



Natural Area
CONSULTING MANAGEMENT SERVICES

Town of Bassendean

1A May Holman Drive Level 1 Fauna Assessment



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1.0 Introduction

Natural Area Consulting Management Services (Natural Area) was contracted by the Town of Bassendean to undertake a Level 1 fauna survey at 1A May Holman Drive, Bassendean. The site has been selected as the development location for a local Mens Shed, and the Town required a fauna assessment to inform the development planning process. 1A May Holman Drive is approximately 1,790 m² and situated on the corner of May Holman Drive and Railway Parade, Bassendean (Figure 1).

Activities undertaken by Natural Area personnel included:

- desktop database searched to identify likely fauna species present at the site, including any conservation significant species and ecological communities
- a target search on site for fauna
- reporting on survey outcomes.



Figure 1: 1A May Holman Drive, Bassendean

2.0 Site Characteristics

2.1 Regional Context

According to Interim Biogeographical Regionalisation of Australia (IBRA) description, 1A May Holman Drive is located in the Perth Swan Coastal Plain subregion (SW02). This area is broadly characterised by Banksia woodland in sandy soil and paperbark in swampy areas (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 (Perth Airport, Station ID 009021, 2019):

- average rainfall is 765.3 mm pa, with the majority falling between May and August
- average maximum temperature ranges from 17.9 °C in winter to 31.9 °C in summer, with the highest recorded maximum being 46.7 °C
- average minimum temperatures range from 8.0 °C in winter to 17.5 °C in summer, with the lowest recorded minimum being -1.3 °C
- predominant wind directions include morning easterlies and westerly sea breezes during summer months, with an average wind speed of 16.6 km/h and gusts of more than 100 km/h.

2.3 Vegetation Complexes

The vegetation complexes associated with the broader area are Bassendean Complex – Central and South, where the vegetation type ranges from woodlands of *Eucalyptus marginata* (Jarrah), *Allocasuarina fraseriana* (Sheoak) and Banksia species to low woodlands of Melaleuca species and sedgeland in the moister areas (Hedde, Loneragan & Havel 1980).

The site area was cleared prior to 1953 (Landgate 2019), and no remnant vegetation remains within the block (Figure 2)



Figure 2: Current site conditions at 1A May Holman Drive, Bassendean.

3.0 Methodology

3.1 Literature Review

A desktop fauna survey involved a review of NatureMap (State; Attachment 1) and Protected Matter Search Tool (PMST, Commonwealth; Attachment 2) reports, using a 2km buffer to identify likely species present along with their conservation significance at a State and Commonwealth level. The species listed as conservation significant in both reports were assessed to determine those likely to occur on site (see Table 1) and this list was used to perform a target search of the area (see below)

3.2 Fauna Survey

A level one fauna survey was undertaken; this involved:

- desktop review of the NatureMap and Protected Matters Search Tool reports to review the likely species presence, along with their conservation significance
- recording the presence of vertebrate fauna species through direct observation or indirect indicators of their presence in the form of tracks, scats, calls, diggings, dens, warrens, or burrows.

3.3 Limitations

Limitations of the fauna survey included:

- Migratory species and highly mobile species may not have been present on the site at the time of assessment.

4.0 Fauna Survey Results

4.1 Literature Review Results

The NatureMap Report (2019, Attachment 1) identified 141 fauna species recorded within 2 km of the site, including 3 species of invertebrates, 107 bird species, 2 fish species, 11 invertebrate species, 2 mammal species and 16 species of reptiles. Of these 141 species, 6 were introduced and 11 were conservation significant species. The PMST report (2019, Attachment 2) listed 40 Threatened species and 25 migratory species. Excluding marine species and species where appropriate habitat does not occur on site, 3 conservation significant species could potentially occur within the site (Table 1).

Table 1: Conservation significant flora that may occur within the study area

Species	NatureMap	PMST	Conservation Codes*
<i>Calyptorhynchus banksii naso</i> (Forest Red-tailed Black Cockatoo)		*	Vu
<i>Calyptorhynchus baudinii</i> (Baudin’s Cockatoo)	*	*	T, En
<i>Calyptorhynchus latirostris</i> (Carnaby’s Cockatoo)	*	*	T, En

*Refer to Attachment 3 for a full definition of the conservation codes

En – Endangered (federal)

T – rare or likely to become extinct (state)

Vu – Vulnerable (federal)

4.2 Fauna Survey Results

An assessment of the site was undertaken September 20, 2019; no fauna was directly sighted during the inspection and there were also obvious visible signs of fauna activity (scats, tracks or diggings) in the area. There were several mature trees onsite, mainly *Eucalyptus* sp. (likely *camaldulensis*), but no visible hollows for nesting. A second site assessment was undertaken on September 26, 2019. During this assessment a magpie (*Cracticus tibicen*) was sighted building a nest and a completed nest was located, both in trees scheduled to be retained on current development plans (Figure 3 and 4).



Figure 3: Magpie building nest onsite (left) and completed nest (right)

5.0 Discussion

Given the limited number of tree species commonly utilised by black cockatoos on site (Commonwealth 2012) and lack of tree hollows or other signs of cockatoo presence, it is unlikely that the conservation significant species listed in Table 1 utilise the area.

Signs of fauna activity on site included a magpie building a nest and an existing nest. No activity was seen around the existing nest and assessment with an Elevated Work Platform (EWP) was not requested, so occupancy could not be confirmed at the time of the survey. Given the activity on site and in adjacent areas (magpie nest on the other side of Railway Parade (Figure 4 and 5)) it is probable that this was also a magpie nest.



Figure 4: Location of established nests (red) and location of magpie building nest (yellow)



Figure 5: Existing magpie nest on the south east side of Railway Parade

5.1 Implications of Fauna Presence

Under environmental laws it is an offence to intentionally or recklessly kill, injure, trade, keep or move native fauna species unless there is a permit authorising such activities (DBCA 2017), and it is likely that clearing land surrounding the existing nest would disturb any nesting birds present. If the existing nest is occupied clearing works should be postponed until fledging has occurred (usually 7 weeks from hatching).

The magpie breeding season runs between August and October/November (DBCA 2017, Murray 2018) and magpies can double clutch if the first brood fails; the magpie seen constructing a nest could either be preparing for a late first clutch or a second clutch. If the existing nest is not occupied and clearing works are to commence prior to the second nest being completed, the birds will abandon the area during clearing. The impact on the magpie colony would likely be minimal if clearing occurred when no nests are occupied.

6.0 References

Bureau of Meteorology, (2018), *Climate Data Online – Perth Airport Station 009021*, accessed September 2019 via: <http://www.bom.gov.au/climate/data/>

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Murra, Mellisaa (2018) *Australian Magpie* accessed September 2019 from <https://australianmuseum.net.au/learn/animals/birds/australian-magpie/>

Western Australian Local Government Association, (2019), *Environmental Planning Tool – Environmental Considerations*, accessed July 2019 via <http://lbp.asn.au/module/enviro#map>.

Attachment 1: NatureMap Report

NatureMap Species Report

Created By Guest user on 25/09/2019

Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 115° 56' 23" E, 31° 54' 32" S
Buffer 2km
Group By Kingdom

Kingdom	Species	Records
Animalia	141	2656
Fungi	1	1
Plantae	31	36
TOTAL	173	2693

Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query Area
Animalia				
1.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
2.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
3.	24262 <i>Acanthiza inornata</i> (Western Thornbill)			
4.	24560 <i>Acanthorhynchus superciliosus</i> (Western Spinebill)			
5.	25535 <i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			
6.	24281 <i>Accipiter cirrocephalus</i> subsp. <i>cirrocephalus</i> (Collared Sparrowhawk)			
7.	25536 <i>Accipiter fasciatus</i> (Brown Goshawk)			
8.	24282 <i>Accipiter fasciatus</i> subsp. <i>fasciatus</i> (Brown Goshawk)			
9.	42368 <i>Acritoscincus trilineatus</i> (Western Three-lined Skink)			
10.	25755 <i>Acrocephalus australis</i> (Australian Reed Warbler)			
11.	41323 <i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
12.	<i>Allothereua maculata</i>			
13.	<i>Amniataba caudavittata</i>			
14.	24310 <i>Anas castanea</i> (Chestnut Teal)			
15.	24311 <i>Anas clypeata</i> (Northern Shoveler)			Y
16.	24312 <i>Anas gracilis</i> (Grey Teal)			
17.	24313 <i>Anas platyrhynchos</i> (Mallard)			
18.	<i>Anas platyrhynchos</i> subsp. <i>domesticus</i>			
19.	24315 <i>Anas rhynchotis</i> (Australasian Shoveler)			
20.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
21.	47414 <i>Anhinga novaehollandiae</i> (Australasian Darter)			
22.	<i>Anser anser</i>			
23.	24561 <i>Anthochaera carunculata</i> (Red Wattlebird)			
24.	24991 <i>Aprasia repens</i> (Sand-plain Worm-lizard)			
25.	41324 <i>Ardea modesta</i> (great egret, white egret)			
26.	24341 <i>Ardea pacifica</i> (White-necked Heron)			
27.	24318 <i>Aythya australis</i> (Hardhead)			
28.	<i>Barnardius zonarius</i>			
29.	24319 <i>Biziura lobata</i> (Musk Duck)			
30.	42381 <i>Brachyurophis semifasciatus</i> (Southern Shovel-nosed Snake)			
31.	25714 <i>Cacatua pastinator</i> (Western Long-billed Corella)			
32.	25716 <i>Cacatua sanguinea</i> (Little Corella)			
33.	24729 <i>Cacatua tenuirostris</i> (Eastern Long-billed Corella)	Y		
34.	25598 <i>Cacomantis flabelliformis</i> (Fan-tailed Cuckoo)			
35.	42307 <i>Cacomantis pallidus</i> (Pallid Cuckoo)			
36.	25717 <i>Calyptorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
37.	24733 <i>Calyptorhynchus baudinii</i> (Baudin's Cockatoo, White-tailed Long-billed Black Cockatoo)		T	
38.	24734 <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)		T	
39.	48400 <i>Calyptorhynchus</i> sp. (white-tailed black cockatoo)		T	
40.	<i>Carcharinus leucas</i>			
41.	24321 <i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
42.	<i>Chroicocephalus novaehollandiae</i>			
43.	24288 <i>Circus approximans</i> (Swamp Harrier)			
44.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
45.	24399 <i>Columba livia</i> (Domestic Pigeon)	Y		
46.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
47.	<i>Cormocephalus aurantiipes</i>			
48.	25592 <i>Corvus coronoides</i> (Australian Raven)			
49.	24420 <i>Cracticus nigrogularis</i> (Pied Butcherbird)			
50.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
51.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
52.	25398 <i>Crinia georgiana</i> (Quacking Frog)			
53.	25027 <i>Ctenotus australis</i>			
54.	24322 <i>Cygnus atratus</i> (Black Swan)			
55.	30901 <i>Dacelo novaeguineae</i> (Laughing Kookaburra)	Y		
56.	30902 <i>Dacelo novaeguineae</i> subsp. <i>novaeguineae</i> (Laughing Kookaburra)	Y		
57.	25766 <i>Delma fraseri</i> (Fraser's Legless Lizard)			
58.	24999 <i>Delma grayii</i>			
59.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			
60.	<i>Egretta novaehollandiae</i>			
61.	<i>Elanus axillaris</i>			
62.	25250 <i>Elapognathus coronatus</i> (Crowned Snake)			
63.	47937 <i>Euseyornis melanops</i> (Black-fronted Dotterel)			
64.	<i>Eolophus roseicapillus</i>			
65.	<i>Eriophora biapicata</i>			
66.	25622 <i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
67.	25623 <i>Falco longipennis</i> (Australian Hobby)			
68.	25624 <i>Falco peregrinus</i> (Peregrine Falcon)		S	
69.	25727 <i>Fulica atra</i> (Eurasian Coot)			
70.	25729 <i>Gallinula tenebrosa</i> (Dusky Moorhen)			
71.	25730 <i>Gallirallus philippensis</i> (Buff-banded Rail)			
72.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
73.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
74.	24295 <i>Haliastur sphenurus</i> (Whistling Kite)			
75.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			
76.	24491 <i>Hirundo neoxena</i> (Welcome Swallow)			
77.	24215 <i>Hydromys chrysogaster</i> (Water-rat, Rakali)		P4	
78.	48587 <i>Hydroprogne caspia</i> (Caspian Tern)		IA	
79.	<i>Idiomata blackwalli</i>			
80.	48588 <i>Isodon fusciventer</i> (Quenda, southwestern brown bandicoot)		P4	
81.	<i>Lampona cylindrata</i>			
82.	25165 <i>Lerista praepedita</i>			
83.	25005 <i>Lialis burtonis</i>			
84.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
85.	<i>Lophoictinia isura</i>			
86.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
87.	25758 <i>Megalurus gramineus</i> (Little Grassbird)			
88.	24598 <i>Merops ornatus</i> (Rainbow Bee-eater)			
89.	<i>Microcarbo melanoleucos</i>			
90.	<i>Missulena granulosa</i>			
91.	<i>Missulena occatoria</i>			
92.	25420 <i>Myobatrachus gouldii</i> (Turtle Frog)			
93.	25248 <i>Neelaps bimaculatus</i> (Black-naped Snake)			
94.	25249 <i>Neelaps calonotos</i> (Black-striped Snake, black-striped burrowing snake)		P3	
95.	25252 <i>Notechis scutatus</i> (Tiger Snake)			
96.	25564 <i>Nycticorax caledonicus</i> (Rufous Night Heron)			
97.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
98.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
99.	48591 <i>Pandion cristatus</i> (Osprey, Eastern Osprey)		IA	
100.	25681 <i>Pardalotus punctatus</i> (Spotted Pardalote)			
101.	25682 <i>Pardalotus striatus</i> (Striated Pardalote)			
102.	24648 <i>Pelecanus conspicillatus</i> (Australian Pelican)			
103.	48060 <i>Petrochelidon ariel</i> (Fairy Martin)			
104.	48061 <i>Petrochelidon nigricans</i> (Tree Martin)			
105.	48066 <i>Petroica boodang</i> (Scarlet Robin)			
106.	24659 <i>Petroica goodenovii</i> (Red-capped Robin)			
107.	25697 <i>Phalacrocorax carbo</i> (Great Cormorant)			
108.	24667 <i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
109.	25699 <i>Phalacrocorax varius</i> (Pied Cormorant)			
110.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
111.	48071 <i>Phylidonyris niger</i> (White-cheeked Honeyeater)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
112.	24596 <i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
113.	24841 <i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
114.	25720 <i>Platycercus icterotis</i> (Western Rosella)			
115.	25721 <i>Platycercus zonarius</i> (Australian Ringneck, Ring-necked Parrot)			
116.	24681 <i>Poliiocephalus poliocephalus</i> (Hoary-headed Grebe)			
117.	25731 <i>Porphyrio porphyrio</i> (Purple Swamphen)			
118.	25259 <i>Pseudonaja affinis</i> subsp. <i>affinis</i> (Dugite)			
119.	25433 <i>Pseudophryne guentheri</i> (Crawling Toadlet)			
120.	<i>Purpureicephalus spurius</i>			
121.	48096 <i>Rhipidura albiscapa</i> (Grey Fantail)			
122.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
123.	25534 <i>Sericornis frontalis</i> (White-browed Scrubwren)			
124.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			
125.	30948 <i>Smicronis brevirostris</i> (Weebill)			
126.	<i>Steatoda grossa</i>			
127.	24525 <i>Sterna fuscata</i> subsp. <i>nubilosa</i> (Sooty Tern)			
128.	25589 <i>Streptopelia chinensis</i> (Spotted Turtle-Dove)	Y		
129.	25590 <i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)	Y		
130.	25705 <i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
131.	24331 <i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
132.	48597 <i>Thalasseus bergii</i> (Crested Tern)		IA	
133.	24845 <i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
134.	25549 <i>Todiramphus sanctus</i> (Sacred Kingfisher)			
135.	24309 <i>Todiramphus sanctus</i> subsp. <i>sanctus</i> (Sacred Kingfisher)			
136.	25723 <i>Trichoglossus haematodus</i> (Rainbow Lorikeet)			
137.	24983 <i>Underwoodisaurus milii</i> (Barking Gecko)			
138.	<i>Urodacus novaehollandiae</i>			
139.	<i>Venator immansueta</i>			
140.	34113 <i>Westralunio carteri</i> (Carter's Freshwater Mussel)		T	
141.	25765 <i>Zosterops lateralis</i> (Grey-breasted White-eye, Silvereye)			

Fungi

142. *Chlorophyllum brunneum*

Plantae

143.	12040 <i>Apium prostratum</i> subsp. <i>prostratum</i> var. <i>prostratum</i> (Sea Celery)			
144.	226 <i>Arundo donax</i> (Giant Reed)	Y		
145.	20249 <i>Astartea leptophylla</i> (River-bank Astartea)			
146.	20283 <i>Astartea scoparia</i> (Common Astartea)			
147.	44679 <i>Auranticarpa rhombifolia</i>	Y		Y
148.	233 <i>Avena barbata</i> (Bearded Oat)	Y		
149.	48689 <i>Bolboschoenus fluviatilis</i>		P1	
150.	18321 <i>Casuarina glauca</i>	Y		
151.	1742 <i>Casuarina obesa</i> (Swamp Sheoak, Kuli)			
152.	6132 <i>Epilobium ciliatum</i>	Y		
153.	5763 <i>Eucalyptus rudis</i> (Flooded Gum, Kulurda)			
154.	20216 <i>Ficinia nodosa</i> (Knotted Club Rush)			
155.	20505 <i>Gastrolobium celsianum</i>			
156.	1526 <i>Hesperantha falcata</i>	Y		
157.	5154 <i>Hibbertia perfoliata</i>			
158.	6620 <i>Ipomoea cairica</i> (Coast Morning Glory)	Y		
159.	6630 <i>Ipomoea indica</i> (Morning Glory)	Y		
160.	1185 <i>Juncus kraussii</i> (Sea Rush)			
161.	1188 <i>Juncus pallidus</i> (Pale Rush)			
162.	6733 <i>Lantana camara</i> (Common Lantana)	Y		
163.	2396 <i>Lysiana casuarinae</i>			
164.	5987 <i>Melaleuca viminea</i> (Mohan)			
165.	3618 <i>Paraserianthes lophantha</i> (Albizia)			
166.	48675 <i>Pterostylis atosanguinea</i>			
167.	1698 <i>Pterostylis vittata</i> (Banded Greenhood)			
168.	48834 <i>Schinus terebinthifolia</i>	Y		
169.	617 <i>Sorghum halepense</i> (Johnson Grass)	Y		
170.	2639 <i>Suaeda australis</i> (Seablite)			
171.	33319 <i>Tecticornia indica</i> subsp. <i>bidens</i>			
172.	17763 <i>Trifolium campestre</i> var. <i>campestre</i> (Hop Clover)	Y		
173.	5106 <i>Waltheria indica</i>			

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

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
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2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

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

Attachment 2: Protected Matter Search Tool



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

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

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

Report created: 25/09/19 12:48:55

[Summary](#)

[Details](#)

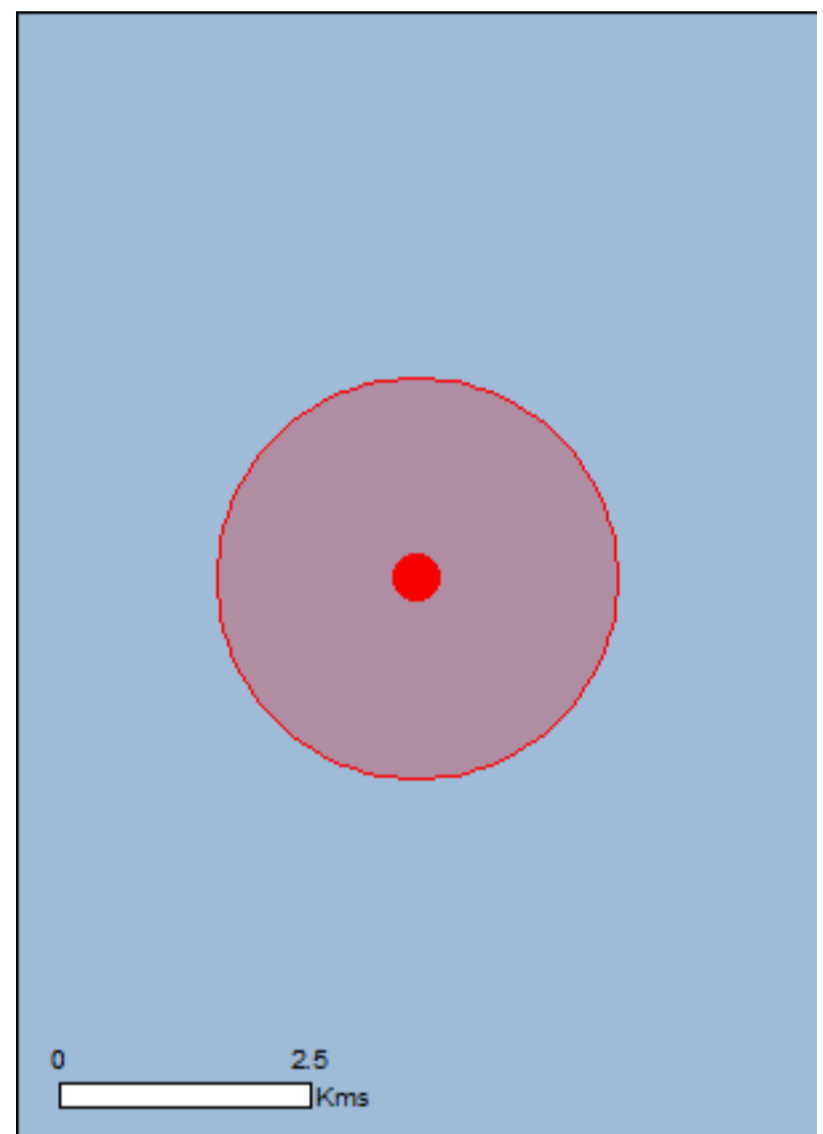
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

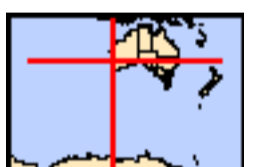
[Acknowledgements](#)



This map may contain data which are ©Commonwealth of Australia (Geoscience Australia), ©PSMA 2010

[Coordinates](#)

Buffer: 2.0Km



Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	40
Listed Migratory Species:	25

Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Land:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	31
Whales and Other Cetaceans:	None
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:	None
Regional Forest Agreements:	None
Invasive Species:	41
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[\[Resource Information \]](#)

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

Name	Status	Type of Presence
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community may 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 ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat likely to occur within area
Calyptorhynchus baudinii Baudin's Cockatoo, Long-billed Black-Cockatoo [769]	Endangered	Species or species habitat likely 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 epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat likely to occur within area

Name	Status	Type of Presence
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat may 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 may occur within area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
Rostratula australis Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area
Thalassarche cauta cauta Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Species or species habitat may occur within area
Thalassarche cauta steadi White-capped Albatross [82344]	Vulnerable	Species or species habitat likely to occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Mammals		
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat likely to occur within area
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat known to occur within area
Plants		
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat likely to occur within area
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw [3435]	Vulnerable	Species or species habitat may occur within area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat may occur within area
Calytrix breviseta subsp. breviseta Swamp Starflower [23879]	Endangered	Species or species habitat may occur within

Name	Status	Type of Presence area
Conospermum undulatum Wavy-leaved Smokebush [24435]	Vulnerable	Species or species habitat likely to occur within area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area
Drakaea elastica Glossy-leaved Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat likely to occur within area
Lepidosperma rostratum Beaked Lepidosperma [14152]	Endangered	Species or species habitat likely to occur within area
Synaphea sp. Fairbridge Farm (D. Papenfus 696) Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area
Thelymitra dedmaniarum Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat may occur within area
Thelymitra stellata Star Sun-orchid [7060]	Endangered	Species or species habitat may occur within area

Reptiles

Caretta caretta 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

Listed Migratory Species

[[Resource Information](#)]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat likely 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
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Species or species habitat likely to occur within area
Migratory Marine Species		
Caretta caretta 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
Manta alfredi Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
Manta birostris Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species

Name	Threatened	Type of Presence
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	habitat likely to occur within area Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land [\[Resource Information \]](#)

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Name
Commonwealth Land -

Listed Marine Species [\[Resource Information \]](#)

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Anous 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]		Breeding known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat likely to occur within area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		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 may occur within area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Thalassarche cauta Tasmanian Shy Albatross [89224]	Vulnerable*	Species or species habitat may occur within area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable*	Species or species habitat likely to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area
Mammals		
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat known to occur within area

Name	Threatened	Type of Presence
Reptiles		
Caretta caretta 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

Extra Information

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 Resources Audit, 2001.

Name	Status	Type of Presence
Birds		
<i>Acridotheres tristis</i> Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
<i>Anas platyrhynchos</i> Mallard [974]		Species or species habitat likely to occur within area
<i>Carduelis carduelis</i> European Goldfinch [403]		Species or species habitat likely to occur within area
<i>Columba livia</i> Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
<i>Passer domesticus</i> House Sparrow [405]		Species or species habitat likely to occur within area
<i>Passer montanus</i> Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
<i>Streptopelia chinensis</i> Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
<i>Streptopelia senegalensis</i> Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
<i>Sturnus vulgaris</i> Common Starling [389]		Species or species habitat likely to occur within area
Mammals		
<i>Bos taurus</i> Domestic Cattle [16]		Species or species habitat likely to occur

Name	Status	Type of Presence 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		
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]		Species or species habitat likely to occur within area
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]		Species or species habitat likely to occur within area
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Asparagus declinatus Bridal Veil, Bridal Veil Creeper, Pale Berry Asparagus Fern, Asparagus Fern, South African Creeper [66908]		Species or species habitat likely to occur within area
Asparagus plumosus Climbing Asparagus-fern [48993]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]		Species or species habitat likely to occur

Name	Status	Type of Presence within area
Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892]		Species or species habitat likely to occur within area
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 Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		Species or species habitat likely to occur within area
Reptiles		
Hemidactylus frenatus Asian House Gecko [1708]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[Resource Information]
Name	State	
Swan-Canning Estuary	WA	

Caveat

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

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

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

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

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

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

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

- migratory and
- marine

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

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

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

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

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

Coordinates

-31.90831 115.93971

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- [-Other groups and individuals](#)

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

Attachment 3: Conservation Code

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. The codes for conservation significant species referred to in this management plan are identified.

Western Australia

Conservation Code	Name	Description
T	Threatened	Flora and fauna listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the <i>Biodiversity Conservation Act 2016</i> (BC Act).
EX	Extinct species	Flora or fauna Species where “there is no reasonable doubt that the last member of the species has died”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).
EW	Extinct in the wild species	Species that “is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).
MI	Migratory Species	Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).
CD	Species of special conservation interest (conservation dependent fauna)	Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).
OS	Specially Protected	Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).
<i>Schedule 1 species that are ranked by the DBCA according to their level of threat using IUCN Red List criteria</i>		
CR	Critically endangered	Species facing an extremely high risk of extinction in the wild in the immediate future
EN	Endangered	Species facing a very high risk of extinction in the wild in the near

Conservation Code	Name	Description
		future
VU	Vulnerable	Species considered to be facing a high risk of extinction in the wild in the medium-term future
<i>Taxa that have not been adequately surveyed for listing under Schedule 1 or 2 of the Wildlife Protection Act are added to the Priority Lists under priorities 1, 2 or 3, according to the priority for further survey and evaluation of their conservation status.</i>		
1	Priority One	Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey
2	Priority Two	Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
3	Priority Three	Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
4	Priority Four	(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands. (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent. (c) Species that have been removed from the list of threatened species

Conservation Code	Name	Description
		during the past five years for reasons other than taxonomy. Taxa that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

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

Commonwealth

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

(Source: Department of the Environment and Energy, 2019)