



Natural Area
CONSULTING MANAGEMENT SERVICES

City of Bunbury Bunbury Youth Precinct Flora Survey

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Executive Summary

Natural Area Consulting Management Services (Natural Area) was commissioned by the City of Bunbury to undertake a basic flora survey within a proposed clearing area along a section of Leschenault Inlet on the foreshore of Luciana Park in the City of Bunbury (Figure 1). The survey was undertaken to inform a clearing proposal for the area, to allow for the development of the Bunbury Youth Precinct (Playce, 2019).

The flora survey confirmed:

- presence of a total of 22 species from 14 families, consisting of four native and 18 introduced (weed) species
- no threatened or priority species were identified
- no threatened or priority ecological communities were present within the survey area
- one vegetation type was recorded within the proposed clearing area, Mixed Open Coastal Heath, comprising of predominantly weed species mixed with sparse native sedges and shrubs
- vegetation condition across the entire site is Completely Degraded, with minimal native species present.

An assessment of information obtained during the 2021 survey has been made against the Western Australian ten clearing principles. It is suggested that the clearing application is unlikely to be at variance with any of the ten clearing principles.

It is recommended that landscaping occurs once construction works have ceased, using locally endemic species as well as the native species present during the survey (*Ficinia nodosa*, *Acacia saligna*, *Frankenia pauciflora* and *Lepidosperma gladiatum*).

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1.0 Introduction

Natural Area Consulting Management Services (Natural Area) was commissioned by the City of Bunbury to undertake a basic flora survey within a proposed clearing area along a section of Leschenault Inlet foreshore of Luciana Park, within the town centre of Bunbury (Figure 1). The survey was undertaken to provide information to inform a clearing proposal for the area to allow for the development of the Bunbury Youth Precinct (Playce, 2019).

1.1 Location


The proposed clearing area is approximately 989 m² of minimal foreshore vegetation within an Environmentally Sensitive Area (ESA) that is protected under the *Environment Protection Act 1986* (EP Act) (WA) (Figure 2). Any clearing of native vegetation within an ESA requires a permit to clear from the Department of Water and Environmental Regulation. The land associated with the Leschenault Inlet has been subject to various disturbance that have altered both the physical and biological aspects of the area since European settlement in the 1800's (Department of Water, 2007).

1.2 Scope

Activities undertaken by Natural Area personnel included:

- desktop database searched to identify potential conservation significant flora species occurring within the proposed clearing area
- desktop search to determine habitat suitability of conservation significant flora or threatened and priority ecological communities
- a basic flora survey to identify species present, existing vegetation types and conditions, occurrence of conservation significant flora and/or Threatened and Priority Ecological Communities (TECs, PECs)
- reporting outcomes of the survey.



 **Figure 1:**
Site Boundary
Luciana Park, Bunbury

Client: City of Bunbury
Date: 18/06/2021
Created by: M. Gray
Image Source: Nearmap, 2021
Datum: GDA 94

0 15 30 m

N



2.0 Site Characteristics

Site characteristics play an important role in determining the flora and fauna assemblages of a specific area. Desktop research from online databases and literature reviews help to acquire contextual information such as climate, topography, and regional context of the survey site.

2.1 Regional Context

According to the Interim Biographical Regionalisation of Australia (IBRA) descriptions, the site is located in the southern portion of the Swan Coastal Plain (SWA02) IBRA subregion (Department of Primary Industries and Regional Development (DPIRD), 2021a). This region is characterised by including areas of Jarrah and Banksia woodlands on sandy soils in a series of sand dunes, along with wetland areas, often within the interdunal swales (Mitchell, Williams and Desmond, 2002).

2.2 Climate

The climate experienced in the area is Mediterranean, with dry, hot summers and cool, wet winters. According to the Bureau of Meteorology (2021); Bunbury WA (site number 009965), the region has an average:

- rainfall of 718.4 mm pa, with rain falling predominantly between May and August
- maximum temperatures ranging from 19 °C in winter to 27 °C in summer, with a maximum recorded temperature of 40.8 °C
- minimum temperatures ranging from 8 °C in winter to 14 °C in summer, with a minimum recorded temperature of -3.0 °C
- predominant wind directions include morning easterlies and westerly sea breezes during the summer months, with an average wind speed of 17.9 km/h and gusts of more than 100 km/h.

2.3 Vegetation Complex

One vegetation complex is associated with the proposed clearing area, the Vasse Complex. Described by Heddle, Loneragan, and Havel (1980) as dominated by a closed scrub of *Melaleuca* spp. a fringing woodland of *Eucalyptus rudis* and open-forest of Tuart-Jarrah-Marri. Other species include *Melaleuca raphiophylla*, *M. preissiana*, *Acacia saligna* and *Casuarina obesa*. *Halosarcia* sp. (syn. *Arthrocnemum*) and *Salicornia* spp. along with other samphire species grow extensively in areas subject to inundation, which includes the Peel Inlet. The pre-European extent of this complex across the Swan Coastal Plain is 31.40%, with 5.29% remaining in the City of Bunbury (Government of Western Australia, 2019).

2.4 Topography and Soils

Topography across the site is approximately 0 m Australian Height Datum (AHD) at the high-water mark on the beach up to 2 m AHD where the vegetation is present (Figure 2) (DPIRD, 2021b). One soil type was identified using NationalMap (DPIRD, 2021b), the Vasse Disturbed Landfill Phase (211VaX_WATER). This soil type is associated with the known history of dredging and alteration of physical environment of the Leschenault Inlet, of which the clearing area is an urbanised geographic landform that does not support the vegetation historical to the area (Department of Water, 2007).

3.0 Methodology

3.1 Desktop and Literature Review

Desktop surveys were undertaken to determine:

- 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 any threatened or priority ecological communities.

A desktop flora survey was undertaken using the following databases to obtain relevant information regarding preliminary site characteristics:

- NatureMap to indicate flora species (Department of Biodiversity, Conservation and Attractions (DBCA), 2021a) (Appendix 1)
- Protected Matters Search Tool (Department of the Agriculture, Water and Environment (DAWE), 2021) (Appendix 2)
- Threatened and priority flora and ecological community database searches (2021c).
- Summary of suitable conservation significant species using, FloraBase (DBCA, 2021b)

Conservation code definitions for the State and Commonwealth and the data relating to conservation significant species from database searches were summarised into field reference guides to aid with on-ground flora and fauna surveys (Appendix 3).

3.2 On-ground Flora Survey

Natural Area Botanist Sharon Hynes surveyed the site on the 18th of June 2021, with key data recorded using Mappt software on a handheld tablet. Survey activities included:

- walking the site and identifying flora species present, including targeting declared rare and priority species indicated as potentially present during desktop assessments
- recording vegetation type including dominant over, middle and understorey species (Table 1) and condition using the scale attributed to Keighery (Table 2) (Government of Western Australia, 2000)
- the use of GPS to map significant species and boundaries of differing vegetation type and condition.

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

3.2.1 Vegetation

The vegetation type was determined using the structural classes described in *Bush Forever Volume 2* (Government of Western Australia, 2000), and records dominant over, middle and understorey species. A description of the various structural classes is provided in Table 1. Vegetation condition was assessed using

the rating scale attributed to Keighery in *Bush Forever Volume 2* (Table 2) (Government of Western Australia, 2000). Table 2 provides a description of the rating scale.

Table 1: Vegetation structural classes

Life Form/Height Class	Canopy Percentage Cover			
	100 – 70%	70 – 30%	30 – 10%	10 – 2 %
Trees over 30 m	Tall closed forest	Tall open forest	Tall woodland	Tall open woodland
Trees 10 – 30 m	Closed forest	Open forest	Woodland	Open woodland
Trees under 10 m	Low closed forest	Low open forest	Low woodland	Low open woodland
Tree Mallee	Closed tree mallee	Tree mallee	Open tree mallee	Very open tree mallee
Shrub Mallee	Closed shrub mallee	Shrub mallee	Open shrub mallee	Very open shrub mallee
Shrubs over 2 m	Closed tall scrub	Tall open scrub	Tall shrubland	Tall open shrubland
Shrubs 1 – 2 m	Closed heath	Open heath	Shrubland	Open shrubland
Shrubs under 1 m	Closed low heath	Open low heath	Low shrubland	Low open shrubland
Grasses	Closed grassland	Grassland	Open grassland	Very open grassland
Herbs	Closed herbland	Herbland	Open herbland	Very open herbland
Sedges	Closed sedgeland	Sedgeland	Open sedgeland	Very open sedgeland

(Source: Government of Western Australia, 2000)

Table 2: Vegetation condition ratings

Category	Description
1 Pristine	Pristine or nearly so, no obvious signs of disturbance.
2 Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
3 Very Good	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
4 Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
5 Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
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

Category	Description
	'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

(Source: Government of Western Australia, 2000)

3.3 Limitations

Several limitations associated with both desktop and on-ground flora and fauna surveys exist, including:

- survey was conducted outside of the optimal time of year for flora surveys in the south-west region, with those species present at the time of the survey recorded
- information on flora species provided on some databases include out-of-date species names, meaning that names need to be checked for currency. This was undertaken on FloraBase with all names checked for currency, so this limitation was negated
- herbarium records are largely limited to vouchered specimens, there were no species present that could not be identified in the field so assessment against herbarium records was not required
- on-ground surveys indicate species present at the time of the assessment, with species flowering at different times not always able to be identified
- not all species flower every year
- the differing databases are reliant on information submitted via various reporting mechanisms, so all records of a particular species or ecological community within a specified area may not be complete.

4.0 Flora Survey Results

4.1 Desktop Survey

4.1.1 Significant Flora

A desktop survey of online databases (NatureMap and PMST) indicated the potential for a total of 23 conservation significant flora species to occur within 5 km of the survey area (Table 3) (DBCA, 2021a & DAWE, 2021). A review of DBCA's threatened and priority flora database indicated six conservation significant flora species which have been found within 1 km of the survey site (DBCA, 2021c). All these species are listed under the *Biodiversity Conservation Act 2016* (WA) with 14 also listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

Of the conservation significant species potentially found in the area, it was determined that the site conditions (soil type, drainage, location) are not suitable for any. It is highly unlikely that many of the conservation significant flora species are present within the site, due to the site being a heavily modified ecosystem with high anthropogenic impacts (i.e., regular mowing and turf management) throughout. Conservation code descriptions are provided in Appendix 3.

Table 3: Threatened and Priority flora species listed by NatureMap, PMST and DBCA

Species Name	Cons Code		NatureMap	PMST	DBCA
	WA	Cth			
<i>Acacia flagelliformis</i>	P4		X		X
<i>Acacia semitrullata</i>	P4		X		X
<i>Andersonia gracilis</i>	T	EN		X	
<i>Austrostipa bronwenae</i>	T	EN		X	
<i>Austrostipa jacobiana</i>	T	CR		X	
<i>Banksia nivea</i> subsp. <i>uliginosa</i>	T	EN		X	
<i>Caladenia huegelii</i>	T	EN		X	
<i>Caladenia speciosa</i>	P4		X		X
<i>Diuris drummondii</i>	T	VU	X	X	
<i>Diuris micrantha</i>	T	VU		X	
<i>Diuris purdiei</i>	T	EN		X	
<i>Drakaea elastica</i>	T	EN		X	
<i>Drakaea micrantha</i>	T	VU		X	
<i>Eleocharis keigheryi</i>	T	VU		X	
<i>Eucalyptus rudis</i> subsp. <i>cratyantha</i>	P4		X		
<i>Lambertia echinata</i> subsp. <i>occidentalis</i>	T	EN		X	
<i>Lasiopetalum membranaceum</i>	P3		X		X

Species Name	Cons Code		NatureMap	PMST	DBCA
	WA	Cth			
<i>Puccinellia vassica</i>	P1		X		X
<i>Pultenaea skinneri</i>	P4		X		
<i>Schoenus benthamii</i>	P3		X		X
<i>Synaphea</i> sp. Fairbridge Farm	T	CR		X	
<i>Synaphea</i> sp. Serpentine	T	CR		X	
<i>Verticordia attenuata</i>	P3		X		

(Source: DBCA, 2021b)

4.1.2 Threatened and Priority Ecological Communities

A review of the PMST report identified four listed Threatened Ecological Communities that could potentially occur within 5km of the site (Table 4) (DAWE, 2021). One Priority 1 Ecological Community is known to be present within 1 km of the survey site, *Relictual White Mangrove Community (Leschenault Inlet)* (DBCA, 2021d). Table 4 lists the five potential ecological communities and their likelihood to occur within the site.

Table 4: Potential Threatened or Priority Ecological Communities within the site

Name	Cons Code		Likelihood
	WA	Cth	
Banksia Woodlands of the Swan Coastal Plain ecological community		EN	Habitat not suitable, occurrence unlikely.
Clay Pans of the Swan Coastal Plain		CR	Habitat not suitable, occurrence unlikely.
Subtropical and Temperate Coastal Saltmarsh		VU	Habitat not suitable, occurrence unlikely.
Relictual White Mangrove Community (Leschenault Inlet)	P1		Soil type unsuitable, occurrence unlikely.
Tuart (<i>Eucalyptus gomphocephala</i>) Woodlands and Forests of the Swan Coastal Plain ecological community		CR	Habitat not suitable, occurrence unlikely.

(Source: DAWE, 2021 & DBCA, 2021d)

4.2 Flora

A total of 22 flora species (taxa) were recorded from 14 families during the field survey, including 18 introduced (weeds) and four native species. No Declared pests or Weeds of National Significance (WoNS) were identified during the survey. Examples of native flora species are shown in Figure 3 and weed species in Figure 4. A complete flora species list is provided in Table 5.



Ficinia nodosa (Knotted Club Rush)



Lepidosperma gladiatum (Coast Sword-sedge)



Frankenia pauciflora (Seaheath)



Acacia saligna (Orange Wattle)

Figure 3: Examples of native flora species recorded within the proposed clearing area



*Coast Teatree (*Leptospermum laevigatum*)



*Rose Pelargonium (*Pelargonium capitatum*)



**Trachyandra divaricata*



*Sea Spurge (*Euphorbia paralias*)

Figure 4: Examples of introduced (*) species recorded within the proposed clearing area

Table 5: Species found within the clearing area. *Denotes introduced species

Family	Species Name	Common Name
Fabaceae	<i>Acacia saligna</i>	Orange Wattle
Asteraceae	<i>Arctotheca calendula</i> *	Cape Weed
Brassicaceae	<i>Cakile maritima</i> *	Sea Rocket
Aizoaceae	<i>Carpobrotus edulis</i> *	Hottentot Fig
Asteraceae	<i>Cotula turbinata</i> *	Funnel Weed
Poaceae	<i>Cynodon dactylon</i> *	Couch
Brassicaceae	<i>Diplotaxis tenuifolia</i> *	Sand Rocket
Euphorbiaceae	<i>Euphorbia paralias</i> *	Sea Spurge
Euphorbiaceae	<i>Euphorbia peplus</i> *	Petty Spurge
Euphorbiaceae	<i>Euphorbia terracina</i> *	Geraldton Carnation Weed
Cyperaceae	<i>Ficinia nodosa</i>	Knotted Club Rush
Frankeniaceae	<i>Frankenia pauciflora</i>	Seaheath

Family	Species Name	Common Name
Iridaceae	<i>Gladiolus undulatus</i> *	Wild Gladiolus
Asteraceae	<i>Hypochaeris glabra</i> *	Smooth Cats-ear
Cyperaceae	<i>Lepidosperma gladiatum</i>	Coast Sword-sedge
Myrtaceae	<i>Leptospermum laevigatum</i> *	Coast Teatree
Onagraceae	<i>Oenothera mollissima</i> *	
Oxalidaceae	<i>Oxalis pes-caprae</i> *	Soursob
Geraniaceae	<i>Pelargonium capitatum</i> *	Rose Pelargonium
Aizoaceae	<i>Tetragonia decumbens</i> *	Sea Spinach
Asphodelaceae	<i>Trachyandra divaricata</i> *	
Fabaceae	<i>Trifolium arvense</i> *	Hare's Foot Clover

4.3 Vegetation Type and Condition

One vegetation type was recorded within the proposed clearing area, Mixed Open Coastal Heath. This vegetation type comprises of predominantly weed species mixed with sparse native sedges (*Ficinia nodosa* and *Lepidosperma gladiatum*) and shrubs (*Frankenia pauciflora* and *Acacia saligna*) (Figure 5). Vegetation condition was completely degraded across the entire site.



Figure 5: Example of vegetation type within the clearing area

4.4 Threatened and Priority Ecological Communities

Due to the Completely Degraded vegetation condition, the lack of a native flora species the area does not form part of a Threatened Ecological Community (TEC) or Priority Ecological Community (PEC). The only potential TEC indicated by the desktop searches that could occur, due to the location of the site is the Relictual White Mangrove Community (P1) which occurs approximately 750 m to the east. However, due to the highly modified state of the site comprising of fill (soil) and the lack of dominant species the site does not meet the TEC requirements. All other potential TECs identified are not present due to the lack of dominant species which make up these communities such as *Banksia* spp. *Eucalyptus gomphocephala*, and samphire species (Refer to Table 5).

5.0 Conclusion and Recommendation

5.1 Flora and Vegetation

Natural Area's survey recorded 22 flora species from 14 families, of which 18 (82%) were introduced (weeds) and four (18%) were native species. No Declared pests or WoNS were identified during the survey. One vegetation type was recorded within the proposed clearing area, Mixed Open Coastal Heath. This vegetation type comprises of predominantly weed species mixed with sparse native sedges and shrubs. Vegetation condition was degraded to completely degraded across the entire site.

5.2 Significant Flora

No significant flora was recorded during the Autumn 2021 survey. The survey was undertaken outside of the optimal time of year (spring) when some annual conservation significant flora would be presenting. However, the presence of significant flora is considered highly unlikely, due to the degraded nature of the site and the site consisting of filled land.

5.3 Threatened and Priority Ecological Communities

No priority or threatened ecological communities (TEC) were recorded during the survey due to the completely degraded nature of the site, and the lack of vegetation strata layers to meet the requirements of potential priority communities or TECs identified through desktop searches.

5.4 Assessment Against Clearing Principles

An assessment of information obtained during the 2021 survey has been made against the Western Australian clearing principles. It is suggested that the clearing application is unlikely to be variance with any of the ten clearing principles (Department of Environment and Regulation, 2014) (Table 6).

5.5 Recommendation

It is recommended once construction works have ceased to landscape using locally endemic species as well as the native species present during the survey, *Ficinia nodosa*, *Acacia saligna*, *Frankenia pauciflora* and *Lepidosperma gladiatum*.

Table 6: Assessment against clearing principles

Clearing Principle	Comment
<p>A Native vegetation should not be cleared if it comprises a high level of biological diversity.</p>	<p>The proposed area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> ▪ a total of 22 flora species from 14 families, of which 18 (82%) were introduced (weeds) and four (18%) were native species. The site has a low native species diversity ▪ the survey site is comprised of fill soil which is the result of dredging activities and alteration of the Inlet environment (Department of Water, 2007) ▪ one vegetation type was recorded within the proposed clearing area, Mixed Open Coastal Heath. This vegetation type comprises of predominantly weed species mixed with sparse native sedges (<i>Ficinia nodosa</i> and <i>Lepidosperma gladiatum</i>) and shrubs (<i>Frankenia pauciflora</i> and <i>Acacia saligna</i>) ▪ vegetation condition was Completely Degraded across the entire site. No upper and minimal middle storey native species are present within the survey area.
<p>B Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.</p>	<p>The proposed area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> ▪ the site is comprised of a highly altered foreshore environment which has the capacity to provide minimal habitat for fauna species ▪ a fauna survey and habitat assessment were not undertaken within the site although in the wider context of the area, better habitat occurs approximately 750 m to the east within Koombana Park.
<p>C Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.</p>	<p>The proposed area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> ▪ no rare or priority flora was recorded during the survey, although the survey was not conducted at the optimal time of year (spring) for the South West region. However due to the completely degraded nature of the site and the highly modified and altered environment, with the native vegetation consisting of minimal sedge and shrub species the presence of significant flora within the site is considered unlikely.
<p>D Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.</p>	<p>The proposed area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> ▪ no threatened or priority ecological communities were identified as occurring during the 2021 survey ▪ the survey site is a highly modified state comprising of fill from dredging activities and alteration of the inlet environment ▪ the site lacks the dominant species required to be classified as any of the identified TEC and priority communities.

E	Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.	<p>The proposed area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> the site comprises of a highly modified area comprising of fill from dredging and alteration of the inlet with the landform not naturally occurring as the area is man-made, vegetation present within does not comprise of remnant native vegetation. Flora species present comprise of four native and 18 introduced species.
F	Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	<p>The proposed area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> the survey area occurs on the banks of the Leschenault Inlet, Bunbury, although the vegetation present is not riparian vegetation it is associated with beach foredunes systems although the vegetation present is growing in association with the waterway which is listed as a conservation category wetland (refer to Figure 2), the site comprises of a highly modified area consist of fill from dredging, alteration of the inlet and ground contours with the native vegetation present not considered to be naturally occurring.
G	Native Vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	The proposed area to be cleared is not likely to be at variance with this principle. As the area is highly modified with altered landform and minimal native vegetation, clearing of this area it is not expected to cause further land degradation.
H	Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.	The proposed area to be cleared is not likely to be at variance with this principle. As the proposed clearing area contains minimal native vegetation and is comprise mainly of weed species, clearing is not expected to have an impact on the nearby conservation area.
I	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.	<p>The proposed area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> the site is approximately 989 m² and it not completely vegetated. Due to the small size of the site clearing is not expected to cause deterioration in the water quality the surrounding area has previously been extensively cleared for development.
J	Native vegetation should not be cleared if clearing the vegetation is	The proposed area to be cleared is not likely to be at variance with this principle:

likely to cause, or exacerbate, the incidence of flooding.

- the site occurs in an urban environment with the area comprising of a highly modified landform which has been previously cleared and developed
 - the site is approximately 989 m² with minimal native vegetation present. Due to the small size of the site clearing is not expected to cause or exacerbate, the incidence of flooding.
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6.0 References

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Appendix 1: NatureMap Report 5 km

NatureMap Species Report

Created By Guest user on 17/06/2021

Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 115° 38' 25" E, 33° 19' 18" S
Buffer 5km
Group By Species Group

Species Group	Species	Records
Alga	21	28
Amphibian	7	206
Bird	189	8090
Bryopsid (Moss)	12	18
Dicotyledon	257	382
Fish	62	94
Fungus	3	5
Gymnosperm	1	1
Hepatic (Liverwort)	1	1
Invertebrate	27	81
Lichen	15	16
Mammal	24	640
Monocotyledon	116	173
Reptile	22	108
TOTAL	757	9843

	Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query Area
Alga					
1.	35909	<i>Amansia pinnatifida</i>			
2.	26586	<i>Caulocystis uvifera</i>			
3.	26607	<i>Chaetomorpha aerea</i>			
4.	26663	<i>Cladurus elatus</i>			
5.	26666	<i>Cliftonaea pectinata</i>			
6.	26667	<i>Codiophyllum flabelliforme</i>			
7.	26720	<i>Cystophora grevillei</i>			
8.	26854	<i>Gigartina disticha</i>			
9.	26877	<i>Grateloupia filicina</i>			
10.	27090	<i>Myriodesma quercifolium</i>			
11.	27126	<i>Petalonia fascia</i>			
12.	27131	<i>Phacelocarpus alatus</i>			
13.	27151	<i>Platythalia angustifolia</i>			
14.	27195	<i>Pterocladia lucida</i>			
15.	27238	<i>Sargassum distichum</i>			
16.	27249	<i>Sargassum linearifolium</i>			
17.	35911	<i>Scytosiphon lomentaria</i>			
18.	27327	<i>Thamnoclonium dichotomum</i>			
19.	27345	<i>Turbinaria gracilis</i>			
20.	35260	<i>Ulva compressa</i>			
21.	35262	<i>Ulva intestinalis</i>			
Amphibian					
22.	25400	<i>Crinia insignifera</i> (Squelching Froglet)			
23.	25404	<i>Geocrinia leai</i> (Ticking Frog)			
24.	25410	<i>Heleioporus eyrei</i> (Moaning Frog)			
25.	25415	<i>Limnodynastes dorsalis</i> (Western Banjo Frog)			
26.	25378	<i>Litoria adelaidensis</i> (Slender Tree Frog)			
27.	25388	<i>Litoria moorei</i> (Motorbike Frog)			
28.	25433	<i>Pseudophryne guentheri</i> (Crawling Toadlet)			
Bird					
29.	24260	<i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
30.	24261	<i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
31.	24262	<i>Acanthiza inornata</i> (Western Thornbill)			
32.	24560	<i>Acanthorhynchus superciliosus</i> (Western Spinebill)			
33.	25535	<i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
34.	25536	<i>Accipiter fasciatus</i> (Brown Goshawk)			
35.	25755	<i>Acrocephalus australis</i> (Australian Reed Warbler)			
36.	41323	<i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
37.	24310	<i>Anas castanea</i> (Chestnut Teal)			
38.	24312	<i>Anas gracilis</i> (Grey Teal)			
39.	24313	<i>Anas platyrhynchos</i> (Mallard)			
40.		<i>Anas platyrhynchos</i> subsp. domesticus			
41.	24315	<i>Anas rhynchotis</i> (Australasian Shoveler)			
42.	24316	<i>Anas superciliosa</i> (Pacific Black Duck)			
43.	47414	<i>Anhinga novaehollandiae</i> (Australasian Darter)			
44.	24561	<i>Anthochaera carunculata</i> (Red Wattlebird)			
45.	24562	<i>Anthochaera lunulata</i> (Western Little Wattlebird)			
46.	24285	<i>Aquila audax</i> (Wedge-tailed Eagle)			
47.	25558	<i>Ardea ibis</i> (Cattle Egret)			
48.	41324	<i>Ardea modesta</i> (great egret, white egret)			
49.	24340	<i>Ardea novaehollandiae</i> (White-faced Heron)			
50.	24341	<i>Ardea pacifica</i> (White-necked Heron)			
51.	41326	<i>Ardenna carneipes</i> (Flesh-footed Shearwater, Fleishy-footed Shearwater)		T	
52.	25736	<i>Arenaria interpres</i> (Ruddy Turnstone)		IA	
53.	25566	<i>Artamus cinereus</i> (Black-faced Woodswallow)			
54.	24318	<i>Aythya australis</i> (Hardhead)			
55.		<i>Barnardius zonarius</i>			
56.	24319	<i>Biziura lobata</i> (Musk Duck)			
57.	24359	<i>Burhinus grallarius</i> (Bush Stone-curlew)			
58.	25714	<i>Cacatua pastinator</i> (Western Long-billed Corella)			
59.	25716	<i>Cacatua sanguinea</i> (Little Corella)			
60.	25598	<i>Cacomantis flabelliformis</i> (Fan-tailed Cuckoo)			
61.	42307	<i>Cacomantis pallidus</i> (Pallid Cuckoo)			
62.	24779	<i>Calidris acuminata</i> (Sharp-tailed Sandpiper)		IA	
63.	24780	<i>Calidris alba</i> (Sanderling)		IA	
64.	25738	<i>Calidris canutus</i> (Red Knot, knot)		IA	
65.	24784	<i>Calidris ferruginea</i> (Curlew Sandpiper)		T	
66.	24788	<i>Calidris ruficollis</i> (Red-necked Stint)		IA	
67.	24790	<i>Calidris tenuirostris</i> (Great Knot)		T	
68.	25717	<i>Calyptorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
69.	24731	<i>Calyptorhynchus banksii</i> subsp. naso (Forest Red-tailed Black Cockatoo)		T	
70.	24733	<i>Calyptorhynchus baudinii</i> (Baudin's Cockatoo, White-tailed Long-billed Black Cockatoo)		T	
71.	24734	<i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)		T	
72.	48400	<i>Calyptorhynchus</i> sp. (white-tailed black cockatoo)		T	
73.	25575	<i>Charadrius leschenaultii</i> (Greater Sand Plover)		T	
74.	24377	<i>Charadrius ruficapillus</i> (Red-capped Plover)			
75.	24321	<i>Chenonetia jubata</i> (Australian Wood Duck, Wood Duck)			
76.		<i>Chroicocephalus novaehollandiae</i>			
77.	24432	<i>Chrysococcyx lucidus</i> subsp. plagosus (Shining Bronze Cuckoo)			
78.	24288	<i>Circus approximans</i> (Swamp Harrier)			
79.	24774	<i>Cladorhynchus leucocephalus</i> (Banded Stilt)			
80.	25675	<i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
81.	24399	<i>Columba livia</i> (Domestic Pigeon)	Y		
82.	25568	<i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
83.	25592	<i>Corvus coronoides</i> (Australian Raven)			
84.	24417	<i>Corvus coronoides</i> subsp. perplexus (Australian Raven)			
85.	24420	<i>Cracticus nigrogularis</i> (Pied Butcherbird)			
86.	25595	<i>Cracticus tibicen</i> (Australian Magpie)			
87.	25596	<i>Cracticus torquatus</i> (Grey Butcherbird)			
88.	24322	<i>Cygnus atratus</i> (Black Swan)			
89.	30901	<i>Dacelo novaeguineae</i> (Laughing Kookaburra)	Y		
90.	25618	<i>Diomedea exulans</i> (Wandering Albatross)		T	
91.	30836	<i>Diomedea exulans</i> subsp. exulans (Snowy Albatross)		T	
92.		<i>Egretta garzetta</i>			
93.		<i>Egretta novaehollandiae</i>			
94.		<i>Elanus axillaris</i>			
95.	47937	<i>Elsyornis melanops</i> (Black-fronted Dotterel)			
96.		<i>Eolophus roseicapillus</i>			
97.	24651	<i>Eopsaltria australis</i> subsp. griseogularis (Western Yellow Robin)			
98.	24652	<i>Eopsaltria georgiana</i> (White-breasted Robin)			
99.	24567	<i>Epthianura albiglans</i> (White-fronted Chat)			
100.	24813	<i>Eudyptes chrysocome</i> subsp. filholi (Rockhopper Penguin)			Y
101.	25746	<i>Eudyptula minor</i> (Little Penguin)			

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
102.	25622	<i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
103.	25623	<i>Falco longipennis</i> (Australian Hobby)			
104.	25624	<i>Falco peregrinus</i> (Peregrine Falcon)		S	
105.	25727	<i>Fulica atra</i> (Eurasian Coot)			
106.	24761	<i>Fulica atra</i> subsp. <i>australis</i> (Eurasian Coot)			
107.	25729	<i>Gallinula tenebrosa</i> (Dusky Moorhen)			
108.	24763	<i>Gallinula tenebrosa</i> subsp. <i>tenebrosa</i> (Dusky Moorhen)			
109.	25730	<i>Gallirallus philippensis</i> (Buff-banded Rail)			
110.	25530	<i>Gerygone fusca</i> (Western Gerygone)			
111.	24443	<i>Grallina cyanoleuca</i> (Magpie-lark)			
112.	24487	<i>Haematopus longirostris</i> (Pied Oystercatcher)			
113.	24293	<i>Haliaeetus leucogaster</i> (White-bellied Sea-Eagle)			
114.	24295	<i>Haliastur sphenurus</i> (Whistling Kite)			
115.	24689	<i>Halobaena caerulea</i> (Blue Petrel)			
116.	47965	<i>Hieraaetus morphnoides</i> (Little Eagle)			
117.	25734	<i>Himantopus himantopus</i> (Black-winged Stilt)			
118.	24491	<i>Hirundo neoxena</i> (Welcome Swallow)			
119.	48587	<i>Hydroprogne caspia</i> (Caspian Tern)		IA	
120.	25638	<i>Larus pacificus</i> (Pacific Gull)			
121.	25661	<i>Lichmera indistincta</i> (Brown Honeyeater)			
122.	30932	<i>Limosa lapponica</i> (Bar-tailed Godwit)		IA	
123.	25741	<i>Limosa limosa</i> (Black-tailed Godwit)		IA	
124.	24690	<i>Macronectes giganteus</i> (Southern Giant Petrel)		IA	
125.	24326	<i>Malacorhynchus membranaceus</i> (Pink-eared Duck)			
126.	25654	<i>Malurus splendens</i> (Splendid Fairy-wren)			
127.	25758	<i>Megalurus gramineus</i> (Little Grassbird)			
128.	25663	<i>Melithreptus brevirostris</i> (Brown-headed Honeyeater)			
129.	24598	<i>Merops ornatus</i> (Rainbow Bee-eater)			
130.		<i>Microcarbo melanoleucos</i>			
131.	48008	<i>Morus serrator</i> (Australasian Gannet)			
132.	24738	<i>Neophema elegans</i> (Elegant Parrot)			
133.	24739	<i>Neophema petrophila</i> (Rock Parrot)			
134.	24798	<i>Numenius madagascariensis</i> (Eastern Curlew)		T	
135.	25742	<i>Numenius phaeopus</i> (Whimbrel)		IA	
136.	25564	<i>Nycticorax caledonicus</i> (Rufous Night Heron)			
137.	24497	<i>Oceanites oceanicus</i> (Wilson's Storm-petrel)		IA	
138.	24407	<i>Ocyphaps lophotes</i> (Crested Pigeon)			
139.	41347	<i>Onychoprion anaethetus</i> (Bridled Tern)		IA	
140.	24328	<i>Oxyura australis</i> (Blue-billed Duck)		P4	
141.	25680	<i>Pachycephala rufiventris</i> (Rufous Whistler)			
142.	24692	<i>Pachyptila belcheri</i> (Slender-billed Prion)			
143.	24693	<i>Pachyptila desolata</i> (Antarctic Prion)			
144.	25707	<i>Pachyptila salvini</i> (Salvin's Prion)			
145.	48591	<i>Pandion cristatus</i> (Osprey, Eastern Osprey)		IA	
146.	25681	<i>Pardalotus punctatus</i> (Spotted Pardalote)			
147.	25682	<i>Pardalotus striatus</i> (Striated Pardalote)			
148.	25687	<i>Passer domesticus</i> (House Sparrow)	Y		
149.	24642	<i>Passer montanus</i> (Eurasian Tree Sparrow)	Y		
150.	24649	<i>Pelecanoides urinatrix</i> subsp. <i>exsul</i> (Common Diving Petrel)			
151.	24648	<i>Pelecanus conspicillatus</i> (Australian Pelican)			
152.	48061	<i>Petrochelidon nigricans</i> (Tree Martin)			
153.	48066	<i>Petroica boodang</i> (Scarlet Robin)			
154.	25697	<i>Phalacrocorax carbo</i> (Great Cormorant)			
155.	24664	<i>Phalacrocorax carbo</i> subsp. <i>novaehollandiae</i> (Great Cormorant)			
156.	24665	<i>Phalacrocorax fuscescens</i> (Black-faced Cormorant)			
157.	25698	<i>Phalacrocorax melanoleucos</i> (Little Pied Cormorant)			
158.	24667	<i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
159.	25699	<i>Phalacrocorax varius</i> (Pied Cormorant)			
160.	24668	<i>Phalacrocorax varius</i> subsp. <i>hypoleucos</i> (Pied Cormorant)			
161.	24409	<i>Phaps chalcoptera</i> (Common Bronzewing)			
162.	25587	<i>Phaps elegans</i> (Brush Bronzewing)			
163.	48071	<i>Phylidonyris niger</i> (White-cheeked Honeyeater)			
164.	24596	<i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
165.	24841	<i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
166.	24842	<i>Platalea regia</i> (Royal Spoonbill)			
167.	25720	<i>Platycercus icterotis</i> (Western Rosella)			
168.	24747	<i>Platycercus spurius</i> (Red-capped Parrot)			
169.	25721	<i>Platycercus zonarius</i> (Australian Ringneck, Ring-necked Parrot)			
170.	24843	<i>Plegadis falcinellus</i> (Glossy Ibis)		IA	
171.	24382	<i>Pluvialis fulva</i> (Pacific Golden Plover)		IA	

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
172.	24383	<i>Pluvialis squatarola</i> (Grey Plover)		IA	
173.	25703	<i>Podargus strigoides</i> (Tawny Frogmouth)			
174.	25704	<i>Podiceps cristatus</i> (Great Crested Grebe)			
175.	24681	<i>Poliiocephalus poliocephalus</i> (Hoary-headed Grebe)			
176.	25722	<i>Polytelis anthopeplus</i> (Regent Parrot)			
177.	25731	<i>Porphyrio porphyrio</i> (Purple Swamphen)			
178.	24771	<i>Porzana tabuensis</i> (Spotless Crane)			
179.	24388	<i>Psophodes nigrogularis</i> subsp. <i>nigrogularis</i> (Western Whipbird (western heath))		T	
180.	24702	<i>Pterodroma brevirostris</i> (Kerguelen Petrel)			
181.	24703	<i>Pterodroma lessonii</i> (White-headed Petrel)			
182.		<i>Pterodroma macroptera</i> subsp. <i>macroptera</i>			
183.	25711	<i>Pterodroma mollis</i> (Soft-plumaged Petrel)			
184.	24711	<i>Puffinus assimilis</i> subsp. <i>assimilis</i> (Little Shearwater)			
185.		<i>Purpureicephalus spurius</i>			
186.	24776	<i>Recurvirostra novaehollandiae</i> (Red-necked Avocet)			
187.	48096	<i>Rhipidura albiscapa</i> (Grey Fantail)			
188.	25614	<i>Rhipidura leucophrys</i> (Willie Wagtail)			
189.	25616	<i>Rhipidura rufiventris</i> (Northern Fantail)			
190.	25534	<i>Sericornis frontalis</i> (White-browed Scrubwren)			
191.	30948	<i>Smicornis brevirostris</i> (Weebill)			
192.	24522	<i>Sterna bergii</i> (Crested Tern)			
193.	25642	<i>Sterna hirundo</i> (Common Tern)		IA	
194.	48594	<i>Sternula nereis</i> (Fairy Tern)			
195.	24329	<i>Stictonetta naevosa</i> (Freckled Duck)			
196.	25655	<i>Stipiturus malachurus</i> (Southern Emu-wren)			
197.	24554	<i>Stipiturus malachurus</i> subsp. <i>westernensis</i> (Southern Emu-wren)			
198.	25597	<i>Strepera versicolor</i> (Grey Currawong)			
199.	25589	<i>Streptopelia chinensis</i> (Spotted Turtle-Dove)	Y		
200.	25590	<i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)	Y		
201.	25705	<i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
202.	24331	<i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
203.	34134	<i>Thalassarche carteri</i> (Indian Yellow-nosed Albatross)		T	
204.	44607	<i>Thalassarche melanophrys</i> (Black-browed Albatross)		T	
205.	48597	<i>Thalasseus bergii</i> (Crested Tern)		IA	
206.	48135	<i>Thinornis rubricollis</i> (Hooded Plover, Hooded Dotterel)		P4	
207.	24845	<i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
208.	25549	<i>Todiramphus sanctus</i> (Sacred Kingfisher)			
209.	25723	<i>Trichoglossus haematodus</i> (Rainbow Lorikeet)			
210.	24755	<i>Trichoglossus haematodus</i> subsp. <i>moluccanus</i> (Rainbow Lorikeet)	Y		
211.	24803	<i>Tringa brevipes</i> (Grey-tailed Tattler)		P4	
212.	24806	<i>Tringa glareola</i> (Wood Sandpiper)		IA	
213.	24808	<i>Tringa nebularia</i> (Common Greenshank, greenshank)		IA	
214.	24809	<i>Tringa stagnatilis</i> (Marsh Sandpiper, little greenshank)		IA	
215.	24386	<i>Vanellus tricolor</i> (Banded Lapwing)			
216.	41351	<i>Xenus cinereus</i> (Terek Sandpiper)		IA	
217.	25765	<i>Zosterops lateralis</i> (Grey-breasted White-eye, Silvereye)			

Bryopsid (Moss)

218.	32315	<i>Barbula calycina</i>			
219.	32338	<i>Campylopus introflexus</i>	Y		
220.	32345	<i>Didymodon australasiae</i>			
221.	32346	<i>Didymodon torquatus</i>			
222.	32367	<i>Fissidens megalotis</i>			
223.	32369	<i>Fissidens tenellus</i>			
224.	32380	<i>Gemmabryum pachythecum</i>			
225.	32480	<i>Racopilum cuspidigerum</i> var. <i>convolutaceum</i>			
226.	32424	<i>Rosulabryum albolimbatum</i>			
227.	44608	<i>Rosulabryum billardieri</i>			
228.	32437	<i>Syntrichia antarctica</i>			
229.	32486	<i>Thuidium sparsum</i> var. <i>hastatum</i>			

Dicotyledon

230.	3282	<i>Acacia cyclops</i> (Coastal Wattle)			
231.	3339	<i>Acacia flagelliformis</i>		P4	
232.	18217	<i>Acacia iteaphylla</i>	Y		
233.	17861	<i>Acacia longifolia</i>	Y		
234.	17860	<i>Acacia podalyriifolia</i>	Y		
235.	3537	<i>Acacia semitrullata</i>		P4	
236.	3557	<i>Acacia stenoptera</i> (Narrow Winged Wattle)			
237.	1790	<i>Adenanthos meisneri</i>			
238.	28281	<i>Adenanthos</i> sp. <i>Whicher Range</i> (G.J. Keighery 9736)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
239.	4582 <i>Adriana quadripartita</i> (Bitter Bush)			
240.	48513 <i>Aizoon pubescens</i>	Y		
241.	6565 <i>Alyxia buxifolia</i> (Dysentery Bush)			
242.	7833 <i>Angianthus preissianus</i>			
243.	6949 <i>Anthocercis littorea</i> (Yellow Tailflower)			
244.	8595 <i>Apium graveolens</i> (Wild Celery)	Y		
245.	12040 <i>Apium prostratum</i> subsp. <i>prostratum</i> var. <i>prostratum</i> (Sea Celery)			
246.	17355 <i>Araujia sericifera</i>	Y		
247.	7839 <i>Arctotheca populifolia</i> (Dune Arctotheca, Beach Pumpkin, Coast Capeweed, Beach Daisy)	Y		
248.	45213 <i>Astartea pulchella</i>			
249.	6323 <i>Astroloma ciliatum</i> (Candle Cranberry)			
250.	2452 <i>Atriplex cinerea</i> (Grey Saltbush)			
251.	2460 <i>Atriplex hortensis</i> (Garden Orache)	Y		
252.	2463 <i>Atriplex isatidea</i> (Coast Saltbush)			
253.	6828 <i>Avicennia marina</i> (White Mangrove)			
254.	14555 <i>Avicennia marina</i> subsp. <i>marina</i>			
255.	1822 <i>Banksia ilicifolia</i> (Holly-leaved Banksia)			
256.	7853 <i>Berkheya rigida</i> (African Thistle, Hamelin Thistle)	Y		
257.	4417 <i>Boronia dichotoma</i>			
258.	48782 <i>Bossiaea angustifolia</i>			
259.	14396 <i>Bossiaea aquifolium</i> subsp. <i>aquifolium</i>			
260.	7878 <i>Brachyscome iberidifolia</i>			
261.	2994 <i>Brassica x juncea</i> (Indian Mustard)	Y		
262.	3002 <i>Cakile maritima</i> (Sea Rocket)	Y		
263.	4717 <i>Callitriche stagnalis</i> (Common Starwort)	Y		
264.	35797 <i>Calothamnus lateralis</i> var. <i>lateralis</i>			
265.	16493 <i>Calycopeplus oligandrus</i>			
266.	5458 <i>Calytrix flavescens</i> (Summer Starflower)			
267.	19713 <i>Campsis radicans</i>	Y		
268.	2957 <i>Cassytha racemosa</i> (Dodder Laurel)			
269.	2483 <i>Chenopodium album</i> (Fat Hen)	Y		
270.	2490 <i>Chenopodium glaucum</i> (Glaucous Goosefoot)	Y		
271.	2494 <i>Chenopodium murale</i> (Nettle-leaf Goosefoot)	Y		
272.	8971 <i>Chorizema cordatum</i>			
273.	7935 <i>Cichorium intybus</i> (Chicory)	Y		
274.	4554 <i>Comesperma flavum</i>			
275.	4564 <i>Comesperma virgatum</i> (Milkwort)			
276.	19881 <i>Convolvulus angustissimus</i> subsp. <i>angustissimus</i>			
277.	6611 <i>Convolvulus arvensis</i> (Field Bindweed)	Y		
278.	20074 <i>Conyza sumatrensis</i>	Y		
279.	2891 <i>Corrigiola litoralis</i> (Strapwort)	Y		
280.	7946 <i>Cotula cotuloides</i> (Smooth Cotula)			
281.	7947 <i>Cotula turbinata</i> (Funnel Weed)	Y		
282.	42009 <i>Craspedia</i> sp. Yalgorup National Park (G.J. Keighery 14449)			
283.	3136 <i>Crassula alata</i>	Y		
284.	15706 <i>Crassula natans</i> var. <i>minus</i>	Y		
285.	13484 <i>Cryptandra arbutiflora</i> var. <i>tubulosa</i>			
286.	16411 <i>Cucumis</i> sp. Bunbury (G. Brayshaw s.n. 26/2/91)	Y		Y
287.	13732 <i>Cuscuta campestris</i> (Golden dodder)	Y		
288.	6663 <i>Cuscuta epithymum</i> (Lesser Dodder, Greater Dodder)	Y		
289.	7454 <i>Dampiera linearis</i> (Common Dampiera)			
290.	19747 <i>Daviesia decurrens</i> subsp. <i>decurrens</i>			
291.	3832 <i>Daviesia physodes</i>			
292.	4454 <i>Diplolaena dampieri</i> (Southern Diplolaena)			
293.	3012 <i>Diploxys tenuifolia</i> (Sand Rocket)	Y		
294.	3867 <i>Dipogon lignosus</i> (Dolichos Pea)	Y		
295.	7961 <i>Ditrichia graveolens</i> (Stinkwort)	Y		
296.	48751 <i>Drosera drummondii</i>			
297.	3097 <i>Drosera gigantea</i> (Giant Sundew)			
298.	48769 <i>Drosera indumenta</i>			
299.	33500 <i>Dysphania ambrosioides</i> (Mexican Tea)	Y		
300.	33517 <i>Dysphania multifida</i> (Scented Goosefoot)	Y		
301.	33480 <i>Dysphania pumilio</i> (Clammy Goosefoot)			
302.	17175 <i>Eremophila glabra</i> subsp. <i>albicans</i>			
303.	4336 <i>Erodium moschatum</i> (Musky Crowfoot)	Y		
304.	5659 <i>Eucalyptus gomphocephala</i> (Tuart, Duart)			
305.	13512 <i>Eucalyptus rudis</i> subsp. <i>cratyantha</i>		P4	
306.	4636 <i>Euphorbia paralias</i> (Sea Spurge)	Y		
307.	3880 <i>Eutaxia virgata</i>			

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
308.	10765	<i>Exocarpos sparteus</i> (Broom Ballart, Djuk)			
309.	6221	<i>Foeniculum vulgare</i> (Fennel)	Y		
310.	5209	<i>Frankenia pauciflora</i> (Seaheath)			
311.	2969	<i>Fumaria capreolata</i> (Whiteflower Fumitory)	Y		
312.	20475	<i>Gastrolobium capitatum</i>			
313.	20473	<i>Gastrolobium ebracteolatum</i>			
314.	20512	<i>Gastrolobium praemorsum</i>			
315.	16311	<i>Gazania linearis</i>	Y		
316.	3936	<i>Genista linifolia</i> (Flaxleaf Broom)	Y		
317.	46134	<i>Glebionis segetum</i>	Y		
318.	3956	<i>Gompholobium shuttleworthii</i>			
319.	7505	<i>Goodenia eatoniana</i>			
320.	2066	<i>Grevillea pilulifera</i> (Woolly-flowered Grevillea)			
321.	2122	<i>Grevillea wilsonii</i> (Native Fuchsia)			
322.	2216	<i>Hakea varia</i> (Variable-leaved Hakea)			
323.	8008	<i>Helianthus annuus</i> (Sunflower, Common Sunflower)	Y		
324.	12016	<i>Helianthus debilis</i> subsp. <i>cucumerifolius</i>	Y		
325.	6839	<i>Hemiandra pungens</i> (Snakebush)			
326.	41020	<i>Hemiphora bartlingii</i> (Woolly Dragon)			
327.	5117	<i>Hibbertia cuneiformis</i> (Cutleaf Hibbertia)			
328.	20051	<i>Hibbertia diamesogenos</i>			
329.	45534	<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>			
330.	5162	<i>Hibbertia racemosa</i> (Stalked Guinea Flower)			
331.	5172	<i>Hibbertia stellaris</i> (Orange Stars)			
332.	5176	<i>Hibbertia vaginata</i>			
333.	6222	<i>Homalosciadium homalocarpum</i>			
334.	5216	<i>Hybanthus calycinus</i> (Wild Violet)			
335.	5221	<i>Hybanthus floribundus</i>			
336.	12007	<i>Hybanthus floribundus</i> subsp. <i>floribundus</i>			
337.	6223	<i>Hydrocotyle alata</i>			
338.	6224	<i>Hydrocotyle blepharocarpa</i>			
339.	6225	<i>Hydrocotyle bonariensis</i>	Y		
340.	11546	<i>Hydrocotyle pilifera</i> var. <i>glabrata</i>			
341.	5817	<i>Hypocalymma angustifolium</i> (White Myrtle, Kudjid)			
342.	35070	<i>Hypocalymma angustifolium</i> subsp. <i>Swan Coastal Plain</i> (G.J. Keighery 16777)			
343.	5825	<i>Hypocalymma robustum</i> (Swan River Myrtle)			
344.	9352	<i>Hypochoeris radicata</i> (Flat Weed, Cats-ear)	Y		
345.	6630	<i>Ipomoea indica</i> (Morning Glory)	Y		
346.	4012	<i>Jacksonia furcellata</i> (Grey Stinkwood)			
347.	4017	<i>Jacksonia horrida</i>			
348.	4028	<i>Jacksonia spinosa</i>			
349.	4044	<i>Kennedia prostrata</i> (Scarlet Runner)			
350.	15498	<i>Kunzea glabrescens</i> (Spearwood)			
351.	17461	<i>Kunzea micrantha</i> subsp. <i>micrantha</i>			
352.	3669	<i>Labichea punctata</i> (Lance-leaved Cassia)			
353.	8096	<i>Lactuca serriola</i> (Prickly Lettuce)	Y		
354.	5038	<i>Lasiopetalum membranaceum</i>		P3	
355.	4047	<i>Lathyrus tingitanus</i> (Tangier Pea)	Y		
356.	4958	<i>Lawrenzia spicata</i>			
357.	7572	<i>Lechenaultia expansa</i>			
358.	7574	<i>Lechenaultia floribunda</i> (Free-flowering Leschenaultia)			
359.	6880	<i>Leonotis leonurus</i> (Lion's Ear)	Y		
360.	19989	<i>Lepidium didymum</i>	Y		
361.	16449	<i>Leucophyta brownii</i>			
362.	6425	<i>Leucopogon oxycedrus</i>			
363.	6428	<i>Leucopogon pendulus</i>			
364.	6434	<i>Leucopogon polymorphus</i>			
365.	6440	<i>Leucopogon racemosus</i>			
366.	4363	<i>Linum trigynum</i> (French Flax)	Y		
367.	36180	<i>Liparophyllum latifolium</i>			
368.	9289	<i>Lobelia anceps</i> (Angled Lobelia)			
369.	7408	<i>Lobelia tenuior</i> (Slender Lobelia)			
370.	3048	<i>Lobularia maritima</i> (Sweet Alyssum)	Y		
371.	4067	<i>Lupinus luteus</i> (Yellow Lupin)	Y		
372.	34736	<i>Lysinema pentapetalum</i>			
373.	5281	<i>Lythrum hyssopifolia</i> (Lesser Loosestrife)	Y		
374.	36480	<i>Malva arborea</i> (Tree Mallow)	Y		
375.	4075	<i>Medicago littoralis</i> (Strand Medic)	Y		
376.	4079	<i>Medicago polymorpha</i> (Burr Medic)	Y		
377.	13273	<i>Melaleuca incana</i> subsp. <i>incana</i>			

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378.	5926	<i>Melaleuca lateritia</i> (Robin Redbreast Bush)			
379.	5938	<i>Melaleuca microphylla</i>			
380.	5946	<i>Melaleuca pauciflora</i>			
381.	48990	<i>Melaleuca quinquenervia</i>	Y		
382.	18598	<i>Melaleuca systema</i>			
383.	5978	<i>Melaleuca teretifolia</i> (Banbar)			
384.	5980	<i>Melaleuca thymoides</i>			
385.	4785	<i>Melianthus major</i>	Y		
386.	4085	<i>Melilotus indicus</i>	Y		
387.	19827	<i>Melilotus siculus</i>	Y		
388.	29418	<i>Monoculus monstrosus</i>	Y		
389.	4666	<i>Monotaxis occidentalis</i>			
390.	16896	<i>Muehlenbeckia complexa</i>	Y		Y
391.	7289	<i>Myoporum caprarioides</i> (Slender Myoporum)			
392.	6189	<i>Myriophyllum crispatum</i>			
393.	16390	<i>Oenothera drummondii</i> subsp. <i>drummondii</i>	Y		
394.	6140	<i>Oenothera mollissima</i>	Y		
395.	8127	<i>Olearia axillaris</i> (Coastal Daisybush)			
396.	8133	<i>Olearia elaeophila</i>			
397.	46316	<i>Orianthera serpyllifolia</i> subsp. <i>angustifolia</i>			
398.	36177	<i>Ornduffia albiflora</i>			
399.	4113	<i>Ornithopus compressus</i> (Yellow Serradella)	Y		
400.	7122	<i>Orobanche minor</i> (Lesser Broomrape)	Y		
401.	5225	<i>Passiflora filamentosa</i>	Y		
402.	6244	<i>Pastinaca sativa</i> (Wild Parsnip)	Y		
403.	4343	<i>Pelargonium capitatum</i> (Rose Pelargonium)	Y		
404.	4346	<i>Pelargonium littorale</i>			
405.	6006	<i>Pericalymma ellipticum</i> (Swamp Teatree)			
406.	16477	<i>Pericalymma ellipticum</i> var. <i>ellipticum</i>			
407.	11052	<i>Persicaria prostrata</i>			
408.	2299	<i>Petrophile linearis</i> (Pixie Mops)			
409.	19825	<i>Petrorhagia dubia</i>	Y		
410.	18529	<i>Philotheca spicata</i> (Pepper and Salt)			
411.	4675	<i>Phyllanthus calycinus</i> (False Boronia)			
412.	31275	<i>Physalis hederifolia</i> (Sticky Cape Gooseberry)	Y		Y
413.	2408	<i>Ptilostyles hamiltonii</i>			
414.	11402	<i>Pimelea imbricata</i> var. <i>piligera</i>			
415.	5252	<i>Pimelea lanata</i>			
416.	18117	<i>Pimelea rosea</i> subsp. <i>rosea</i>			
417.	18352	<i>Pithocarpa pulchella</i> var. <i>melanostigma</i>			
418.	7303	<i>Plantago lanceolata</i> (Ribwort Plantain)	Y		
419.	6249	<i>Platysace compressa</i> (Tapeworm Plant)			
420.	6253	<i>Platysace filiformis</i>			
421.	4524	<i>Platytheca galioides</i>			
422.	8179	<i>Podolepis nutans</i> (Nodding Podolepis)			
423.	8188	<i>Pogonolepis stricta</i>			
424.	2905	<i>Polycarpon tetraphyllum</i> (Fourleaf Allseed)	Y		
425.	15856	<i>Ptilotus sericostachyus</i> subsp. <i>sericostachyus</i>			
426.	4181	<i>Pultenaea reticulata</i>			
427.	4183	<i>Pultenaea skinneri</i> (Skinner's Pea)		P4	
428.	19183	<i>Retama raetam</i>	Y		
429.	11341	<i>Rhagodia baccata</i> subsp. <i>baccata</i>			
430.	4705	<i>Ricinus communis</i> (Castor Oil Plant)	Y		
431.	3066	<i>Rorippa nasturtium-aquaticum</i> (Watercress)	Y		
432.	2433	<i>Rumex crispus</i> (Curled Dock)	Y		
433.	2443	<i>Rumex vesicarius</i> (Ruby Dock)	Y		
434.	2908	<i>Sagina maritima</i>	Y		
435.	48433	<i>Salicornia blackiana</i>			
436.	6484	<i>Samolus repens</i> (Creeping Brookweed)			
437.	14107	<i>Samolus repens</i> var. <i>paucifolius</i>			
438.	7613	<i>Scaevola glandulifera</i> (Viscid Hand-flower)			
439.	41660	<i>Schenkia australis</i>			
440.	48834	<i>Schinus terebinthifolia</i>	Y		
441.	6263	<i>Schoenolaena juncea</i>			
442.	20663	<i>Senecio multicaulis</i> subsp. <i>multicaulis</i>			
443.	20161	<i>Senecio pinnatifolius</i>			
444.	8227	<i>Silybum marianum</i> (Variegated Thistle)	Y		
445.	7005	<i>Solanum elaeagnifolium</i> (White Horse Nettle, Silverleaf Nightshade)	Y		
446.	7022	<i>Solanum nigrum</i> (Black Berry Nightshade)	Y		
447.	1765	<i>Soleirolia soleiroliae</i> (Babys Tears)	Y		

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448.	10920	<i>Soliva sessilis</i> (Jo-jo, Onehunga Weed)	Y		
449.	8231	<i>Sonchus oleraceus</i> (Common Sowthistle)	Y		
450.	4828	<i>Spyridium globulosum</i> (Basket Bush)			
451.	6930	<i>Stachys arvensis</i> (Staggerweed)	Y		
452.	2918	<i>Stellaria media</i> (Chickweed)	Y		
453.	30278	<i>Stylidium androsaceum</i>			
454.	7696	<i>Stylidium calcaratum</i> (Book Triggerplant)			
455.	7713	<i>Stylidium dichotomum</i> (Pins-and-needles)			
456.	7798	<i>Stylidium schoenoides</i> (Cow Kicks)			
457.	7806	<i>Stylidium utricularioides</i> (Pink Fan Triggerplant)			
458.	6476	<i>Styphelia tenuiflora</i> (Common Pinheath)			
459.	2639	<i>Suaeda australis</i> (Seablite)			
460.	2323	<i>Synaphea gracillima</i>			
461.	2324	<i>Synaphea petiolaris</i> (Synaphea)			
462.	45613	<i>Taraxacum khatoonae</i>	Y		
463.	33236	<i>Tecticornia halocnemoides</i> (Shrubby Samphire)			
464.	33319	<i>Tecticornia indica</i> subsp. <i>bidens</i>			
465.	4535	<i>Tetradlea hirsuta</i> (Black Eyed Susan)			
466.	48341	<i>Tetradlea hirsuta</i> subsp. <i>viminea</i>			
467.	5084	<i>Thomasia grandiflora</i> (Large Flowered Thomasia)			
468.	6280	<i>Trachymene pilosa</i> (Native Parsnip)			
469.	4291	<i>Trifolium arvense</i> (Hare's Foot Clover)	Y		
470.	17763	<i>Trifolium campestre</i> var. <i>campestre</i> (Hop Clover)	Y		
471.	4293	<i>Trifolium cernuum</i> (Drooping Flower Clover)	Y		
472.	17759	<i>Trifolium fragiferum</i> var. <i>fragiferum</i>	Y		
473.	4298	<i>Trifolium hirtum</i> (Rose Clover)	Y		
474.		<i>Trifolium</i> sp.			
475.	8257	<i>Vellereophyton dealbatum</i> (White Cudweed)	Y		
476.	7107	<i>Verbascum virgatum</i> (Twiggy Mullein)	Y		
477.	20120	<i>Verbena littoralis</i>	Y		Y
478.	19511	<i>Verbena officinalis</i>	Y		
479.	7108	<i>Veronica arvensis</i> (Wall Speedwell)	Y		
480.	12392	<i>Verticordia attenuata</i>		P3	
481.	4322	<i>Vicia sativa</i> (Common Vetch)	Y		
482.	11474	<i>Vicia sativa</i> subsp. <i>nigra</i>	Y		
483.	8282	<i>Waitzia suaveolens</i> (Fragrant Waitzia)			
484.	6658	<i>Wilsonia backhousei</i> (Narrow-leaf Wilsonia)			
485.	6659	<i>Wilsonia humilis</i> (Silky Wilsonia)			
486.	2331	<i>Xylomelum occidentale</i> (Woody Pear, Djandin)			

Fish

487.		<i>Acentrogobius bifrenatus</i>			
488.		<i>Aetapcus maculatus</i>			
489.		<i>Aldrichetta forsteri</i>			
490.		<i>Anoplocapros lenticularis</i>			
491.		<i>Aracana aurita</i>			
492.		<i>Arenigobius bifrenatus</i>			
493.		<i>Arripis truttacea</i>			
494.		<i>Asymbolus submaculatus</i>			
495.		<i>Atherinosoma elongata</i>			
496.		<i>Aulohalaelurus labiosus</i>			
497.		<i>Auxis thazard</i>			
498.		<i>Carcharhinus</i> sp.			
499.		<i>Chelidonichthys kumu</i>			
500.		<i>Cleidopus gloriamaris</i>			
501.		<i>Dactylophora nigricans</i>			
502.		<i>Diodon nichthemerus</i>			
503.		<i>Diodon</i> sp.			
504.		<i>Echeneis naucrates</i>			
505.		<i>Eubalichthys</i> sp.			
506.		<i>Euleptorhamphus viridis</i>			
507.		<i>Furgaleus macki</i>			
508.		<i>Galeorhinus galeus</i>			
509.	34030	<i>Geotria australis</i> (Pouched Lamprey)		P3	
510.		<i>Gonorynchus greyi</i>			
511.		<i>Gymnapistes marmoratus</i>			
512.		<i>Gymnothorax woodwardi</i>			
513.		<i>Hemipristis elongata</i>			
514.		<i>Heterodontus portusjacksoni</i>			
515.		<i>Hippocampus</i> sp.			
516.		<i>Hyperlophus vittatus</i>			

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517.	<i>Hyporhamphus melanochir</i>			
518.	<i>Ichthyscopus barbatus</i>			
519.	<i>Lagocephalus sceleratus</i>			
520.	<i>Macroramphosus scolopax</i>			
521.	<i>Makaira indica</i>			
522.	<i>Meuschenia freycineti</i>			
523.	<i>Mugil cephalus</i>			
524.	<i>Myliobatis</i> sp.			
525.	<i>Nelusetta ayraudi</i>			
526.	<i>Omegophora armilla</i>			
527.	<i>Ophisurus serpens</i>			
528.	<i>Ophthalmolepis lineolatus</i>			
529.	<i>Parazanclostius hutchinsi</i>			
530.	<i>Phyllopteryx taeniolatus</i>			
531.	<i>Platycephalus speculator</i>			
532.	<i>Prionace glauca</i>			
533.	<i>Pristiophorus nudipinnis</i>			
534.	<i>Pseudogobius olorum</i>			
535.	<i>Pterygotrigla polyommata</i>			
536.	<i>Scomber australasicus</i>			
537.	<i>Sillago fraseri</i> (invalid)			Y
538.	<i>Sphyræna obtusata</i>			
539.	<i>Squalus megalops</i>			
540.	<i>Squatina australis</i>			
541.	<i>Stigmatopora argus</i>			
542.	<i>Thyrsites atun</i>			
543.	<i>Trachinotus bailloni</i>			
544.	<i>Trachurus novaezelandiae</i>			
545.	<i>Trichiurus lepturus</i>			
546.	<i>Trichiurus</i> sp.			
547.	<i>Trygonoptera mucosa</i>			
548.	<i>Urolophus</i> sp.			

Fungus

549.	46074	<i>Boletellus ananiceps</i>		
550.		<i>Phytophthora cinnamomi</i>		
551.	45895	<i>Ustilago avenae</i>		

Gymnosperm

552. 86 *Podocarpus drouynianus* (Wild Plum, Kula)

Hepatic (Liverwort)

553. *Cephaloziella exiliflora*

Invertebrate

554.		<i>Allothreua maculata</i>		
555.		<i>Aname mainae</i>		
556.		<i>Aname tepperi</i>		
557.		<i>Artoria linnaei</i>		
558.		<i>Austracantha minax</i>		
559.		<i>Backobourkia heroine</i>		
560.		<i>Baiami volucris</i>		
561.		<i>Cyrtophora parnasia</i>		
562.		<i>Erigone prominens</i>		
563.		<i>Eriophora biapicata</i>		
564.	48935	<i>Idiosoma sigillatum</i> (Swan Coastal Plain shield-backed trapdoor spider)	P3	
565.		<i>Isopeda leishmanni</i>		
566.		<i>Lampona cylindrata</i>		
567.		<i>Latrodectus hasseltii</i>		
568.		<i>Missulena granulosa</i>		
569.		<i>Missulena hoggi</i>		
570.		<i>Missulena occatoria</i>		
571.		<i>Nephila edulis</i>		
572.		<i>Nicodamus mainae</i>		
573.		<i>Nunciella aspera</i>		
574.		<i>Steatoda capensis</i>		
575.		<i>Steatoda grossa</i>		
576.		<i>Synsphyronus magnus</i>		
577.		<i>Tasmanicosa leuckartii</i>		
578.		<i>Venator immansueta</i>		
579.		<i>Venatrix pullastra</i>		
580.	34113	<i>Westralunio carteri</i> (Carter's Freshwater Mussel)		T

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Lichen				
581.	27628 <i>Caloplaca erythrosticta</i>			
582.	27645 <i>Candelariella xanthostigmoides</i>			
583.	27744 <i>Flavoparmelia ferax</i>			
584.	41286 <i>Flavoparmelia virensica</i>			
585.	27775 <i>Heterodermia japonica</i>			
586.	27787 <i>Hypogymnia subphysodes</i>			
587.	45299 <i>Jackelisia elixii</i>			
588.	30458 <i>Parmotrema reticulatum</i>			
589.	27975 <i>Physcia stellaris</i>			
590.	28007 <i>Punctelia subalbicans</i>			
591.	28223 <i>Ramalina celastri subsp. ovalis</i>			
592.	28224 <i>Ramalina inflata subsp. australis</i>			
593.	28065 <i>Teloschistes chrysophthalmus</i>			
594.	<i>Trapeliopsis flexuosa</i>			
595.	28087 <i>Usnea inermis</i>			
Mammal				
596.	24208 <i>Arctocephalus forsteri</i> (New Zealand Fur Seal, long-nosed fur-seal)		S	
597.	24209 <i>Arctocephalus tropicalis</i> (Subantarctic fur-seal)		T	
598.	24044 <i>Balaenoptera acutorostrata</i> (Dwarf Minke Whale)			
599.	24251 <i>Bos taurus</i> (European Cattle)	Y		
600.	24043 <i>Eubalaena australis</i> (Southern Right Whale)		T	
601.	24215 <i>Hydromys chrysogaster</i> (Water-rat, Rakali)		P4	
602.	48588 <i>Isodon fusciventer</i> (Quenda, southwestern brown bandicoot)		P4	
603.	<i>Lobodon carcinophaga</i>			
604.	24076 <i>Mesoplodon bowdoini</i> (Andrew's Beaked Whale)			
605.	24078 <i>Mesoplodon grayi</i> (Gray's Beaked Whale)			
606.	24081 <i>Mesoplodon mirus</i> (True's Beaked Whale)			
607.	24210 <i>Neophoca cinerea</i> (Australian Sea-lion)		T	
608.	24085 <i>Oryctolagus cuniculus</i> (Rabbit)	Y		
609.	48070 <i>Phascogale tapoatafa subsp. wambenger</i> (South-western Brush-tailed Phascogale, Wambenger)		S	
610.	24073 <i>Physeter macrocephalus</i> (Sperm Whale)		T	
611.	24166 <i>Pseudocheirus occidentalis</i> (Western Ringtail Possum, ngwayir)		T	
612.	24243 <i>Rattus fuscipes</i> (Western Bush Rat)			
613.	24245 <i>Rattus rattus</i> (Black Rat)	Y		
614.	48113 <i>Stenella coeruleoalba</i> (Striped Dolphin)			
615.	48114 <i>Stenella longirostris</i> (Spinner Dolphin)		P4	
616.	24259 <i>Sus scrofa</i> (Pig)	Y		
617.	25521 <i>Trichosurus vulpecula</i> (Common Brushtail Possum)			
618.	30954 <i>Tursiops aduncus</i> (Indo-Pacific Bottlenose Dolphin)			
619.	24069 <i>Tursiops truncatus</i> (Bottlenose Dolphin)			
Monocotyledon				
620.	1208 <i>Acanthocarpus preissii</i>			
621.	23501 <i>Agrostocrinum scabrum subsp. scabrum</i>			
622.	35159 <i>Ammophila arenaria subsp. arenaria</i>	Y		
623.	126 <i>Amphibolis antarctica</i> (Sea Nymph)			
624.	11434 <i>Anigozanthos humilis subsp. humilis</i>			
625.	11261 <i>Anigozanthos manglesii subsp. manglesii</i>			
626.	29487 <i>Anigozanthos manglesii var. x angustifolius</i>			
627.	8779 <i>Asparagus asparagoides</i> (Bridal Creeper)	Y		
628.	16943 <i>Asparagus declinatus</i>	Y		
629.	16945 <i>Asparagus plumosus</i>	Y		
630.	17234 <i>Austrostipa compressa</i>			
631.	233 <i>Avena barbata</i> (Bearded Oat)	Y		
632.	235 <i>Avena sativa</i> (Common Oat)	Y		
633.	749 <i>Bolboschoenus caldwellii</i> (Marsh Club-rush)			
634.	248 <i>Bromus catharticus</i> (Prairie Grass)	Y		
635.	249 <i>Bromus diandrus</i> (Great Brome)	Y		
636.	1385 <i>Burchardia multiflora</i> (Dwarf Burchardia)			
637.	1277 <i>Caesia occidentalis</i>			
638.	1595 <i>Caladenia hirta</i> (Sugar Candy Orchid)			
639.	15354 <i>Caladenia hirta subsp. hirta</i>			
640.	1605 <i>Caladenia marginata</i> (White Fairy Orchid)			
641.	15503 <i>Caladenia paludosa</i>			
642.	13862 <i>Caladenia speciosa</i>		P4	
643.	19309 <i>Calectasia narragara</i>			
644.	754 <i>Carex divisa</i> (Divided Sedge)	Y		
645.	41570 <i>Cenchrus spinifex</i> (Spiny Burrgrass)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
		Y		
646.	17685 <i>Chaetanthus aristatus</i>			
647.	267 <i>Chloris gayana</i> (Rhodes Grass)	Y		
648.	1418 <i>Conostylis aculeata</i> (Prickly Conostylis)			
649.	11826 <i>Conostylis aculeata</i> subsp. <i>aculeata</i>			
650.	48259 <i>Cortaderia selloana</i> subsp. <i>selloana</i>	Y		
651.	15114 <i>Cyanicula gemmata</i>			
652.	783 <i>Cyperus congestus</i> (Dense Flat-sedge)	Y		
653.	801 <i>Cyperus laevigatus</i>	Y		
654.	816 <i>Cyperus tenuiflorus</i> (Scaly Sedge)	Y		
655.	10916 <i>Cyrtostylis huegelii</i>			
656.	17691 <i>Desmocladius fasciculatus</i>			
657.	10796 <i>Diuris drummondii</i> (Tall Donkey Orchid)		T	
658.	10938 <i>Diuris filifolia</i> (Cat's Face Orchid)			
659.	1640 <i>Drakaea glyptodon</i> (King-in-his-carriage)			
660.	347 <i>Ehrharta calycina</i> (Perennial Veldt Grass)	Y		
661.	349 <i>Ehrharta longiflora</i> (Annual Veldt Grass)	Y		
662.	1644 <i>Elythranthera emarginata</i> (Pink Enamel Orchid)			
663.	1067 <i>Empodisma gracillimum</i>			
664.	376 <i>Eragrostis curvula</i> (African Lovegrass)	Y		
665.	1646 <i>Eriochilus dilatatus</i> (White Bunny Orchid)			
666.	15410 <i>Eriochilus dilatatus</i> subsp. <i>dilatatus</i>			
667.	15412 <i>Eriochilus dilatatus</i> subsp. <i>multiflorus</i>			
668.	15415 <i>Eriochilus scaber</i> subsp. <i>scaber</i>			
669.	430 <i>Festuca arundinacea</i> (Tall Fescue)	Y		
670.	20216 <i>Ficinia nodosa</i> (Knotted Club Rush)			
671.	894 <i>Fimbristylis velata</i>			
672.	1524 <i>Gladiolus undulatus</i> (Wild Gladiolus)	Y		
673.	49050 <i>Gloriosa superba</i>	Y		Y
674.	11451 <i>Hemarthria uncinata</i> var. <i>uncinata</i>			
675.	17841 <i>Hypolaena pubescens</i>			
676.	20199 <i>Isolepis cernua</i> var. <i>cernua</i>			
677.	1178 <i>Juncus bufonius</i> (Toad Rush)	Y		
678.	11922 <i>Juncus kraussii</i> subsp. <i>australiensis</i>			
679.	940 <i>Lepidosperma pubisquameum</i>			
680.	945 <i>Lepidosperma squamatum</i>			
681.	46376 <i>Leptocarpus denmarkicus</i>			
682.	46377 <i>Leptocarpus scoparius</i>			
683.	46374 <i>Leptocarpus trisepalus</i>			
684.	1493 <i>Leucojum aestivum</i> (Snowflake)	Y		
685.	476 <i>Lolium perenne</i> (Perennial Ryegrass)	Y		
686.	478 <i>Lolium rigidum</i> (Wimmera Ryegrass)	Y		
687.	<i>Lolium</i> sp.			
688.	1228 <i>Lomandra hermaphrodita</i>			
689.	1236 <i>Lomandra odora</i> (Tiered Matrush)			
690.	1092 <i>Loxocarya cinerea</i>			
691.	18049 <i>Lyginia imberbis</i>			
692.	1656 <i>Lyperanthus serratus</i> (Rattle Beak Orchid)			
693.	14985 <i>Melinis repens</i>	Y		
694.	15419 <i>Microtis media</i> subsp. <i>media</i>			
695.	19179 <i>Moraea flaccida</i> (One-leaf Cape Tulip)	Y		
696.	44496 <i>Narcissus tazetta</i> subsp. <i>italicus</i>	Y		
697.	1381 <i>Nothoscordum gracile</i>	Y		
698.	14531 <i>Ottelia ovalifolia</i> subsp. <i>ovalifolia</i>			
699.	502 <i>Panicum capillare</i> (Witchgrass)	Y		
700.	43762 <i>Pauridia occidentalis</i> var. <i>quadriloba</i>			
701.	547 <i>Phalaris angusta</i>	Y		
702.	1478 <i>Phlebotocarya ciliata</i>			
703.	577 <i>Poa poliformis</i> (Coastal Poa)			
704.	122 <i>Posidonia angustifolia</i>			
705.	110 <i>Potamogeton drummondii</i>			
706.	15424 <i>Praecoxanthus aphyllus</i>			
707.	1674 <i>Prasophyllum giganteum</i> (Bronze Leek Orchid)			
708.	1680 <i>Prasophyllum parvifolium</i> (Autumn Leek Orchid)			
709.	44084 <i>Prasophyllum</i> sp. <i>early</i> (G. Brockman GBB 1626)			
710.	1685 <i>Pterostylis angusta</i>			
711.	15426 <i>Pterostylis aspera</i>			
712.	44723 <i>Pterostylis glebosa</i>			
713.	11118 <i>Pterostylis pyramidalis</i> (Snail Orchid)			
714.	1694 <i>Pterostylis rogersii</i> (Curled-tongue Shell Orchid)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
715.	<i>Pterostylis</i> sp.			
716.	10998 <i>Pterostylis turfosa</i> (Bird Orchid)			
717.	1698 <i>Pterostylis vittata</i> (Banded Greenhood)			
718.	31673 <i>Puccinellia vassica</i>		P1	
719.	16367 <i>Pyrorchis nigricans</i> (Red beaks, Elephants ears)			
720.	14485 <i>Romulea flava</i> var. <i>minor</i>	Y		
721.	1555 <i>Romulea obscura</i>	Y		
722.	968 <i>Schoenoplectus pungens</i> (Sharpleaf Rush)			
723.	974 <i>Schoenus benthamii</i>		P3	
724.	1312 <i>Sowerbaea laxiflora</i> (Purple Tassels)			
725.	625 <i>Spinifex longifolius</i> (Beach Spinifex)			
726.	635 <i>Sporobolus virginicus</i> (Marine Couch)			
727.	1318 <i>Thysanotus arbuscula</i>			
728.	1368 <i>Trachyandra divaricata</i>	Y		
729.	1481 <i>Tribonanthes australis</i> (Southern Tiurmdin)			
730.	147 <i>Triglochin mucronata</i>			
731.	151 <i>Triglochin striata</i>			
732.	1566 <i>Watsonia marginata</i>	Y		
733.	18108 <i>Watsonia meriana</i> var. <i>bulbillifera</i>	Y		
734.	18118 <i>Watsonia meriana</i> var. <i>meriana</i>	Y		
735.	1049 <i>Zantedeschia aethiopica</i> (Arum Lily)	Y		

Reptile

736.	42368 <i>Acritoscincus trilineatus</i> (Western Three-lined Skink)			
737.	24991 <i>Aprasia repens</i> (Sand-plain Worm-lizard)			
738.	25335 <i>Caretta caretta</i> (Loggerhead Turtle)		T	
739.	24980 <i>Christinus marmoratus</i> (Marbled Gecko)			
740.	25039 <i>Ctenotus fallens</i>			
741.	25250 <i>Elapognathus coronatus</i> (Crowned Snake)			
742.	30919 <i>Hemiergis gracilipes</i> (skink)			
743.	25119 <i>Hemiergis quadrilineata</i>			
744.	44656 <i>Hydrophis major</i> (Olive-headed seasnake, greater seasnake)			
745.	42410 <i>Hydrophis ornatus</i> (Ornate Reef Seasnake, Sea Snake)			
746.	43384 <i>Hydrophis platurus</i> (Yellow-bellied Seasnake)			
747.	25131 <i>Lerista distinguenda</i>			
748.	25133 <i>Lerista elegans</i>			
749.	25005 <i>Lialis burtonis</i>			
750.	42413 <i>Lissolepis luctuosa</i> (Western Swamp Skink)			
751.	25184 <i>Menetia greyii</i>			
752.	25344 <i>Natator depressus</i> (Flatback Turtle)		T	
753.	25248 <i>Neelaps bimaculatus</i> (Black-naped Snake)			
754.	25253 <i>Parasuta gouldii</i>			
755.	25255 <i>Parasuta nigriceps</i>			
756.	24907 <i>Pogona minor</i> subsp. <i>minor</i> (Dwarf Bearded Dragon)			
757.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			

Conservation Codes

T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholly contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

Appendix 2: PMST Report 5km



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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 17/06/21 15:11:43

[Summary](#)

[Details](#)

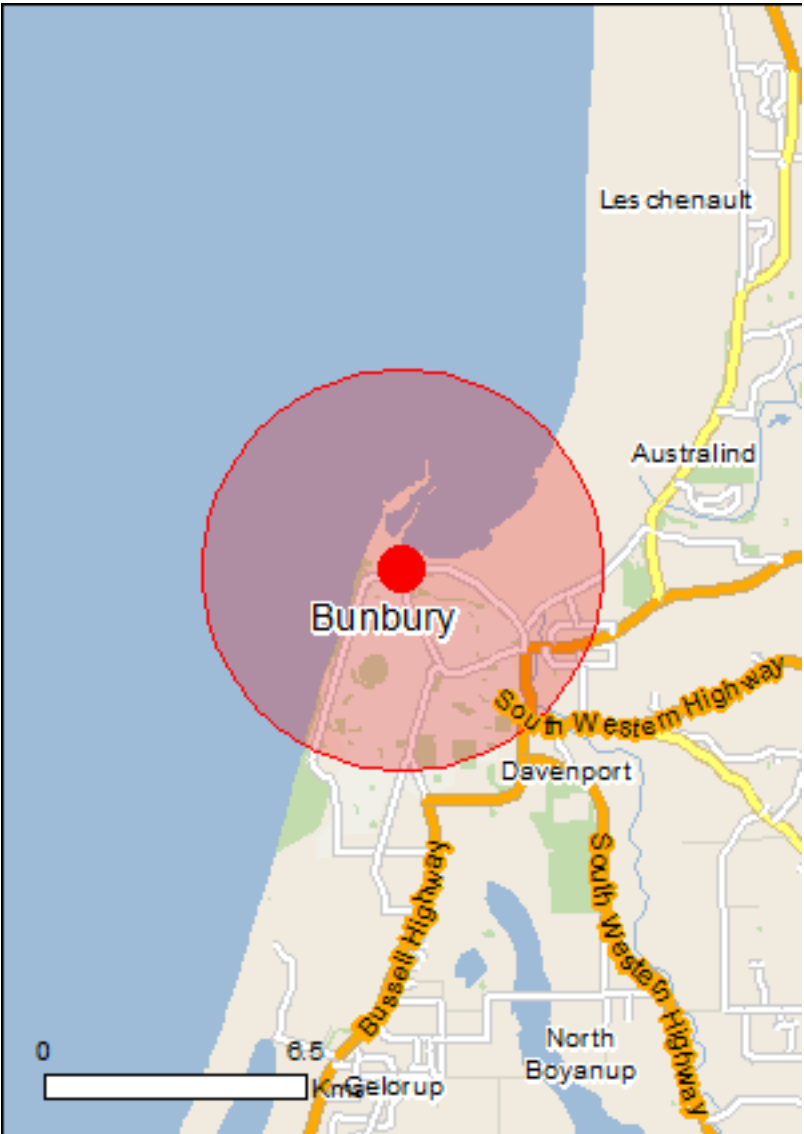
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

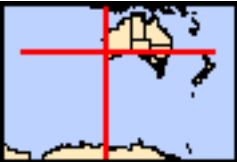
[Acknowledgements](#)



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[Coordinates](#)

Buffer: 5.0Km



Summary

Matters of National Environmental 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:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	12
Listed Threatened Species:	58
Listed Migratory Species:	44

Other Matters Protected by the EPBC Act

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

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/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 Land:	2
Commonwealth Heritage Places:	None
Listed Marine Species:	68
Whales and Other Cetaceans:	13
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	1
Regional Forest Agreements:	None
Invasive Species:	28
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area
Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area
Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area
Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area

Listed Threatened Species

[Resource Information]

Name	Status	Type of Presence
Birds		
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species

Name	Status	Type of Presence
Calyptorhynchus baudinii Baudin's Cockatoo, Long-billed Black-Cockatoo [769]	Endangered	habitat likely to occur within area Breeding known to occur within area
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Species or species habitat known to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Critically Endangered	Species or species habitat known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour known to occur within area

Name	Status	Type of Presence
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or related behaviour may occur within area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Fish		
Nannatherina balstoni Balston's Pygmy Perch [66698]	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Congregation or aggregation known to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat known to occur within area
Setonix brachyurus Quokka [229]	Vulnerable	Species or species habitat may occur within area
Other		
Westralunio carteri Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat known to occur within area
Plants		
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area
Austrostipa bronwenae [87808]	Endangered	Species or species habitat known to occur within area
Austrostipa jacobiana [87809]	Critically Endangered	Species or species habitat likely to occur within area

Name	Status	Type of Presence
Banksia nivea subsp. uliginosa Swamp Honeypot [82766]	Endangered	Species or species habitat may occur within area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat likely to occur within area
Diuris drummondii Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat known to occur within area
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area
Drakaea elastica Glossy-leaved Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat likely to occur within area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat may occur within area
Lambertia echinata subsp. occidentalis Western Prickly Honeysuckle [64528]	Endangered	Species or species habitat may occur within area
Synaphea sp. Fairbridge Farm (D. Papenfus 696) Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area
Synaphea sp. Serpentine (G.R. Brand 103) [86879]	Critically Endangered	Species or species habitat may occur within area
Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Sharks		
Carcharias taurus (west coast population) Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat known to occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area

Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Species or species habitat likely to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Hydroprogne caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Onychoprion anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or related behaviour may occur within area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Migratory Marine Species		
Balaena glacialis australis Southern Right Whale [75529]	Endangered*	Breeding known to occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area
Manta alfredi Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
Manta birostris Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Congregation or aggregation known to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		

Name	Threatened	Type of Presence
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land	[Resource Information]
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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.

Name
Commonwealth Land - Defence - BUNBURY TRAINING DEPOT

Listed Marine Species	[Resource Information]
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* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Anous stolidus Common Noddy [825]		Species or species habitat may occur within area
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Catharacta skua Great Skua [59472]		Species or species habitat may occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area
Puffinus assimilis Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area
Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Species or species habitat likely to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Sterna anaethetus Bridled Tern [814]		Foraging, feeding or related behaviour likely to occur within area
Sterna caspia Caspian Tern [59467]		Foraging, feeding or related behaviour known to occur within area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or related behaviour may occur within area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat known to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area
Fish		
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Campichthys galei Gale's Pipefish [66191]		Species or species habitat may occur within area
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area
Hippocampus subelongatus West Australian Seahorse [66722]		Species or species habitat may occur within area
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area
Lissocampus fatiloquus Prophet's Pipefish [66250]		Species or species habitat may occur within area
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area
Mitotichthys meraculus Western Crested Pipefish [66259]		Species or species habitat may occur within area
Nannocampus subosseus Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area

Name	Threatened	Type of Presence
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area

Mammals		
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area

Reptiles		
Caretta caretta Loggerhead Turtle [1763]	Endangered	Foraging, feeding or related behaviour known to occur within area
Chelonia mydas Green Turtle [1765]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Foraging, feeding or related behaviour known to occur within area

Whales and other Cetaceans		[Resource Information]
Name	Status	Type of Presence
Mammals		
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area

Name	Status	Type of Presence
Lagenorhynchus obscurus Dusky Dolphin [43]	Vulnerable	Species or species habitat may occur within area
Megaptera novaeangliae Humpback Whale [38]		Congregation or aggregation known to occur within area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area
Stenella attenuata Spotted Dolphin, Pantropical Spotted Dolphin [51]		Species or species habitat may occur within area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Leschenault Peninsula	WA

Invasive Species

[Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Mammals		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]		Species or species habitat likely to occur within area
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Asparagus declinatus Bridal Veil, Bridal Veil Creeper, Pale Berry Asparagus Fern, Asparagus Fern, South African Creeper [66908]		Species or species habitat likely to occur within area
Asparagus plumosus Climbing Asparagus-fern [48993]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within

Name	Status	Type of Presence
Pinus radiata		area
Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate		
Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii		
Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Solanum elaeagnifolium		
Silver Nightshade, Silver-leaved Nightshade, White Horse Nettle, Silver-leaf Nightshade, Tomato Weed, White Nightshade, Bull-nettle, Prairie-berry, Satansbos, Silver-leaf Bitter-apple, Silverleaf-nettle, Trompillo [12323]		Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

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.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-33.32173 115.64021

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 3: Conservation Codes

Western Australia

Conservation Code	Name	Description
T	Threatened	Flora or fauna that is rare or likely to become extinct, ranked according to their level of threat using IUCN Red List criteria (Schedules 1-3 of the Wildlife Conservation (Specially Protected Fauna) Notice or the Wildlife Conservation (Rare Flora) Notice)
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
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
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	Specially Protected	Fauna otherwise in need of special protection to ensure their conservation (Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice)
P	Priority Species	Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or

Conservation Code	Name	Description
		flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.
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.
2	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.
3	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
4	Priority Four	Rare or near threatened and other species in need of monitoring.

(Source: Department of Biodiversity, Conservation and Attractions, 2020)

Commonwealth

Category	Description
Critically Endangered	Species facing an extremely high risk of extinction in the wild in the immediate future
Endangered	Species facing a very high risk of extinction in the wild in the near future
Vulnerable	Species facing a high risk of extinction in the wild in the medium term

(Source: Department of Biodiversity, Conservation and Attractions, 2019)