City of Rockingham

Foreshore Activity Node Environmental Assessment 2025

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Executive Summary

Natural Area Consulting Management Services (Natural Area) was commissioned by the City of Rockingham to undertake a targeted and detailed flora survey and basic fauna survey within the Foreshore Activity Node on Rockingham Beach Road.

The flora survey determined:

- A total of 56 flora species comprising of 36 introduced (weeds) and 20 native species.
- A total of two vegetation types.
- Vegetation condition ranged from completed degraded to good.
- No conservation significant flora species were recorded.
- No Threatened Ecological Communities were identified.
- One declared pest was recorded: **Gomphocarpus fruticosus* (Narrowleaf Cottonbush).

The fauna survey determined:

- A total of 16 fauna species comprising of 7 introduced and 9 native species.
- A total of three habitat types.
- One significant fauna species was recorded: *Isoodon fusciventer* (Quenda), listed as Priority 4 under the *Biodiversity Conservation Act 2016* (BC Act).
- One declared pest was recorded: **Oryctolagus cuniculus* (Rabbit).

A detailed fauna survey incorporating trapping methods is recommended to confirm the presence or absence of the *Lerista lineata* (Priority 3), as this species is considered likely to occur within the survey site but was not identified during the basic fauna survey.

It is recommended to undertake removal of **Gomphocarpus fruticosus* (Narrowleaf Cottonbush) to reduce impact to the environmental values present onsite. Management of declared pest fauna species observed onsite should be undertaken to alleviate the harmful impact of the species and to reduce numbers and distribution along the Rockingham foreshore.

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1.0 Introduction

Natural Area Consulting Management Services (Natural Area) was commissioned by the City of Rockingham to undertake a targeted and detailed flora survey and basic fauna survey within the Foreshore Activity Node on Rockingham Beach Road.

1.1 Location

The survey site is comprised of three areas of vegetation, herein referred to as Zone 1, Zone 2, and Zone 3, within the dunes of Rockingham Beach on Rockingham Beach Road (Figure 1). Zone 1 is approximately 0.86 ha. Zone 2 is approximately 0.27 ha and is located south-west of Zone 1. Zone 3 is approximately 0.24 ha and is located north of Zone 2, bisected by a footpath. The combined total area of all three zones is approximately 1.37 ha. The site is located approximately 2 km north-east of the City of Rockingham Administration Offices and Council Chambers building.

The entirety of the site is within an environmentally sensitive area (Department of Water and Environmental Regulation (DWER), 2021) as it falls within the 2 km buffer of the Sedgelands in Holocene dune swales of the southern Swan Coastal Plain (floristic community type 19 as originally described in in Gibson et al. 1994) Threatened Ecological Community (TEC).

1.2 Scope

Natural Area undertook a targeted and detailed flora survey and basic fauna survey. Activities included:

- Desktop assessment of available data including:
  - Protected Matters Search Tool (PMST)
  - Nature Map
  - DBCA database searches of conservation significant flora, fauna and ecological communities.
- Targeted and detailed flora and vegetation survey including:
  - determining the extent of vegetation types and condition
  - recording flora (native and introduced) species present
  - mapping threatened or priority species, declared pests (DP) and Weeds of National Significance (WoNS).
- Basic fauna survey including:
  - recording fauna (native and introduced) species present, including mapping threatened or priority species and declared pests
  - determining the fauna habitat types present across site.
- Reporting of survey outcomes.



Figure 1:
Site Location

Rockingham, City of Rockingham

Legend

Survey Boundary

Client:	City of Rockingham
Date:	25/03/2026
Created by:	S. Treloar
Image Source:	Nearmap, 2026
Datum:	GDA2020 / MGA zone 50
Scale:	1: 1350

0 20 40 m

N

1.3 Legislative Context

State and Federal environment-related laws impact how environmental values are governed in Western Australia. The following legislation and policies are relevant to this report.

1.3.1 Relevant Legislation

***Biosecurity and Agriculture Management Act 2007* (WA)**

The *Biosecurity and Agriculture Management Act 2007* (WA) (BAM Act) regulates the framework for plant and animal pest and disease biosecurity in Western Australia. The framework provides for the control of declared flora and fauna species (declared organisms) that are known to be a significant environmental threat and the management, control and prevention of these declared plants and animals.

***Biodiversity Conservation Act 2016* (WA)**

The *Biodiversity Conservation Act 2016* (WA) (BC Act) aims to protect and conserve biodiversity as well as to promote the ecologically sustainable use of biodiversity components in the State. The BC Act provides the statute relating to conservation and legal protection of flora, fauna, and ecological communities. The BC Act follows the principles of ecologically sustainable development, detailing that decision-making processes should effectively integrate long-term and short-term economic, environmental, social, and equity considerations.

***Environmental Protection Act 1986* (WA)**

The *Environmental Protection Act 1986* (WA) (EP Act) provides for the prevention, control and abatement of pollution and environmental harm, for the conservation, preservation, protection, enhancement, and management of the environment connected with the foregoing. The Environmental Protection Authority (EPA) is established under this act and provides a structured policy framework that is consistent with the EP A*ct*. The EPA produces the guidelines and procedures associated with conducting environmental assessments in line with the EP Act.

***Environment Protection and Biodiversity Conservation Act 1999* (Cth)**

The Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) serves to protect and manage nationally and internationally important flora, fauna, ecological communities, and heritage places. The primary objective of the EPBC Act is to promote the conservation of biodiversity and the sustainable use of natural resources while allowing for ecologically sustainable development. The EPBC Act allows for the creation of conservation agreements between the Australian government and individuals, communities, or organisations to support the conservation of biodiversity.

Heritage Act 2018 (WA)

The Heritage Act recognises the importance of and promotes understanding and appreciation of Western Australia's cultural heritage; and provides for the identification and documentation of places of cultural heritage significance and for the conservation, use, development and adaptation of such places.

***Soil and Land Conservation Act 1945* (WA)**

The *Soil and Land Conservation Act 1945* (WA) serves to conserve soil and land resources, and to mitigate the impacts of erosion, salinity, and flooding. This Act outlines the mitigation and prevention of land

degradation, promoting soil conservation and land management and the administration of Land Conservation District Committees (LCDC).

1.3.2 Relevant Planning and Policy

Australia's Biodiversity Conservation Strategy 2010-2030

Australia's Biodiversity Conservation Strategy 2010-2030 aims to protect biological diversity and maintain ecological processes and systems (Natural Resource Management Ministerial Council, 2010).

International Union for Conservation of Nature (IUCN) Red List of Threatened Species

The IUCN Red List of Threatened Species provides taxonomic, conservation status and distribution information on plants and animals that have been globally evaluated using the IUCN Red List Categories and Criteria (IUCN, 2025).

Threatened Species Action Plan 2022-2032

The Threatened Species Action Plan 2022-2032 outlines the Federal Government's approach to protect, manage and restore Australia's threatened species and important natural places (Department of Climate Change, Energy, the Environment and Water (DCCEEW), 2022).

2.0 Site Characteristics

2.1 Regional Context

The survey site is located within the Swan Coastal Plain (SWA02) IBRA subregion (DCCEEW, 2025a). This region is a low-lying coastal plain characterised by soils comprised of colluvial aeolian sands, as well as alluvial river flats and coastal limestone. It is dominated by *Banksia* spp. or *Eucalyptus gomphocephala* (Tuart) vegetation types, as well as some areas of *Casuarina obesa, Melaleuca* spp. or *Eucalyptus marginata* (Jarrah) woodlands (Mitchell *et al*., 2002).

2.2 Climate

The survey site is within the Mediterranean climatic zone, which is characterised by dry, hot summers and cool, wet winters. According to the Bureau of Meteorology (BoM) Garden Island HSF, site number 9256, the long-term average climate conditions for the region are:

- Average rainfall of 604.6 mm per annum, with majority of rainfall between May and August (2001 - 2026) (BoM, 2026).
- Average maximum temperature range of 18.4 °C in winter to 27.3 °C in summer (2001 - 2026) (BoM, 2026).
- Average minimum temperature ranging from 11.6 °C in winter to 18.67 °C in summer (2001 - 2026) (BoM, 2026).

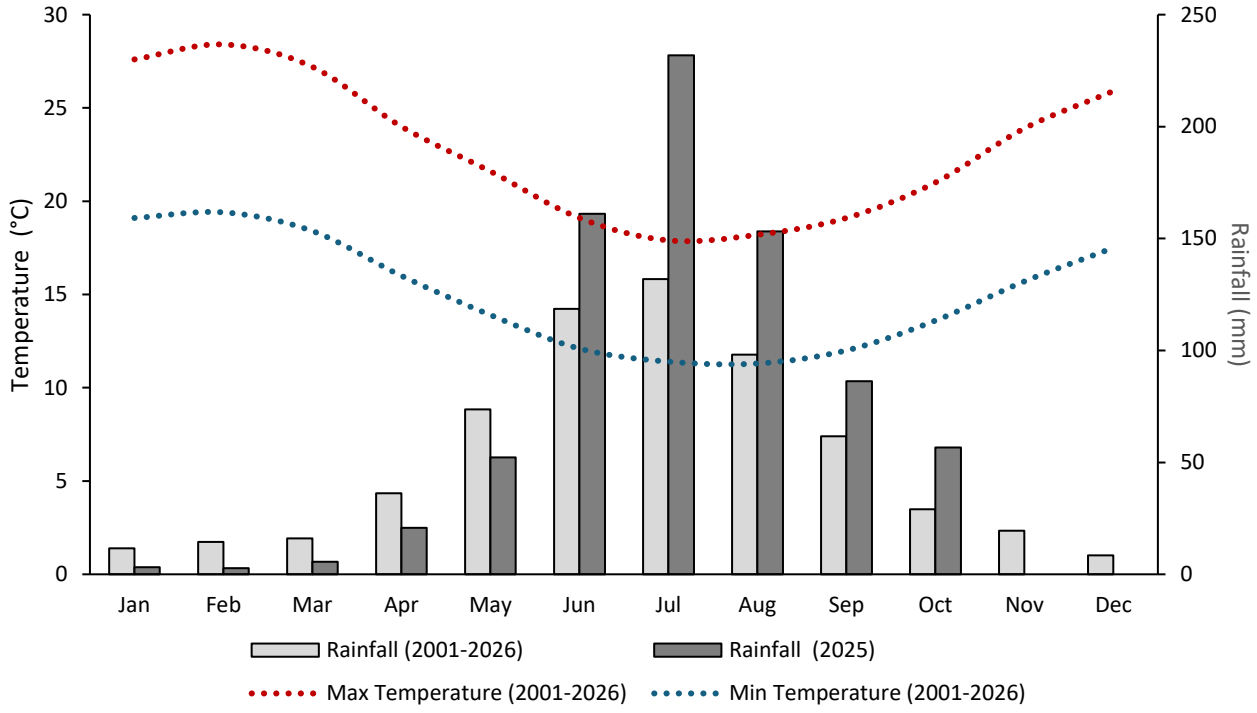


Figure 2: Temperature and rainfall data for the survey site, site number 9256. Source: BoM, 2026.

2.3 Topography and Soils

Two soil types were identified within the survey site, being the Quindalup South Qf1 phase and the Quindalup South Qf2 phase (Department of Primary Industries and Regional Development (DPIRD), 2022)

(Table 1 and Figure 3). The site is relatively flat measuring approximately 4 m Australian Height Datum (AHD) across both survey areas (Geoscience Australia, 2021).

Table 1: Soil types within the survey site

Name	Symbol	Description
Quindalup South Qf1 phase	211Qu_Qf1	Foredune/blowout complexes (semi-erosional) with very low relief ridge and swale topography with deep uniform calcareous sands.
Quindalup South Qf2 phase	211Qu_Qf2	Relict foredunes and gently undulating beach ridge plain with deep uniform calcareous sands.

2.4 Vegetation Complex

One vegetation complex exists within the survey site boundary, the Quindalup Complex (DBCA, 2018). The Quindalup Complex is restricted to the coastal dunes and can be divided into separate sections. The Quindalup Complex foredune contains species such as *Atriplex isatidea*, **Cakile maritima*, *Leucophyta brownii*, *Carpobrotus virescens*, **Pelargonium capitatum*, and *Spinifex longifolius*. The Quindalup Complex mobile and stable dune contains *Acacia cyclops*, *Lepidosperma gladiatum*, *Myoporum insulare*, *Olearia axillaris*, *Scaevola crassifolia* and *Spyridium globulosum* (Heddle *et al.* 1980). The pre-European extent of this vegetation complex remaining is:

- 56.83 % within the Swan Coastal Plain
- 34.78 % within the City of Rockingham (Government of Western Australia, 2025).



Figure 3:
Soils

Rockingham, City of Rockingham

Legend

- Quindalup South Qf1 phase
- Quindalup South Qf2 phase
- Survey Boundary

Client:	City of Rockingham
Date:	27/03/2026
Created by:	S. Treloar
Image Source:	Nearmap, 2026
Datum:	GDA2020 / MGA zone 50
Scale:	1: 1350

0 20 40 m

N

2.5 Hydrology

The survey site is located amongst vegetation within the dunes of Rockingham Beach which meets the Indian Ocean. There are no geomorphic wetlands present within the survey site (DBCA, 2025a).

2.6 Heritage Values

The site is within the Gnaala Karla Booja Indigenous Land Use Agreement area (Landgate, 2025). There are no current records of Aboriginal or European heritage within the survey area.

2.7 Ecological Linkages

The survey site does not fall within the Perth Regional Ecological Linkage Network (Western Australian Local Government Association (WALGA), 2004). The nearest ecological linkage is Link 77 approximately 1.3 km south of the site which includes connecting vegetation from Point Peron to Lake Cooloongup.

2.8 Black Cockatoo Habitat

The closest recorded Carnaby's Cockatoo roost site (buffered by 1 km) is less than 1 km away from the survey site (DBCA, 2019; 2025d), however the three threatened black cockatoo species are unlikely to occur within the survey site as coastal heathland vegetation does not provide suitable habitat (Department of Agriculture, Water, and the Environment (DAWE), 2022).

3.0 Methodology

3.1 Desktop and Literature Review

The desktop survey included reviewing online databases to gather contextual knowledge and determine preliminary site characteristics including:

- likely native and non-native flora and fauna species present
- current extent of native vegetation
- general floristic community types
- likely presence of threatened or priority flora and fauna species
- likely presence of threatened or priority ecological communities.

The following databases were accessed to obtain relevant information:

- NatureMap (DBCA, 2025b)
- PMST (DCCEEW, 2025b) (Appendix 1)
- FloraBase (Western Australian Herbarium, 1998-)
- Threatened and priority flora, fauna, and ecological community database searches (DBCA, 2025c; 2025d, 2025e).

Conservation code definitions for the State and Commonwealth are provided in Appendix 2. Information relating to conservation significant species from database searches were summarised into field reference guides to aid with the on-ground flora surveys which is provided in Appendix 3.

3.2 On-ground Flora Survey

3.2.1 Detailed Flora Survey

The detailed flora and vegetation survey was conducted in accordance with *Technical Guidance-Flora and Vegetation Surveys for Environmental Impact Assessment* (Environmental Protection Authority (EPA), 2016). Samples were collected, or photographs taken of unfamiliar species to enable later identification.

Natural Area environmental scientists undertook the detailed flora survey of Zones 1 and 2 on 17 November 2025 and Zone 3 on 28 November 2025. Key data was recorded using QField software on a handheld tablet. Survey activities included:

- Setting out a total of seven 100 m^2 quadrats across the two vegetation types present (Figure 4).
  - This included three quadrats per vegetation type plus an additional quadrat established in Zone 3.
  - All quadrats measured 10 x 10 m with the exception of SlG2 and SlG3 which were 5 x 20 m.
- Photographing each quadrat in the north-west corner and recording GPS coordinates using GDA2020 Zone 50 datum.
- Recording landscape characteristics including soil types/colour, aspect, slope, surface rock, topography and drainage using Natural Area's modified recording sheets based on the NAIA templates developed for the Perth Biodiversity Project.
- Determining leaf litter depth, percentage cover, and percentage of bare ground within each quadrat.
- Recording percentage cover, height, and life form for each flora species in the quadrats.
- Compiling a flora species list, outlining native and non-native species present.

- Marking locations of any conservation significant flora, declared pests (DP) and/or WoNS identified.
- Recording vegetation type including dominant over, middle and understorey species to describe vegetation type in line with the National Vegetation Information System (NVIS) Level V – Association (Executive Steering Committee for Australian Vegetation Information (ESCAVI), 2003).
- Recording vegetation condition using the scale attributed to Keighery (Table 2) (EPA, 2016).
- Determining presence and extent of threatened and priority ecological communities.
- Using GPS to map significant species and boundaries of differing vegetation types and condition.
- Recording evidence of disturbance, such as fire.

Table 2: Vegetation condition ratings

Category		Description
1	Pristine	Pristine or nearly so, no obvious signs of disturbance or damage caused by human activities since European settlement.
2	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.
3	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.
4	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 some very aggressive weeds, partial clearing, dieback and grazing.
5	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.
6	Completely Degraded	The structure of the vegetation is no longer intact, and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

Source: EPA, 2016



Figure 4:
Quadrat Locations

Rockingham, City of Rockingham

Legend

- Quadrat
- Survey Boundary

Client:	City of Rockingham
Date:	25/03/2026
Created by:	S. Treloar
Image Source:	Nearmap, 2026
Datum:	GDA2020 / MGA zone 50
Scale:	1: 1350

0 20 40 m

N

3.2.2 Targeted Flora Survey

The targeted flora survey was conducted in accordance with *Technical Guidance-Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016). Samples were collected, or photographs taken of unfamiliar species to enable later identification.

Natural Area environmental scientists undertook the detailed flora survey of Zones 1 and 2 on 17 November 2025 and Zone 3 on 28 November 2025. Key data was recorded using QField software on a handheld tablet. Survey activities included:

- Traversing the entirety of the site (Figure 5) and conducting a search for conservation significant flora species that were identified to have the potential to occur in the area.
- Marking locations of any conservation significant flora identified and determining population size and extent.

3.3 On-ground Fauna Survey

The fauna survey was conducted in accordance with a basic fauna survey as outlined in the *Technical Guidance, Terrestrial vertebrate fauna surveys for environmental impact assessment* (EPA, 2020). Natural Area environmental scientists traversed Zones 1 and 2 on 17 November 2025 and Zone 3 on 28 November 2025, undertaking this survey in conjunction with other survey activities. A basic survey is defined as a low-intensity survey, which gathers broad fauna and habitat information including opportunistic fauna observations (EPA, 2020). Survey activities included:

- Recording opportunistic sightings of fauna species while traversing the survey area, along with recording evidence of their presence in the form of:
  - scats
  - tracks
  - diggings
  - burrows, dens and warrens
  - runnels (vegetative tunnels)
  - calls.
- Compiling a fauna species list, outlining native and non-native species present.
- Marking locations of any conservation significant fauna and/or declared pests.
- Recording the extent of habitat types within the survey boundary.
- Installing 3 trail cameras and 1 acoustic bat recorder (Song Meter Mini Bat 2) within the survey site (Figure 6) in areas that were not visible to the public. Devices were deployed for a total of 11 nights to capture additional species that were not identified whist traversing the site.



Figure 5:
Targeted Flora Search
Track Logs

Rockingham, City of Rockingham

Legend

Tracklogs
Survey Boundary

Client:	City of Rockingham
Date:	25/03/2026
Created by:	S. Treloar
Image Source:	Nearmap, 2026
Datum:	GDA2020 / MGA zone 50
Scale:	1: 1350

0 20 40 m

N



Figure 6:
Trail Camera and Acoustic Recorder Locations

Rockingham, City of Rockingham

Legend

- Trail Camera
- Acoustic Recorder
- Survey Boundary

Client:	City of Rockingham
Date:	25/03/2026
Created by:	S. Treloar
Image Source:	Nearmap, 2026
Datum:	GDA2020 / MGA zone 50
Scale:	1: 1350

0 20 40 m

N

3.4 Limitations

The limitations associated with the targeted and detailed flora survey and basic fauna survey undertaken within the survey site are outlined in Table 3 and Table 4 below.

Table 3: Targeted and detailed flora survey limitations

Potential Limitation	Degree of Limitation	Comments
Availability of contextual information	None	Broad scale and local contextual information were readily available for the site.
Competency/ experience of team	None	Survey activities were undertaken by experienced environmental scientists who have extensive experience undertaking detailed and targeted flora surveys within the Swan Coastal Plain.
Proportion of flora recorded/ collected, any identification issues	None	A total of 58 flora species (taxa) were recorded from 27 families during the field survey, comprised of 37 introduced (weeds) and 21 native species. Of these, all species were able to be identified to species level.
Survey effort and extent	None	The entirety of the site was traversed over 3 days, with at least three quadrats per vegetation type across site being sampled.
Access restrictions	None	There were no access restrictions; the entirety of the site could be surveyed.
Survey timing	None	The survey was undertaken during spring which is the optimal season for flora surveys within the Swan Coastal Plain subregion. Whilst the survey was undertaken during flowering season, some species may flower earlier or later in the season and therefore may not be able to be identified. This was not a limitation for this study as there were no conservation significant flora species identified in the desktop survey as being likely to occur within the survey area and all species present within the site could be identified during the survey.
Disturbances	None	No recent disturbances which may have had an impact on survey results (e.g. fire, recent clearing or floods) were identified during the survey.

Table 4: Basic fauna survey limitations

Potential Limitation	Degree of Limitation	Comments
Availability of contextual information	None	Broad scale and local contextual information were readily available for the site.
Competency/ experience of team	None	Survey activities were undertaken by experienced environmental scientists who have extensive experience undertaking basic fauna surveys within the Swan Coastal Plain.
Proportion of fauna identified, recorded or collected	Minor	A total of 16 fauna species (taxa) were recorded from 12 families during the field survey, comprised of 7 introduced and 9 native species. Of these, one taxon (Scincidae sp.), which was identified via indirect evidence, could not be identified to species level. Multiple burrows were observed throughout the site and were identified to be from a reptile species from the Scincidae family; however, there are multiple Scincidae species likely to be present within the site and therefore the species that formed the observed burrows could not be confirmed.
Survey effort and extent	None	The entirety of the site was thoroughly traversed over 3 days to gather broad fauna and habitat information.
Access restrictions	None	There were no access restrictions; the entirety of the site could be surveyed.
Survey timing	Minor	The survey was undertaken during spring which is the optimal season for fauna surveys within the Swan Coastal Plain subregion as this is when species are most active. Nocturnal surveys were not undertaken, therefore reducing the likelihood of recording nocturnal species within the site. However, all species likely to utilise the site are able to be identified via indirect evidence of their presence.
Disturbances	None	No recent disturbances which may have had an impact on survey results (e.g. fire, recent clearing or floods) were identified during the survey.

4.0 Flora Survey Results

4.1 Desktop Survey

A desktop survey of online databases indicated the potential for a total of 21 conservation significant species to occur within 10 km of the survey area (Table 5). NatureMap indicated 8 conservation significant flora species listed under the BC Act or by the Western Australian Herbarium (1998-), as potentially occurring within 10 km radius of the site (DBCA, 2025b). A review of the PMST (DCCEEW, 2025b) indicated 13 significant flora species listed under the EPBC Act as potentially occurring within a 10 km radius of the site (Appendix 1). A review of the DBCA (2025c) threatened and priority flora database indicated 8 threatened or priority species have been recorded within 10 km of the site.

Of the conservation significant species potentially found in the area, it was determined that the site conditions (soil type, drainage, location) were not suitable for any of the species. Conservation code descriptions are provided in Appendix 2.

Table 5: Threatened and Priority flora species listed by NatureMap, PMST and DBCA

Species Name	Cons Code (Cth)	Cons Code (WA)	Nature Map	PMST	DBCA
Acacia sp. Binningup (G. Cockerton et al. WB 37784)	P1		X		X
Andersonia gracilis	T/VU	EN		X	
Banksia mimica	T/VU	EN		X	
Caladenia huegelii	T/CR	EN		X	
Diuris drummondii	T/EN	VU		X	
Diuris micrantha	T/VU	VU		X	
Diuris purdiei	T/EN	EN		X	
Dodonaea hackettiana	P4		X		X
Drakaea elastica	T/CR	EN		X	
Drakaea micrantha	T/EN	VU		X	
Eleocharis keigheryi	T/VU	VU		X	
Eucalyptus foecunda subsp. *foecunda*	P4		X		X
Eucalyptus x *balanites*	T/CR	EN		X	
Jacksonia sericea	P4		X		X
Lachnagrostis nesomytica subsp. *paralia*	P1		X		X
Morelotia australiensis	T/VU	VU		X	
Pimelea calcicola	P3		X		X
Sphaerolobium calcicola	P3		X		X

Stylidium ireneae	P4		X		X
Synaphea sp. Fairbridge Farm (D.Papenfus 696)	T/CR	CR		X	
Synaphea sp. Serpentine (G.R.Brand 103)	T/CR	CR		X	

4.1.1 Threatened and Priority Ecological Communities

A review of the PMST report identified 6 listed Threatened Ecological Communities (TECs) that could potentially occur within 10 km of the site (DCCEEW, 2025b). A review of the DBCA threatened and priority communities database listed 11 TECs that could potentially occur within 10 km of the site (DBCA, 2025e) (Table 6).

Table 6: Potential Threatened Ecological Communities within the survey site

Commonwealth Name	State Name	Cons Code (Cth)	Cons Code (WA)
Banksia Woodlands of the Swan Coastal Plain ecological community	Northern Spearwood shrublands and woodlands	EN	P3
	Callitris preissii (or *Melaleuca lanceolata*) forests and woodlands of the Swan Coastal Plain (floristic community type 30a as originally described in Gibson et al. 1994)		CR
	Coastal shrublands on shallow sands		P3
Assemblages of plants and invertebrate animals of tumulus (organic mound) springs of the Swan Coastal Plain	Communities of Tumulus Springs (Organic Mound Springs, Swan Coastal Plain)	EN	CR
Empodisma peatlands of southwestern Australia		EN	
Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion	*Melaleuca huegelii - M. systena* shrublands of limestone ridges (SCP26a)	CR	CR
	Microbial community of a coastal saline lake (Lake Walyungup)		P1
Sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Sedgelands in Holocene dune swales of the southern Swan Coastal Plain (floristic community type 19 as originally described in in Gibson et al. 1994)	EN	CR
Subtropical and Temperate Coastal Saltmarsh	Subtropical and Temperate Coastal Saltmarsh	VU	P3
Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community	Southern *Eucalyptus gomphocephala-Agonis flexuosa* woodlands	CR	P3
Thrombolite (microbial) community of coastal freshwater lakes of the Swan Coastal Plain (Lake Richmond)	Stromatolite like microbialite community of coastal freshwater lakes (Lake Richmond)	EN	CR

4.2 Flora Survey Results

4.2.1 Flora

A total of 56 flora species (taxa) were recorded from 27 families during the field survey, comprising of 36 introduced (weeds) and 20 native species. No conservation significant flora species were identified within the survey boundary. Examples of native flora species are shown in Figure 7 and weed species in Figure 8. A complete flora species list is provided in Appendix 4 and quadrat data is provided in Appendix 5.

One declared pest was identified within the survey site, **Gomphocarpus fruticosus* (Narrowleaf Cottonbush); the location is shown in Figure 9. Declared pests are listed on the Western Australian Organism List (WAOL) under the BAM Act. This classification requires the landowner/land manager to control the population to limit damage as a result of the presence of these species (DPIRD, 2026).



Clematis linearifolia (Slender Clematis)



Carpobrotus virescens (Coastal Pigface)



Hardenbergia comptoniana (Native Wisteria)



Scaevola crassifolia (Thick-leaved Fan-flower)

Figure 7: Examples of native flora species recorded.



**Gomphocarpus fruticosus* (Narrowleaf Cottonbush)



**Ammophila arenaria* (Marram Grass)



**Arctotis stoechadifolia* (White Arctotis)



**Reichardia tingitana* (False Sowthistle)

Figure 8: Examples of introduced flora species recorded.



Figure 9:
Declared Pest Locations

Rockingham, City of Rockingham

Legend

- **Gomphocarpus fruticosus*
- Survey Boundary

Client:	City of Rockingham
Date:	27/03/2026
Created by:	S. Treloar
Image Source:	Nearmap, 2026
Datum:	GDA2020 / MGA zone 50
Scale:	1: 1350

0 20 40 m

N

4.2.2 Vegetation Types

Two vegetation types were recorded within the survey boundary: *Acacia rostellifera* mid shrubland over *Lepidosperma gladiatum* mid open sedgeland (ArSLgOS) and *Spinifex longifolius* grassland (SlG). ArSLgOS occurred within all zones, while SlG only occurred within the north of Zone 1 along the foredunes. Vegetation types are described in Table 7 and shown in Figure 10.

Table 7: Vegetation types within the survey site

Vegetation Type	Description	Photograph
Acacia rostellifera mid shrubland over *Lepidosperma gladiatum* mid open sedgeland (ArSLgOS)	*Acacia rostellifera* over *Lepidosperma gladiatum. Clematis linearifolia* often in the canopy, with mixed introduced grasses in the ground strata. Associated species include *Rhagodia baccata*, *Scaevola crassifolia*, and **Rhamnus alaternus*.	
Spinifex longifolius grassland (SlG)	*Spinifex longifolius* with occasional shrubs of *Olearia axillaris* and encroaching *Acacia rostellifera*.	



Figure 10:
Vegetation Type

Rockingham, City of Rockingham

Legend

- ArSLgOS
- SlG
- Survey Boundary

Client:	City of Rockingham
Date:	25/03/2026
Created by:	S. Treloar
Image Source:	Nearmap, 2026
Datum:	GDA2020 / MGA zone 50
Scale:	1: 1350

0 20 40 m

N

4.2.3 Vegetation Condition

Vegetation condition on site ranged from completely degraded to good (Table 8, Figure 11), with most of the site being in degraded condition. Table 9 provides an example photograph of each condition rating across site.

Table 8: Vegetation condition within survey site

Vegetation Condition	Pristine	Excellent	Very Good	Good	Degraded	Completely Degraded	Total
Area (ha)	0	0	0	0.44	0.86	0.07	1.37
Area (%)	0	0	0	32.12	62.77	5.11	100

Table 9: Vegetation condition justification

Vegetation condition	Photograph
Good Areas retain a basic vegetation structure, with native species present across all three strata layers; however, overall species diversity is reduced and weed load is high.	
Degraded Vegetation structure has been severely impacted by disturbance, lacking native species diversity across strata layers and presence of high weed load including aggressive weeds.	
Completely Degraded Areas consisting of little to no native species and dominated by aggressive weed species. Dead *Acacia rostellifera* shrubs also present in some areas.	



Figure 11:
Vegetation Condition

Rockingham, City of Rockingham

Legend

- Good
- Degraded
- Completely Degraded
- Survey Boundary

Client:	City of Rockingham
Date:	25/03/2026
Created by:	S. Treloar
Image Source:	Nearmap, 2026
Datum:	GDA2020 / MGA zone 50
Scale:	1: 1350

0 20 40 m

N

4.2.4 Threatened and Priority Communities

The survey site did not exhibit any structural, floristic or environmental features that would indicate the presence of a threatened ecological community listed under the BC Act or the EPBC Act.

5.0 Fauna Survey Results

5.1 Desktop Survey

A desktop survey of online databases indicated the potential for a total of 58 conservation significant fauna species to occur within 10 km of the survey area (Table 10). NatureMap indicated 35 conservation significant species listed under the BC Act as potentially occurring within a 10 km radius of the site (DBCA, 2025b). The PMST indicated 38 threatened species listed under the EPBC Act as potentially occurring within a 10 km radius of the site (DCCEEW, 2025b) (Appendix 1). A review of the DBCA threatened and priority fauna species database indicated the potential for 34 conservation significant fauna species to occur within a 10 km radius of the site (DBCA, 2025d).

Both abiotic (soil, climate) and biotic (food resources, predator pressure) factors will determine the suitability of habitats for specific fauna assemblages based on their ecological requirements. Evaluating the site locality, existing conditions and known home ranges, Natural Area determined that two species (highlighted green in Table 10) have the potential to be present within the survey site.

Table 10: Threatened and Priority fauna species listed by NatureMap, PMST and DBCA

Species Name	Common Name	Cons Code (Cwlth)	Cons Code (WA)	Nature Map	PMST	DBCA
Bird						
Actitis hypoleucos	Common Sandpiper	MI	MI	X		X
Anous tenuirostris melanops	Australian Lesser Noddy	VU	EN	X	X	X
Ardenna grisea	Sooty Shearwater	MI	VU		X	
Arenaria interpres	Ruddy Turnstone	MI	MI	X	X	X
Botaurus dubius	Australian Little Bittern		P4	X		X
Botaurus poiciloptilus	Australasian Bittern		EN		X	
Calidris acuminata	Sharp-Tailed Sandpiper	MI	MI	X	X	X
Calidris alba	Sanderling	MI	MI	X		X
Calidris canutus	Red Knot	EN & MI	EN	X	X	X
Calidris ferruginea	Curlew Sandpiper	CR & MI	CR	X	X	X
Calidris ruficollis	Red-Necked Stint	MI	MI	X		X
Calidris tenuirostris	Great Knot	CR & MI	CR	X	X	X
Calyptorhynchus banksii naso	Forest Red-Tailed Black Cockatoo	VU	VU	X	X	X
Charadrius cucullatus	Hooded Plover, Hooded Dotterel		P4	X		X

Species Name	Common Name	Cons Code (Cwlth)	Cons Code (WA)	Nature Map	PMST	DBCA
Charadrius leschenaultii	Greater Sand Plover, Large Sand Plover	MI	VU		X	
Charadrius mongolus	Lesser Sand Plover, Mongolian Plover	MI	EN		X	
Diomedea amsterdamensis	Amsterdam Albatross	MI	EN		X	
Diomedea dabbenena	Tristan Albatross	MI	EN		X	
Diomedea epomophora	Southern Royal Albatross	MI	VU		X	
Diomedea exulans	Wandering Albatross	MI	VU		X	
Diomedea sanfordi	Northern Royal Albatross	MI	EN		X	
Falco peregrinus	Peregrine Falcon		OS	X		X
Halobaena caerulea	Blue Petrel		VU		X	
Hydroprogne caspia	Caspian Tern	MI	MI	X		X
Leipoa ocellata	Malleefowl		VU		X	
Limosa lapponica	Bar-Tailed Godwit	MI	MI	X	X	X
Limosa limosa	Black-Tailed Godwit	MI	EN		X	
Macronectes giganteus	Southern Giant Petrel	EN & MI	MI	X	X	X
Macronectes halli	Northern Giant Petrel	VU & MI	MI	X	X	X
Numenius madagascariensis	Eastern Curlew	CR & MI	CR	X	X	X
Numenius phaeopus	Whimbrel	MI	MI	X		X
Onychoprion anaethetus	Bridled Tern	MI	MI	X		X
Oxyura australis	Blue-Billed Duck		P4	X		X
Pachyptila turtur subantarctica	Fairy Prion (Southern)		VU		X	
Pandion haliaetus	Osprey	MI	MI	X		X
Phaethon rubricauda westralis	Red-Tailed Tropicbird (Indian Ocean), Indian Ocean Red-Tailed Tropicbird		EN		X	
Phoebetria fusca	Sooty Albatross	MI	VU		X	
Phoebetria palpebrata	Light-Mantled Albatross	MI	P4 & MI	X		X
Plegadis falcinellus	Glossy Ibis	MI	MI	X		X

Species Name	Common Name	Cons Code (Cwlth)	Cons Code (WA)	Nature Map	PMST	DBCA
Pterodroma mollis	Soft-Plumaged Petrel		VU		X	
Rostratula australis	Australian Painted Snipe		EN		X	
Stercorarius antarcticus lonnbergi	Brown Skua, Subantarctic Skua		P4	X		X
Stercorarius maccormicki	South Polar Skua	MI	MI	X		X
Sterna dougallii	Roseate Tern	MI	MI	X		X
Sternula albifrons	Little Tern	MI	VU		X	
Sternula nereis nereis	Fairy Tern	VU	VU	X	X	X
Thalassarche carteri	Indian Yellow-Nosed Albatross	MI	VU		X	
Thalassarche cauta	Shy Albatross	MI	EN		X	
Thalassarche chlororhynchos	Atlantic Yellow-Nosed Albatross	MI	VU	X		X
Thalassarche chrysostoma	Grey-Headed Albatross	EN & MI	VU	X		X
Thalassarche impavida	Campbell Albatross, Campbell Black-Browed Albatross	MI	VU		X	
Thalassarche melanophris	Black-Browed Albatross	MI	VU		X	
Thalassarche steadi	White-Capped Albatross	MI	VU		X	
Thalasseus bergii	Crested Tern	MI	MI	X		X
Tringa glareola	Wood Sandpiper		MI	X		
Tringa nebularia	Common Greenshank	MI	MI	X	X	X
Zanda baudinii	Baudin's Cockatoo	EN	EN	X	X	X
Zanda latirostris	Carnaby's Cockatoo	EN	EN	X	X	X
Fish						
Carcharias taurus	Grey Nurse Shark	VU	VU	X		X
Carcharodon carcharias	Great White Shark	VU & MI	VU	X		X
Invertebrate						
Idiosoma sigillatum	Swan Coastal Plain Shield-Backed Trapdoor Spider		P3	X		X
Synemon gratiosa	Graceful Sunmoth		P4	X		X

Species Name	Common Name	Cons Code (Cwlth)	Cons Code (WA)	Nature Map	PMST	DBCA
Westralunio carteri	Carter's Freshwater Mussel	VU	VU	X	X	X
Mammal						
Balaenoptera musculus	Blue Whale	MI	EN		X	
Bettongia penicillata ogilbyi	Woylie		EN		X	
Dasyurus geoffroii	Chuditch, Western Quoll		VU		X	
Eubalaena australis	Southern Right Whale	EN & MI	VU	X	X	X
Hydromys chrysogaster	Water-Rat, Rakali		P4	X		X
Isoodon fusciventer	Quenda, Southwestern Brown Bandicoot		P4	X		X
Neophoca cinerea	Australian Sea-Lion	EN	EN	X	X	X
Notamacropus eugenii derbianus	Tammar Wallaby		P4	X		X
Notamacropus irma	Western Brush Wallaby		P4	X		X
Phascogale tapoatafa wambenger	South-Western Brush-Tailed Phascogale, Wambenger		CD	X		X
Pseudocheirus occidentalis	Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit		CR		X	
Reptile						
Caretta caretta	Loggerhead Turtle	EN & MI	EN	X	X	X
Chelonia mydas	Green Turtle	VU & MI	VU	X	X	X
Dermochelys coriacea	Leatherback Turtle	EN & MI	VU	X	X	X
Lerista lineata			P3	X		X
Natator depressus	Flatback Turtle	VU & MI	VU	X	X	X
Neelaps calonotos	Black-Striped Snake, Black-Striped Burrowing Snake		P3	X		X

5.2 Fauna Survey Results

A total of 16 fauna species from 12 families were recorded during the basic fauna survey, including one conservation significant species, *Isoodon fusciventer* (Quenda), which is listed as Priority 4 under the BC Act. Seven introduced species were recorded within the survey site either directly or indirectly, including one declared pest, **Oryctolagus cuniculus* (Rabbit). The feathers of a deceased *Chroicocephalus novaehollandiae novaehollandiae* (Silver Gull) were observed in the site, likely predated on by a **Felis catus* (Cat). A complete species list is provided in Table 11 and example photographs provided in Figure 12.

Table 11: Fauna observations within the survey site. * denotes introduced species

Family	Species Name	Common Name
Bird		
Columbidae	**Columba livia*	Domestic Pigeon (Rock Dove)
Columbidae	**Spilopelia senegalensis*	Laughing Turtle Dove
Columbidae	*Ocyphaps lophotes*	Crested Pigeon
Corvidae	*Corvus coronoides*	Australian Raven
Laridae	*Chroicocephalus novaehollandiae novaehollandiae*	Silver Gull
Meliphagidae	*Gavicalis virescens virescens*	Singing Honeyeater
Rhipiduridae	*Rhipidura leucophrys leucophrys*	Willie Wagtail
Strigidae	*Ninox boobook*	Boobook Owl
Mammal		
Canidae	**Canis lupus familiaris*	Domestic Dog
Felidae	**Felis catus*	Cat
Leporidae	**Oryctolagus cuniculus*	Rabbit
Muridae	**Mus musculus*	House Mouse
Muridae	**Rattus rattus*	Black Rat
Peramelidae	*Isoodon fusciventer*	Quenda
Reptile		
Scincidae	*Morethia lineoocellata*	
Scincidae	Scincidae sp.	



**Spilopelia senegalensis* (Laughing Turtle Dove)



Evidence of predation on Silver Gull



Rhipidura leucophrys leucophrys (Willy Wagtail)



Morethia lineoocellata



Scincidae sp. diggings



Isoodon fusciventer (Quenda) scat

Figure 12: Fauna species observed, including direct and indirect indication of presence. *denotes introduced species.

5.2.2 Fauna Habitat

Three broad fauna habitat types were recorded within the survey site, comprising of shrubland, low shrubland, and Spinifex grassland. Habitat types are described in Table 12 and shown in Figure 13.

Table 12: Fauna habitats within the survey site

Fauna Habitat	Description	Photograph
Shrubland	*Acacia rostellifera* shrubs provide breeding, roosting and foraging habitat for bird species. An understorey of low shrubs, sedges and grasses provide shelter and foraging habitat for reptile and small mammal species. Soil is suitable for burrowing reptiles.	
Low shrubland	Low shrubs and sedges and current weed cover over dune systems provide shelter and foraging habitat for reptiles and small bird species. Gaps in shrub coverage provide areas for reptile basking. Soil is suitable for burrowing reptiles.	
Spinifex grassland	*Spinifex longifolius* adjacent the beach front provides some refuge and foraging opportunities for reptiles; however, activity is less likely in this habitat due to lower vegetation cover. Open areas create foraging opportunities for predatory birds such as the Nankeen Kestrel.	



Figure 13:
Habitat Type

Rockingham, City of Rockingham

Legend

- Shrubland
- Spinifex grassland
- Low shrubland
- Survey Boundary

Client:	City of Rockingham
Date:	25/03/2026
Created by:	S. Treloar
Image Source:	Nearmap, 2026
Datum:	GDA2020 / MGA zone 50
Scale:	1: 1350

0 20 40 m

N

6.0 Implications of Results

6.1 Flora and Vegetation

The survey site did not contain a high diversity of native flora species with a total of 20 (36 %) species recorded across the site. Weed diversity was proportionally higher with 36 (64 %) introduced flora species recorded. The quadrats (100m^2) recorded on average a native species diversity of 5 with an average introduced species diversity of 9. Due to the lower native species diversity than expected for coastal vegetation, and a relatively higher weed diversity, most of the site was assessed as being in degraded to completely degraded condition.

One declared pest was identified within the survey site, **Gomphocarpus fruticosus* (Narrowleaf Cottonbush). Only one individual of this species was observed, and it is likely the seed dispersed from a different location via wind, transient fauna, or human movement. Declared pests are listed on the Western Australian Organism List (WAOL) under the BAM Act (Appendix 6). This classification requires the landowner/land manager to control the population to limit damage as a result of the presence of these species (DPIRD, 2026). **Gomphocarpus fruticosus* is capable of forming dense thickets and outcompeting native species; it is therefore recommended to control the existing plant before it reproduces.

6.2 Significant Flora

The desktop assessment indicated the potential for 21 conservation significant species to potentially occur within 10 km of the survey site; however, based on site characteristics it was determined that the survey site was likely not suitable for any of the species. The field assessment confirmed there are no conservation significant species present within the survey site.

6.3 Threatened Ecological Communities

Although the desktop assessment identified the presence of 11 TECs potentially within 10 km of the survey site, the DBCA database search did not identify any TECs within the survey site. This was confirmed during the field assessment, with no structural, floristic or environmental features within the site that indicate the presence of a TEC listed under the BC Act or the EPBC Act.

6.4 Fauna

All fauna species identified during the field survey commonly occur within the habitat types present within the survey site. Coastal dunes on the Swan Coastal Plain typically support a high diversity of fauna. The basic fauna survey confirmed the presence of three fauna groups (birds, reptiles and mammals); however, species richness is likely greater than observed. A detailed fauna survey incorporating trapping methods would be required to further inform species diversity.

One conservation significant species, the Quenda (listed as Priority 4), was identified during the field survey. This species is common in coastal habitats and is well adapted to utilising degraded environments. The desktop survey identified one additional conservation significant species likely to occur within the site, *Lerista lineata* (listed as Priority 3). The survey site provides suitable habitat for this species, however due to its burrowing behaviour, it was unlikely to be detected during the basic fauna survey. A detailed fauna survey would be required to confirm the presence/absence of this species.

All introduced fauna identified within the site are typical of coastal areas on the Swan Coastal Plain. **Oryctolagus cuniculus* (Rabbits) are listed as a declared pest under the BAM Act and require the landowner/land manager to control the population to limit damage as a result of the presence of these species (DPIRD, 2026).

Evidence of predation on a Silver Gull was observed during the field survey, most likely attributable to a cat. Given the proximity to residential areas, domestic cats are likely to frequent the bushland within and surrounding the survey site and are the likely cause of the predation.

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Appendix 1: PMST Report 10 km

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: 03-Jul-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.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	3
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	6
Listed Threatened Species:	68
Listed Migratory Species:	64

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	198
Commonwealth Heritage Places:	1
Listed Marine Species:	96
Whales and Other Cetaceans:	12
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

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

State and Territory Reserves:	14
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	64
Key Ecological Features (Marine):	None
Biologically Important Areas:	11
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands) [Resource Information]

Ramsar Site Name	Proximity	Buffer Status
Becher point wetlands	Within Ramsar site	In feature area
Forrestdale and thomsons lakes	Within 10km of Ramsar site	In buffer area only
Peel-yalgorup system	20 - 30km upstream from Ramsar site	In buffer area only

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area	In feature area
Empodisma peatlands of southwestern Australia	Endangered	Community may occur within area	In buffer area only
Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion	Critically Endangered	Community likely to occur within area	In buffer area only
Sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Endangered	Community known to occur within area	In buffer area only
Thrombolite (microbial) community of coastal freshwater lakes of the Swan Coastal Plain (Lake Richmond)	Endangered	Community known to occur within area	In buffer area only
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris tenuirostris Great Knot [862]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]	Endangered	Species or species habitat known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area	In feature area
Phaethon rubricauda westralis Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824]	Endangered	Species or species habitat known to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Sternula albifrons Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche melanophris			
Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi			
White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In feature area
Tringa nebularia			
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
Zanda baudinii listed as Calyptorhynchus baudinii			
Baudin's Cockatoo, Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Zanda latirostris listed as Calyptorhynchus latirostris			
Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Breeding known to occur within area	In feature area
MAMMAL			
Balaenoptera musculus			
Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
Bettongia penicillata ogilbyi			
Woylie [66844]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Dasyurus geoffroii			
Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Eubalaena australis			
Southern Right Whale [40]	Endangered	Breeding known to occur within area	In feature area
Neophoca cinerea			
Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat likely to occur within area	In feature area
Pseudocheirus occidentalis			
Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
OTHER			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Westralunio carteri Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
PLANT			
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat likely to occur within area	In feature area
Banksia mimica Summer Honeypot [82765]	Endangered	Species or species habitat may occur within area	In buffer area only
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Diuris drummondii Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat known to occur within area	In feature area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Drakaea elastica Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Eucalyptus x balanites Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Morelotia australiensis listed as Tetraria australiensis]			
Southern Tetraria [92784]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Synaphea sp. Fairbridge Farm (D.Papenfus 696)]			
Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
[Synaphea sp. Serpentine (G.R.Brand 103)]			
[86879]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
REPTILE			
[Caretta caretta]			
Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
[Chelonia mydas]			
Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
[Dermochelys coriacea]			
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
[Natator depressus]			
Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
SHARK			
[Carcharias taurus (west coast population)]			
Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Carcharodon carcharias]			
White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Galeorhinus galeus]			
School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453]	Conservation Dependent	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In feature area
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat known to occur within area	In feature area

Listed Migratory Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Hydroprogne caspia Caspian Tern [808]		Breeding known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Onychoprion anaethetus Bridled Tern [82845]		Breeding known to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sterna dougallii Roseate Tern [817]		Breeding known to occur within area	In feature area
Sternula albifrons Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In feature area
Migratory Marine Species			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In feature area
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In feature area
Carcharias taurus Grey Nurse Shark [64469]		Species or species habitat likely to occur within area	In feature area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area

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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris alba Sanderling [875]		Species or species habitat known to occur within area	In buffer area only
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area	In feature area
Calidris pugnax as Philomachus pugnax Ruff [91256]		Species or species habitat known to occur within area	In buffer area only
Calidris ruficollis Red-necked Stint [860]		Species or species habitat known to occur within area	In buffer area only
Calidris subminuta Long-toed Stint [861]		Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Calidris tenuirostris](#) Great Knot [862]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
[Charadrius dubius](#) Little Ringed Plover [896]		Species or species habitat known to occur within area	In buffer area only
[Charadrius leschenaultii](#) Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Charadrius mongolus](#) Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area	In buffer area only
[Glareola maldivarum](#) Oriental Pratincole [840]		Species or species habitat known to occur within area	In buffer area only
[Limosa lapponica](#) Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
[Limosa limosa](#) Black-tailed Godwit [845]	Endangered	Species or species habitat known to occur within area	In buffer area only
[Numenius madagascariensis](#) Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
[Pandion haliaetus](#) Osprey [952]		Breeding known to occur within area	In feature area
[Thalasseus bergii](#) Greater Crested Tern [83000]		Breeding known to occur within area	In buffer area only
[Tringa brevipes](#) Grey-tailed Tattler [851]		Species or species habitat known to occur within area	In buffer area only
[Tringa glareola](#) Wood Sandpiper [829]		Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa nebularia			
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
Tringa stagnatilis			
Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known 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
Defence		
Defence - HMAS STIRLING-ROCKINGHAM ;HMAS STIRLING - GARDEN ISLAND [50134]	WA	In buffer area only
Defence - HMAS STIRLING-ROCKINGHAM ;HMAS STIRLING - GARDEN ISLAND [50133]	WA	In buffer area only
Defence - HMAS STIRLING-ROCKINGHAM ;HMAS STIRLING - GARDEN ISLAND [50132]	WA	In buffer area only
Defence - HMAS STIRLING-ROCKINGHAM ;HMAS STIRLING - GARDEN ISLAND [50117]	WA	In buffer area only
Defence - ROCKINGHAM - NAVY CPSO [50135]	WA	In buffer area only
Unknown		
Commonwealth Land - [50459]	WA	In buffer area only
Commonwealth Land - [50571]	WA	In buffer area only
Commonwealth Land - [50482]	WA	In buffer area only
Commonwealth Land - [50485]	WA	In buffer area only
Commonwealth Land - [51499]	WA	In buffer area only
Commonwealth Land - [50480]	WA	In buffer area only
Commonwealth Land - [50437]	WA	In buffer area only
Commonwealth Land - [50483]	WA	In buffer area only
Commonwealth Land - [50423]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50486]	WA	In buffer area only
Commonwealth Land - [50570]	WA	In buffer area only
Commonwealth Land - [50488]	WA	In buffer area only
Commonwealth Land - [51495]	WA	In buffer area only
Commonwealth Land - [50484]	WA	In buffer area only
Commonwealth Land - [50622]	WA	In buffer area only
Commonwealth Land - [50487]	WA	In buffer area only
Commonwealth Land - [51117]	WA	In buffer area only
Commonwealth Land - [51979]	WA	In buffer area only
Commonwealth Land - [51113]	WA	In buffer area only
Commonwealth Land - [50623]	WA	In buffer area only
Commonwealth Land - [50603]	WA	In buffer area only
Commonwealth Land - [50602]	WA	In buffer area only
Commonwealth Land - [50519]	WA	In buffer area only
Commonwealth Land - [50518]	WA	In buffer area only
Commonwealth Land - [50515]	WA	In buffer area only
Commonwealth Land - [50514]	WA	In buffer area only
Commonwealth Land - [50557]	WA	In buffer area only
Commonwealth Land - [50505]	WA	In buffer area only
Commonwealth Land - [50556]	WA	In buffer area only
Commonwealth Land - [50555]	WA	In buffer area only
Commonwealth Land - [50552]	WA	In buffer area only
Commonwealth Land - [50619]	WA	In buffer area only
Commonwealth Land - [50524]	WA	In buffer area only
Commonwealth Land - [50551]	WA	In buffer area only
Commonwealth Land - [50618]	WA	In buffer area only
Commonwealth Land - [50605]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50550]	WA	In buffer area only
Commonwealth Land - [50504]	WA	In buffer area only
Commonwealth Land - [50604]	WA	In buffer area only
Commonwealth Land - [50503]	WA	In buffer area only
Commonwealth Land - [50591]	WA	In buffer area only
Commonwealth Land - [50564]	WA	In buffer area only
Commonwealth Land - [50565]	WA	In buffer area only
Commonwealth Land - [50568]	WA	In buffer area only
Commonwealth Land - [50569]	WA	In buffer area only
Commonwealth Land - [50558]	WA	In buffer area only
Commonwealth Land - [50567]	WA	In buffer area only
Commonwealth Land - [50597]	WA	In buffer area only
Commonwealth Land - [50520]	WA	In buffer area only
Commonwealth Land - [50590]	WA	In buffer area only
Commonwealth Land - [50468]	WA	In buffer area only
Commonwealth Land - [50425]	WA	In buffer area only
Commonwealth Land - [50467]	WA	In buffer area only
Commonwealth Land - [50424]	WA	In buffer area only
Commonwealth Land - [50521]	WA	In buffer area only
Commonwealth Land - [50490]	WA	In buffer area only
Commonwealth Land - [50469]	WA	In buffer area only
Commonwealth Land - [50491]	WA	In buffer area only
Commonwealth Land - [50617]	WA	In buffer area only
Commonwealth Land - [50464]	WA	In buffer area only
Commonwealth Land - [50492]	WA	In buffer area only
Commonwealth Land - [50616]	WA	In buffer area only
Commonwealth Land - [50493]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50615]	WA	In buffer area only
Commonwealth Land - [50466]	WA	In buffer area only
Commonwealth Land - [50497]	WA	In buffer area only
Commonwealth Land - [50614]	WA	In buffer area only
Commonwealth Land - [50465]	WA	In buffer area only
Commonwealth Land - [50495]	WA	In buffer area only
Commonwealth Land - [50499]	WA	In buffer area only
Commonwealth Land - [50496]	WA	In buffer area only
Commonwealth Land - [50506]	WA	In buffer area only
Commonwealth Land - [50507]	WA	In buffer area only
Commonwealth Land - [50612]	WA	In buffer area only
Commonwealth Land - [50613]	WA	In buffer area only
Commonwealth Land - [50610]	WA	In buffer area only
Commonwealth Land - [50611]	WA	In buffer area only
Commonwealth Land - [50463]	WA	In buffer area only
Commonwealth Land - [50462]	WA	In buffer area only
Commonwealth Land - [50461]	WA	In buffer area only
Commonwealth Land - [50460]	WA	In buffer area only
Commonwealth Land - [50526]	WA	In buffer area only
Commonwealth Land - [50543]	WA	In buffer area only
Commonwealth Land - [50527]	WA	In buffer area only
Commonwealth Land - [51889]	WA	In buffer area only
Commonwealth Land - [51123]	WA	In buffer area only
Commonwealth Land - [50481]	WA	In buffer area only
Commonwealth Land - [50525]	WA	In buffer area only
Commonwealth Land - [50474]	WA	In buffer area only
Commonwealth Land - [50522]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50549]	WA	In buffer area only
Commonwealth Land - [50572]	WA	In buffer area only
Commonwealth Land - [50523]	WA	In buffer area only
Commonwealth Land - [50509]	WA	In buffer area only
Commonwealth Land - [50544]	WA	In buffer area only
Commonwealth Land - [50475]	WA	In buffer area only
Commonwealth Land - [50545]	WA	In buffer area only
Commonwealth Land - [50317]	WA	In buffer area only
Commonwealth Land - [50457]	WA	In buffer area only
Commonwealth Land - [50548]	WA	In buffer area only
Commonwealth Land - [50580]	WA	In buffer area only
Commonwealth Land - [50581]	WA	In buffer area only
Commonwealth Land - [50608]	WA	In buffer area only
Commonwealth Land - [50577]	WA	In buffer area only
Commonwealth Land - [50478]	WA	In buffer area only
Commonwealth Land - [50479]	WA	In buffer area only
Commonwealth Land - [50573]	WA	In buffer area only
Commonwealth Land - [51897]	WA	In buffer area only
Commonwealth Land - [50643]	WA	In buffer area only
Commonwealth Land - [51896]	WA	In buffer area only
Commonwealth Land - [50422]	WA	In buffer area only
Commonwealth Land - [51890]	WA	In buffer area only
Commonwealth Land - [50418]	WA	In buffer area only
Commonwealth Land - [50421]	WA	In buffer area only
Commonwealth Land - [50420]	WA	In buffer area only
Commonwealth Land - [50419]	WA	In buffer area only
Commonwealth Land - [50498]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50620]	WA	In buffer area only
Commonwealth Land - [50473]	WA	In buffer area only
Commonwealth Land - [50472]	WA	In buffer area only
Commonwealth Land - [50512]	WA	In buffer area only
Commonwealth Land - [50513]	WA	In buffer area only
Commonwealth Land - [50477]	WA	In buffer area only
Commonwealth Land - [50476]	WA	In buffer area only
Commonwealth Land - [50471]	WA	In buffer area only
Commonwealth Land - [50661]	WA	In buffer area only
Commonwealth Land - [50609]	WA	In buffer area only
Commonwealth Land - [50510]	WA	In buffer area only
Commonwealth Land - [50656]	WA	In buffer area only
Commonwealth Land - [50655]	WA	In buffer area only
Commonwealth Land - [50653]	WA	In buffer area only
Commonwealth Land - [50652]	WA	In buffer area only
Commonwealth Land - [50427]	WA	In buffer area only
Commonwealth Land - [50657]	WA	In buffer area only
Commonwealth Land - [50659]	WA	In buffer area only
Commonwealth Land - [50500]	WA	In buffer area only
Commonwealth Land - [50428]	WA	In buffer area only
Commonwealth Land - [50658]	WA	In buffer area only
Commonwealth Land - [50446]	WA	In buffer area only
Commonwealth Land - [50443]	WA	In buffer area only
Commonwealth Land - [50441]	WA	In buffer area only
Commonwealth Land - [50442]	WA	In buffer area only
Commonwealth Land - [50449]	WA	In buffer area only
Commonwealth Land - [50654]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50538]	WA	In buffer area only
Commonwealth Land - [50539]	WA	In buffer area only
Commonwealth Land - [50531]	WA	In buffer area only
Commonwealth Land - [50501]	WA	In buffer area only
Commonwealth Land - [50470]	WA	In buffer area only
Commonwealth Land - [50629]	WA	In buffer area only
Commonwealth Land - [51496]	WA	In buffer area only
Commonwealth Land - [50532]	WA	In buffer area only
Commonwealth Land - [50416]	WA	In buffer area only
Commonwealth Land - [50417]	WA	In buffer area only
Commonwealth Land - [51980]	WA	In buffer area only
Commonwealth Land - [50452]	WA	In buffer area only
Commonwealth Land - [50456]	WA	In buffer area only
Commonwealth Land - [50451]	WA	In buffer area only
Commonwealth Land - [50450]	WA	In buffer area only
Commonwealth Land - [50453]	WA	In buffer area only
Commonwealth Land - [50458]	WA	In buffer area only
Commonwealth Land - [50455]	WA	In buffer area only
Commonwealth Land - [50454]	WA	In buffer area only
Commonwealth Land - [51436]	WA	In buffer area only
Commonwealth Land - [50638]	WA	In buffer area only
Commonwealth Land - [50579]	WA	In buffer area only
Commonwealth Land - [50636]	WA	In buffer area only
Commonwealth Land - [50639]	WA	In buffer area only
Commonwealth Land - [50635]	WA	In buffer area only
Commonwealth Land - [50634]	WA	In buffer area only
Commonwealth Land - [50528]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50633]	WA	In buffer area only
Commonwealth Land - [50631]	WA	In buffer area only
Commonwealth Land - [52119]	WA	In buffer area only
Commonwealth Land - [50412]	WA	In buffer area only
Commonwealth Land - [50645]	WA	In buffer area only
Commonwealth Land - [50415]	WA	In buffer area only
Commonwealth Land - [50447]	WA	In buffer area only
Commonwealth Land - [50444]	WA	In buffer area only
Commonwealth Land - [50445]	WA	In buffer area only
Commonwealth Land - [50640]	WA	In buffer area only
Commonwealth Land - [50511]	WA	In buffer area only
Commonwealth Land - [50642]	WA	In buffer area only
Commonwealth Land - [50662]	WA	In buffer area only
Commonwealth Land - [50621]	WA	In buffer area only
Commonwealth Land - [50431]	WA	In buffer area only
Commonwealth Land - [50438]	WA	In buffer area only
Commonwealth Land - [50646]	WA	In buffer area only
Commonwealth Land - [50628]	WA	In buffer area only
Commonwealth Land - [50433]	WA	In buffer area only
Commonwealth Land - [50432]	WA	In buffer area only
Commonwealth Land - [51497]	WA	In buffer area only
Commonwealth Land - [50434]	WA	In buffer area only

Commonwealth Heritage Places			[Resource Information]
Name	State	Status	Buffer Status
Natural			
Garden Island	WA	Listed place	In buffer area only

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area	In feature area
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris alba Sanderling [875]		Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Calidris canutus](#) Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat known to occur within area overfly marine area	In feature area
[Calidris pugnax as Philomachus pugnax](#) Ruff [91256]		Species or species habitat known to occur within area overfly marine area	In buffer area only
[Calidris ruficollis](#) Red-necked Stint [860]		Species or species habitat known to occur within area overfly marine area	In buffer area only
[Calidris subminuta](#) Long-toed Stint [861]		Species or species habitat known to occur within area overfly marine area	In buffer area only
[Calidris tenuirostris](#) Great Knot [862]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In buffer area only
[Charadrius dubius](#) Little Ringed Plover [896]		Species or species habitat known to occur within area overfly marine area	In buffer area only
[Charadrius leschenaultii](#) Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Charadrius mongolus](#) Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius ruficapillus Red-capped Plover [881]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Chroicocephalus novaehollandiae as Larus novaehollandiae Silver Gull [82326]		Breeding known to occur within area	In buffer area only
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In feature area
Eudyptula minor Little Penguin [1085]		Breeding known to occur within area	In buffer area only
Glareola maldivarum Oriental Pratincole [840]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Hydroprogne caspia as Sterna caspia Caspian Tern [808]		Breeding known to occur within area	In feature area
Larus pacificus Pacific Gull [811]		Breeding known to occur within area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]	Endangered	Species or species habitat known to occur within area overfly marine area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Onychoprion anaethetus as Sterna anaethetus Bridled Tern [82845]		Breeding known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Onychoprion fuscatus as Sterna fuscata Sooty Tern [90682]		Breeding known to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In feature area
Pelagodroma marina White-faced Storm-Petrel [1016]		Breeding known to occur within area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Puffinus assimilis Little Shearwater [59363]		Breeding known to occur within area	In feature area
Recurvirostra novaehollandiae Red-necked Avocet [871]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Stercorarius antarcticus as Catharacta skua Brown Skua [85039]		Species or species habitat may occur within area	In buffer area only
Sterna dougallii Roseate Tern [817]		Breeding known to occur within area	In feature area
Sternula albifrons as Sterna albifrons Little Tern [82849]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Sternula nereis as Sterna nereis Fairy Tern [82949]		Breeding known to occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalasseus bergii as Sterna bergii Greater Crested Tern [83000]		Breeding known to occur within area	In buffer area only
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat known to occur within area overfly marine area	In feature area
Tringa brevipes as Heteroscelus brevipes Grey-tailed Tattler [851]		Species or species habitat known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Fish			
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In feature area
Campichthys galei Gale's Pipefish [66191]		Species or species habitat may occur within area	In feature area
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In feature area
Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area	In feature area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In feature area
Hippocampus subelongatus West Australian Seahorse [66722]		Species or species habitat may occur within area	In feature area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In feature area
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In feature area
Lissocampus fatiloquus Prophet's Pipefish [66250]		Species or species habitat may occur within area	In feature area
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In feature area
Mitotichthys meraculus Western Crested Pipefish [66259]		Species or species habitat may occur within area	In feature area
Nannocampus subosseus Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area	In feature area
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In feature area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In feature area
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In feature area
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In feature area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In feature area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In feature area
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In feature area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Vanacampus phillipi](#) Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In feature area
[Vanacampus poecilolaemus](#) Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In feature area
Mammal			
[Arctocephalus forsteri](#) Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In feature area
[Neophoca cinerea](#) Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat likely to occur within area	In feature area
Reptile			
[Caretta caretta](#) Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
[Chelonia mydas](#) Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
[Dermochelys coriacea](#) Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In feature area
[Hydrophis kingii as Disteira kingii](#) Spectacled Sea Snake [93511]		Species or species habitat may occur within area	In feature area
[Natator depressus](#) Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area

Whales and Other Cetaceans			[Resource Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			

Current Scientific Name	Status	Type of Presence	Buffer Status
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In feature area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In feature area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In feature area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In feature area
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area	In feature area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In feature area

Current Scientific Name	Status	Type of Presence	Buffer Status
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Henderson	Conservation Park	WA	In buffer area only
Leda	Nature Reserve	WA	In buffer area only
Penguin Island	Conservation Park	WA	In buffer area only
Point Peron	Conservation Park	WA	In buffer area only
Point Peron Reserve	5(1)(h) Reserve	WA	In buffer area only
Port Kennedy Scientific Park	Nature Reserve	WA	In buffer area only
Shoalwater Bay Islands	Nature Reserve	WA	In buffer area only
Shoalwater Bay Islands	Nature Reserve	WA	In buffer area only
Shoalwater Islands	Marine Park	WA	In buffer area only
Unnamed WA24309	5(1)(h) Reserve	WA	In buffer area only
Unnamed WA43903	Nature Reserve	WA	In buffer area only
Unnamed WA44004	Nature Reserve	WA	In buffer area only
Unnamed WA51658	5(1)(h) Reserve	WA	In buffer area only
Unnamed WA53313	Conservation Park	WA	In buffer area only

EPBC Act Referrals				[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Abercrombie Road Quarry	2023/09465		Assessment	In buffer area only
Anketell Road Upgrade (Leith Road to Kwinana Freeway)	2024/09841		Assessment	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Baldivis Residential Development - Spires Estate	2024/09995		Completed	In buffer area only
Commercial Development of Lots 12 and 13 Lodge Drive, East Rockingham, WA	2021/9069		Post-Approval	In buffer area only
Freight handling expansion, Kwinana Rail Depot	2023/09474		Assessment	In buffer area only
H2Perth hydrogen and ammonia project	2023/09559		Completed	In buffer area only
Kwinana Alumina Refinery ? Future Residue Storage Area	2023/09454		Completed	In buffer area only
Lot 1401 Fifty Road, Baldivis	2020/8620		Approval	In buffer area only
Outer Harbour Port Development, Kwinana	2024/09859		Assessment	In buffer area only
SMAP telecommunications submarine cable installation	2024/09989		Completed	In buffer area only
Spatial Property Group Ltd - Residential Development, Kerosene Lane and Baldivis Road	2021/9006		Approval	In buffer area only
Submarine Rotational Force ? West, Priority Infrastructure Works	2024/10031		Approval	In buffer area only
Submarine Rotational Force ? West, Priority Infrastructure Works: Maritime Upgrades	2024/09943		Completed	In buffer area only
Wellard Road Widening Project	2023/09570		Referral Decision	In buffer area only
Controlled action				
Alcoa Bauxite Residue Storage Area Extension	2011/5878	Controlled Action	Further Information Request	In buffer area only
Baldivis Residential development on lots 98, 323,529 and 530	2010/5733	Controlled Action	Post-Approval	In buffer area only
Clearing of 18.80 ha of vegatation ahead of quarrying operations	2010/5650	Controlled Action	Completed	In buffer area only
Clearing of 22 ha vegatation to allow for the continuation of quarrying	2010/5649	Controlled Action	Post-Approval	In buffer area only
Construction of a Deepwater, General Container Port	2009/5178	Controlled Action	Proposed Decision	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Construction of New Perth Bunbury Highway project	2005/2193	Controlled Action	Post-Approval	In buffer area only
Development of Kwinana Quay port facility	2008/4387	Controlled Action	Completed	In buffer area only
Develop three sites into residential housing and mixed use developments, Western Australia	2013/6916	Controlled Action	Post-Approval	In buffer area only
Extend a section of Mundijong Road	2011/5971	Controlled Action	Post-Approval	In buffer area only
Industry Zone	2010/5337	Controlled Action	Post-Approval	In buffer area only
Mangles Bay Marina Based Tourist Precinct	2010/5659	Controlled Action	Post-Approval	In buffer area only
Natural Gas Pipeline Expansion	2006/2813	Controlled Action	Post-Approval	In buffer area only
Residential development, Village of Wellard, City of Kwinana, WA	2013/6986	Controlled Action	Post-Approval	In buffer area only
Wellard Village Primary School development, part Lot 9074 Lambeth Circle, Wellard	2020/8732	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
'Looping 10' gas transmission pipeline from Kwinana to Hopelands	2005/2212	Not Controlled Action	Completed	In feature area
Baldivis District Sporting Complex, Baldivis, WA	2018/8323	Not Controlled Action	Completed	In buffer area only
Clear native vegetation to undertake a residential development, Baldivis, Wa	2013/6779	Not Controlled Action	Completed	In buffer area only
Construction of Secret Harbour High School	2004/1489	Not Controlled Action	Completed	In buffer area only
Continuation of quarrying sand and limestone, Lot 800 Kerosene Lane, Baldivis, WA	2013/6832	Not Controlled Action	Completed	In buffer area only
Expansion of berthing facilities at Kwinana Bulk Terminal	2006/2509	Not Controlled Action	Completed	In buffer area only
Expansion of existing Ammonium Nitrate Production Facility	2005/1941	Not Controlled Action	Completed	In buffer area only
Expansion of Lifestyle Village development, Lots 1, 3, 700 and 703 Mandurah Rd, Baldivis, WA	2016/7850	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Gas-fired Power Station	2005/2213	Not Controlled Action	Completed	In feature area
Highschool and Primary development, Wellard, WA	2016/7639	Not Controlled Action	Completed	In buffer area only
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Kennedy Bay urban development, Port Kennedy, WA	2014/7122	Not Controlled Action	Completed	In buffer area only
Kennedy Park Estate Residential Development	2003/1044	Not Controlled Action	Completed	In feature area
Kwinana Depot Upgrade	2011/6035	Not Controlled Action	Completed	In buffer area only
Kwinana Gas-Fired Power Station	2005/2101	Not Controlled Action	Completed	In feature area
Lot 170 Hope Valley Road, Hope Valley	2020/8830	Not Controlled Action	Completed	In buffer area only
Palm Beach Caravan Park Redevelopment, Rockingham, WA	2013/6853	Not Controlled Action	Completed	In buffer area only
Perth Desalination Plant 2	2019/8454	Not Controlled Action	Completed	In buffer area only
Residential development, part of Lot 601, Mandurah Road, West Baldivis, WA	2013/6871	Not Controlled Action	Completed	In buffer area only
Residential development of Lot 9501 Muzzlewood Street, Baldivis, WA	2016/7775	Not Controlled Action	Completed	In buffer area only
Residential Subdivision on Baldivis Road, Sabrina Road & Zig Zag Road	2012/6613	Not Controlled Action	Completed	In buffer area only
Residential Subdivision on Lots 921 & 922 Baldivis Road and Lot 3 Key Close, Baldivis, WA	2012/6601	Not Controlled Action	Completed	In buffer area only
Sepia Depression Ocean Outlet Landline Duplication	2012/6248	Not Controlled Action	Completed	In buffer area only
Subdivision development on Fifty Rd & Eighty Rd Baldivis	2011/6195	Not Controlled Action	Completed	In buffer area only
Wellard Farms Urban Development, Baldivis WA	2020/8634	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Not controlled action (particular manner)				
CETO 6 Garden Island Project, offshore WA	2016/7635	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
CETO 6 Geophysical and Geotechnical Surveys	2014/7408	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
City of Cockburn Sporting Facilties	2005/2139	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Lake Richmond Boardwalk installation, Rockingham, WA	2013/6977	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Multipurpose development stage 1 within 340ha	2004/1913	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
South West Metropolitan Railway Project	2003/1175	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Wastewater Treatment Plant	2009/4970	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
Referral decision				
Kennedy Bay Urban Development,PortKennedy,Rockingh	2013/7022	Referral Decision	Completed	In buffer area only
Mundijong Road Ext Realignment Project Baldivis WA	2011/5864	Referral Decision	Completed	In buffer area only

Biologically Important Areas			[Resource Information]
Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Ardenna carneipes			
Flesh-footed Shearwater [82404]	Aggregation	Known to occur	In buffer area only

Scientific Name	Behaviour	Presence	Buffer Status
Ardenna pacifica			
Wedge-tailed Shearwater [84292]	Foraging (in high numbers)	Known to occur	In feature area
Eudyptula minor			
Little Penguin [1085]	Foraging (provisioning young)	Known to occur	In feature area
Hydroprogne caspia			
Caspian Tern [808]	Foraging (provisioning young)	Known to occur	In feature area
Larus pacificus			
Pacific Gull [811]	Foraging (in high numbers)	Former Range	In feature area
Onychoprion anaethetus			
Bridled Tern [82845]	Foraging (in high numbers)	Known to occur	In feature area
Puffinus assimilis tunneyi			
Little Shearwater [59363]	Foraging (in high numbers)	Known to occur	In feature area
Sterna dougallii			
Roseate Tern [817]	Foraging	Known to occur	In feature area
Sternula nereis			
Fairy Tern [82949]	Foraging (in high numbers)	Known to occur	In feature area
Seals			
Neophoca cinerea			
Australian Sea Lion [22]	Foraging (male)	Likely to occur	In buffer area only
Whales			
Megaptera novaeangliae			
Humpback Whale [38]	Migration (north and south)	Known to occur	In feature area

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.

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Appendix 2: Conservation Codes

A2.1 Flora and Fauna

State Flora and Fauna Conservation Codes under the *Biodiversity Conservation Act 2018* (WA)

Conservation Code	Name	Description
Threatened Species		
CR	Critically endangered	Species considered to be facing an extremely high risk of extinction within the wild in the immediate future
EN	Endangered	Species considered to be facing a very high risk of extinction in the wild in the near future
VU	Vulnerable	Species considered to be facing a high risk of extinction in the wild in the medium-term future
Extinct Species		
EX	Extinct Species	Species where 'there is no reasonable doubt that the last member of the species has died (Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice or the Wildlife Conservation (Rare Flora) Notice)
EW	Extinct in the Wild	Species that are known to only survive in cultivation, in captivity, or as a naturalised population well outside its past range; and it has not been recorded in its known or expected habitat at appropriate seasons anywhere in its past range, despite surveys over a timeframe appropriate to its life cycle and form
Specially Protected Species		
MI	Migratory Species	Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth (Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice)
CD	Conservation Dependent	Species of special conservation interest (conservation dependent fauna), being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened (Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice)
OS	Other Specially Protected Species	Fauna otherwise in need of special protection to ensure their conservation (Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice)

State Flora and Fauna Conservation Codes listed by Department of Biodiversity, Conservation and Attractions

Conservation Code	Name	Description
P1	Priority One	Poorly known species – Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either very small or on lands not managed for conservation, such as road verges, urban areas, farmland, active mineral lease and under threat of habitat destruction or degradation.
P2	Priority Two	Poorly known species – Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, such as national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves and similar.
P3	Priority Three	Poorly known species – Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat
P4	Priority Four	Rare or near threatened and other species in need of monitoring. a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands. b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species. c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.

Source: DBCA, 2023

Commonwealth Flora and Fauna Conservation Codes under the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth)

Category	Description
Extinct	A native species which at at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
Extinct in the wild	A native species which at a particular time if, at that time: a) It is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or b) It has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
Critically endangered	A species considered to be facing an extremely high risk of extinction in the wild and is determined that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations.
Endangered	A species considered to be facing a very high risk of extinction in the wild and is determined that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations.
Vulnerable	A species considered to be facing a high risk of extinction in the wild and is determined that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations.
Conservation dependent	A native species which at a particular time if, at that time: a) is the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or b) the following subparagraphs are satisfied: i. the species is a species of fish; ii. the species is the focus of a plan of management that provides for management actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long term survival in nature are maximised; iii. the plan of management is in force under a law of the Commonwealth or of a State or Territory; iv. cessation of the plan of management would adversely affect the conservation status of the species

A2.2 Ecological Communities

State Ecological Community Conservation Codes under the *Biodiversity Conservation Act 2018* (WA)

Conservation Code	Name	Description
PD	Presumed Totally Destroyed	An ecological community that has been adequately searched for but for which no representative occurrences have been located. The community has been found to be totally destroyed or so extensively modified throughout its range that no occurrence of it is likely to recover its species composition and/or structure in the foreseeable future
CR	Critically Endangered	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.
EN	Endangered	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
VU	Vulnerable	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.

State Ecological Community Conservation Codes listed by Department of Biodiversity, Conservation and Attractions

Conservation Code	Name	Description
P1	Priority One	**Poorly known ecological communities - very few occurrences, very restricted distribution** Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤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
P2	Priority Two	**Poorly known ecological communities - few occurrences, restricted distribution** Communities that are known from few occurrences with a restricted distribution (generally ≤10 occurrences or a total area of ≤200 ha). At least some occurrences are not believed to be under immediate threat (within approximately 10 years) of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.
P3	Priority Three	**Poorly known ecological communities - inadequately surveyed or not well defined** Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them. his category includes three sub-categories: i. Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation. ii. Communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat (within approximately 10 years), iii. Communities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across

Conservation Code	Name	Description
		much of their range from processes such as grazing by domestic and/or feral stock, inappropriate fire regimes, clearing, hydrological change etc.
P4	Priority Four	**Adequately known ecological communities - rare, near threatened, or recently removed from the threatened list** Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring. i. Rare: Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These communities are usually represented on conservation lands. ii. Near Threatened: Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for a higher threat category. iii. Ecological communities that have been removed from the list of threatened communities during the past five years.
P5	Priority Five	**Conservation dependent ecological communities** Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Source: DBCA, 2023

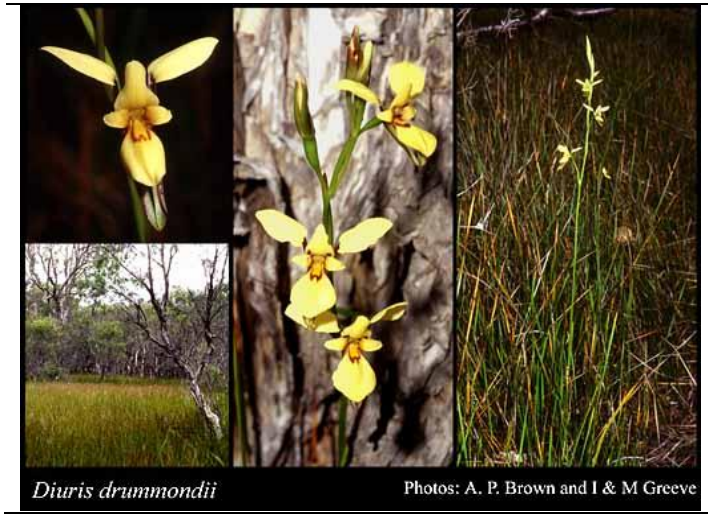
Commonwealth Ecological Community Conservation Codes under the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth)

Category	Description
Critically endangered	If, at that time, an ecological community is facing an extremely high risk of extinction in the wild in the immediate future (indicative timeframe being the next 10 years).
Endangered	If, at that time, an ecological community is not critically endangered but is facing a very high risk of extinction in the wild in the near future (indicative timeframe being the next 20 years).
Vulnerable	If, at that time, an ecological community is not critically endangered or endangered but is facing a high risk of extinction in the wild in the medium-term future (indicative timeframe being the next 50 years).

Appendix 3: Significant Species

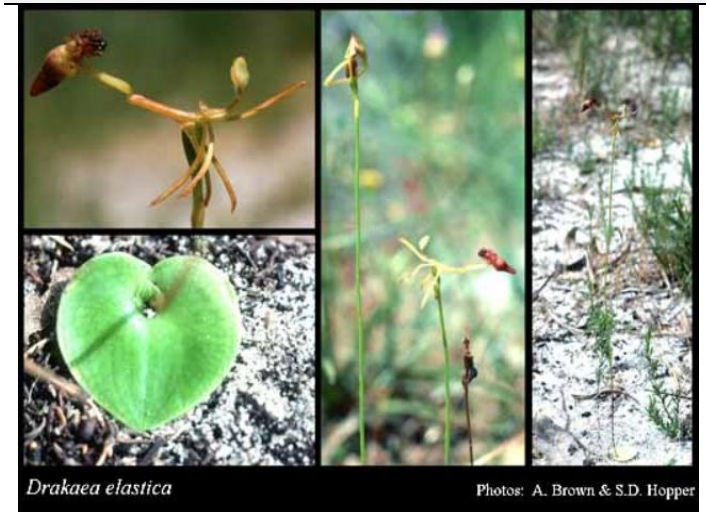
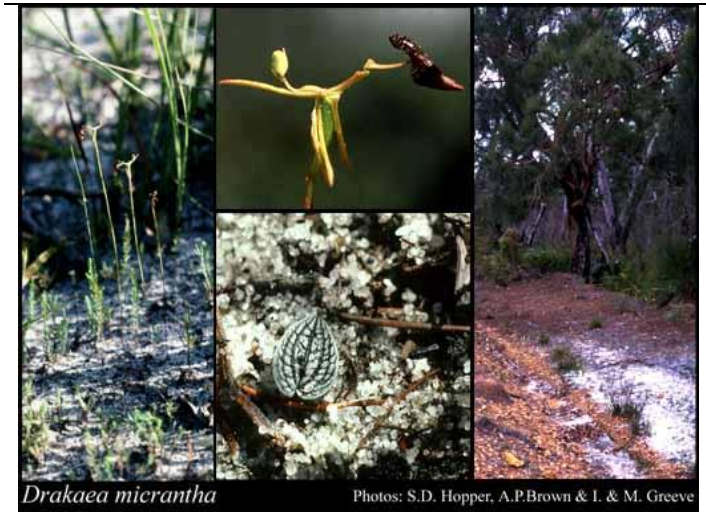
Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
Acacia sp. Binningup		Upright shrub 1 to 2.1 m, pinnate glaucous, glabrous foliage, non-spiny. Plant propagates from root suckers.	-	Tuart woodland over scattered Agonis flexuosa over soapbush tall shrubland.	P1	N	Not likely. Habitat not suitable.
 *Andersonia gracilis*		Slender erect or open straggly shrub, 0.1-0.5(-1) m high. Fl. white-pink-purple.	Sep to Nov.	White/grey sand, sandy clay, gravelly loam. Winter-wet areas, near swamps.	VU	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
 *Banksia mimica*	Summer Honeypot	Prostrate, lignotuberous shrub, 0.15-0.4 m high. Fl. yellow-brown.	Dec or Jan to Feb.	White or grey sand over laterite, sandy loam.	EN	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
 *Caladenia huegelii*	Grand Spider Orchid	Tuberous, perennial, herb, 0.25-0.6 m high. Fl. green & cream & red.	Sep to Oct.	Grey or brown sand, clay loam.	CR	N	Not likely. Habitat not suitable.
	Tall Donkey Orchid	Tuberous, perennial, herb, 0.5-1.05 m high. Fl. Yellow.	Nov to Dec or Jan.	Low-lying depressions, swamps.	T	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
Diuris drummondii							
 *Diuris micrantha*	Dwarf Bee Orchid	Tuberous, perennial, herb, 0.3-0.6 m high. Fl. yellow & brown.	Sep to Oct.	Brown loamy clay. Winter-wet swamps, in shallow water.	VU	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
 *Diuris purdiei*	Purdie's Donkey Orchid	Tuberous, perennial, herb, 0.15-0.35 m high. Fl. Yellow.	Sep to Oct.	Grey-black sand, moist. Winter-wet swamps.	EN	N	Not likely. Habitat not suitable.
 *Dodonaea hackettiana*	Hackett's Hopbush	Erect shrub or tree, 1-5 m high. Fl. yellow-green/red, mainly.	Jul to Oct.	Sand. Outcropping limestone.	P4	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
 *Drakaea elastica*	Glossy-leaved Hammer Orchid	Tuberous, perennial, herb, 0.12-0.3 m high. Fl. red & green & yellow.	Oct to Nov.	White or grey sand. Low-lying situations adjoining winter-wet swamps.	CR	N	Not likely. Habitat not suitable.
 *Drakaea micrantha*		Tuberous, perennial, herb, 0.15-0.3 m high. Fl. red & yellow.	Sep to Oct.	White-grey sand.	T	N	Not likely. Habitat not suitable.

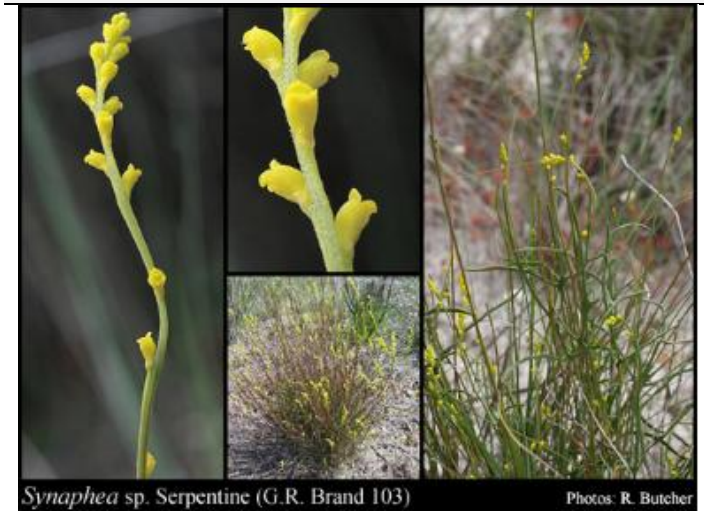
Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
 *Eleocharis keigheryi*		Rhizomatous, clumped perennial, grass-like or herb (sedge), to 0.4 m high. Fl. Green.	Aug to Nov.	Clay, sandy loam. Emergent in freshwater: creeks, claypans.	VU	N	Not likely. Habitat not suitable.
Eucalyptus foecunda subsp. *foecunda*	Fremantle Mallee	Dense emergent mallee. Bark +/- smooth; buds golden.	-	Sand over limestone.	P4	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
 *Eucalyptus x balanites*	Cadda Road Mallee	(Mallee), to 5 m high, bark rough, flaky. Fl. White.	Oct to Dec or Jan to Feb.	Sandy soils with lateritic gravel.	CR	N	Not likely. Habitat not suitable.
 *Jacksonia sericea*	Waldjumi	Low spreading shrub, to 0.6 m high. Fl. orange,	Usually, Dec or Jan to Feb.	Calcareous & sandy soils.	P4	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
Lachnagrostis nesomytica subsp. *paralia*		Loosely tufted, weakly ascending, short-lived perennial or annual, herb (grass), to 0.5 m high. Fl. purple-green.		Calcareous sands. Coastal dunes and swales.	P1	N	Not likely. Populations present on Garden Island.
Morelotia australiensis	Southern Tetraria	Rhizomatous, tufted perennial, grass-like or herb (sedge), to 1 m high. Fl. Brown.	Nov to Dec. Post fire.	Grey sand over clay. Winter-wet, swampy depressions, drainage lines or rises surrounding swamps. Open forest or *Corymbia calophylla* (Marri) woodland.	T	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
 *Pimelea calcicola*	Coastal Banjine	Erect to spreading shrub, 0.2-1 m high. Fl. Pink.	Sep to Nov.	Sand. Coastal limestone ridges.	P3	N	Not likely. Habitat not suitable.
 *Sphaerolobium calcicola*		Slender, multi-stemmed, scandent or erect shrub, to 1.5 m high. Fl. orange-red	Jun or Sep to Nov.	White-grey-brown sand, sandy clay over limestone, black peaty sandy clay. Tall dunes, winter-wet flats, interdunal swamps, low-lying areas.	P3	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
 *Stylidium ireneae*		Lax perennial, herb, 0.1-0.28 m high, Leaves oblanceolate, 0.4-2 cm long, 1-3 (-5) mm wide, apex subacute to acuminate, margin entire, glandular. Scape glandular. Inflorescence racemose. Fl. Pink.	Oct to Dec.	Sandy loam. Valleys near creek lines, woodland, often with Agonis.	P4	N	Not likely. Habitat not suitable.
 *Synaphea* sp. Fairbridge Farm		Dense, clumped shrub, to 0.3 m high, to 0.4 m wide. Fl. yellow	Oct.	Sandy with lateritic pebbles. Near winter-wet flats, in low woodland with weedy grasses.	CR/CR	N	Not likely. Habitat not suitable.

Species Name	Common Name	Description	Flowering Period	Habitat Type	Cons code	Likelihood (Y/N)	Comment
 *Synaphea* sp. Serpentine		Perennial, erect, clumped shrub (sub-shrub), to 0.6 m high x to 0.5 m wide. Flowers are yellow and borne on long spikes, well above the leaves.	Aug to Nov.	Flat terrain. grey-brown sandy loams to clay in seasonally wet areas.	CR/CR	N	Not likely. Habitat not suitable.

Appendix 4: Species List

The complete flora list for the site is provided in the table below with flora listed by family. *Denotes introduced species.

Family	Species Name	Common Name
Aizoaceae	**Tetragonia decumbens*	Sea Spinach
Aizoaceae	*Carpobrotus virescens*	Coastal Pigface
Anacardiaceae	**Schinus terebinthifolia*	
Apocynaceae	**Gomphocarpus fruticosus*	Narrowleaf Cottonbush
Asparagaceae	*Acanthocarpus preissii*	
Asparagaceae	*Lomandra maritima*	Maritime Mat Rush
Asphodelaceae	**Trachyandra divaricata*	
Asteraceae	**Arctotis stoechadifolia*	White Arctotis
Asteraceae	**Erigeron sumatrensis*	
Asteraceae	**Lactuca serriola*	Prickly Lettuce
Asteraceae	**Reichardia tingitana*	False Sowthistle
Asteraceae	**Senecio condylus*	Perth Groundsel
Asteraceae	**Sonchus asper*	Rough Sowthistle
Asteraceae	**Sonchus oleraceus*	Common Sowthistle
Asteraceae	*Olearia axillaris*	Coastal Daisybush
Brassicaceae	**Brassica tournefortii*	Mediterranean Turnip
Brassicaceae	**Cakile maritima*	Sea Rocket
Caprifoliaceae	**Centranthus macrosiphon*	
Chenopodiaceae	*Atriplex isatidea*	Coast Saltbush
Chenopodiaceae	*Rhagodia baccata* subsp. *baccata*	Berry Saltbush
Crassulaceae	**Crassula glomerata*	
Cyperaceae	*Lepidosperma gladiatum*	Coast Sword-sedge
Ericaceae	*Leucopogon parviflorus*	Coast Beard-heath
Euphorbiaceae	**Euphorbia maculata*	
Euphorbiaceae	**Euphorbia paralias*	Sea Spurge
Euphorbiaceae	**Euphorbia peplus*	Petty Spurge
Euphorbiaceae	**Euphorbia terracina*	Geraldton Carnation Weed
Fabaceae	**Acacia podalyriifolia*	
Fabaceae	**Medicago polymorpha*	Burr Medic

Family	Species Name	Common Name
Fabaceae	*Acacia rostellifera*	Summer-scented Wattle
Fabaceae	*Hardenbergia comptoniana*	Native Wisteria
Geraniaceae	**Pelargonium capitatum*	Rose Pelargonium
Goodeniaceae	*Scaevola crassifolia*	Thick-leaved Fan-flower
Haemodoraceae	*Conostylis aculeata*	Prickly Conostylis
Hemerocallidaceae	*Dianella revoluta*	Blueberry Lily
Iridaceae	**Ferraria crispa*	Black Flag
Iridaceae	**Romulea rosea*	Guildford Grass
Nitrariaceae	*Nitraria billardierei*	Nitre Bush
Onagraceae	**Oenothera drummondii*	Beach Evening Primrose
Papaveraceae	**Fumaria capreolata*	Whiteflower Fumitory
Poaceae	**Ammophila arenaria*	Marram Grass
Poaceae	**Avena barbata*	Bearded Oat
Poaceae	**Bromus diandrus*	Great Brome
Poaceae	**Cenchrus clandestinus*	Kikuyu Grass
Poaceae	**Cynodon dactylon*	Couch
Poaceae	**Ehrharta longiflora*	Annual Veldt Grass
Poaceae	**Lagurus ovatus*	Hare's Tail Grass
Poaceae	**Lolium rigidum*	Wimmera Grass
Poaceae	*Austrostipa flavescens*	
Poaceae	*Spinifex longifolius*	Beach Spinifex
Poaceae	*Sporobolus virginicus*	Marine Couch
Primulaceae	**Lysimachia loeflingii*	
Ranunculaceae	*Clematis linearifolia*	Slender Clematis
Rhamnaceae	**Rhamnus alaternus*	Buckthorn
Rhamnaceae	*Spyridium globulosum*	Basket Bush
Scrophulariaceae	*Eremophila glabra* subsp. *albicans*	Tar Bush

Appendix 5: Quadrat Data

Quadrat No.:	ArLgOS1
Survey Date:	17/11/2025
Personnel:	LC, LFI
Easting:	380967
Northing:	6428839
Topography:	Mid Slope
Aspect:	East
Slope:	1-3 %
Soil:	Grey sand
Gravel:	0 %
Rock:	0 %
Leaf Litter:	0 %
Bare Ground:	0 %
Drainage:	Well
Condition:	Good



Notes: *Acacia rostellifera* shrubland over *Lepidosperma gladiatum* sedgeland

Species	Cover (%)	Height (m)
**Bromus diandrus*	15.00	0.30
**Ehrharta longiflora*	15.00	0.30
**Euphorbia terracina*	2.00	0.40
**Fumaria capreolata*	25.00	1.50
**Lolium rigidum*	10.00	0.30
**Sonchus oleraceus*	1.00	0.40
**Tetragonia decumbens*	15.00	2.00
Acacia rostellifera	60.00	2.50
Acanthocarpus preissii	6.00	0.70
Clematis linearifolia	30.00	2.00
Lepidosperma gladiatum	50.00	1.50
Rhagodia baccata subsp. *Baccata*	2.00	1.40

Note: *denotes introduced species.

Quadrat No.:	ArLgOS2
Survey Date:	17/11/2025
Personnel:	LC, LFI
Easting:	380916
Northing:	6428815
Topography:	Mid Slope
Aspect:	East
Slope:	1-3 %
Soil:	Grey sand
Gravel:	0 %
Rock:	0 %
Leaf Litter:	0 %
Bare Ground:	0 %
Drainage:	Well
Condition:	Good



Notes: *Acacia rostellifera* shrubland over *Lepidosperma gladiatum* sedgeland

Species	Cover (%)	Height (m)
**Bromus diandrus*	30.00	0.80
**Ehrharta longiflora*	10.00	0.80
**Euphorbia terracina*	3.00	0.50
**Fumaria capreolata*	5.00	1.50
**Lolium rigidum*	5.00	0.30
**Sonchus oleraceus*	0.25	1.00
**Tetragonia decumbens*	3.00	2.00
Acacia rostellifera	50.00	3.00
Acanthocarpus preissii	15.00	0.70
Clematis linearifolia	10.00	3.00
Lepidosperma gladiatum	15.00	1.50
Rhagodia baccata subsp. Baccata	30.00	2.00
Scaevola crassifolia	2.00	1.50

Note: *denotes introduced species.

Quadrat No.:	ArLgOS3
Survey Date:	18/11/2025
Personnel:	LC
Easting:	380813
Northing:	6428702
Topography:	Mid Slope
Aspect:	East
Slope:	1-3 %
Soil:	Grey sand
Gravel:	0 %
Rock:	0 %
Leaf Litter:	2 %
Bare Ground:	0 %
Drainage:	Well
Condition:	Good



Notes: *Acacia rostellifera* shrubland over *Lepidosperma gladiatum* sedgeland

Species	Cover (%)	Height (m)
**Avena barbata*	9.00	1.40
**Bromus diandrus*	0.50	0.30
**Ehrharta longiflora*	0.10	0.40
**Euphorbia terracina*	4.00	1.00
**Fumaria capreolata*	5.00	1.00
**Lysimachia loeflingii*	0.10	0.30
**Sonchus oleraceus*	0.25	0.20
Acacia rostellifera	7.00	1.30
Acanthocarpus preissii	6.00	0.50
Lepidosperma gladiatum	30.00	1.30
Leucopogon parviflorus	1.00	1.20
Rhagodia baccata subsp. *baccata*	20.00	1.70

Note: *denotes introduced species.

Quadrat No.:	ArLgOS4
Survey Date:	28/11/2025
Personnel:	JMG, RTH
Easting:	380827
Northing:	6428758
Topography:	Crest
Aspect:	West
Slope:	3-5 %
Soil:	White sand
Gravel:	0 %
Rock:	0 %
Leaf Litter:	4 %
Bare Ground:	2 %
Drainage:	Well
Condition:	Good



Notes: *Acacia rostellifera* shrubland over *Lepidosperma gladiatum* sedgeland

Species	Cover (%)	Height (m)
**Arctotis stoechadifolia*	2.00	0.20
**Avena barbata*	1.50	1.20
**Brassica tournefortii*	0.20	0.50
**Bromus diandrus*	2.00	0.30
**Crassula glomerata*	0.10	0.10
**Euphorbia terracina*	5.00	1.00
**Lagurus ovatus*	0.30	0.20
**Lolium rigidum*	0.30	0.30
**Pelargonium capitatum*	3.00	0.40
**Sonchus asper*	0.10	0.20
**Sonchus oleraceus*	0.40	0.20
**Tetragonia decumbens*	2.00	0.60
**Trachyandra divaricata*	2.00	0.60
Acacia rostellifera	6.00	1.00
Acanthocarpus preissii	4.00	0.50
Lepidosperma gladiatum	7.00	1.10

Species	Cover (%)	Height (m)
Rhagodia baccata subsp. *baccata*	0.50	0.50
Scaevola crassifolia	50.00	1.10
Spinifex longifolius	1.00	0.50

Note: *denotes introduced species.

Quadrat No.:	SlG1
Survey Date:	18/11/2025
Personnel:	LC
Easting:	380971
Northing:	6428901
Topography:	Mid Slope
Aspect:	North-west
Slope:	10-20 %
Soil:	White sand
Gravel:	0 %
Rock:	0 %
Leaf Litter:	0 %
Bare Ground:	30 %
Drainage:	Well
Condition:	Degraded



Notes: *Spinifex longifolius* grassland

Species	Cover (%)	Height (m)
**Avena barbata*	0.25	0.50
**Bromus diandrus*	50.00	0.30
**Crassula glomerata*	0.25	0.10
**Euphorbia paralias*	0.25	0.30
**Euphorbia terracina*	0.50	0.30
**Lolium rigidum*	1.00	0.30
**Pelargonium capitatum*	1.00	0.20
**Reichardia tingitana*	0.25	0.30
**Senecio condylus*	0.10	0.20
**Sonchus oleraceus*	0.10	0.20
**Trachyandra divaricata*	1.00	0.20
Acacia rostellifera	1.00	0.50
Atriplex isatidea	2.00	1.50
Rhagodia baccata subsp. Baccata	0.50	0.30
Spinifex longifolius	25.00	0.40
Sporobolus virginicus	0.25	0.10

Species	Cover (%)	Height (m)
Tetragonia decumbens	4.00	0.30

Note: *denotes introduced species.

Quadrat No.:	SlG2
Survey Date:	18/11/2025
Personnel:	LC
Easting:	380935
Northing:	6428874
Topography:	Mid Slope
Aspect:	North-west
Slope:	20-45 %
Soil:	White sand
Gravel:	0 %
Rock:	0 %
Leaf Litter:	0 %
Bare Ground:	20 %
Drainage:	Well
Condition:	Degraded



Notes: *Spinifex longifolius* grassland

Species	Cover (%)	Height (m)
**Avena barbata*	0.10	1.00
**Bromus diandrus*	1.00	0.20
**Euphorbia paralias*	0.10	0.10
**Euphorbia terracina*	4.00	0.40
**Lolium rigidum*	3.00	0.30
**Pelargonium capitatum*	1.00	0.20
**Reichardia tingitana*	1.00	0.30
**Sonchus oleraceus*	0.10	0.10
**Tetragonia decumbens*	3.00	0.20
Acacia rostellifera	9.00	1.10
Lepidosperma gladiatum	0.20	0.40
Olearia axillaris	0.50	1.10
Spinifex longifolius	40.00	0.50
Sporobolus virginicus	0.10	0.10

Note: *denotes introduced species.

Quadrat No.:	**SlG3**
Survey Date:	18/11/2025
Personnel:	LC
Easting:	380887
Northing:	6428836
Topography:	Mid Slope
Aspect:	North-west
Slope:	20-45 %
Soil:	White sand
Gravel:	0 %
Rock:	0 %
Leaf Litter:	0 %
Bare Ground:	30 %
Drainage:	Well
Condition:	Degraded



Notes: *Spinifex longifolius* grassland

Species	**Cover (%)**	**Height (m)**
**Bromus diandrus*	3.00	0.20
**Cakile maritima*	0.20	0.20
**Euphorbia paralias*	2.00	0.40
**Euphorbia terracina*	1.00	0.40
**Lagurus ovatus*	0.10	0.20
**Lolium rigidum*	3.00	0.20
**Pelargonium capitatum*	1.00	0.20
**Reichardia tingitana*	0.10	0.10
**Romulea rosea*	0.10	0.10
**Senecio condylus*	0.10	0.10
**Sonchus oleraceus*	0.30	0.50
**Tetragonia decumbens*	1.00	0.20
Acacia rostellifera	2.00	1.00
Olearia axillaris	2.00	1.30
Spinifex longifolius	30.00	1.00
Sporobolus virginicus	2.00	0.10

Appendix 6: Declared Pest Legal Status and Control Categories

Legal status of organisms as listed under the *Biosecurity and Agriculture Management Act 2007* (WA)

Legal Status	Definition
Permitted - s11	Organisms that are allowed entry into WA.
Declared Pest, Prohibited - s12	Organisms that are prohibited from entry into WA. Where there are reasonable grounds that the organism may have adverse effect on: i. another organism ii. human beings iii. the environment or part of the environment iv. agricultural activities, fishing or pearling activities, or related commercial activities, carried on or intended to be carried on, in the State or part of the State. Or it may have an adverse effect on any of those things if it were present in the State or part of the State, or if it were present in the State or the part in greater numbers or to a greater extent.
Declared Pest - s22(2)	Organisms that are present in WA and are under a control category. Where there are reasonable grounds that the organism may have adverse effect on: i. another organism in the area ii. human beings in the area iii. the environment or part of the environment in the area iv. agricultural activities, fishing or pearling activities, or related commercial activities, carried on or intended to be carried on, in the State or part of the State in the area. Or it may have an adverse effect on any of those things if it were present in the area, or if it were present in the area in greater numbers or to a greater extent.
Permitted, Requires Permit - r73	Organisms may only be imported subject to an import permit. These organisms may be subject to restriction under legislation other than the *Biosecurity and Agriculture Management Act 2007*. Permit conditions applicable to some species may only be appropriate or available to research organisations or similarly secure institutions.
Unlisted - s14	Is not a permitted organism or a declared pest. Unlisted organisms are automatically prohibited entry into Western Australia.

Declared pests listed under the *Biosecurity and Agriculture Management Act 2007* (WA) under section 22 (2) are subjected to control categories listed under the Biosecurity and Agriculture Management Regulations 2013 (WA).

Control Category	Definition
C1 Exclusion	If in the opinion of the Minister introduction of the declared pest into an area or part of an area for which it is declared should be prevented;
C2 Eradication	If in the opinion of the Minister eradication of the declared pest from an area or part of an area for which it is declared is feasible;

Control Category	Definition
C3 Management	If in the opinion of the Minister eradication of the declared pest from an area or part of an area for which it is declared is not feasible but that it is necessary to i. alleviate the harmful impact of the declared pest in the area ii. reduce the number or distribution of the declared pest in the area iii. prevent or contain the spread of the declared pest in the area.
Unassigned	Declared pests that are recognised as having a harmful impact under certain circumstances, where their subsequent control requirements are determined by a Plan or other legislative arrangements under the Act.