>				
<a href="#">Transmission Line Rebuild and Extension</a>	2009/4972	Referral Decision	Completed	In buffer area only
<b>Biologically Important Areas</b>			<b>[ Resource Information ]</b>	
Scientific Name		Behaviour	Presence	Buffer Status
<b>Seabirds</b>				
<a href="#">Ardenna pacifica</a>				
Wedge-tailed Shearwater [84292]		Foraging (in high numbers)	Known to occur	In buffer area only

Scientific Name	Behaviour	Presence	Buffer Status
<a href="#">Hydroprogne caspia</a> Caspian Tern [808]	Foraging (provisioning young)	Known to occur	In buffer area only
<a href="#">Larus pacificus</a> Pacific Gull [811]	Foraging (in high numbers)	Known to occur	In buffer area only
<a href="#">Puffinus assimilis tunneyi</a> Little Shearwater [59363]	Foraging (in high numbers)	Known to occur	In buffer area only
<a href="#">Sternula nereis</a> Fairy Tern [82949]	Foraging (in high numbers)	Known to occur	In buffer area only
<b>Seals</b>			
<a href="#">Neophoca cinerea</a> Australian Sea Lion [22]	Foraging (male and female)	Known to occur	In buffer area only
<b>Whales</b>			
<a href="#">Megaptera novaeangliae</a> 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 referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is 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 report 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 on the contents of this report.

## 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 and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

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); or 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 to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

## 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 breeding sites; and
- 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:

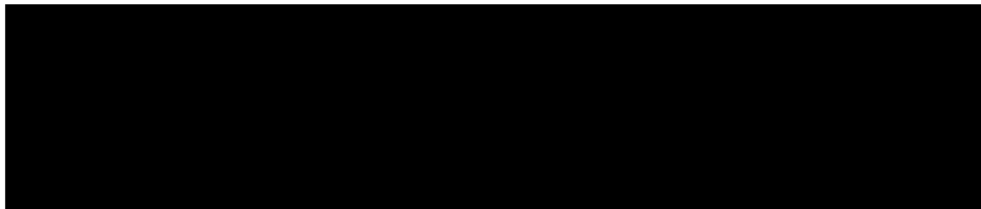
- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department 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](#)
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- [-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.



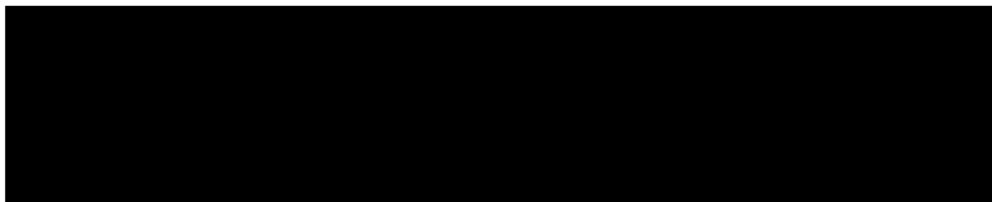
<b>Project name</b>		Shire of Irwin – Milo Road Crossing Upgrade					
<b>Document title</b>		Report   Environment Protection and Biodiversity Act 1999 Significance Self-Assessment					
<b>Project number</b>		12650028					
<b>File name</b>		12650028_REP_1-EPBC Act Significance Self-Assessment.docx					
<b>Status Code</b>	<b>Revision</b>	<b>Author</b>	<b>Reviewer</b>		<b>Approved for issue</b>		
			<b>Name</b>	<b>Signature</b>	<b>Name</b>	<b>Signature</b>	<b>Date</b>
S3	A						
S4	0						
S4	1						



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<b>Project name</b>		Shire of Irwin Milo Road Crossing Upgrade					
<b>Document title</b>		Report   Native Vegetation Clearing Permit application supporting document					
<b>Project number</b>		12650028					
<b>File name</b>		12650028_REP_1-NVCP Supporting document.docx					
Status Code	Revision	Author	Reviewer		Approved for issue		
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S3	A						
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