

# **City of Rockingham**

# **Ennis Avenue Flora Survey**



















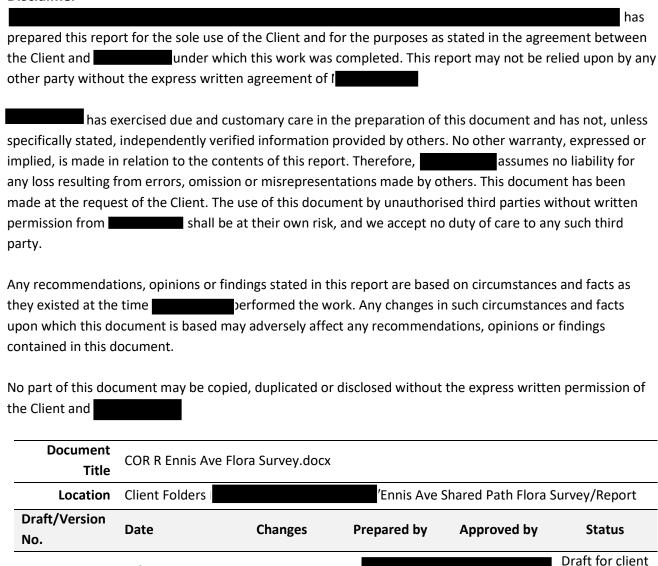
#### Disclaimer

D1

Final

Feb 2021

Mar 2021



**New Document** 

Minor edits

comment

Final

## **Executive Summary**

was commissioned by City of Rockingham (the

City) to undertake a basic flora and vegetation survey for a proposed shared path along Ennis Avenue, Rockingham. Outcomes of the survey activities will inform environmental approvals and procedures associated with implementation of the proposed works.

#### Survey outcomes confirmed:

- the presence of 12 flora species from seven families, including four (33%) native species and eight (67%) introduced species
- twenty individual native plants that may be impacted by the proposed works due to their close proximity to the path alignment
- no threatened or priority species within the survey area
- no Threatened or Priority Ecological Communities within the survey area (TECs, PECs)
- three vegetation types namely: Open grassland, Eucalyptus gomphocephala and Melaleuca huegelli
   Open Woodland and Eucalyptus gomphocephala Open Woodland
- vegetation condition ranged from Degraded to Completely Degraded with reduced vegetative structure and high weed loads.

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#### 1.0 Introduction

was commissioned by the City of Rockingham (the City) to undertake a flora and vegetation survey in an area of vegetation adjacent to Ennis Avenue, Rockingham, where a shared path is proposed to be installed. Flora and vegetation survey activities were carried out in February 2021, and this report identifies the existing vegetation located within the proposed clearing envelope, following the proposed path alignment.

#### 1.1 Location

The survey area is situated approximately 40 km south of the Perth's central business district, within the suburb of Rockingham. The site is at the corner of Dixon Road and Ennis Avenue and bounded by industrial developments to the west and Ennis Avenue to the east (Figure 1). The survey site is also within an Environmentally Sensitive Area, with Bush Forever Site 356 occurring 0.5 km south-east of the survey site on the southern corner of Dixon Road and Ennis Avenue (Australian Government, 2021).

#### 1.2 Scope

scope of works included:

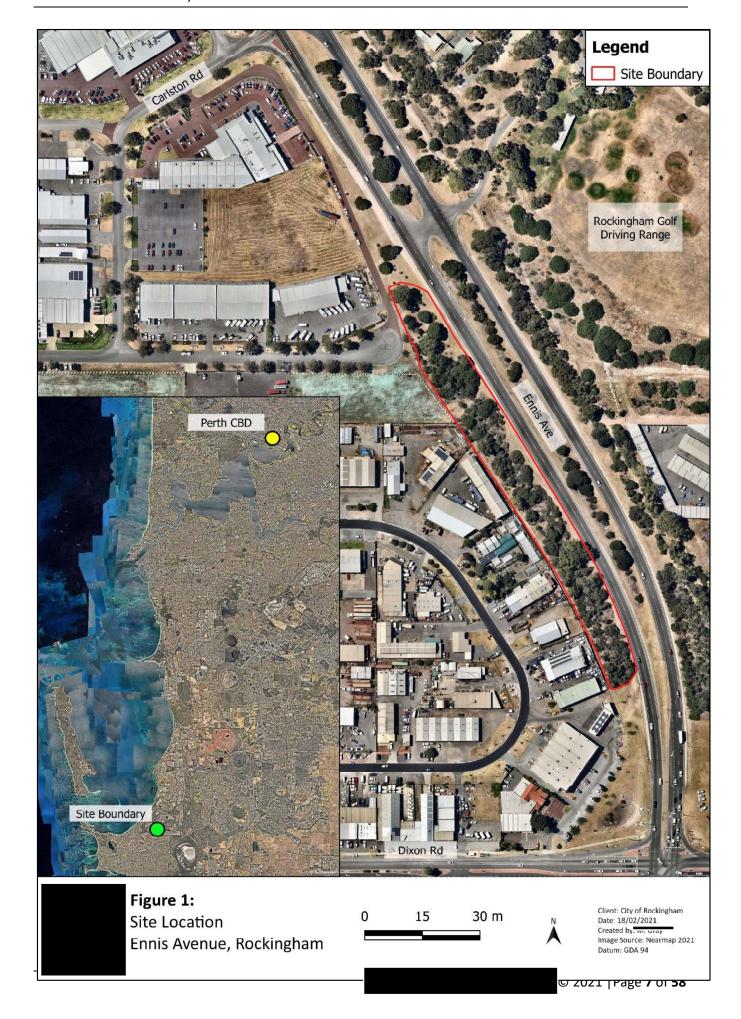
- desktop assessment to determine environmental value and conservation significant flora, habitat or vegetation in the vicinity of the project area
- flora survey to identify species present, existing vegetation types and conditions, occurrence of conservation significant flora and/or Threatened and Priority Ecological Communities (TECs, PECs)
- on-ground flora survey of the area to determine:
  - flora species (native and non-native)
  - presence of any priority or threatened flora species
  - vegetation type and condition
- provide all spatial/mapping data collected
- provide recommendations for alignment of the shared path
- report outcomes of survey.

#### 1.3 Objectives

The main objective of the survey was to collect sufficient data to adequately inform relevant stakeholders and approval processes, as well as to provide recommendations on the alignment of the shared path.

The flora survey aimed to determine:

- the extent and boundaries of vegetation types
- flora species (native and introduced) present
- the location of declared rare or priority flora and or ecological communities.



#### 2.0 Site Characteristics

The characteristics of a site have a strong bearing on the flora, vegetation, fauna, and ecological communities present. Key characteristics such as climate, topography and soil types are outlined in this section.

#### 2.1 Regional Context

According to the Interim Biographical Regionalisation of Australia (IBRA) descriptions, Rockingham is located within the Swan Coastal Plain region. The Swan Coastal Plain comprises two major divisions, the Swan Coastal Plain 1 -Dandaragan Plateau and Swan Coastal Plain 2 -Perth Coastal Plain (Mitchell, Williams and Desmond, 2002), with the Ennis Avenue survey site situated in the latter. This area is described as a low-lying coastal plain with sands of colluvial and aeolian origin, as well as alluvial river flats and coastal limestone. The region is dominated by Banksia and/or Jarrah Woodland over sandy soils associated with the dune systems, with Paperbark (Melaleuca) in swampy/damp areas and Jarrah Woodland to the east where the Swan Coastal Plain rises (Mitchell, Williams & Desmond, 2002).

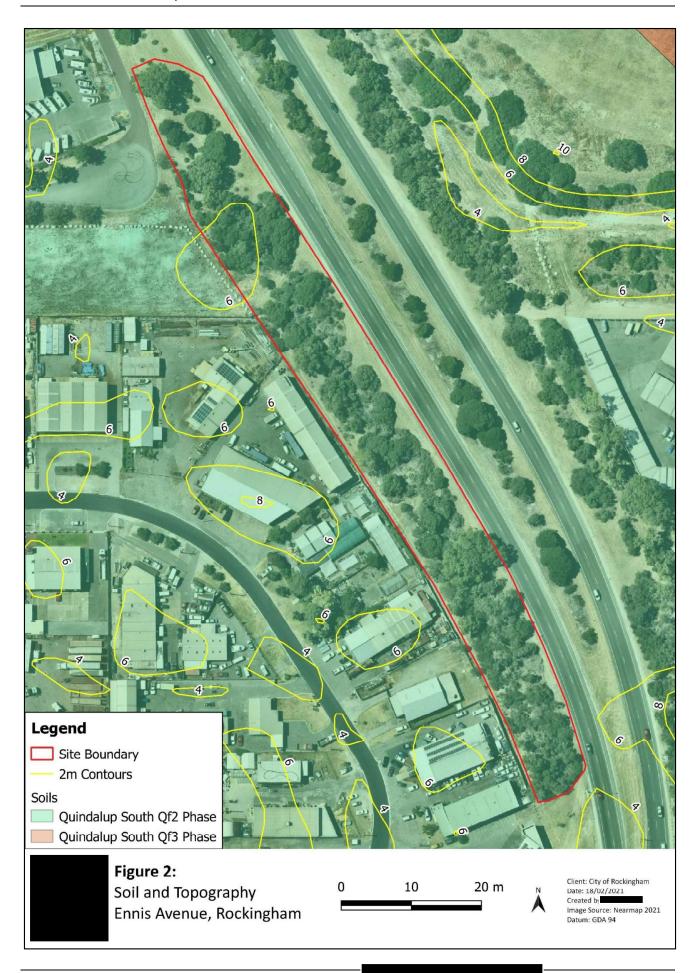
#### 2.2 Climate

The climate experienced in the area is Mediterranean, with dry, hot summers and cool, wet winters. According to the Bureau of Meteorology (Jandakot Aero, Station ID 009172, 2021):

- average rainfall is 816 mm pa, with the majority falling between June and August
- average maximum temperature ranges from 18 °C in winter to 31.6 °C in summer, with the highest recorded maximum being 46.6 °C
- average minimum temperatures range from 7.0 °C in winter to 17.2 °C in summer, with the lowest recorded minimum being -3.4 °C
- predominant wind directions include morning easterlies and south-westerly sea breezes during summer months, with an average wind speed of 18.6 km/h and gusts of more than 100 km/h.

#### 2.3 Topography and Soils

According to the Natural Resource Info (NRInfo) data maintained by the Department of Primary Industries and Regional Development (DPIRD, 2021) one soil type exist within the survey site, namely Quindalup South Qf3 Phase. This soil type is described as relict foredunes and gently undulating beach ridge plain with deep uniform calcareous sands (Figure 2) (DPIRD,2021). The site is relatively flat with only the north-west corner rising gently to approximately 6 m AHD (Australian Height Datum) (DPIRD, 2021).



#### 2.4 Vegetation Complex

One vegetation complex occurs within the survey area, the Quindalup Complex (Australian Government, 2021). Heddle, Loneragan, and Havel (1980) describe this complex as being restricted to coastal dunes categorised into two alliances (strand and foredune or mobile and stable) depending on specific flora species present. Variations in dune environment due to edaphic and topographical factors influence species composition from one habitat to the other. Small restricted localised pockets exist vegetated by low closed forests of *Melaleuca lanceolata* and *Callitris preissii* (Heddle et al., 1980).

#### 2.5 Tenure and Current Land Use

Under the City's Town Planning Scheme No. 2 (TPS2) zoning, the survey area is zoned as Primary Regional Road and is currently functioning as a passive reserve (City of Rockingham, 2021).

### 3.0 Methodology

The various methodologies for the flora and vegetation survey undertaken by this section.

#### 3.1 Desktop and Literature Review

Desktop surveys were undertaken to determine:

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

The following databases were accessed to obtain relevant information:

- NatureMap (Department of Biodiversity, Conservation and Attractions, 2021a) (Appendix 1)
- Protected Matters Search Tool (Department of Agriculture, Water and the Environment, 2021)
   (Appendix 2)
- National Map (Australian Government, 2021)
- Natural Resource Info (NRInfo) (Department Primary Industries and Regional Development, 2021)
- FloraBase (Department of Biodiversity, Conservation and Attractions, 2021b)
- Threatened and priority flora and ecological community database searches (Department of Biodiversity, Conservation and Attractions, 2021c).

Conservation code definitions for the State and Commonwealth and the data relating to conservation significant species from database searches are listed in Appendix 3.

#### 3.2 On-ground Flora Survey

surveyed the site on 2 February 2021, with key GPS

data recorded using Mappt software on a handheld Samsung tablet. Field activities included:

- walking the proposed shared path alignment and identifying flora species present, including targeting declared rare and priority species indicated as potentially present during desktop assessments
- marking (using yellow spray paint or orange flagging tape) plants within or in close proximity to the proposed path alignment
- assessing vegetation condition across the site
- using a GPS to map significant species and boundaries of differing vegetation types and condition
- determining the presence of any further threatened or priority listed flora species and/or ecological communities listed under the *Biodiversity and Conservation Act 2016* (WA) and/or the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth).

The flora and vegetation surveys were carried out in accordance with *EPA Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment* (Environmental Protection Authority, 2016). Samples were collected and any unfamiliar species were recorded and photographed to enable later identification.

#### 3.2.1 Vegetation Type

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. (Table 1).

**Table 1:** Vegetation structural classes

Life Form/Height	Canopy Percentage Cover						
Class	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)

#### 3.2.2 Vegetation Condition

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:** Vegetation condition ratings

Cate	egory	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,				

Cat	egory	Description				
		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 '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 surveys exist, including:

- database searches provide an indication of what flora species may be present, with on ground surveys required to confirm those present
- information on flora species provided on some databases include out-of-date species names, meaning that names need to be checked for currency
- herbarium records are largely limited to vouchered specimens
- plant species flower at different times and are not always able to be identified
- 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
- survey was carried out in summer, which is not the optimal period to carry out flora surveys in the
   Swan Coastal Plain, as most species will not be flowering and annual species may not present.

Despite these limitations, estimates that 80 - 90% of flora species within the survey area were identified.

#### 4.0 Results

#### 4.1 Flora Desktop Survey

A review of NatureMap identified a total of 293 flora species which could potentially occur within a 5km radius of the survey site including:

- 181 dicots
- two gymnosperms
- 110 monocots.

#### 4.1.1 Significant Flora

A review of NatureMap indicated four conservation significant flora species listed under the *Biodiversity Conservation Act 2016* (WA), potentially occurring within 5 km of the survey site (Department of Biodiversity, Conservation and Attractions, 2021a). A review of the Protected Matters Search Tool (PMST) indicated that six significant flora species listed under the *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act*) (Cwlth) have the potential to occur within a 5 km radius of the survey site (Department of the Environment and Energy, 2021).

A review of the DBCA's threatened and priority flora database indicated three priority species and one threatened species have previously been recorded within a 10 km buffer of the survey site. Of the 11 conservation significant species potentially found in the area, it was determined that the site conditions (soil type, drainage, location) may be suitable for eight (highlighted in green) of these species (Table 3). 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
Acacia sp. Binningup	P1	Х		
Aponogeton hexatepalus	P4			Х
Caladenia huegelii	VU		Х	Х
Cyathochaeta teretifolia	Р3			Х
Diuris micrantha	VU		Х	
Diuris purdiei	EN		Х	
Dodonaea hackettiana	P4	Х		Х
Drakaea elastica	EN		Х	
Drakaea micrantha	VU		Х	
Jacksonia sericea	P4	Х		
Sphaerolobium calcicola	Р3	Х		

(Source: DBCA, 2021a, DAWE, 2021 and DBCA, 2021c)

#### 4.1.2 Threatened Ecological Communities

A review of the PMST report indicated that there are four listed Threatened Ecological Communities that could potentially occur within 5 km of the site (Table 4). A review of the DBCA's Threatened Ecological Communities database indicates that three threatened and one priority floristic community type occur within a 5 km buffer of the area (Table 4).

Table 4: Potential Threatened Ecological Communities listed by PMST and DBCA

Name	Status	Presence
Banksia woodlands of the Swan Coastal Plain	Endangered	Community may occur within
		area
Sedgelands in Holocene dune swales of the	Endangered	Community known to occur
southern Swan Coastal Plain		within area
Thrombolite (microbial) community of coastal	Endangered	Community known to occur
freshwater lakes of the Swan Coastal Plain		within area
(Lake Richmond)		
Tuart (Eucalyptus gomphocephala) Woodlands	Critically	Community likely to occur within
and Forests of the Swan Coastal Plain	Endangered	area

### 4.2 Flora On-ground Survey

The survey confirmed the presence of 12 flora species from seven families, including four (33%) native species and eight (67%) introduced species (Table 5). No threatened or priority species were recoded during the survey, with majority of the species recorded being non-native (introduced) species. Examples of flora species recorded on site are included in Figure 3.

Table 5: Species recorded during the survey. \* Denotes introduced species

Family	Species
Fabaceae	Acacia rostellifera
Myrtaceae	Callistemon citrinus*
Myrtaceae	Chamelaucium uncinatum*
Ranunculaceae	Clematis linearifolia
Poaceae	Cynodon dactylon*
Poaceae	Eragrostis curvula*
Asteraceae	Erigeron bonariensis*
Myrtaceae	Eucalyptus sp. *
Euphorbiaceae	Euphorbia terracina*
Myrtaceae	Melaleuca huegelii
Myrtaceae	Melaleuca systena
Anacardiaceae	Schinus terebinthifolia*



Figure 3: Photos of flora species recorded on site. \*Denotes introduced species

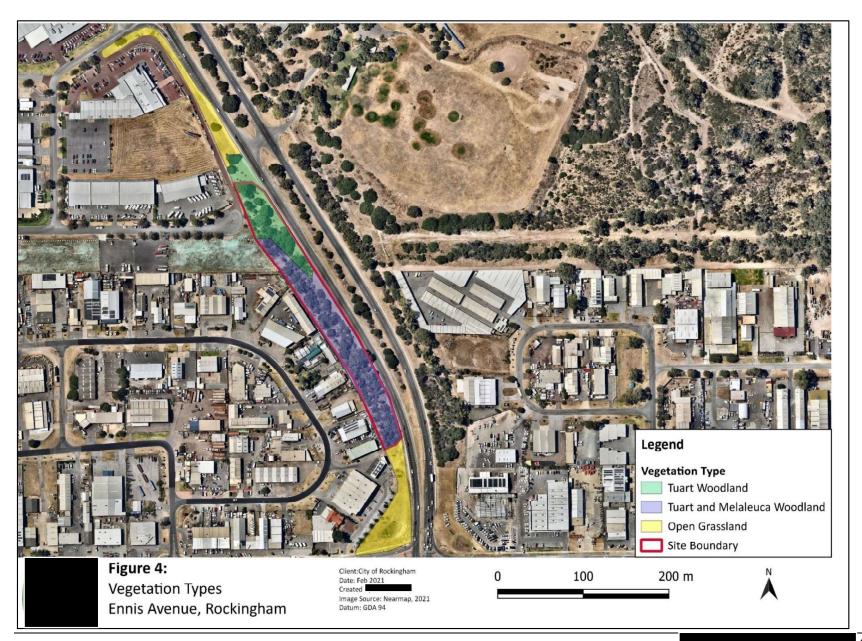
#### 4.2.1 Vegetation Type

Three vegetation types were recorded within the survey area (Table 6 and Figure 4), namely:

- Open Grassland
- Eucalyptus gomphocephala and Melaleuca huegelli Open Woodland
- Eucalyptus gomphocephala Open Woodland.

Table 6: Vegetation type and description

Vegetation Type	Description
Open Grassland	Maintained grassed areas of Cynodon dactylon
Eucalyptus gomphocephala and Melaleuca huegelli	Eucalyptus gomphocephala, Melaleuca huegelli,
Open Woodland	Acacia rostellifera over weedy grass understorey
Eucalyptus gomphocephala Open Woodland	Eucalyptus gomphocephala over Xanthorrhoea
	preissii and weedy grass understorey

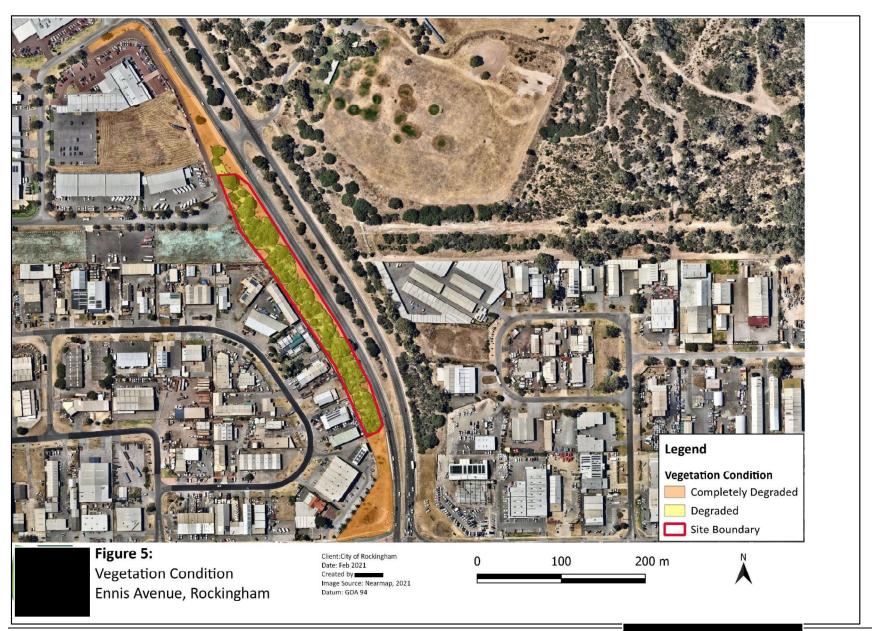


#### 4.2.2 Vegetation Condition

Vegetation condition across the site ranges from Completed Degraded to Degraded, with most of the basic vegetation structures impacted from previous clearing (Table 7). Understorey comprises of mainly weedy grass with maintained turfed grass lawns in the surrounding areas.

Table 7: Vegetation Condition

Vegetation Condition	Pristine	Excellent	Very Good	Good	Degraded	Completely Degraded	Total
Area (ha)	0	0	0	0	0.69	1.27	1.96
Area (%)	0	0	0	0	35	65	100



#### 4.2.3 Threatened and Priority Ecological Communities

No TECs or PECs were found to be within the survey site. Although the survey sites meet the key diagnostic characteristics for the Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain, the existing vegetation condition and patch size does not meet the minimum requirements to be considered a TEC. The Key diagnostic characteristics of the Tuart Woodland TEC are outlined in Table 8.

Table 8: Key Diagnostic Characteristics of Tuart Woodland TEC

Key diagnostic characteristics	Description					
	Occurs primarily in the Swan Coastal Plain IBRA Bioregion on Spearwood and					
Location	Quindalup dune systems.					
	Can also occur on Bassendean dunes system, Pinjarra Plain system; and					
	on the banks of rivers and wetlands					
	The presence of at least two living established Eucalyptus gomphocephala					
Characterizal Farms	(Tuart) in the uppermost canopy.					
Structural Form	Established tree is defined as ≥15 cm diameter breast height (DBH).					
	A Patch is defined as having a gap of no more than 60 m between outer edges of					
	the canopies of adjacent Tuart trees.					
	Other tree species may be present in the canopy or sub-canopy. They commonly					
	include:					
	<ul> <li>Agonis flexuosa (Peppermint)</li> </ul>					
	<ul><li>Banksia grandis (Bull Banksia)</li></ul>					
	<ul> <li>Banksia attenuata (Candlestick Banksia)</li> </ul>					
Vegetation	<ul><li>Eucalyptus marginata (Jarrah)</li></ul>					
	<ul><li>and less commonly</li></ul>					
	<ul><li>Corymbia calophylla (Marri)</li></ul>					
	<ul> <li>Banksia menziesii (Firewood Banksia)</li> </ul>					
	<ul> <li>Banksia prionotes (Acorn Banksia).</li> </ul>					
	An understorey of native plants is typically present, which may include grasses,					
	herbs and shrubs, although this is often modified by disturbance.					

Source: Department of Environment and Energy (2019)

#### 5.0 Discussion

#### 5.1 Flora and Vegetation

Flora diversity within the survey area is relatively low with majority (67%) being non-native (weed) species. This is not uncommon for an urban roadside verges with close proximity to anthropogenic influences such as housing development and vehicular traffic. Surrounding areas have been turfed with remnant vegetation losing most of its vegetative structure and containing high weed loads resulting in a classification of mostly Degraded to Completely Degraded vegetation condition.

The proposed alignment, running along the road carriageway may impact 20 individual native plants (Figure 6) due to close proximity (less than 2m) to the proposed path. These plants have been identified and marked during the flora survey. Impacts may range from minor pruning to the removal of the entire plant depending on the construction design and installation methodology. Natural Area note that there is an existing firebreak running behind industrial developments along Hurrell Way. As the existing firebreaks are cleared of vegetation, this may be a potential alternative for the proposed footpath to avoid impact any existing vegetation. Another alternative is to reclaim road space from the carriageway, but this is subjected to approval from relevant road authorities, with traffic impact assessments to determine feasibility.

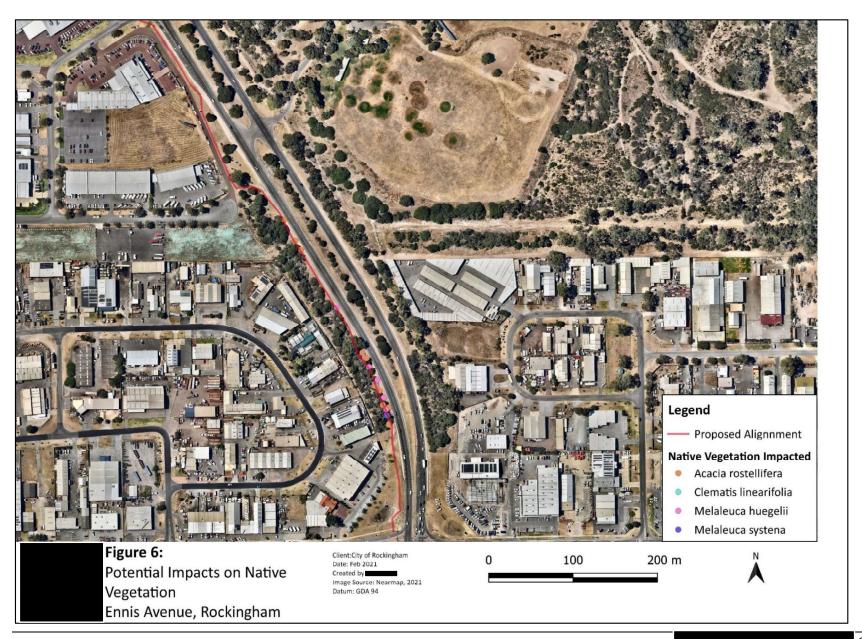
The four native species recorded for the site are common species throughout the Perth Region. These species are relatively easy to propagate and are commonly used in revegetation projects. It is recommended that if any native vegetation is removed, it is replaced accordingly, in another section of the road verge to mitigate the loss and potentially improve the vegetation condition of road verge.

#### 5.2 Significant Flora

No threatened or priority species are recorded during the survey, and due to the highly degraded nature of the road verge vegetation none are expected to occur within the area.

#### **5.3** Threatened Ecological Communities

No threatened or priority ecological communities are recorded during the survey, as the Tuart Woodland present does not meet the patch size or condition requirements to be classified as the TEC.



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# Appendix 1: NatureMap Report (5 km)



# **NatureMap Species Report**

# Created By Guest user on 18/02/2021

Current Names Only Yes
Core Datasets Only Yes

Method 'By Circle'

Centre 115° 45' 33" E,32° 16' 28" S

Buffer 5km

Group By Species Group

Species Group	Species	Records
Alga	57	77
Amphibian	6	90
Bird	163	1836
Dicotyledon	181	341
Fish	105	291
Fungus	5	5
Gymnosperm	2	4
Invertebrate	35	72
Mammal	11	213
Monocotyledon	110	179
Reptile	53	230
TOTAL	728	3338

Name ID Species Name

Naturalised Conservation Code <sup>1</sup>Endemic To Query Area

1. 2. 3.		Acetabularia caliculus Anotrichium crinitum
	26475	Anotrichium crinitum
3.	26475	
		Antithamnion hanovioides
4.	26484	Areschougia ligulata
5.	26522	Bryopsis foliosa
6.		Bryopsis gemellipara
7.	26533	Callophycus costatus
8.	26535	Callophycus harveyanus
9.	26536	Callophycus oppositifolius
10.	44539	Caulerpa cylindracea
11.	26580	Caulerpa trifaria
12.	26586	Caulocystis uvifera
13.	26616	Champia affinis
14.	26638	Chondria lanceolata
15.	36316	Cladophora herpestica
16.	26662	Cladostephus spongiosus
17.	26665	Claviclonium ovatum
18.	26666	Cliftonaea pectinata
19.	26672	Codium galeatum
20.	26690	Coelocionium verticillatum
21.	26704	Craspedocarpus venosus
22.	26714	Cutleria multifida
23.	26739	Dasya extensa
24.	26751	Dasyclonium flaccidum
25.	26752	Dasyclonium incisum
26.	26757	Delisea pulchra
27.	26762	Dictyomenia sonderi
28.	26766	Dictyopteris muelleri
29.	29537	Dictyota fastigiata
30.	26830	Euptilota articulata
31.	26850	Gelinaria ulvoidea
32.	26854	Gigartina disticha
33.	26864	Gloiosaccion brownii
34.	26868	Gracilaria cliftonii
35.	47213	Halimeda versatilis
36.	26900	Haloplegma preissii
37.	26915	Hennedya crispa
38.	26949	Hydroclathrus clathratus

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	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Qu Area
39.		Hypnea ramentacea			
40.		Laurencia dendroidea			
41.		Laurencia elata			
42.		Laurencia filiformis			
43.		Leptosomia rosea			
44.		Lobospira bicuspidata			
45.		Myriodesma peronii			
46.		Papenfussiella extensa			
47.		Penicillus nodulosus			
48.		Petalonia fascia			
49.		Platysiphonia mutabilis			
50.		Pterocladia rectangularis			
51.		Sarconema filiforme			
52.		Sargassum fallax			
53.		Sargassum peronii			
54.		Scytosiphon lomentaria			.,
55.		Shepleya claviformis			Y
56.		Sirophysalis trinodis			
57.	2/345	Turbinaria gracilis			
nphibian					
58.	25399	Crinia glauerti (Clicking Frog)			
59.	25400	Crinia insignifera (Squelching Froglet)			
60.	25410	Heleioporus eyrei (Moaning Frog)			
61.	25415	Limnodynastes dorsalis (Western Banjo Frog)			
62.	25378	Litoria adelaidensis (Slender Tree Frog)			
63.	25388	Litoria moorei (Motorbike Frog)			
rd					
	24260	Acouthize enjectic (Preed tailed Thershill Inland Thershill)			
64.		Acanthiza apicalis (Broad-tailed Thornbill, Inland Thornbill)			
65.		Acanthiza chrysorrhoa (Yellow-rumped Thornbill)			
66.		Acanthiza inornata (Western Thornbill)			
67.		Accipiter cirrocephalus (Collared Sparrowhawk)			
68.		Accipiter fasciatus (Brown Goshawk)			
69.		Accipiter fasciatus subsp. fasciatus (Brown Goshawk)			
70.		Acrocephalus australis (Australian Reed Warbler)		14	
71. 72.		Actitis hypoleucos (Common Sandpiper)  Anas gracilis (Grey Teal)		IA	
73.	24312				
73. 74.	24245	Anas platyrhynchos subsp. domesticus			
		Anas rhynchotis (Australasian Shoveler)  Anas superciliosa (Pacific Black Duck)			
75. 76.					
	4/414	Anhinga novaehollandiae (Australasian Darter)			
77. 78.	04564	Anthonormous and Mothering			
		Anthochaera carunculata (Red Wattlebird)			
79.		Anthochaera lunulata (Western Little Wattlebird)			
80.		Aquila audax (Wedge-tailed Eagle)			
81.		Ardea modesta (great egret, white egret)  Ardea novaehollandiae (White-faced Heron)			
82.		· · · · · · · · · · · · · · · · · · ·		14	
83. 84.		Arenaria interpres (Ruddy Turnstone)  Artamus cinereus (Black-faced Woodswallow)		IA	
85. 86.		Artamus cyanopterus (Dusky Woodswallow)  Aythya australis (Hardhead)			
87.	24010	Barnardius zonarius			
88.	24240	Biziura lobata (Musk Duck)			
89.		Cacatua pastinator (Western Long-billed Corella)			
90.		Cacatua pastinator (Western Long-billed Corella)  Cacatua sanguinea (Little Corella)			
91.		Cacatua sanguinea (Little Corella)  Cacatua tenuirostris (Eastern Long-billed Corella)	Υ		
92.		Cacomantis flabelliformis (Fan-tailed Cuckoo)	ī		
93.		Calidris acuminata (Sharp-tailed Sandpiper)		IA	
93. 94.		Calidris acuminata (Snarp-talled Sandpiper)  Calidris ferruginea (Curlew Sandpiper)		T	
95.		Calidris reruginea (Currew Sandpiper)  Calidris melanotos (Pectoral Sandpiper)		IA	
96.		Calidris ruficollis (Red-necked Stint)		IA IA	
96.		Calidris runcollis (Red-riecked Stint)  Calidris subminuta (Long-toed Stint)		IA IA	
98.		Calidris subminuta (Long-toed Stint)  Calidris tenuirostris (Great Knot)		T	
99.		Caliptorhynchus banksii (Red-tailed Black-Cockatoo)		I	
100.		Calyptorhynchus banksii (ked-tailed black-Cockatoo)  Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black Cockatoo)		Т	
100.		Calyptorhynchus baudinii (Baudin's Cockatoo, White-tailed Long-billed Black		ı	
101.	24133	Calyptornynchus baudinii (Baudin's Cockatoo, White-tailed Long-biiled Black Cockatoo)		Т	
102.	2/1724	Cockatoo) Calyptorhynchus latirostris (Carnaby's Cockatoo, White-tailed Short-billed Black			
IVZ.	24134			Ţ	
		Cockatoo)			







	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
104.	24321	Chenonetta jubata (Australian Wood Duck, Wood Duck)			
105.	41332	Chlidonias leucopterus (White-winged Black Tern, white-winged tern)		IA	
106.		Chroicocephalus novaehollandiae			
107.	24432	Chrysococcyx lucidus subsp. plagosus (Shining Bronze Cuckoo)			
108.		Circus approximans (Swamp Harrier)			
109.		Cladorhynchus leucocephalus (Banded Stilt)			
110.		Colluricincla harmonica (Grey Shrike-thrush)			
111.		Columba livia (Domestic Pigeon)	Υ		
112.		Coracina novaehollandiae (Black-faced Cuckoo-shrike)			
113.		Corvus coronoides (Australian Raven)			
114.		Corvus splendens (House Crow)			
115. 116.		Cracticus nigrogularis (Pied Butcherbird) Cracticus tibicen (Australian Magpie)			
117.		Cracticus torquatus (Grey Butcherbird)			
118.		Cygnus atratus (Black Swan)			
119.		Cygnus olor (Mute Swan)	Υ		
120.		Dacelo novaeguineae (Laughing Kookaburra)	Y		
121.		Dacelo novaeguineae subsp. novaeguineae (Laughing Kookaburra)	Y		
122.		Daphoenositta chrysoptera (Varied Sittella)			
123.		Daption capense (Cape Petrel)			
124.		Egretta novaehollandiae			
125.		Elanus axillaris			
126.	47937	Elseyornis melanops (Black-fronted Dotterel)			
127.		Eolophus roseicapillus			
128.	24567	Epthianura albifrons (White-fronted Chat)			
129.	24379	Erythrogonys cinctus (Red-kneed Dotterel)			
130.	25746	Eudyptula minor (Little Penguin)			
131.	25621	Falco berigora (Brown Falcon)			
132.	25622	Falco cenchroides (Australian Kestrel, Nankeen Kestrel)			
133.	25623	Falco longipennis (Australian Hobby)			
134.	25624	Falco peregrinus (Peregrine Falcon)		S	
135.		Fulica atra (Eurasian Coot)			
136.		Fulica atra subsp. australis (Eurasian Coot)			
137.		Gallinula tenebrosa (Dusky Moorhen)			
138.		Gallinula tenebrosa subsp. tenebrosa (Dusky Moorhen)			
139.		Gallirallus philippensis (Buff-banded Rail)			
140. 141.		Gerygone fusca (Western Gerygone) Grallina cyanoleuca (Magpie-lark)			
141.		Haematopus longirostris (Pied Oystercatcher)			
143.		Haliaeetus leucogaster (White-bellied Sea-Eagle)			
144.		Haliastur sphenurus (Whistling Kite)			
145.		Halobaena caerulea (Blue Petrel)			
146.		Hieraaetus morphnoides (Little Eagle)			
147.		Himantopus himantopus (Black-winged Stilt)			
148.		Hirundo neoxena (Welcome Swallow)			
149.		Hydroprogne caspia (Caspian Tern)		IA	
150.	30920	Larus crassirostris (Black-tailed Gull)			Υ
151.	24511	Larus novaehollandiae subsp. novaehollandiae (Silver Gull)			
152.	25661	Lichmera indistincta (Brown Honeyeater)			
153.	24582	Lichmera indistincta subsp. indistincta (Brown Honeyeater)			
154.	25741	Limosa limosa (Black-tailed Godwit)		IA	
155.	24690	Macronectes giganteus (Southern Giant Petrel)		IA	
156.	24326	Malacorhynchus membranaceus (Pink-eared Duck)			
157.		Malurus splendens (Splendid Fairy-wren)			
158.	25758	Megalurus gramineus (Little Grassbird)			
159.	24598	Merops ornatus (Rainbow Bee-eater)			
160.		Microcarbo melanoleucos			
161.		Morus serrator (Australasian Gannet)		_	
162.		Numenius madagascariensis (Eastern Curlew)		Т	
163.		Nycticorax caledonicus (Rufous Night Heron)			
164. 165		Ocyphaps lophotes (Crested Pigeon) Onychoprion anaethetus (Bridled Tern)		14	
165. 166.		Onychoprion anaethetus (Bridled Tern)  Oxyura australis (Blue-billed Duck)		IA P4	
167.				P4	
167.		Pachycephala rufiventris (Rufous Whistler) Pachyptila belcheri (Slender-billed Prion)			
169.		Pachyptila desolata (Antarctic Prion)			
170.		Pandion cristatus (Osprey, Eastern Osprey)		IA	
171.		Pardalotus punctatus (Spotted Pardalote)		<i>u</i> (	
172.		Pardalotus striatus (Striated Pardalote)			
173.		Pardalotus striatus subsp. westraliensis (Striated Pardalote)			
			Department Conservation	of Biodiversity,	WESTERN







	Name ID	Species Name	Naturali	sed Conserva	ation Code	<sup>1</sup> Endemic To Que
174. 175.		Passer montanus (Eurasian Tree Sparrow) Pavo cristatus (Common Peafowl, Indian Peafowl)	Y Y			Alou
176.		Pelecanus conspicillatus (Australian Pelican)	•			
177.		Petrochelidon nigricans (Tree Martin)				
178.		Petroica boodang (Scarlet Robin)				
179.		Phalacrocorax carbo (Great Cormorant)				
180.	25698	Phalacrocorax melanoleucos (Little Pied Cormorant)				
181.	24667	Phalacrocorax sulcirostris (Little Black Cormorant)				
182.	25699	Phalacrocorax varius (Pied Cormorant)				
183.	24668	Phalacrocorax varius subsp. hypoleucos (Pied Cormorant)				
184.	24409	Phaps chalcoptera (Common Bronzewing)				
185.	48071	Phylidonyris niger (White-cheeked Honeyeater)				
186.	24596	Phylidonyris novaehollandiae (New Holland Honeyeater)				
187.		Platalea flavipes (Yellow-billed Spoonbill)				
188.		Platycercus zonarius subsp. semitorquatus (Twenty-eight Parrot)				
189.		Podargus strigoides subsp. brachypterus (Tawny Frogmouth)				
190.		Podiceps cristatus (Great Crested Grebe)				
191.		Poliocephalus poliocephalus (Hoary-headed Grebe)				
192.		Polytelis anthopeplus (Regent Parrot)				
193.		Porphyrio porphyrio (Purple Swamphen)				
194.		Porphyrio porphyrio subsp. bellus (Purple Swamphen)				
195. 196.		Porzana fluminea (Australian Spotted Crake) Porzana tabuensis (Spotless Crake)				
196.		Porzana tabuerisis (Spoiless Crake) Pterodroma brevirostris (Kerguelen Petrel)				
197.		Pterodroma lessonii (White-headed Petrel)				
199.	2-700	Purpureicephalus spurius				
200.	30867	Pycnonotus jocosus subsp. jocosus (Red-whiskered Bulbul)	Υ			Υ
201.		Recurvirostra novaehollandiae (Red-necked Avocet)	•			·
202.		Rhipidura albiscapa (Grey Fantail)				
203.		Rhipidura leucophrys (Willie Wagtail)				
204.		Rostratula australis (Australian Painted Snipe)			т	
205.	25534	Sericornis frontalis (White-browed Scrubwren)				
206.	30948	Smicrornis brevirostris (Weebill)				
207.	24517	Stercorarius parasiticus (Arctic jaeger, Arctic Skua)			IA	
208.	24522	Sterna bergii (Crested Tern)				
209.	25640	Sterna dougallii (Roseate Tern)			IA	
210.	48594	Sternula nereis (Fairy Tern)				
211.	25597	Strepera versicolor (Grey Currawong)				
212.		Streptopelia chinensis (Spotted Turtle-Dove)	Υ			
213.		Streptopelia senegalensis (Laughing Turtle-Dove)	Y			
214.		Tachybaptus novaehollandiae (Australasian Grebe, Black-throated Grebe)				
215.		Tachybaptus novaehollandiae subsp. novaehollandiae (Australasian Grebe, Black- throated Grebe)				
216.	24331	Tadorna tadornoides (Australian Shelduck, Mountain Duck)				
217.		Thalasseus bergii (Crested Tern)			IA	
218.		Thinornis rubricollis (Hooded Plover, Hooded Dotterel)		-	P4	
219.		Threskiornis spinicollis (Straw-necked Ibis)				
220.		Trichoglossus haematodus (Rainbow Lorikeet)				
221.		Tringa glareola (Wood Sandpiper)			IA	
222. 223.		Tringa nebularia (Common Greenshank, greenshank)  Tringa stagnatilis (Marsh Sandniner, little greenshank)			IA IA	
223.		Tringa stagnatilis (Marsh Sandpiper, little greenshank) Tyto alba (Barn Owl)			IA	
224.		Vanellus tricolor (Banded Lapwing)				
226.		Zosterops lateralis (Grey-breasted White-eye, Silvereye)				
		,				
icotyledon						
227.		Acacia cyclops (Coastal Wattle)				
228.		Acacia lasiocarpa var. lasiocarpa				
229.		Acacia pulchella (Prickly Moses)				
230.		Acacia pulchella var. goadbyi  Acacia rostollifora (Summer scontad Mattle)				
231. 232.		Acacia rostellifera (Summer-scented Wattle) Acacia saligna (Orange Wattle, Kudjong)				
232.		Acacia saligna (Urange Wattle, Kudjong) Acacia saligna subsp. saligna				
233.		Acacia saiigria suosp. saiigria Acacia sp. Binningup (G. Cockerton et al. WB 37784)			P1	
234.		Acacia stenoptera (Narrow Winged Wattle)			1	
236.		Adenanthos cygnorum subsp. cygnorum (Common Woollybush)				
230.		Adriana quadripartita (Bitter Bush)				
238.		Allocasuarina fraseriana (Sheoak, Kondil)				
		Ambrosia tenuifolia (Lacy Ragweed)	Υ			
239.						
239. 240.		Anthocercis littorea (Yellow Tailflower)				
	6949	Anthocercis littorea (Yellow Tailflower)  Apium prostratum (Sea Celery)	£13	Department of <b>Biodiversity</b> ,		WESTE AUSTR



	Name ID	Species Name	Naturali	sed Conservation Code	Area
242.		Apium prostratum subsp. prostratum var. prostratum (Sea Celery)			
243.		Atriplex hypoleuca			
244.		Atriplex prostrata (Hastate Orache)	Y		
245.		Banksia attenuata (Slender Banksia, Piara)			
246.		Banksia ilicifolia (Holly-leaved Banksia)			
247.		Bellardia trixago (Bellardia)	Y		
248.		Bellardia viscosa	Y		
249.		Boronia crenulata subsp. viminea			
250.		Brachyloma preissii (Globe Heath)			
251.		Brassica rapa	Y		
252.		Brassica tournefortii (Mediterranean Turnip)	Y		
253.		Brassica x napus	Y		
254.		Cakile maritima (Sea Rocket)	Υ		
255.		Calandrinia calyptrata (Pink Purslane)			
256.		Calothamnus lateralis			
257.		Calothamnus quadrifidus subsp. quadrifidus			
258.		Calytrix fraseri (Pink Summer Calytrix)	<b>Y</b>		
259. 260.		Cardamine hirsuta (Common Bittercress)  Carduus pycnocephalus (Slender Thistle)	Y		
			Υ		
261.		Cassytha racemosa (Dodder Laurel) Cassytha racemosa forma racemosa			
262. 263.		•	Υ		
263. 264.		Casuarina glauca Casuarina obesa (Swamp Sheoak, Kuli)	Y		
264. 265.		Casuarina obesa (Swamp Sneoak, Kulii) Centaurium erythraea (Common Centaury)	Υ		
266.		Centella asiatica	1		
267.		Cerastium glomeratum (Mouse Ear Chickweed)	Υ		
268.		Chenopodium glaucum (Glaucous Goosefoot)	Y		
269.		Cirsium vulgare (Spear Thistle, Scotch Thistle)	Y		
270.		Clematis linearifolia			
271.		Clematis pubescens (Common Clematis)			
272.		Comesperma confertum			
273.		Comesperma integerrimum			
274.		Conium maculatum (Hemlock)	Υ		
275.		Conospermum triplinervium (Tree Smokebush)			
276.		Conyza sumatrensis	Υ		
277.		Crassula colorata (Dense Stonecrop)			
278.		Crassula glomerata	Υ		
279.		Cryptandra mutila			
280.		Cuscuta epithymum (Lesser Dodder, Greater Dodder)	Υ		
281.		Daviesia divaricata subsp. divaricata			
282.		Daviesia triflora			
283.	4454	Diplolaena dampieri (Southern Diplolaena)			
284.		Diplotaxis muralis (Wall Rocket)	Υ		
285.		Dischisma arenarium	Υ		
286.		Dodonaea hackettiana (Hackett's Hopbush)		P4	
287.	3106	Drosera macrantha (Bridal Rainbow)			
288.	3118	Drosera pallida (Pale Rainbow)			
289.		Epilobium billardiereanum subsp. billardiereanum (Smooth Willow Herb)			
290.	6133	Epilobium hirtigerum (Hairy Willow Herb)			
291.		Eremophila glabra subsp. albicans			
292.	4333	Erodium cicutarium (Common Storksbill)	Υ		
293.	5649	Eucalyptus foecunda (Narrow-leaved Red Mallee)			
294.	5659	Eucalyptus gomphocephala (Tuart, Duart)			
295.	5708	Eucalyptus marginata (Jarrah, Djara)			
296.	17342	Euphorbia cyathophora	Υ		
297.	4627	Euphorbia helioscopia (Sun Spurge)	Υ		
298.	4648	Euphorbia terracina (Geraldton Carnation Weed)	Υ		
299.	6221	Foeniculum vulgare (Fennel)	Υ		
300.	2969	Fumaria capreolata (Whiteflower Fumitory)	Υ		
301.	7323	Galium murale (Small Goosegrass)	Υ		
302.	20346	Gamochaeta coarctata	Υ		
303.	16311	Gazania linearis	Υ		
304.	4339	Geranium molle (Dove's Foot Cranesbill)	Υ		
305.	3957	Gompholobium tomentosum (Hairy Yellow Pea)			
306.	1982	Grevillea crithmifolia			
307.	2119	Grevillea vestita			
308.	12824	Grevillea vestita subsp. vestita			
309.	2175	Hakea lissocarpha (Honey Bush)			
310.	2214	Hakea trifurcata (Two-leaf Hakea)			

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	Name ID	Species Name	Naturalise	ed Conservation Code	<sup>1</sup> Endemic To Quei Area
312.	3961	Hardenbergia comptoniana (Native Wisteria)			Aiou
313.	3016	Heliophila pusilla	Υ		
314.	5135	Hibbertia hypericoides (Yellow Buttercups)			
315.	5162	Hibbertia racemosa (Stalked Guinea Flower)			
316.	12859	Hovea trisperma var. trisperma			
317.	5216	Hybanthus calycinus (Wild Violet)			
318.	5218	Hybanthus debilissimus			
319.	6224	Hydrocotyle blepharocarpa			
320.		Hydrocotyle tetragonocarpa			
321.		Hypocalymma angustifolium subsp. Swan Coastal Plain (G.J. Keighery 16777)			
322.		Hypochaeris glabra (Smooth Catsear)	Y		
323.		Hypochaeris radicata (Flat Weed, Cats-ear)	Υ		
324.		Ixiolaena viscosa (Sticky Ixiolaena)			
325.		Jacksonia furcellata (Grey Stinkwood)			
326.		Jacksonia sericea (Waldjumi)		P4	
327.		Kennedia coccinea (Coral Vine)			
328. 329.		Kennedia prostrata (Scarlet Runner) Leontodon rhagadioloides	Υ		
330.		Leucopogon parviflorus (Coast Beard-heath)	Y		
331.		Leucopogon propinquus			
332.		Linum marginale (Wild Flax)			
333.		Lobelia anceps (Angled Lobelia)			
334.		Lobelia tenuior (Slender Lobelia)			
335.		Medicago sativa (Alfalfa)	Υ		
336.		Meionectes brownii (Swamp Raspwort)			
337.		Melaleuca huegelii subsp. huegelii			
338.		Melaleuca incana subsp. incana			
339.		Melaleuca rhaphiophylla (Swamp Paperbark)			
340.		Melaleuca teretifolia (Banbar)			
341.	13280	Melaleuca viminea subsp. viminea			
342.	4516	Melia azedarach (White Cedar)			
343.	4085	Melilotus indicus	Υ		
344.	16693	Minuartia mediterranea	Υ		
345.	2412	Muehlenbeckia adpressa (Climbing Lignum)			
346.	7289	Myoporum caprarioides (Slender Myoporum)			
347.	18356	Nerium oleander	Υ		
348.	2401	Nuytsia floribunda (Christmas Tree, Mudja)			
349.	8127	Olearia axillaris (Coastal Daisybush)			
350.	8149	Olearia rudis (Rough Daisybush)			
351.	7348	Opercularia hispidula (Hispid Stinkweed)			
352.	18255	Opercularia vaginata (Dog Weed)			
353.		Papaver rhoeas (Field Poppy)	Υ		
354.		Pelargonium capitatum (Rose Pelargonium)	Y		
355.		Pelargonium littorale			
356.		Persicaria lapathifolia	Y		
357.		Petrophile linearis (Pixie Mops)			
358.		Phyla nodiflora var. nodiflora	Y		
359.		Phyllanthus calycinus (False Boronia)			
360.		Physalis angulata	Y		
361.		Physalis peruviana (Cape Gooseberry)	Y		
362. 363		Plantago lanceolata (Ribwort Plantain)	Y		
363. 364		Podolepis gracilis (Slender Podolepis) Podotheca angustifolia (Sticky Longheads)			
364. 365.		Poranthera microphylla (Small Poranthera)			
366.		Pseudognaphalium luteoalbum (Jersey Cudweed)			
367.		Ptilotus polystachyus (Prince of Wales Feather)			
368.		Pultenaea reticulata			
369.		Reichardia tingitana (False Sowthistle)	Υ		
370.		Rhagodia baccata subsp. baccata			
371.		Rhagodia baccata subsp. dioica (Sea Berry Saltbush)			
372.		Rhamnus alaternus (Buckthorn)	Υ		
373.		Rorippa nasturtium-aquaticum (Watercress)	Y		
374.		Rumex crispus (Curled Dock)	Y		
375.		Samolus junceus	·		
376.		Samolus repens (Creeping Brookweed)			
377.		Samolus repens var. paucifolius			
378.		Scabiosa atropurpurea (Purple Pincushion)	Υ		
379.		Scaevola anchusifolia			
380.		Scaevola crassifolia (Thick-leaved Fan-flower)			
381.	48834	Schinus terebinthifolia	Υ		
			Land D	epartment of Biodiversity,	WESTER
ap is a collabora	ative project of	the Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.	OUVERNMENT OF WESTERN AVSTRALIA	onservation and Attractions	AUSTR MUSEU



	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
382.	6033	Scholtzia involucrata (Spiked Scholtzia)			7.1.00
383.	25878	Senecio condylus			
384.	8220	Senecio vulgaris (Common Groundsel)	Υ		
385.	2909	Silene gallica (French Catchfly)	Υ		
386.	3072	Sisymbrium orientale (Indian Hedge Mustard)	Υ		
387.		Solanum nigrum (Black Berry Nightshade)	Υ		
388.		Solanum symonii			
389.		Solidago chilensis	Y		
390.		Sonchus hydrophilus (Native Sowthistle)			
391.		Sonchus oleraceus (Common Sowthistle)	Y		
392.		Sphaerolobium calcicola		P3	
393.		Spyridium globulosum (Basket Bush)	.,		
394.		Stellaria media (Chickweed)	Y		
395.		Stenopetalum gracile			
396. 397.		Stirlingia latifolia (Blueboy)			
398.		Stylidium piliferum (Common Butterfly Triggerplant)			
		Templetonia retusa (Cockies Tongues) Tersonia cyathiflora (Button Creeper)			
399. 400.		Tetragonia decumbens (Sea Spinach)	V		
			Υ		
401.		Thomasia cognata  Trachymena cognulas subsp. cognulas			
402. 403.		Trachymene coerulea subsp. coerulea Trifolium angustifolium var. angustifolium	Υ		
403.		Trifolium scabrum (Rough Clover)	Y		
404.		Ursinia anthemoides subsp. anthemoides	Y		
405.		Verbascum virgatum (Twiggy Mullein)	Y		
407.		Wilsonia backhousei (Narrow-leaf Wilsonia)	r		
407.	0000	Wilsonia backilousei (Waltow-leaf Wilsonia)			
Fish					
408.		??			
409.		Ablennes hians			
410.		Acanthaluteres brownii			
411.		Acanthaluteres spilomelanurus			
412.		Aetapcus maculatus			
413.		Afurcagobius suppositus			
414.		Allenichthys glauerti			
415.		Anoplocapros amygdaloides?			
416.		Anoplocapros robustus			
417.		Anoplocapros sp.			
418.		Aploactisoma milesii subsp. milesii			Y
419.		Aplodactylus westralis			
420.		Apogon rueppellii			
421.		Apogon victoriae			
422.		Aptychotrema sp.			
423. 424.		Aptychotrema vincentiana Aracana aurita			
424.					Υ
		Asymbolus sp.			Ť
426. 427.		Atherina sp.  Atherina sp.   Atherin			
427.		Atherinosoma presbyteroides Atherinosoma wallacei			
420.		Batrachomoeus rubricephalus			
429.		Brachaluteres jacksonianus			
430.		Carassius auratus			
431.		Chaetodermis penicilligera			
433.		Cheilodactylus rubrolabiatus			
434.		Chelidonichthys kumu			
435.		Cirrhimuraena calamus			
436.		Cleidopus gloriamaris			
437.		Coryphaena hippurus			
438.		Cristiceps aurantiacus			
439.		Cristiceps australis			
440.		Dactylophora nigricans			
441.		Dactylopus dactylopus			
442.		Decapterus muroadsi			
443.		Diodon nicthemerus			
444.		Echeneis naucrates			
		Enoplosus armatus			
445.		Eubalichthys caeruleoguttatus			
445. 446.		· -			
		Eubalichthys cyanoura			
446.		Eubalichthys cyanoura Euleptorhamphus viridis			
446. 447.					







	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
451.		Furgaleus macki			702
452.		Girella zebra			
453.		Gnathanacanthus goetzeei			
454.		Gnathophis longicaudatus			
455.		Gonorynchus greyi			
456.		Gymnapistes marmoratus			
457.		Gymnothorax sp.			
458.		Gymnothorax woodwardi			
459.		Haletta semifasciata			
460.		Halichoeres brownfieldi			
461.		Heteroclinus sp.			
462.		Heterodontus portusjacksoni			
463.		Hexanchus nakamurai			Υ
464.		Hippocampus elongatus			·
465.		Histrio histrio			
466.		Hypnos monopterygium			
467.		Lagocephalus sceleratus			
468.		Leviprora inops			
469.		Lotella rhacinus			
470.		Maxillicosta scabriceps			
471.		Meuschenia freycineti			
472.		Monacanthus chinensis			
473.		Mustelus antarcticus			
474.		Myliobatis sp.			
475.		Neoodax balteatus			
476.		Neosebastes pandus			
477.		Notolabrus parilus			
478.		Omegophora armilla			
479.		Ophichthus melanochir			
480.		Ophisurus serpens			
481.		Parablennius postoculomaculatus			
482.		Paraplotosus albilabris			
483.		Paristiopterus gallipavo			
484.		Pegasus sp.			Υ
485.		Pegasus volitans			
486.		Pelates sexlineatus			
487.		Pentaceropsis recurvirostris			
488.		Phyllophryne scortea			
489.		Phyllopteryx taeniolatus			
490.		Pomatomus saltatrix			
491.		Pterygotrigla polyommata			
492.		Rachycentron canadum			
493.		Rhynchobatus djiddensis			
494.		Saurida tumbil			
495.		Saurida undosquamis			
496.		Scorpaena sumptuosa			
497.		Scorpis georgianus			
498.		Seriola hippos			
499.		Sillago sp.			
500.		Siphonognathus argyrophanes			
501.		Siphonognathus radiatus			
502.		Stigmatopora argus			
503.		Stigmatopora nigra			
504.		Strongylura leiura			
505.		Sutorectus tentaculatus			
506.		Tetrapturus angustirostris			
507.		Thyrsites atun			
508.		Thysanophrys cirronasus			
509.		Torquigener pleurogramma			
510.		Trachinocephalus myops			
511.		Trygonorrhina fasciata			
512.		Zanclistius elevatus			
Eupara					
Fungus		Purcomonalius conium			
513.		Byssomerulius corium  Familia sia li liania siti un			
514.		Fomitopsis lilacinogilva			
515.		Phlebia rufa			
516.		Phlebia subceracea			
517.		Rickenella fibula			
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#### Gymnosperm

NatureMap is a collaborative project of the Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.







	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Que Area
518.		Callitris preissii (Rottnest Island Pine, Maro)			
519.	85	Macrozamia riedlei (Zamia, Djiridji)			
vertebrate					
520.		Allotrochosina karri			
521. 522.		Aname mainae Araneus senicaudatus			
523.		Argiope protensa			
524.		Argiope trifasciata			
525.		Artoria flavimana			
526.		Artoria linnaei			
527.		Artoriopsis expolita			
528.		Austracantha minax			
529.		Backobourkia brounii			
530.		Clynotis albobarbatus			
531.		Clynotis severus			
532.		Cormocephalus aurantiipes			
533.		Dingosa serrata			
534.		Hogna crispipes Idiommata blackwalli			
535. 536.	18035	Idiosoma sigillatum (Swan Coastal Plain shield-backed trapdoor spider)		P3	
537.	40933	Isopeda leishmanni		Po	
537.		Lampona cylindrata			
539.		Latrodectus hasseltii			
540.		Lycosa godeffroyi			
541.		Missulena granulosa			
542.		Missulena hoggi			
543.		Myandra bicincta			
544.		Phryganoporus candidus			
545.		Prionosternum nitidiceps			
546.		Prionosternum scutatum			
547.		Servaea spinibarbis			
548.		Simaetha tenuior			
549.		Tasmanicosa leuckartii			
550.		Tetragnatha demissa			
551.		Tetragnatha nitens			
552.		Tetralycosa oraria			
553.		Venator immansueta			
554.		Venatrix pullastra			
ammal					
555.		Austronomus australis (White-striped Free-tailed Bat)			
556.		Balaenoptera acutorostrata (Dwarf Minke Whale)			
557.		Chalinolobus gouldii (Gould's Wattled Bat)			
558.	24041	Felis catus (Cat)	Y		
550					
559.		Isoodon fusciventer (Quenda, southwestern brown bandicoot)	•	P4	
560.	24070	Kogia breviceps (Pygmy Sperm Whale)		P4	
560. 561.	24070 24223	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse)	Y	P4	
560. 561. 562.	24070 24223 24085	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit)	Y Y	P4	
560. 561. 562. 563.	24070 24223 24085 24245	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat)	Y	P4	
560. 561. 562. 563. 564.	24070 24223 24085 24245 24158	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum)	Y Y	P4	
560. 561. 562. 563.	24070 24223 24085 24245 24158	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat)	Y Y	P4	
560. 561. 562. 563. 564.	24070 24223 24085 24245 24158 24069	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum)	Y Y	P4	
560. 561. 562. 563. 564. 565.	24070 24223 24085 24245 24158 24069	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin) Acanthocarpus preissii	Y Y Y	P4	
560. 561. 562. 563. 564. 565. <b>conocotyled</b> 566. 567.	24070 24223 24085 24245 24158 24069 On 1208 1505	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant)	Y Y	P4	
560. 561. 562. 563. 564. 565. <b>conocotyled</b> 566. 567. 568.	24070 24223 24085 24245 24158 24069 lon 1208 1505 126	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph)	Y Y Y	P4	
560. 561. 562. 563. 564. 565. <b>conocotyled</b> 566. 567. 568. 569.	24070 24223 24085 24245 24158 24069 On 1208 1505 126 1411	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang)	Y Y Y	P4	
560. 561. 562. 563. 564. 565.  conocotyled 566. 567. 568. 569. 570.	24070 24223 24085 24245 24158 24069 On 1208 1505 126 1411 226	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed)	Y Y Y	P4	
560. 561. 562. 563. 564. 565.  conocotyled 566. 567. 568. 569. 570.	24070 24223 24085 24245 24158 24069 <b>On</b> 1208 1505 126 1411 226 1364	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed)	Y Y Y	P4	
560. 561. 562. 563. 564. 565.  conocotyled 566. 567. 568. 569. 570. 571.	24070 24223 24085 24245 24158 24069 0n 1208 1505 126 1411 226 1364 17240	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens	Y Y Y	P4	
560. 561. 562. 563. 564. 565.  conocotyled 566. 567. 568. 569. 570. 571. 572.	24070 24223 24085 24245 24158 24069 0n 1208 1505 126 1411 226 1364 17240 231	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii	Y Y Y	P4	
560. 561. 562. 563. 564. 565.  conocotyled 566. 567. 568. 569. 570. 571. 572. 573. 574.	24070 24223 24085 24245 24158 24069 <b>ion</b> 1208 1505 126 1411 226 1364 17240 231 233	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii Avena barbata (Bearded Oat)	Y Y Y Y Y Y Y	P4	
560. 561. 562. 563. 564. 565.  conocotyled 566. 567. 568. 569. 570. 571. 572. 573. 574.	24070 24223 24085 24245 24158 24069 100 1208 1505 126 1411 226 1364 17240 231 233 234	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii Avena barbata (Bearded Oat) Avena fatua (Wild Oat)	Y Y Y Y Y Y Y Y Y Y	P4	
560. 561. 562. 563. 564. 565.  Onocotyled 566. 567. 568. 569. 570. 571. 572. 573. 574. 575.	24070 24223 24085 24245 24158 24069 1000 1208 1505 126 1411 226 1364 17240 231 233 234 235	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii Avena barbata (Bearded Oat) Avena fatua (Wild Oat) Avena sativa (Common Oat)	Y Y Y Y Y Y Y	P4	
560. 561. 562. 563. 564. 565.  Onocotyled 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576.	24070 24223 24085 24245 24158 24069 On 1208 1505 126 1411 226 1364 17240 231 233 234 235 740	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii Avena barbata (Bearded Oat) Avena fatua (Wild Oat) Avena sativa (Common Oat) Baumea arthrophylla	Y Y Y Y Y Y Y Y Y Y	P4	
560. 561. 562. 563. 564. 565.  Onocotyled 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578.	24070 24223 24085 24245 24158 24069  On 1208 1505 126 1411 226 1364 17240 231 233 234 235 740 743	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii Avena barbata (Bearded Oat) Avena fatua (Wild Oat) Avena sativa (Common Oat) Baumea arthrophylla Baumea juncea (Bare Twigrush)	Y Y Y Y Y Y Y Y Y Y	P4	
560. 561. 562. 563. 564. 565.  Onocotyled 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576.	24070 24223 24085 24245 24158 24069  On  1208 1505 126 1411 226 1364 17240 231 233 234 235 740 743 749	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii Avena barbata (Bearded Oat) Avena fatua (Wild Oat) Avena sativa (Common Oat) Baumea arthrophylla Baumea juncea (Bare Twigrush) Bolboschoenus caldwellii (Marsh Club-rush)	Y Y Y Y Y Y Y Y Y Y Y	P4	
560. 561. 562. 563. 564. 565.  Onocotyled 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580.	24070 24223 24085 24245 24158 24069  1208 1505 126 1411 226 1364 17240 231 233 234 235 740 743 749 244	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii Avena barbata (Bearded Oat) Avena fatua (Wild Oat) Avena sativa (Common Oat) Baumea arthrophylla Baumea juncea (Bare Twigrush) Bolboschoenus caldwellii (Marsh Club-rush) Briza maxima (Blowfiy Grass)	Y Y Y Y Y Y Y Y Y Y	P4	
560. 561. 562. 563. 564. 565.  Onocotyled 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578.	24070 24223 24085 24245 24158 24069  I 208 1505 126 1411 226 1364 17240 231 233 234 235 740 743 749 244 245	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii Avena barbata (Bearded Oat) Avena fatua (Wild Oat) Avena sativa (Common Oat) Baumea arthrophylla Baumea juncea (Bare Twigrush) Bolboschoenus caldwellii (Marsh Club-rush) Briza maxima (Blowfly Grass)	Y Y Y Y Y Y Y Y Y Y Y	P4	
560. 561. 562. 563. 564. 565.  Onocotyled 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581.	24070 24223 24085 24245 24158 24069  I 208 1505 126 1411 226 1364 17240 231 233 234 235 740 743 749 244 245 249	Kogia breviceps (Pygmy Sperm Whale) Mus musculus (House Mouse) Oryctolagus cuniculus (Rabbit) Rattus rattus (Black Rat) Trichosurus vulpecula subsp. vulpecula (Common Brushtail Possum) Tursiops truncatus (Bottlenose Dolphin)  Acanthocarpus preissii Agave americana (Century Plant) Amphibolis antarctica (Sea Nymph) Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang) Arundo donax (Giant Reed) Asphodelus fistulosus (Onion Weed) Austrostipa flavescens Avellinia michelii Avena barbata (Bearded Oat) Avena fatua (Wild Oat) Avena sativa (Common Oat) Baumea arthrophylla Baumea juncea (Bare Twigrush) Bolboschoenus caldwellii (Marsh Club-rush) Briza maxima (Blowfiy Grass)	Y Y Y Y Y Y Y Y Y Y Y Y Y Y	P4	



	Name ID	Species Name	Naturalised	I Conservation Code	Endemic To Area
E0.4	4077	Divisional in annuals	Υ		
584.		Burchardia congesta			
585.		Caesia micrantha (Pale Grass Lily)			
586. 507		Caladenia flava subsp. flava			
587.		Caladenia latifolia (Pink Fairy Orchid)			
588.		Cartonema philydroides	.,		
589. 500		Centralonia drummandiana	Υ		
590. 591.		Centrolepis drummondiana Chaetanthus aristatus			
592.		Chamaescilla corymbosa (Blue Squill)			
593.		Conostylis aculeata (Prickly Conostylis)			
594.		Conostylis aculeata subsp. preissii			
595.		Conostylis candicans (Grey Cottonhead)			
596.		Conostylis candicans subsp. candicans			
597.		Cortaderia selloana subsp. selloana	Υ		
598.		Corynotheca micrantha var. micrantha			
599.		Cryptostylis ovata (Slipper Orchid)			
600.		Cynodon dactylon (Couch)	Υ		
601.		Cyperus tenuiflorus (Scaly Sedge)	Υ		
602.		Desmocladus asper			
603.		Dianella revoluta (Blueberry Lily)			
604.		Dianella revoluta var. divaricata			
605.	1287	Dichopogon capillipes			
606.		Dielsia stenostachya			
607.		Diuris laxiflora (Bee Orchid)			
608.	349	Ehrharta longiflora (Annual Veldt Grass)	Υ		
609.		Eragrostis sp. indet.			
610.	20216	Ficinia nodosa (Knotted Club Rush)			
611.	907	Gahnia trifida (Coast Saw-sedge)			
612.	1520	Gladiolus caryophyllaceus (Wild Gladiolus)	Y		
613.	11451	Hemarthria uncinata var. uncinata			
614.	448	Hordeum glaucum (Northern Barley Grass)	Υ		
615.	452	Hyparrhenia hirta (Tambookie Grass)	Υ		
616.	17841	Hypolaena pubescens			
617.		Isolepis cernua (Nodding Club-rush)			
618.		Isolepis cernua var. cernua			
619.		Isolepis cernua var. setiformis			
620.		Isolepis marginata (Coarse Club-rush)			
621.		Juncus bufonius (Toad Rush)	Υ		
622.		Juncus kraussii (Sea Rush)			
623. 624.		Juncus kraussii subsp. australiensis			
625.		Juncus pallidus (Pale Rush)  Lachenalia reflexa	Y		
626.		Lachnagrostis filiformis	Y		
627.		Lagurus ovatus (Hare's Tail Grass)	Υ		
628.		Lepidosperma angustatum	ľ		
629.		Lepidosperma calcicola			
630.		Lepidosperma gladiatum (Coast Sword-sedge, Kerbin)			
631.		Lepidosperma Igradiatum (odast oword-sedge, renam) Lepidosperma Iongitudinale (Pithy Sword-sedge)			
632.		Lepidosperma pubisquameum			
633.	340	Lepidosperma sp.			
634.	945	Lepidosperma squamatum			
635.		Lolium perenne x rigidum	Υ		
636.		Lolium rigidum (Wimmera Ryegrass)	Y		
637.		Lolium x hybridum	Y		
638.		Lomandra caespitosa (Tufted Mat Rush)			
639.		Lomandra maritima			
640.		Luzula meridionalis (Field Woodrush)			
641.		Lyginia barbata			
642.		Microlaena stipoides (Weeping Grass)			
643.	44496	Narcissus tazetta subsp. italicus	Υ		
644.	516	Parapholis incurva (Coast Barbgrass)	Υ		
645.	533	Paspalum vaginatum (Salt Water Couch)			
646.	1550	Patersonia occidentalis (Purple Flag, Koma)			
647.	577	Poa poiformis (Coastal Poa)			
648.	578	Poa porphyroclados			
649.		Polypogon monspeliensis (Annual Beardgrass)	Υ		
650.		Romulea rosea (Guildford Grass)	Υ		
651.	10970	Rostraria cristata	Υ		
652.	116	Ruppia polycarpa			



	Name ID	Species Name	Naturali	sed	Conservation Code	<sup>1</sup> Endemic To Que
653.		Schoenoplectus tabernaemontani				
654.		Schoenus clandestinus				
655.		Schoenus nitens (Shiny Bog-rush)				
656.		Sporobolus virginicus (Marine Couch)				
657.		Stenotaphrum secundatum (Buffalo Grass)	Υ			
658.		Stuckenia pectinata				
659.		Thysanotus arenarius				
660.		Thysanotus multiflorus (Many-flowered Fringe Lily)				
661.		Trachyandra divaricata	Υ			
662.	1481	Tribonanthes australis (Southern Tiurndin)				
663.	1361	Tricoryne elatior (Yellow Autumn Lily)				
664.	1363	Tricoryne tenella				
665.	147	Triglochin mucronata				
666.	151	Triglochin striata				
667.	708	Triticum aestivum (Wheat)	Υ			
668.	99	Typha orientalis (Bulrush, Cumbungi)				
669.	722	Vulpia bromoides (Squirrel Tail Fescue)	Υ			
670.		Vulpia myuros (Rat's Tail Fescue)	Υ			
671.		Vulpia myuros forma megalura	Υ			
672.		Vulpia myuros forma myuros	Y			
673.		Wurmbea dioica (Early Nancy)	•			
674.		Wurmbea dioica subsp. alba				
675.		Xanthorrhoea preissii (Grass tree, Palga)				
010.	1230	Administration protecting trace trace, I aliga)				
Reptile						
676.	24991	Aprasia repens (Sand-plain Worm-lizard)				
677.	25335	Caretta caretta (Loggerhead Turtle)			Т	
678.	43380	Chelodina colliei (South-western Snake-necked Turtle)				
679.	25336	Chelonia mydas (Green Turtle)			Т	
680.		Christinus marmoratus (Marbled Gecko)				
681.		Ctenophorus adelaidensis (Southern Heath Dragon, Western Heath Dragon)				
682.		Ctenotus australis				
683.		Ctenotus fallens				
684.		Delma fraseri (Fraser's Legless Lizard)				
685.		Delma grayii			_	
686.		Dermochelys coriacea (Leatherback Turtle)			Т	
687.		Elapognathus coronatus (Crowned Snake)				
688.		Hemiergis quadrilineata				
689.		Hydrophis platurus (Yellow-bellied Seasnake)				
690.	25133	Lerista elegans				
691.	25147	Lerista lineata (Perth Slider, Lined Skink)			P3	
692.	25165	Lerista praepedita				
693.	25005	Lialis burtonis				
694.	25184	Menetia greyii				
695.	25185	Menetia maini				
696.	25186	Menetia surda subsp. cresswelli				
697.	25187	Menetia surda subsp. surda				
698.		Morethia adelaidensis				
699.		Morethia boulengeri				
700.		Morethia lineoocellata				
700. 701.		Morethia obscura				
702.		Morethia ruficauda subsp. exquisita				
703.		Morethia ruficauda subsp. ruficauda				
704.		Morethia storri				
705.		Neelaps calonotos (Black-striped Snake, black-striped burrowing snake)			P3	
706.		Notechis scutatus (Tiger Snake)				
707.	25196	Notoscincus butleri (lined soil-crevice skink (Dampier))			P4	
708.	25197	Notoscincus ornatus subsp. ornatus				
709.	25253	Parasuta gouldii				
710.	25006	Pletholax gracilis subsp. edelensis (Keeled Legless Lizard (Shark Bay))			P3	
711.	25007	Pletholax gracilis subsp. gracilis (Keeled Legless Lizard)				
712.	24907	Pogona minor subsp. minor (Dwarf Bearded Dragon)				
713.		Pogona minor subsp. mitchelli (Dwarf Bearded Dragon)				
714.		Pogona nullarbor (Nullabor Bearded Dragon)				
715.		Proablepharus reginae				
716.						
		Proudemais baudini				
717.		Pseudemoia baudini				
718.		Pseudonaja affinis subsp. affinis (Dugite)				
719.		Pygopus lepidopodus (Common Scaly Foot)				
720.		Pygopus nigriceps				
721.	25266	Simoselaps bertholdi (Jan's Banded Snake)	, Aid.	Department -	of Biodiversity,	WESTE
Map is a collabora	ative project of	the Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.	OCYTHONOLY OF	Conservation	n and Attractions	AUSTR



	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
722.	24942	Strophurus spinigerus subsp. spinigerus			
723.	25202	Tiliqua multifasciata (Central Blue-tongue)			
724.	25203	Tiliqua occipitalis (Western Bluetongue)			
725.	25519	Tiliqua rugosa			
726.	25204	Tiliqua rugosa subsp. aspera			
727.	25207	Tiliqua rugosa subsp. rugosa			
728.	25227	Varanus tristis subsp. tristis (Racehorse Monitor)			

- 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

- <sup>1</sup> For NatureMap's purposes, species flagged as endemic are those whose records are wholely 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.





# **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 <u>Environment Assessments</u> and the EPBC Act including significance guidelines, forms and application process details.

Report created: 18/02/21 12:08:44

**Summary** 

**Details** 

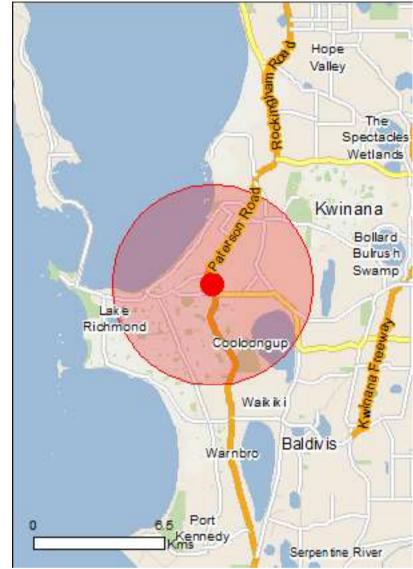
**Matters of NES** 

Other Matters Protected by the EPBC Act

**Extra Information** 

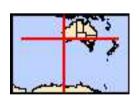
**Caveat** 

<u>Acknowledgements</u>



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2015

Coordinates
Buffer: 5.0Km



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 <u>Administrative Guidelines on Significance</u>.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	2
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	45
Listed Migratory Species:	51

#### 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 <u>permit</u> 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
<u>Listed Marine Species:</u>	81
Whales and Other Cetaceans:	12
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:	2
Regional Forest Agreements:	None
Invasive Species:	36
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

vveilands of international importance (Kamsar)	<u>[ Resource information ]</u>
Name	Proximity
Becher point wetlands	Within 10km of Ramsar
Forrestdale and thomsons lakes	Within 10km of Ramsar

### 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 may occur within area
Sedgelands in Holocene dune swales of the southern Swan Coastal Plain	Endangered	Community known to occur within area
Thrombolite (microbial) community of coastal freshwater lakes of the Swan Coastal Plain (Lake Richmond)	Endangered	Community known 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 habitat 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

Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<u>Diomedea sanfordi</u>		
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<u>Halobaena caerulea</u>		
Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
<u>Leipoa ocellata</u>		
Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area
<u>Limosa lapponica menzbieri</u>		
Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [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 likely to occur within area
Pachyptila turtur_subantarctica		
Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Pterodroma mollis		
Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat
Cont plantaged i circi [1000]	Valiforable	may occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area
Sternula nereis nereis		
Australian Fairy Tern [82950]	Vulnerable	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 Albetross, Campbell Black browed Albetross	\/ulnoroblo	Species or appairs habitet
Campbell Albatross, Campbell Black-browed Albatross [64459]	vuinerable	Species or species habitat may occur within area
Thalassarche melanophris		
Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area

Woylie [66844]	Endangered	Species or species habitat may occur within area
Dasyurus geoffroii		
Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
Eubalaena australis		
Southern Right Whale [40]	Endangered	Breeding known to occur within area
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
Neophoca cinerea  Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat known to occur within area
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area
Plants		
<u>Caladenia huegelii</u>		
King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat may occur within area
<u>Diuris micrantha</u>		
Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat known to occur within area
Diuris purdiei		
Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area
<u>Drakaea elastica</u>		
Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area
<u>Drakaea micrantha</u>		
Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area
Reptiles		
<u>Caretta caretta</u>		
Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area
Chelonia mydas		
Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area
Dermochelys coriacea		
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
Natator depressus		
Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area
Sharks		
Carcharias taurus (west coast population)		

Name Migratory Marine Birds Migratory Marine Birds Anous stolidus Common Noddy (825) Species or species habitat may occur within area  Apus pacificus Fork-tailed Swift (678) Fork-tailed Swift (678)  Ardenna cameipes Flesh-footed Sheanwater, Fleshy-footed Sheanwater (82404) Diomedea smsterdamensis Amsterdam Albatross (84405) Diomedea dabbenena Tristan Albatross (84405) Tristan Albatross (86471) Tristan Albatross (86471) Diomedea epomophora Southern Royal Albatross (89221) Diomedea exulans Vandering Albatross (89223) Vulnerable Foraging, feeding or related behaviour likely to occur within area  Diomedea exulans Vandering Albatross (89223) Vulnerable Foraging, feeding or related behaviour likely to occur within area  Diomedea exulans Vandering Albatross (89223) Vulnerable Foraging, feeding or related behaviour likely to occur within area  Diomedea sanfordi Northern Royal Albatross (84456) Endangered Foraging, feeding or related behaviour likely to occur within area  Diomedea sanfordi Northern Royal Albatross (84456) Endangered Foraging, feeding or related behaviour likely to occur within area  Diomedea sanfordi Northern Royal Albatross (84456) Endangered Foraging, feeding or related behaviour likely to occur within area  Diomedea sanfordi Northern Giant Petrel [1060] Endangered Foraging, feeding or related behaviour known to occur within area  Macronacetes diganteus Southern Giant-Petrel, Southern Giant Petrel [1060] Endangered Foraging, feeding or related behaviour likely to occur within area  Macronacetes halli Northern Giant Petrel [1061] Vulnerable Foraging, feeding or related behaviour likely to occur within area  Macronacetes halli Roseate Tern [817] Foraging, feeding or related behaviour likely to occur within area	Listed Migratory Species  * Species is listed under a different scientific name on	the FPBC Act - Threaten	[Resource Information]
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] Birding Species or species habitat likely to occur within area  Ardenna carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404] Diomedea amsterdamensis Amsterdam Albatross [64405] Endangered Species or species habitat may occur within area  Diomedea dabbenena Tristan Albatross [64405] 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 Diomedea exulans Wandering Albatross [64456] Endangered Foraging, feeding or related behaviour likely to occur within area  Diomedea exulans Wandering Albatross [64456] Endangered Foraging, feeding or related behaviour likely to occur within area  Foraging, feeding or related behaviour likely to occur within area  Southern Giant-Petrel, Southern Giant Petrel [1060] Endangered Species or species habitat may occur within area  Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060] Endangered Foraging, feeding or related behaviour likely to occur within area  Macronectes halli Northern Giant Petrel [1061] Vulnerable Foraging, feeding or related behaviour likely to occur within area  Foraging, feeding or related behaviour likely to occur within area  Foraging, feeding or related behaviour likely to occur within area  Foraging, feeding or related behaviour likely to occur within area  Foraging, feeding or related behaviour likely to occur within area  Foraging, feeding or related behaviour likely to occur within area  Foraging, feeding or related behaviour likely to occur within area  Foraging, feeding or related behaviour likely to occur within area			
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Northern Giant Petrel [1061]  Vulnerable  Species or species habitat may occur within area  Onychoprion anaethetus  Bridled Tern [82845]  Bridled Tern [82845]  Sterna dougallii  Roseate Tern [817]  Foraging, feeding or related behaviour likely to occur within area  Thalassarche carteri  Indian Yellow-nosed Albatross [64464]  Vulnerable  Foraging, feeding or related behaviour likely to occur within area			
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behaviour may occur within area		Violes = == 1.1=	
area	ındıan Yellow-nosed Albatross [64464]	vuinerable	
			•
	Thalassarche cauta		

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
Palagnentora muggulus		
Balaenoptera musculus	Endangered	Species or species habitat
Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
Caperea marginata		
Pygmy Right Whale [39]		Species or species habitat
· ygy · ag · · · · · · · · · · · · · · · · · ·		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
	T dill of diagram	known to occur within area
<u>Caretta caretta</u>		
Loggerhead Turtle [1763]	Endangered	Species or species habitat
		known to occur within area
Chelonia mydas		
Green Turtle [1765]	Vulnerable	Species or species habitat
		known to occur within area
Dermochelys coriacea		
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area
		known to occur within area
Lamna nasus		
Porbeagle, Mackerel Shark [83288]		Species or species habitat
		may occur within area
Manta alfradi		
Manta alfredi  Poof Monto Poy Coostol Monto Poy Inchero Monto		Species or appoies habitat
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
ray, i filloc fallod 3 ray, resident wanta ray [0+35+]		may occar within area
Manta birostris		
Giant Manta Ray, Chevron Manta Ray, Pacific Manta		Species or species habitat
Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		may occur within area
Magantara navagangliga		
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Species or species habitat
Transpack Whate [50]	Vulliciable	known to occur within area
Natator depressus		
Flatback Turtle [59257]	Vulnerable	Species or species habitat
		known to occur within area
Orcinus orca		
Killer Whale, Orca [46]		Species or species habitat
, r -1		may accur within area

Migratory Wetlands Species		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat likely to occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
<u>Calidris canutus</u>		
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
<u>Calidris melanotos</u>		
Pectoral Sandpiper [858]		Species or species habitat known to occur within area
Calidris ruficollis		
Red-necked Stint [860]		Species or species habitat known to occur within area
Calidris subminuta		
Long-toed Stint [861]		Species or species habitat known to occur within area
Charadrius dubius		
Little Ringed Plover [896]		Species or species habitat known to occur within area
<u>Limosa lapponica</u>		
Bar-tailed Godwit [844]		Species or species habitat known to occur within area
<u>Limosa limosa</u>		
Black-tailed Godwit [845]		Species or species habitat known to occur within area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area
Pandion haliaetus		
Osprey [952]		Species or species habitat known to occur within area
Philomachus pugnax		
Ruff (Reeve) [850]		Species or species habitat known to occur within area
<u>Tringa glareola</u>		
Wood Sandpiper [829]		Species or species habitat known to occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]		Species or species habitat known to occur within area
Tringa stagnatilis		
March Sandningr Little Groonshank [922]		Species or appoint habitat

Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information. Name Commonwealth Land -Defence - ROCKINGHAM - NAVY CPSO **Listed Marine Species** [ Resource Information ] Species is listed under a different scientific name on the EPBC Act - Threatened Species list. Type of Presence Threatened Name Birds Actitis hypoleucos Common Sandpiper [59309] Species or species habitat likely to occur within area Anous stolidus Species or species habitat Common Noddy [825] 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 Ardea alba Great Egret, White Egret [59541] Species or species habitat known to occur within area <u>Ardea ibis</u> 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] Species or species habitat Endangered 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 known to occur within area Calidris ruficollis Red-necked Stint [860] Species or species habitat known to occur within area Calidris subminuta Long-toed Stint [861] Species or species habitat known to occur within area

Species or species habitat

may occur within area

Catharacta skua

Great Skua [59472]

<u>Diomedea amsterdamensis</u> Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
<u>Diomedea dabbenena</u> Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area
<u>Diomedea epomophora</u> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<u>Diomedea exulans</u> Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<u>Diomedea sanfordi</u> Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		within area  Species or species habitat known to occur within area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Species or species habitat known to occur within area
<u>Larus pacificus</u> Pacific Gull [811]		Foraging, feeding or related behaviour may occur within
<u>Limosa lapponica</u> Bar-tailed Godwit [844]		area Species or species habitat known to occur within area
<u>Limosa limosa</u> Black-tailed Godwit [845]		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
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat

Ruff (Reeve) [850]		Species or species habitat known to 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]		Foraging, feeding or related behaviour likely to occur within area
Recurvirostra novaehollandiae		
Red-necked Avocet [871]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato)		
Painted Snipe [889]	Endangered*	Species or species habitat known 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
Sterna dougallii  Pagata Torn [917]		Earaging fooding or related
Roseate Tern [817]		Foraging, feeding or related behaviour likely to occur within area
Thalassarche carteri	<b>V</b> 1 11	
Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or related behaviour may occur within area
<u>Thalassarche cauta</u> Shy Albatross [89224]	Endangered	Foraging, feeding or related
	Endangered	behaviour likely to occur within area
Thalassarche impavida Comphell Albetrace, Comphell Black browned Albetrace	Vulnarabla	Charles or angeles habitat
Campbell Albatross, Campbell Black-browed Albatross [64459]	vuirierable	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 glareola		Opposion on accessor lead that
Wood Sandpiper [829]		Species or species habitat known to occur within area

Acentronura australe Southern Pygmy Pipehorse [66185] Species or species habitat may occur within area Campichthys galei Species or species habitat Gale's Pipefish [66191] may occur within area <u>Heraldia nocturna</u> Upside-down Pipefish, Eastern Upside-down Pipefish, Species or species habitat Eastern Upside-down Pipefish [66227] may occur within area Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse Species or species habitat [66234] may occur within area Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse Species or species habitat may occur within area [66235] Hippocampus subelongatus West Australian Seahorse [66722] Species or species habitat may occur within area Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Species or species habitat may occur within area Pipefish [66243] Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249] Species or species habitat may occur within area <u>Lissocampus fatiloquus</u> Prophet's Pipefish [66250] Species or species habitat may occur within area <u>Lissocampus runa</u> 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

Species or species habitat

may occur within area

Pugnose Pipefish, Pug-nosed Pipefish [66269]

Urocampus carinirostris Hairy Pipefish [66282] Species or species habitat
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 poecilolaemusVanacampus poecilolaemusLongsnout Pipefish, Australian Long-snout Pipefish,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 known to occur within area
Reptiles
Caretta caretta
Loggerhead Turtle [1763] Endangered Species or species habitat known to occur within area
<u>Chelonia mydas</u>
Green Turtle [1765] Vulnerable Species or species habitat known to occur within area
Dermochelys coriacea
Leatherback Turtle, Leathery Turtle, Luth [1768] Endangered Species or species habitat known to occur within area
<u>Disteira kingii</u>
Spectacled Seasnake [1123] Species or species habitat may occur within area
Natator depressus
Flatback Turtle [59257]  Vulnerable  Species or species habitat 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

<u>Eubalaena australis</u>		
Southern Right Whale [40]	Endangered	Breeding known to occur within area
<u>Grampus griseus</u>		
Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
Megaptera novaeangliae		
Humpback Whale [38]	Vulnerable	Species or species habitat 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
<u>Tursiops aduncus</u>		
Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area
<u>Tursiops truncatus s. str.</u>		

Species or species habitat

may occur within area

### **Extra Information**

Bottlenose Dolphin [68417]

State and Territory Reserves	[ Resource Information ]
Name	State
Leda	WA
Unnamed WA51658	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 Birds	Status	Type of Presence
Acridotheres tristis		
Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis		
European Goldfinch [403]		Species or species habitat likely to occur within area

Passer montanus	
Eurasian Tree Sparrow [406]	Species or species habitat likely to occur within area
	intoly to obodi 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
Sturnus vulgaris	
Common Starling [389]	Species or species habitat likely to occur within area
Turdus merula	
Common Blackbird, Eurasian Blackbird [596]	Species or species habitat likely to occur within area
Mammals	
Bos taurus	
Domestic Cattle [16]	Species or species habitat likely to occur within area
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
Funambulus pennantii	
Northern Palm Squirrel, Five-striped Palm Squirrel [129]	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 norvegicus	
Brown Rat, Norway Rat [83]	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
Vulpes vulpes	
Red Fox, Fox [18]	Species or species habitat likely to occur within area
Plants	
Asparagus asparagoides	
Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]	Species or species habitat likely to occur within area

Prophigric mutico

Chrysanthemoides monilifera subsp. monilifera Boneseed [16905] Species or species habitat likely to occur within area Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom Species or species habitat likely to occur within area [2800] Genista sp. X Genista monspessulana Broom [67538] Species or species habitat may occur within area Lantana camara Species or species habitat Lantana, Common Lantana, Kamara Lantana, Largeleaf Lantana, Pink Flowered Lantana, Red Flowered likely to occur within area Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892] Lycium ferocissimum African Boxthorn, Boxthorn [19235] Species or species habitat likely to occur within area Olea europaea Olive, Common Olive [9160] Species or species habitat may occur within area Opuntia spp. Prickly Pears [82753] Species or species habitat likely to occur within area Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Species or species habitat may occur within area Pine [20780] 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 Species or species habitat Sterile Pussy Willow [68497] likely to occur within area Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Species or species habitat Weed [13665] likely to occur within area Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Species or species habitat Athel Tamarix, Desert Tamarisk, Flowering Cypress, likely to occur within area Salt Cedar [16018] Reptiles Hemidactylus frenatus

Asian House Gecko [1708]

Species or species habitat

likely to occur within area

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

-32.2737 115.75878

- -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

<u>-Department of Environment and Primary Industries, Victoria</u>

- -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.

#### **Appendix 3: Conservation Codes**

Conservation codes are used to describe the status of species and ecological communities that are no longer common and under threat of extinction. Species and communities can be listed under state legislation and/or commonwealth legislation.

#### Western Australia

Conservation Code	Name	Description
		Flora or fauna that is rare or likely to become extinct, ranked according
Т	Threatened	to their level of threat using IUCN Red List criteria
	Inreatened	(Schedules 1-3 of the Wildlife Conservation (Specially Protected Fauna)
		Notice or the Wildlife Conservation (Rare Flora) Notice)
CP	Critically	Species considered to be facing an extremely high risk of extinction
CR	endangered	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
VO	vuillerable	medium-term future
		Species where 'there is no reasonable doubt that the last member of the
EV	Extinct Species	species has died
EX	Extinct Species	(Schedule 4 of the Wildlife Conservation (Specially Protected Fauna)
		Notice or the Wildlife Conservation (Rare Flora) Notice)
	Extinct in the Wild	Species that are known to only survive in cultivation, in captivity, or as a
EW		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
		Fauna that periodically or occasionally visit Australia or an external
	Migratory Species	Territory or the exclusive economic zone; or the species is subject of an
MI		international agreement that relates to the protection of migratory
IVII		species and that binds the Commonwealth
		(Schedule 5 of the Wildlife Conservation (Specially Protected Fauna)
		Notice)
		Species of special conservation interest (conservation dependent fauna),
CD	Conservation Dependent	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)

Conservation Code	Name	Description
Р	Priority Species	Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.
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
Critically Endangered	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 Agriculture, Water, and the Environment, 2020)