























APPENDIX A

Definition of Declared Rare / Priority / Threatened Flora and Fauna Species



Categories of Declared Rare Flora (WC act) and Priority listings (DPaW)

CONSERVATI ON CODE	DESCRIPTION
Х	Presumed Extinct Flora (Declared Rare Flora – Extinct) "Taxa which have been adequately searched for and there is no reasonable doubt that the last individual has died, and have been gazetted as such (Schedule 2 under the Wildlife Conservation Act 1950)."
Т	Threatened Flora (Declared Rare Flora – Extant) "Taxa which have been adequately searched for and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such (Schedule 1 under the Wildlife Conservation Act 1950)." "Threatened Flora (Schedule 1) are further ranked by the Department according to their level of threat using IUCN Red List criteria: CR: Critically Endangered – considered to be facing an extremely high risk of extinction in the wild; EN: Endangered – considered to be facing a very high risk of extinction in the wild; VU: Vulnerable – considered to be facing a high risk of extinction in the wild."
P1	Priority One: Poorly-known taxa "Taxa which are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, Westrail and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Taxa may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes."
P2	Priority Two: Poorly-known taxa "Taxa which are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown Land, water reserves, etc. Taxa may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes."
P3	Priority Three: Poorly-known taxa "Taxa which are known from collections or sight records from several localities not under imminent threat, or few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Taxa may be included if they are comparatively well known from several localities but do not meet



CONSERVATI ON CODE	DESCRIPTION				
	adequacy of survey requirements and known threatening processes exist that could affect them."				
P4	Priority Four: Rare, Near Threatened and other taxa in need of monitoring a. Rare. "Taxa which are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These taxa are usually represented on conservation lands." b. Near Threatened. "Taxa that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are				
	close to qualifying for Vulnerable." c. "Taxa that have been removed from the list of threatened species during the past five years for reasons other than taxonomy."				
P5	Priority Five: Conservation Dependent taxa "Taxa that are not threatened but are subject to a specific conservation program, the cessation of which would result in the taxon becoming threatened within five years."				

Source: Department of Parks and Wildlife (2013). Online: http://florabase.dpaw.wa.gov.au.

Western Australian Threatened Fauna Categories Wildlife Conservation Act 1950 (WA)

CATEGORY	CODE	DESCRIPTION		
Schedule 1	S1	Rare or likely to become extinct as critically endangered fauna.		
Schedule 2	S2	Fauna that is rare or is likely to become extinct as endangered fauna.		
Schedule 3	S3	Fauna that is rare or is likely to become extinct as vulnerable fauna.		
Schedule 4	S4	Fauna presumed to be extinct.		
Schedule 5	S5	Migratory birds protected under an international agreement.		
Schedule 6	S6	Fauna that is of special conservation need as conservation dependent fauna.		
Schedule 7	S7	Other specially protected fauna		

Department of Environment and Conservation Fauna Priority Codes

CATEGORY	CODE	DESCRIPTION
Priority 1	P1	Taxa with few, poorly known populations on threatened lands.
Priority 2	P2	Taxa with few, poorly known populations on conservation lands.



CATEGORY	CODE	DESCRIPTION				
Priority 3	P3	Taxa with several, poorly known populations, some on conservation lands.				
Priority 4	P4	Taxa in need of monitoring: not currently threatened or in need of special protection, but could become so. Usually represented on conservation lands.				
Priority 5	P5	Taxa in need of monitoring: not considered threatened, but the subject of a specific conservation program, the cessation of which would result in the species becoming threatened within five years.				

Categories of Threatened Flora and Fauna Species under the EPBC Act

CONSERVATION CODE	DESCRIPTION
Ex	Extinct
	Taxa which at a particular time if, at the time, there is no reasonable doubt
	that the last member of the species has died.
ExW	Extinct in the Wild
	Taxa which is known only to survive in cultivation, in captivity or as a
	naturalised population well outside its past range; or it has not been
	recorded in its known and/or expected habitat, at appropriate seasons,
	anywhere in its past range, despite exhaustive surveys over a time frame
	appropriate to its life cycle and form.
CE	Critically Endangered
	Taxa which at a particular time, it is facing an extremely high risk of
	extinction in the wild in the immediate future, as determined in accordance
	with the prescribed criteria.
E	Endangered
	Taxa which is not critically endangered and it is facing a very high risk of
	extinction in the wild in the medium-term future, as determined in
	accordance with the prescribed criteria.
V	Vulnerable
	Taxa which is not critically endangered or endangered and is facing a high
	risk of extinction in the wild in the medium-term future, as determined in
	accordance with the prescribed criteria.
CD	Conservation Dependent
	Taxa which at a particular time if, at that time, the species is the focus of a
	specific conservation program, the cessation of which would result in the
	species becoming vulnerable, endangered or critically endangered within a
	period of 5 years.

Source: Environment Protection and Biodiversity Conservation Act 1999



APPENDIX B

Definition of Threatened and Priority Ecological Communities



Definitions of Threatened Ecological Communities as Endorsed by the Western Australian Minister for the Environment

Presumed Totally Destroyed (PD)

An ecological community will be listed as presumed totally destroyed if there are no recent records of the community being extant and either of the following applies (A or B);

- A) Records within the last 50 years have not been confirmed despite thorough searches or known or likely habitats or
- B) All occurrences recorded within the last 50 years have since been destroyed.

Critically Endangered (CR)

An ecological community will be listed as Critically Endangered when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future. This will be determined on the basis of the best available information, by it meeting any one or more of the following criteria (A, B or C):

- A) The estimated geographic range, and/or total area occupied, and/or number of discrete occurrences since European settlement have been reduced by at least 90% and either or both of the following apply (i or ii):
 - i) Geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is imminent (within approximately 5 years); or
 - ii) Modification throughout its range is continuing such that in the immediate future (within approximately 5 years) the community is unlikely to be capable of being substantially rehabilitated.
- B) Current distribution is limited, and one or more of the following apply (i, ii or iii):
 - i) Geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the immediate future (within approximately 5 years);
 - ii) There are very few occurrences, each of which is small and/or isolated and extremely vulnerable to known threatening processes; or
 - iii) There may be many occurrences but total area is very small and each occurrence is small and/or isolated and extremely vulnerable to known threatening processes.
- C) The ecological community exists only as highly modified occurrences which may be capable of being rehabilitated if such work begins in the immediate future (within approximately 5 years).



Endangered (EN)

An ecological community will be listed as Endangered when it has been adequately surveyed and is not Critically Endangered but is facing a very high risk of total destruction in the near future. This will be determined on the basis of the best available information, by it meeting any one or more of the following criteria (A, B or C):

- A) The estimated geographic range, and/or total area occupied, and/or number of discrete occurrences since European settlement have been reduced by at least 70% and either or both of the following apply (i or ii):
 - Geographic range, and/or total area occupied and/or number of discrete occurrences are continuing to decline such that total destruction of the community is likely in the short term (within approximately 10 years); or
 - ii) Modification throughout its range is continuing such that in the short term future (within approximately 10 years) the community is unlikely to be capable of being substantially restored or rehabilitated.
- B) Current distribution is limited, and one or more of the following apply (i, ii or iii):
 - Geographic range and/or number of discrete occurrences, and/or area occupied is highly restricted and the community is currently subject to known threatening processes which are likely to result in total destruction throughout its range in the short term future (within approximately 10 years);
 - ii) There are very few occurrences, each of which is small and/or isolated and extremely vulnerable to known threatening processes; or
 - iii) There may be many occurrences but total area is very small and each occurrence is small and/or isolated and extremely vulnerable to known threatening processes.
- C) The ecological community exists only as highly modified occurrences which may be capable of being rehabilitated if such work begins in the short term future (within approximately 10 years).

Vulnerable (VU)

An ecological community will be listed as Vulnerable when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing a high risk of total destruction in the medium to long term future. This will be determined on the basis of the best available information, by it meeting any one or more of the following criteria (A, B or C):

- A) The ecological community exists largely as modified occurrences which are likely to be capable of being substantially restored or rehabilitated;
- B) The ecological community can be modified or destroyed and would be vulnerable to threatening processes, is restricted in area and/or range and/or is only found at a few locations: or



C) The ecological community may still be widespread but is believed likely to move into a category of higher threat in the medium to long term future because of existing or impending threatening processes.

Source: Department of Environment and Conservation (2010). Definitions, Categories and Criteria for Threatened and Priority Ecological Communities. Department of Environment and Conservation, Perth, Western Australia. Online: www.naturebase.net/



Definitions of Priority Ecological Communities as listed DPaW

Possible threatened ecological communities that do not meet survey criteria or that are not adequately defined are added to the Priority Ecological Community Lists under Priorities 1, 2 and 3. These three categories are ranked in order of priority for survey and/or definition of the community, and evaluation of conservation status, so that consideration can be given to their declaration as threatened ecological communities. Ecological Communities that are adequately known, and are rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring. Conservation Dependent ecological communities are placed in Priority 5.

Priority One: Poorly known ecological communities

Ecological communities with apparently few, small occurrences, all or most not actively managed for conservation (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) and for which current threats exist. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.

Priority Two: Poorly known ecological communities

Communities that are known from few small occurrences, all or most of which are actively managed for conservation (e.g. within national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc.) and not under imminent threat of destruction or degradation.

Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.

Priority Three: Poorly known ecological communities

- Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation;
- Communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat; or
- Communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, and inappropriate fire regimes.



Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.

Priority Four: Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened or that have been recently removed from the threatened list.

These communities require regular monitoring:

- Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands.
- Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable.
- Ecological communities that have been removed from the list of threatened communities during the past five years.

Priority Five: Conservation Dependent ecological communities.

Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Source: Department of Parks and Wildlife (2013). Definitions, Categories and Criteria for Threatened and Priority Ecological Communities. Department of Environment and Conservation, Perth. Western Australia, Online: www.naturebase.net/



APPENDIX C

Environmental Weeds And Declared Plant Categories



Criteria used for Ranking Environmental Weeds

The Weed Prioritisation Process for DPaW contains criteria for the assessment and ranking of weeds in terms of their environmental impact on biodiversity. These criteria are as follows:

- Potential Distribution Area of potential habitat in the Region that could be occupied or the area at risk of invasion by the weed;
- Current Distribution Area of habitat in the Region currently occupied by the weed, in relation to the habitat that it could invade;
- Ecological Impact Impact of species within the Region, from low impact (causes minimal disruption to ecological processes or loss of biodiversity) to high (causes acute disruption of ecological processes, dominates and/or significantly alters vegetation structure, composition and function of ecosystems);
- Invasiveness rate of spread of a weed in native vegetative, encompassing factors of establishment, reproduction and long distance dispersal (>100 m);
- Feasibility of Control The longer a coordinated control program takes to achieve its desired goal, the more expensive and less feasible it becomes. Is it feasible to eradicate or at least contain the infestation?

Source: DPaW (2013). Weed Prioritisation Process for DPaW (formerly DEC) – "An integrated approach to Weed Management on DPaW-managed lands in WA"

Standard Meanings of Declared Plant Categories

Under the Biosecurity and Agriculture Management Act 2007 (the BAM Act), all declared pests are placed in one of three categories, namely C1 (exclusion), C2 (eradication) or C3 (management).

C1 category (Exclusion) - Pests will be assigned to this category if they are not established in Western Australia and control measures are to be taken, including border checks, in order to prevent them entering and establishing in the State.

C2 category (Eradication) - Pests will be assigned to this category if they are present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility.

C3 category (Management) - Pests will be assigned to this category if they are established in Western Australia but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area which currently is free of that pest.

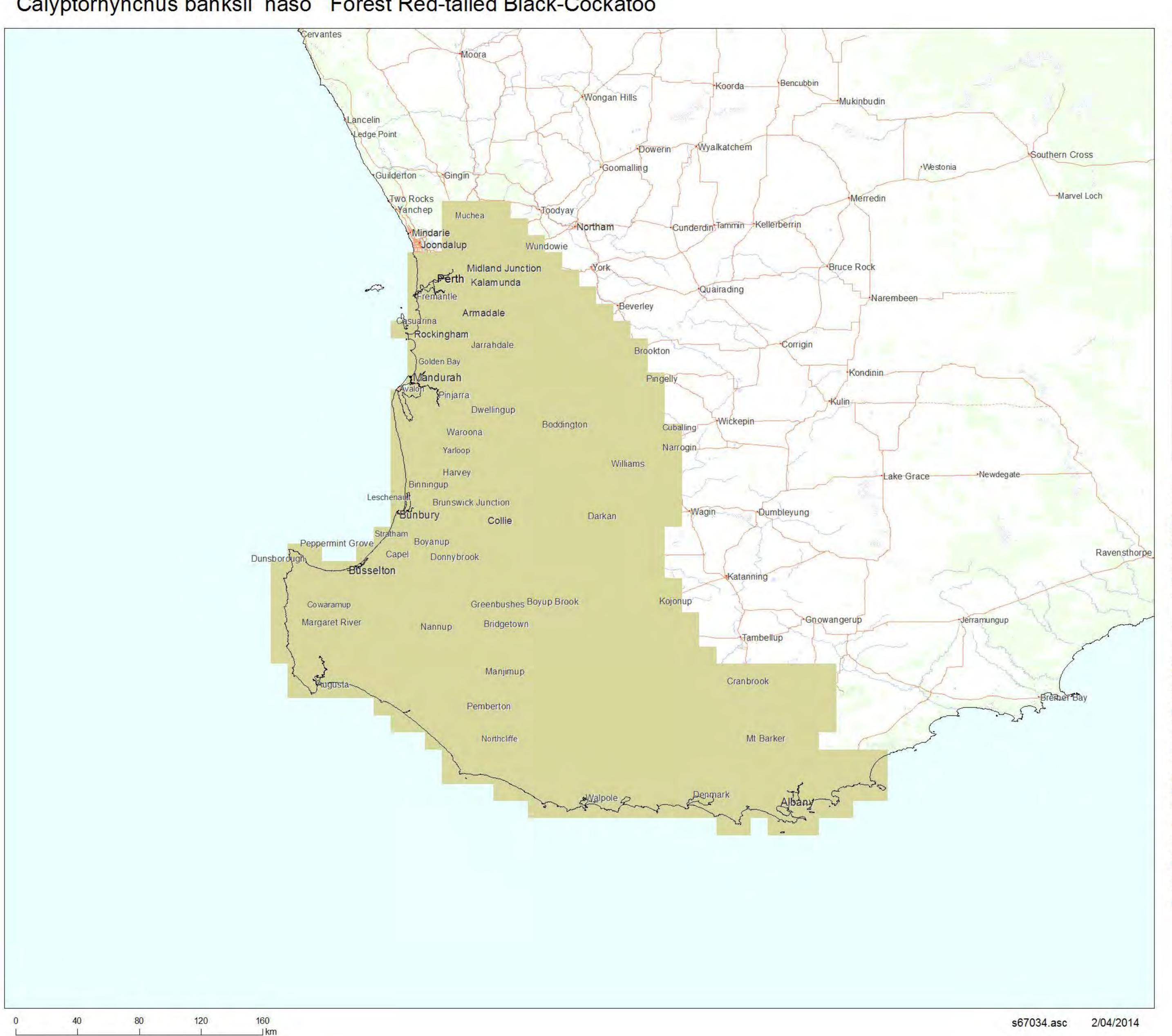
Source: Department of Agriculture and Food, Western Australia. Online: http://www.biosecurity.wa.gov.au/western-australian-organism-list-waol



APPENDIX D

DoE Black Cockatoo Distribution Map

Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo



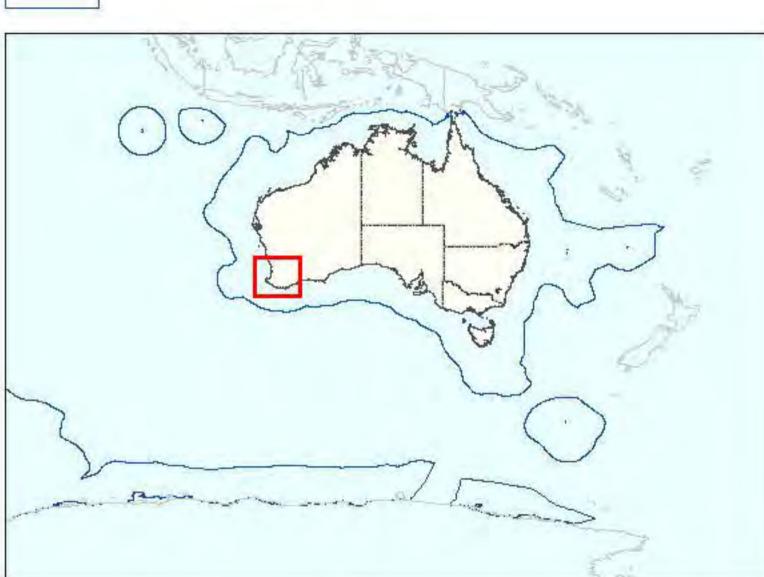
Species of National Environmental Significance, Map Summary Version 1 2014

Distribution

Species or species habitat likely to occur

Species or species habitat may occur

Commonwealth Marine Area



Produced by: Environmental Resources Information Network Contextual data source: Geoscience Australia (2006), Geodata Topo 250K Topographic Data

Indicative Map Only: This map has been compiled from datasets with a range of geographic scales and quality. Species distributions are indicative only and not to be used for local assessment. Local knowledge and information should be sought to confirm the presence of the species, or its habitat, at the location of interest.



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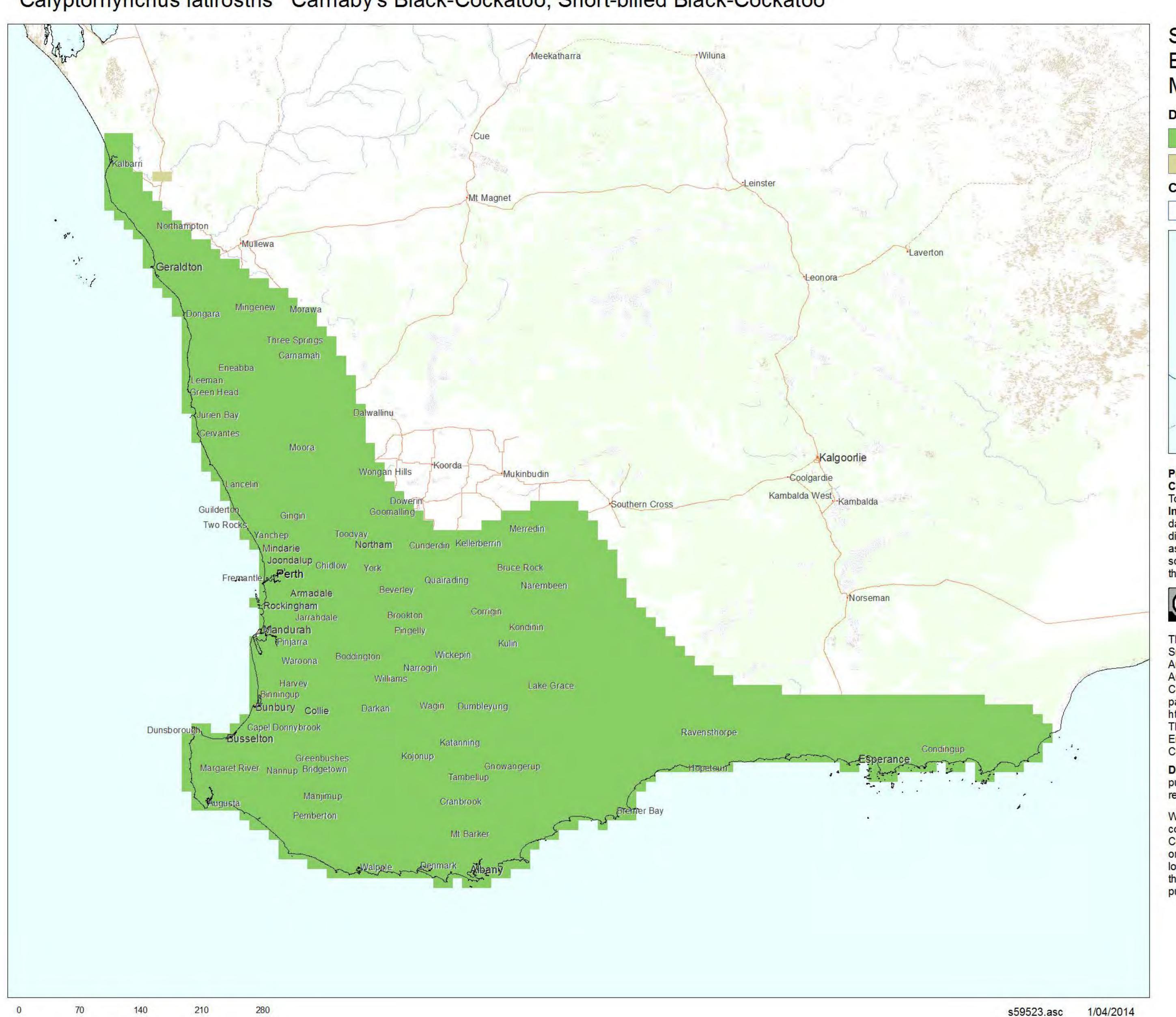
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Australian Government

Department of the Environment

Calyptorhynchus latirostris Carnaby's Black-Cockatoo, Short-billed Black-Cockatoo

Jkm



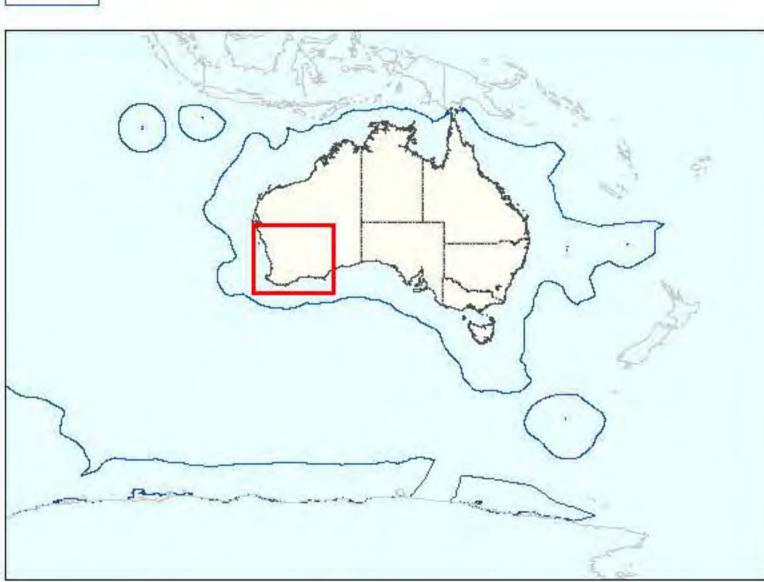
Species of National Environmental Significance, Map Summary Version 1 2014

Distribution

Species or species habitat likely to occur

Species or species habitat may occur

Commonwealth Marine Area



Produced by: Environmental Resources Information Network Contextual data source: Geoscience Australia (2006), Geodata Topo 250K Topographic Data

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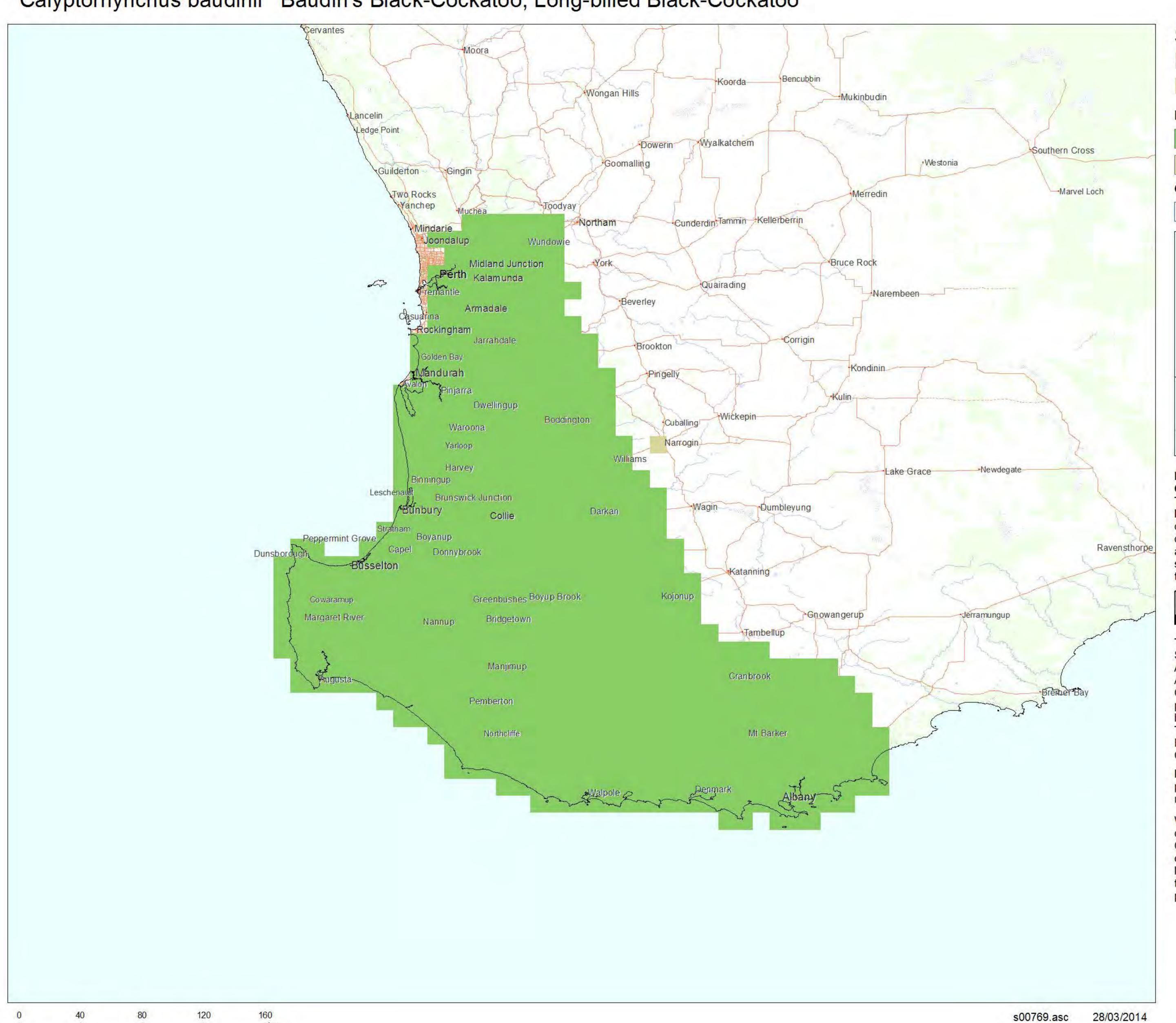
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Department of the Environment

Calyptorhynchus baudinii Baudin's Black-Cockatoo, Long-billed Black-Cockatoo

」km



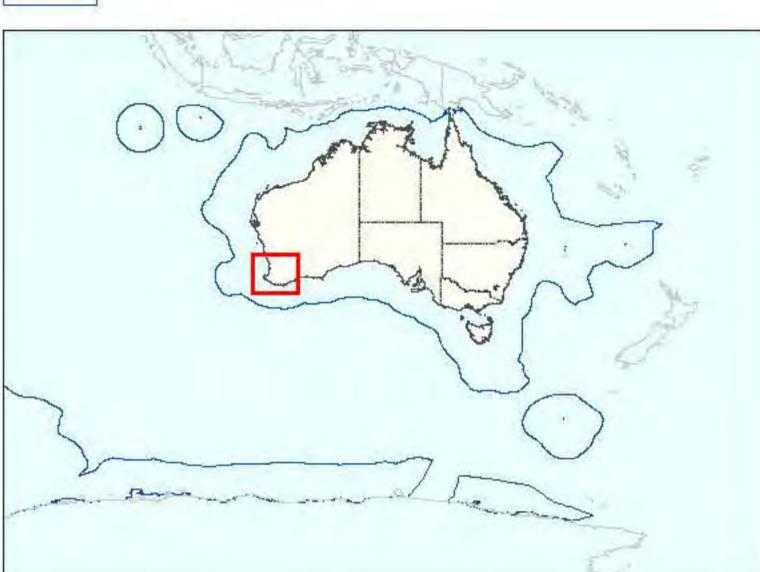
Species of National Environmental Significance, Map Summary Version 1 2014

Distribution

Species or species habitat likely to occur

Species or species habitat may occur

Commonwealth Marine Area



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APPENDIX E

Vegetation Condition Scale



CONDITION SCALE CODE	CONDITION SCALE
Р	Pristine (1)
	Pristine or nearly so, no obvious signs of disturbance
Е	Excellent (2)
	Vegetation structure intact, disturbance affecting individual species and
	weeds are non-aggressive species.
VG	Very Good (3)
	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.
G	Good (4)
	Vegetation structure significantly altered by very obvious signs of
	multiple disturbance. Retains basic vegetation structure or ability to
	regenerate it.
	For example, disturbance to vegetation structure caused by very frequent
	fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.
D	Degraded (5)
	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.
CD	Completely Degraded (6)
	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: Bush Forever Vegetation Condition Scale as developed by Keighery (1994) and summarized in Bush Forever (Government of Western Australia (2000b)



APPENDIX F

Flora Database Search Results



NatureMap Species Report

Created By Guest user on 15/04/2016

Kingdom Plantae

Current Names Only Yes

Core Datasets Only Yes

Method 'By Circle'

Centre 115° 47' 23" E,31° 45' 12" S

Buffer 5km

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1.	15466	Acacia applanata			
2.	3237	Acacia benthamii		P2	
3.	3262	Acacia cochlearis (Rigid Wattle)			
4.	3282	Acacia cyclops (Coastal Wattle)			
5.	11611	Acacia lasiocarpa var. lasiocarpa			
6.	15721	Acacia lasiocarpa var. sedifolia			
7.	17861	Acacia longifolia	Υ		
8.	17464	Acacia longifolia subsp. longifolia	Υ		
9.	15481	Acacia pulchella var. glaberrima			
10.	3525	Acacia rostellifera (Summer-scented Wattle)			
11.	3527	Acacia saligna (Orange Wattle, Kudjong)			
12.	30032	Acacia saligna subsp. saligna			
13.	3541	Acacia sessilis			
14.	3584	Acacia truncata			
15.	3602	Acacia willdenowiana (Grass Wattle)			
16.	17774	Acetosella vulgaris	Υ		
17.	11837	Adenanthos cygnorum subsp. cygnorum (Common Woollybush)			
18.	1790	Adenanthos meisneri			
19.	184	Aira caryophyllea (Silvery Hairgrass)	Υ		
20.	1056	Alexgeorgea nitens			
21.	1728	Allocasuarina fraseriana (Sheoak, Kondil)			
22.	2652	Alternanthera nodiflora (Common Joyweed)			
23.	2653	Alternanthera pungens (Khaki Weed)	Υ		
24.	6565	Alyxia buxifolia (Dysentery Bush)			
25.	25840	Amaranthus blitum	Υ		
26.		Amaranthus sp.			
27.	20184	Amphipogon laguroides subsp. laguroides			
28.	200	Amphipogon turbinatus			
29.	6311	Andersonia heterophylla			
30.	11471	Andersonia lehmanniana subsp. lehmanniana			
31.	1409	Anigozanthos humilis (Catspaw)			
32.	11434	Anigozanthos humilis subsp. humilis			
33.	1411	Anigozanthos manglesii (Mangles Kangaroo Paw, Kurulbrang)			
34.	11261	Anigozanthos manglesii subsp. manglesii			
35.	8595	Apium graveolens (Wild Celery)	Υ		
36.	7838	Arctotheca calendula (Cape Weed)	Υ		
37.	1264	Arnocrinum preissii			
38.	20283	Astartea scoparia			
39.	6323	Astroloma ciliatum (Candle Cranberry)			
40.	6334	Astroloma pallidum (Kick Bush)			
41.	6339	Astroloma xerophyllum			
42.	35317	Austrostipa mundula		P2	
43.	17246	Austrostipa nitida			
44.	17254	Austrostipa tenuifolia			
45.	16346	Bacopa monnieri	Υ		
46.		Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)		P1	
47.		Banksia attenuata (Slender Banksia, Piara)			
48.	1822	Banksia ilicifolia (Holly-leaved Banksia)			
49.		Banksia littoralis (Swamp Banksia, Pungura)			
50.		Banksia menziesii (Firewood Banksia)			
51.		Banksia sessilis var. cygnorum			
52.	32315	Barbula calycina			
				(C)	





	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
53.	741	Baumea articulata (Jointed Rush)			
54.	743	Baumea juncea (Bare Twigrush)			
55.		Baumea laxa			
56.		Baumea preissii			
57.		Beaufortia elegans Pillardiara francia (Flagant Brancus)			
58. 59.		Billardiera fraseri (Elegant Pronaya) Bolboschoenus caldwellii (Marsh Club-rush)			
60.		Boronia purdieana subsp. purdieana			
61.		Boronia ramosa subsp. anethifolia			
62.		Bossiaea eriocarpa (Common Brown Pea)			
63.		Brachyscome bellidioides			
64.	7878	Brachyscome iberidifolia			
65.	11187	Brassica barrelieri subsp. oxyrrhina (Smooth-stem Turnip)	Υ		
66.	2993	Brassica fruticulosa (Twiggy Turnip)	Υ		
67.	3000	Brassica tournefortii (Mediterranean Turnip)	Υ		
68.		Briza maxima (Blowfly Grass)	Υ		
69.		Briza minor (Shivery Grass)	Y		
70.		Bromus diandrus (Great Brome)	Y		
71. 72.		Bryum lanatum Purahardia canacata			
73.		Burchardia congesta Purchardia multiflora (Dwarf Burchardia)			
73. 74.		Burchardia multiflora (Dwarf Burchardia) Caesia micrantha (Pale Grass Lily)			
74. 75.		Caladenia arenicola			
76.		Caladenia flava (Cowslip Orchid)			
77.		Caladenia flava subsp. flava			
78.	1596	Caladenia huegelii (Grand Spider Orchid)		Т	
79.	1599	Caladenia latifolia (Pink Fairy Orchid)			
80.	15360	Caladenia longicauda subsp. borealis			
81.	15361	Caladenia longicauda subsp. calcigena			
82.		Caladenia reptans subsp. reptans			
83.		Calectasia narragara			
84.		Callistachys lanceolata (Wonnich)			
85.		Callitris preissii (Rottnest Island Pine, Maro)			
86. 87.		Calothamnus lateralis Calothamnus quadrifidus subsp. quadrifidus			
88.		Calothamnus sanguineus (Silky-leaved Blood flower, Pindak)			
89.		Calytrix fraseri (Pink Summer Calytrix)			
90.		Calytrix sapphirina			
91.	32338	Campylopus introflexus	Υ		
92.	3005	Cardamine hirsuta (Common Bittercress)	Υ		
93.		Cardamine sp.			
94.	18555	Cardamine sp. Jandakot (P. Luff s.n. 4/7/1969)	Υ		
95.		Carex appressa (Tall Sedge)			
96.		Carex divisa (Divided Sedge)	Y		
97.		Carex fascicularis (Tassel Sedge)			
98.		Carex thecata			
99. 100.		Cartonema philydroides Casuarina cumpinghamiana subsp. cumpinghamiana	Υ		
100.		Casuarina cunninghamiana subsp. cunninghamiana Catapodium rigidum (Rigid Fescue)	Y		
101.		Cenchrus ciliaris (Buffel Grass)	Y		
103.		Centella asiatica	'		
104.		Centrolepis drummondiana			
105.		Cerastium glomeratum (Mouse Ear Chickweed)	Υ		
106.	32462	Ceratodon purpureus subsp. convolutus			
107.	18156	Chamaecytisus palmensis (Tagasaste)	Υ		
108.		Chamelaucium sp.			
109.		Chamelaucium uncinatum (Geraldton Wax)			
110.		Chasmanthe floribunda (African Cornflag)	Y		
111.		Chenopodium glaucum (Glaucous Goosefoot)	Y		
112.		Cheropodium macrospermum Charditay microsodan	Y		
113.	17833	Chycopogon moloporthinus			
114. 115.	2020	Chrysopogon melanorrhinus Clematis pubescens (Common Clematis)			
116.		Comesperma calymega (Blue-spike Milkwort)			
117.		Conospermum acerosum subsp. acerosum			
118.		Conospermum canaliculatum subsp. canaliculatum			
119.		Conospermum incurvum (Plume Smokebush)			
120.		Conostephium minus (Pink-tipped Pearl flower)			
121.	6348	Conostephium pendulum (Pearl Flower)			
122.	6349	Conostephium preissii			
				Departmen	tof







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
123.	1418	Conostylis aculeata (Prickly Conostylis)			
124.	1423	Conostylis aurea (Golden Conostylis)			
125.		Conostylis bracteata		P3	
126.		Conostylis juncea			
127.		Conostylis setigera subsp. setigera Conostylis setigera subsp. setigera	V		
128. 129.		Conyza bonariensis (Flaxleaf Fleabane) Conyza sumatrensis	Y		
130.		Cortaderia selloana (Pampas Grass)	Y		
131.		Corymbia calophylla (Marri)	·		
132.		Cotula coronopifolia (Waterbuttons)	Υ		
133.		Crassula alata	Υ		
134.	3137	Crassula colorata (Dense Stonecrop)			
135.	3140	Crassula glomerata	Υ		
136.	3146	Crassula thunbergiana	Υ		
137.	15114	Cyanicula gemmata			
138.		Cynodon dactylon (Couch)	Υ		
139.		Cyperus involucratus	Υ		
140.		Cyperus tenuiflorus (Scaly Sedge)	Y		
141. 142.		Cyrtostylis huegelii			
143.		Dampiera linearis (Common Dampiera) Dasypogon bromeliifolius (Pineapple Bush)			
144.		Daucus glochidiatus (Australian Carrot)			
145.		Daviesia decurrens (Prickly Bitter-pea)			
146.		Daviesia divaricata (Marno)			
147.		Daviesia divaricata subsp. divaricata			
148.	11879	Daviesia hakeoides subsp. hakeoides			
149.	3824	Daviesia nudiflora			
150.	16585	Daviesia nudiflora subsp. nudiflora			
151.	3832	Daviesia physodes			
152.		Daviesia sp.			
153.		Daviesia triflora			
154.		Dianella revoluta (Blueberry Lily)	.,,		
155.		Dichondra micrantha Distriction approximation (Crash Crash)	Y		Υ
156. 157.		Digitaria sanguinalis (Crab Grass) Diplolaena angustifolia (Yanchep Rose)	Y		
158.		Diuris corymbosa			
159.		Diuris magnifica			
160.		Drakaea glyptodon (King-in-his-carriage)			
161.	3095	Drosera erythrorhiza (Red Ink Sundew)			
162.	3106	Drosera macrantha (Bridal Rainbow)			
163.	14298	Drosera macrantha subsp. macrantha			
164.	3109	Drosera menziesii (Pink Rainbow)			
165.		Drosera menziesii subsp. menziesii			
166.		Drosera menziesii subsp. penicillaris			
167.		Drosera omissa (Bright Sundew)			
168. 169.		Eccremidium pulchellum Ehrharta brevifolia var. cuspidata	Y		
170.		Ehrharta calycina (Perennial Veldt Grass)	Y		
171.		Ehrharta longiflora (Annual Veldt Grass)	Y		
172.		Elythranthera brunonis (Purple Enamel Orchid)	·		
173.		Epilobium ciliatum	Υ		
174.		Epilobium hirtigerum (Hairy Willow Herb)			
175.	14289	Epilobium tetragonum subsp. tetragonum	Υ		
176.	376	Eragrostis curvula (African Lovegrass)	Υ		
177.	14104	Eremaea pauciflora var. pauciflora			
178.		Erodium cicutarium (Common Storksbill)	Υ		
179.		Eryngium pinnatifidum subsp. pinnatifidum			
180.		Eucalyptus gomphocephala (Tuart, Duart)			
181. 182.		Eucalyptus marginata (Jarrah, Djara) Eucalyptus marginata subso marginata (Jarrah)			
182.		Eucalyptus marginata subsp. marginata (Jarrah) Eucalyptus rudis (Flooded Gum, Kulurda)			
184.		Eucalyptus todtiana (Coastal Blackbutt)			
185.		Euchilopsis linearis (Swamp Pea)			
186.		Euphorbia peplus (Petty Spurge)	Υ		
187.		Euphorbia terracina (Geraldton Carnation Weed)	Y		
188.		Fissidens tenellus			
189.	11571	Galenia pubescens var. pubescens	Υ		
190.	7976	Galinsoga parviflora (Potato Weed)	Υ		
191.	20475	Gastrolobium capitatum			
192.	20483	Gastrolobium linearifolium			
				Departmen	tof







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
193.	20482	Gastrolobium nervosum			
194.	16311	Gazania linearis	Υ		
195.		Gemmabryum pachythecum			
196.		Gemmabryum preissianum			
197.		Geranium solanderi (Native Geranium)			
198. 199.	1520	Gladiolus caryophyllaceus (Wild Gladiolus)	Y		
200.	33620	Gladiolus sp. Glischrocaryon angustifolium			
201.		Gomphocarpus physocarpus	Υ		
202.		Gompholobium scabrum	·		
203.		Gompholobium tomentosum (Hairy Yellow Pea)			
204.		Gonocarpus pithyoides			
205.	1982	Grevillea crithmifolia			
206.	15839	Grevillea preissii subsp. preissii			
207.	12824	Grevillea vestita subsp. vestita			
208.	5011	Guichenotia ledifolia			
209.	1468	Haemodorum laxum			
210.		Haemodorum paniculatum (Mardja)			
211.		Hakea costata (Ribbed Hakea)			
212.		Hakea lissocarpha (Honey Bush)			
213.		Hakea prostrata (Harsh Hakea)			
214.		Hakea trifurcata (Two-leaf Hakea)			
215.		Hardenbergia comptoniana (Native Wisteria)			
216.		Helichrysum luteoalbum (Jersey Cudweed)			
217.		Helminthotheca echioides	Y		
218.		Hemarthria uncinata (Matgrass)			
219.		Hemiandra incana			
220. 221.		Hemiandra pungens (Snakebush)			
221.		Hensmania turbinata Heteropogan centertus (Punch Speciariose)			
223.		Heteropogon contortus (Bunch Speargrass)			
223.		Hibbertia aurea Hibbertia cuneiformis (Cutleaf Hibbertia)			
225.		Hibbertia huegelii			
226.		Hibbertia hypericoides (Yellow Buttercups)			
227.		Hibbertia perfoliata			
228.		Hibbertia racemosa (Stalked Guinea Flower)			
229.		Hibbertia sericosepala			
230.		Hibbertia subvaginata			
231.	444	Holcus lanatus (Yorkshire Fog)	Υ		
232.	6222	Homalosciadium homalocarpum			
233.	449	Hordeum leporinum (Barley Grass)	Υ		
234.	3968	Hovea trisperma (Common Hovea)			
235.	5216	Hybanthus calycinus (Wild Violet)			
236.	5817	Hypocalymma angustifolium (White Myrtle, Kudjid)			
237.	5825	Hypocalymma robustum (Swan River Myrtle)			
238.	8086	Hypochaeris glabra (Smooth Catsear)	Υ		
239.	20200	Isolepis cernua var. setiformis			
240.	917	Isolepis marginata (Coarse Club-rush)			
241.		Isolepis producta			
242.		Isopogon sphaerocephalus (Drumstick Isopogon)			
243.		Isotropis cuneifolia (Granny Bonnets)			
244.		Jacksonia floribunda (Holly Pea)			
245.		Jacksonia furcellata (Grey Stinkwood)			
246.		Jacksonia sericea (Waldjumi)		P4	
247.		Jacksonia sternbergiana (Stinkwood, Kapur)			
248.		Juncus pallidus (Pale Rush)			
249.		Kennedia coccinea (Coral Vine)			
250. 251		Kennedia prostrata (Scarlet Runner)	Υ		
251. 252.		Lachenalia reflexa Lachnagrostis filiformis	1		
252.		Lactuca serriola (Prickly Lettuce)	Υ		
253. 254.		Lagenophora huegelii	1		
255.		Lagurus ovatus (Hare's Tail Grass)	Υ		
256.		Lasiopetalum membranaceum	1	P3	
257.		Latrobea tenella		. 5	
258.		Laxmannia ramosa subsp. ramosa			
259.		Laxmannia squarrosa			
260.		Lechenaultia biloba (Blue Leschenaultia)			
261.		Lechenaultia floribunda (Free-flowering Leschenaultia)			
201.					
262.	7580	Lechenaultia linarioides (Yellow Leschenaultia)			







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
263.	6880	Leonotis leonurus (Lion's Ear)	Υ		
264.	937	Lepidosperma longitudinale (Pithy Sword-sedge)			
265.		Lepidosperma persecans			
266.		Lepidosperma scabrum			
267.		Leptoceras menziesii			
268. 269.		Leptomeria empetriformis Leptomeria pauciflora (Sparse-flowered Currant Bush)			
270.		Lessertia frutescens	Υ		
271.		Leucopogon australis (Spiked Beard-heath)	'		
272.		Leucopogon insularis			
273.	6425	Leucopogon oxycedrus			
274.	6434	Leucopogon polymorphus			
275.	6436	Leucopogon propinquus			
276.		Leucopogon sp.			
277.		Leucopogon sp. Murdoch (M. Hislop 1037)			
278.		Leucopogon squarrosus subsp. squarrosus			
279.		Limonium sinuatum (Perennial Sea Lavender)	Υ		
280.		Liparophyllum capitatum			
281. 282.		Lobelia tenuior (Slender Lobelia) Lobelia tenuior subsp. dictyosperma			
283.		Lolium multiflorum (Italian Ryegrass)	Υ		
284.		Lomandra micrantha (Small-flower Mat-rush)			
285.		Lomandra nigricans			
286.		Lomandra preissii			
287.	1246	Lomandra suaveolens			
288.	10900	Lycopersicon esculentum	Υ		
289.	6456	Lysinema ciliatum (Curry Flower)			
290.	34736	Lysinema pentapetalum			
291.		Lythrum hyssopifolia (Lesser Loosestrife)	Υ		
292.		Macarthuria apetala			
293.		Macarthuria australis Macianthura approling		_	
294.		Marianthus paralius	V	Т	
295. 296.		Medicago polymorpha (Burr Medic) Meionectes brownii (Swamp Raspwort)	Υ		
297.		Melaleuca huegelii subsp. huegelii			
298.		Melaleuca incana (Grey Honeymyrtle)			
299.		Melaleuca preissiana (Moonah)			
300.		Melaleuca rhaphiophylla (Swamp Paperbark)			
301.	5964	Melaleuca seriata			
302.	18598	Melaleuca systena			
303.	5978	Melaleuca teretifolia (Banbar)			
304.		Melaleuca trichophylla			
305.		Melia azedarach (White Cedar)			
306.		Melilotus indicus	Υ		
307.		Mesomelaena graciliceps			
308. 309.		Mesomelaena pseudostygia Microlaena stipoides (Weeping Grass)			
310.		Microtis media subsp. media			
311.		Millotia myosotidifolia			
312.		Mirbelia spinosa			
313.	29418	Monoculus monstrosus	Υ		
314.	19179	Moraea flaccida (One-leaf Cape Tulip)	Υ		
315.	2415	Muehlenbeckia polybotrya			
316.	7289	Myoporum caprarioides (Slender Myoporum)			
317.		Myoporum insulare (Blueberry Tree, boobialla)			
318.		Myriophyllum tillaeoides			
319.		Nemesia strumosa	Υ		
320.		Nuytsia floribunda (Christmas Tree, Mudja)			
321. 322.		Oenothera drummondii subsp. drummondii Olea europaea (Olive)	Y Y		
323.		Olearia rudis (Rough Daisybush)	ī		
324.		Opercularia vaginata (Dog Weed)			
325.		Orobanche minor (Lesser Broomrape)	Υ		
326.		Orthrosanthus laxus var. laxus (Morning Iris)			
327.		Paspalum urvillei (Vasey Grass)	Υ		
328.	1550	Patersonia occidentalis (Purple Flag, Koma)			
329.	30472	Patersonia occidentalis var. occidentalis			
330.		Pelargonium capitatum (Rose Pelargonium)	Υ		
331.		Pentameris airoides (False Hairgrass)	Υ		
332.	16477	Pericalymma ellipticum var. ellipticum			
				Departmen	tof







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
333.	13911	Persicaria decipiens			
334.	16984	Persicaria lapathifolia	Υ		
335.		Persoonia saccata (Snottygobble)			
336.		Petrophile axillaris			
337.		Petrophile brevifolia			
338. 339.		Petrophile serruriae Philathers priceto (Penner and Salt)			
340.		Philotheca spicata (Pepper and Salt) Phlebocarya ciliata			
340.		Phyla nodiflora var. nodiflora	Υ		
342.		Phylanthus calycinus (False Boronia)			
343.		Phyllanthus tenellus	Υ		
344.		Phytolacca octandra (Red Ink Plant)	Υ		
345.	5232	Pimelea argentea (Silvery Leaved Pimelea)			
346.	5237	Pimelea calcicola		P3	
347.	5244	Pimelea floribunda			
348.	5254	Pimelea leucantha			
349.	5268	Pimelea sulphurea (Yellow Banjine)			
350.	18352	Pithocarpa pulchella var. melanostigma			
351.	18353	Pithocarpa pulchella var. pulchella			
352.	19745	Pittosporum ligustrifolium			
353.		Pittosporum multiflorum			
354.		Plantago major (Greater Plantain)	Υ		
355.		Poa annua (Winter Grass)	Υ		
356.		Podolepis gracilis (Slender Podolepis)			
357.		Podolepis nutans (Nodding Podolepis)			
358.		Podotheca chrysantha (Yellow Podotheca)			
359.		Podotheca gnaphalioides (Golden Long-heads)	.,		
360.		Polypogon monspeliensis (Annual Beardgrass)	Υ		
361.		Poranthera ericoides (Heath Poranthera)			
362.		Poranthera microphylla (Small Poranthera)			
363. 364.		Prasophyllum fimbria (Fringed Leek Orchid)			
365.		Prasophyllum hians (Yawning Leek Orchid) Pteridium esculentum subsp. esculentum			
366.	41031	Pterostylis aff. nana			
367.	2718	Ptilotus drummondii (Narrowleaf Mulla Mulla)			
368.		Ptilotus drummondii var. drummondii (Pussytail)			
369.		Ptilotus manglesii (Pom Poms, Mulamula)			
370.		Ptilotus sericostachyus subsp. sericostachyus			
371.		Pultenaea reticulata			
372.	16367	Pyrorchis nigricans (Red beaks, Elephants ears)			
373.		Racopilum cuspidigerum var. convolutaceum			
374.	31537	Ranunculus sceleratus	Υ		Υ
375.	3061	Raphanus raphanistrum (Wild Radish)	Υ		
376.	6012	Regelia ciliata			
377.	6014	Regelia inops			
378.	18547	Rhadinothamnus anceps			
379.	4703	Ricinocarpos tuberculatus			
380.	19942	Ricinocarpos undulatus			
381.	1556	Romulea rosea (Guildford Grass)	Υ		
382.	44608	Rosulabryum billarderii			
383.		Rytidosperma occidentale			
384.		Sagina apetala (Annual Pearlwort)	Υ		
385.		Scaevola canescens (Grey Scaevola)			
386.		Scaevola repens			
387.		Scaevola repens var. angustifolia			
388.		Scaevola thesioides subsp. thesioides			
389.		Schangeplactus velidus (Lake Club mah)	Υ		
390.		Schoenoplectus validus (Lake Club-rush)			
391. 392.		Schoenus curvifolius Schoenus grandiflorus (Large Flowered Bogrush)			
392. 393.		Schoenus grandillorus (Large Flowered Bogrush) Schoenus subbarbatus (Bearded Bog-rush)			
393. 394.		Schoenus subfascicularis Schoenus subfascicularis			
395.		Senecio vulgaris (Common Groundsel)	Υ		
396.		Silene gallica (French Catchfly)	Y		
390.		Siloxerus humifusus (Procumbent Siloxerus)			
398.	3220	Solanum lycopersicum			
399.	7022	Solanum nigrum (Black Berry Nightshade)	Υ		
399. 400.	7022	Solanum nigrum (Black Berry Nightshade) Solanum physalifolium var. nitidibaccatum	Y		
			Y		
400.	7037	Solanum physalifolium var. nitidibaccatum	Y		







	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
403.	1312	Sowerbaea laxiflora (Purple Tassels)			
404.		Stackhousia huegelii			
405.		Stellaria media (Chickweed)	Υ		
406.		Stenanthemum notiale subsp. chamelum			
407.		Stenopetalum gracile			
408.		Stirlingia latifolia (Blueboy)			
409.		Stylidium adpressum (Trigger-on-stilts)			
410.		Stylidium araeophyllum (Stilt Walker)			
411.		Stylidium brunonianum (Pink Fountain Triggerplant)			
412.		Stylidium cygnorum			
413.		Stylidium diuroides subsp. diuroides			
414.		Stylidium neurophyllum (Coastal Plain Triggerplant)			
415.		Stylidium paludicola		P3	
416.		Stylidium piliferum (Common Butterfly Triggerplant)			
417.		Synaphea spinulosa subsp. spinulosa			
418.		Syntrichia antarctica			
419.		Syntrichia pagorum			
420.		Taraxacum khatoonae	Y		
421.		Templetonia retusa (Cockies Tongues)			
422.		Tersonia cyathiflora (Button Creeper)			
423.		Tetragonia decumbens (Sea Spinach)	Y		
424.		Tetragonia tetragonioides (New Zealand Spinach)			
425.		Tetrapanax papyrifer	Υ		Y
426.		Tetraria octandra			
427.		Tetraria sp. Chandala (G.J. Keighery 17055)		P2	
428.		Tetratheca hirsuta (Black Eyed Susan)			
429.		Thelymitra campanulata (Shirt Orchid)			
430.		Thelymitra fuscolutea (Chestnut Sun Orchid)			
431.		Thelymitra variegata (Queen of Sheba)		P2	
432.		Thomasia triphylla			
433.		Trachymene pilosa (Native Parsnip)			
434.		Trichostomum eckelianum			
435.		Trifolium arvense (Hare's Foot Clover)	Υ		
436.		Trifolium hirtum (Rose Clover)	Y		
437.		Trifolium resupinatum var. resupinatum	Y		
438.		Trymalium ledifolium var. ledifolium			
439.		Ursinia anthemoides (Ursinia)	Y		
440.		Utricularia australis			
441.		Utricularia dichotoma (Fairy Aprons)			
442.		Utricularia gibba			
443.		Utricularia volubilis (Twining Bladderwort)	v		
444.		Vellereophyton dealbatum (White Cudweed)	Υ		
445.		Verticordia drummondii (Drummond's Featherflower)			
446.		Verticordia nitens (Morrison Featherflower, Kodjeningara)			
447.		Verticordia ovalifolia Vicio estiva (Common Vetch)	V		
448.		Vicia sativa (Common Vetch)	Y		
449. 450		Vicia sativa subsp. nigra Vulpia fasciculata	Y		
450. 451		·	Y		
451. 452		Wahlenbergia capensis (Cape Bluebell) Wahlenbergia gracilenta (Annual Bluebell)	Y		
452. 453		Wahlenbergia gracilenta (Annual Bluebell) Wahlenbergia multicaulis			
453. 454	1300	•			
454. 455.	อวอว	Wahlenbergia sp. Waitzia suaveolens (Fragrant Waitzia)			
		Washingtonia filifera	Υ		
456. 457		•	Y		
457. 458		Wurmbea pygmaea Yanthorrhoaa praissii (Grass tree Palga)			
458. 450		Xanthorrhoea preissii (Grass tree, Palga) Vanthoeia huggelii			
459.		Xanthosia huegelii Xerochrysum bracteatum			
460					
460. 461.		Xylomelum occidentale (Woody Pear, Djandin)			

¹ 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.





Conservation Codes

T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority
2 - Priority
3 - Priority
4 - Priority
5 - Priority
5 - Priority
6 - Priority
7 - Priority
7 - Priority
8 - Priority
9 - Priority
9



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: 14/04/16 14:54:05

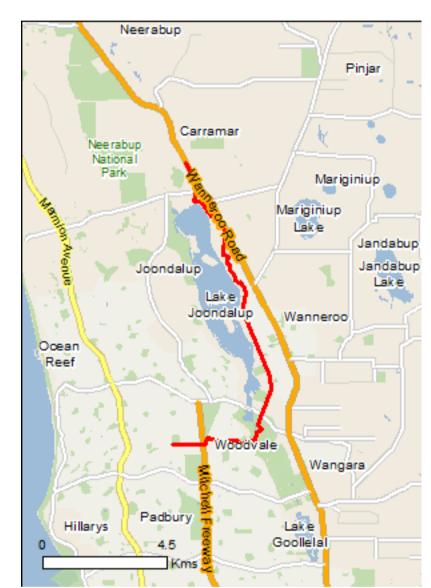
Summary

Details

Matters of NES
Other Matters Protected by the EPBC Act
Extra Information

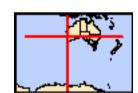
Caveat

<u>Acknowledgements</u>



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Coordinates
Buffer: 0.02Km



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

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:	None
Listed Threatened Species:	11
Listed Migratory Species:	9

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:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	14
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Commonwealth Reserves Marine:	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:	3
Regional Forest Agreements:	None
Invasive Species:	41
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threetened Cressins		
Listed Threatened Species	Ctatus	[Resource Information]
Name Birds	Status	Type of Presence
Calyptorhynchus latirostris		
Carnaby's Black-Cockatoo, Short-billed Black-	Endangered	Species or species habitat
Cockatoo [59523]	Lindangerea	likely to occur within area
		interf to occur minim area
Leipoa ocellata		
Malleefowl [934]	Vulnerable	Species or species habitat
		likely to occur within area
Rostratula australis		
Australian Painted Snipe [77037]	Endangered	Species or species habitat
	aago.oa	may occur within area
		·
Mammals		
Dasyurus geoffroii	N/ 1 1 1	
Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat
		likely to occur within area
Plants		
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	Endangered	Species or species habitat
Spider-orchid [7309]	Litangerea	likely to occur within area
		interf to occur within area
Darwinia foetida		
Muchea Bell [83190]	Critically Endangered	Species or species habitat
		may occur within area
Diuris micrantha		
Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat
Divani Doo oroma [occopy]	Valiforable	likely to occur within area
		•
<u>Diuris purdiei</u>		
Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat
		may occur within area
Drakaea elastica		
Glossy-leafed Hammer-orchid, Praying Virgin [16753]	Endangered	Species or species habitat
	3	likely to occur within area
		•
<u>Drakaea micrantha</u>		
Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat
		may occur within area
Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on t	he EPBC Act - Threatened	d Species list.
Name	Threatened	Type of Presence

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat
		likely to occur within area
Migratory Terrestrial Species		
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
Migratory Wetlands Species		
Ardea alba		
Great Egret, White Egret [59541]		Species or species habitat 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 ruficollis		
Red-necked Stint [860]		Species or species habitat
		known to occur within area
Pandion haliaetus		
Osprey [952]		Species or species habitat
		likely to occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]		Species or species habitat
,		known to occur within area
Other Matters Protected by the EPBC	Act	
Listed Marine Species		[Resource Information
* Species is listed under a different scientific nar	ne on the EPRC Act - Three	
		atoriou opolico list.

Species is listed under a different scientific r	ame on the EPBC Act - Threa	itened Species list.
Name	Threatened	Type of Presence
Birds		
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<u>Ardea alba</u>		
Great Egret, White Egret [59541]		Species or species habitat 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 ruficollis		
Red-necked Stint [860]		Species or species habitat known to occur within area
Haliaeetus leucogaster		

Species or species

White-bellied Sea-Eagle [943]

Mama	Threatened	Turns of Discourses
Name	Threatened	Type of Presence
		habitat known to occur within area
Himantopus himantopus		within area
Black-winged Stilt [870]		Species or species habitat
		known to occur within area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat
ranbow bee eater [or o]		may occur within area
		·
Motacilla cinerea		On saise an energies babitat
Grey Wagtail [642]		Species or species habitat may occur within area
		may occur within area
Pandion haliaetus		
Osprey [952]		Species or species habitat
		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
		may occur within area
The base was been under all the		
Thinornis rubricollis Hooded Player [50510]		Species or species habitat
Hooded Plover [59510]		Species or species habitat may occur within area
		may coom mann area
Tringa nebularia		
Common Greenshank, Greenshank [832]		Species or species habitat

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Lake Joondalup	WA
Unnamed WA21176	WA
Woodvale Nature Reserve	WA

known to occur within area

Invasive Species [Resource Information]

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

Name	Status	Type of Presence
Birds	Otatus	Type of Frescrice
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

Name	Status	Type of Presence
Columba livia		habitat likely to occur within area
Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Passer domesticus		
House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus		
Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
Streptopelia chinensis		Species or species habitat
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
		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat
		likely to occur within area
Mammals Bos taurus		
Domestic Cattle [16]		Species or species habitat likely to occur within area
		incry 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		
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine,		Species or species habitat
Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]		likely to occur within area
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern,		Species or species habitat
Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Asparagus asparagoides		
Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's		Species or species habitat
Smilax, Smilax Asparagus [22473]		likely to occur within area
Asparagus declinatus		
Bridal Veil, Bridal Veil Creeper, Pale Berry Asparagus		Species or species habitat
Fern, Asparagus Fern, South African Creeper [66908]		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		On saise an anasias habitat
Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
		may occur within area
Chrysanthemoides monilifera		
Bitou Bush, Boneseed [18983]		Species or species habitat
		may occur within area
Chrysanthemoides monilifera subsp. monilifera		Species or species habitat
Boneseed [16905]		Species or species habitat likely to occur within area
		intory 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-		Species or species habitat
leaf Lantana, Pink Flowered Lantana, Red Flowered		likely to occur within area
Lantana, Red-Flowered Sage, White Sage, Wild Sage		•
[10892]		
Lycium ferocissimum		On saise an anasia a babitat
African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
		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
Pine [20780]		may occur within area
Protasparagus densiflorus		
Asparagus Fern, Plume Asparagus [5015]		Species or species habitat
		likely to occur within area
Drotooporogue plumoeue		
Protasparagus plumosus Climbing Asparagus forp, Forpy Asparagus [11747]		Species or species habitat
Climbing Asparagus-fern, Ferny Asparagus [11747]		Species or species habitat likely to occur within area
		intoly to occur within area
Rubus fruticosus aggregate		
Blackberry, European Blackberry [68406]		Species or species habitat
		likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x	reichardtii	
Willows except Weeping Willow, Pussy Willow and		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

Name	Status	Type of Presence
Tamarix aphylla		71
Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk,		Species or species habitat
Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		likely to occur within area
Reptiles		
Hemidactylus frenatus		
Asian House Gecko [1708]		Species or species habitat likely to occur within area
Ramphotyphlops braminus		
Flowerpot Blind Snake, Brahminy Blind Snake, Cacing Besi [1258]		Species or species habitat likely to occur within area
Nationally Important Wetlands		[Resource Information]
Name		State
Joondalup Lake		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.

For species where the distributions are well known, maps are digitised from sources such as recovery plans and detailed habitat studies. Where appropriate, core breeding, foraging and roosting areas are indicated under 'type of presence'. For species whose distributions are less well known, point locations are collated from government wildlife authorities, museums, and non-government organisations; bioclimatic distribution models are generated and these validated by experts. In some cases, the distribution maps are based solely on expert knowledge.

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

 $-31.786693\ 115.771205, -31.786693\ 115.781848, -31.784796\ 115.782449, -31.785817\ 115.786912, -31.785525\ 115.79232, -31.786984\ 115.793264, -31.785671\ 115.79601, -31.785598\ 115.798242, -31.783336\ 115.798414, -31.782607\ 115.800216, -31.781002\ 115.798929, -31.771443\ 115.80322, -31.767868\ 115.802619, -31.75028\ 115.794036, -31.748528\ 115.794208, -31.746922\ 115.794551, -31.745024\ 115.795066, -31.743638\ 115.794637, -31.741813\ 115.793436, -31.741959\ 115.792835, -31.741229\ 115.791719, -31.740499\ 115.791633, -31.739623\ 115.791204, -31.738674\ 115.790002, -31.736703\ 115.788801, -31.736265\ 115.789058, -31.734805\ 115.789401, -31.734075\ 115.787857, -31.73298\ 115.787685, -31.732615\ 115.787857, -31.728819\ 115.788715, -31.724293\ 115.78614, -31.723636\ 115.783565, -31.719474\ 115.780303, -31.719547\ 115.778243, -31.715459\ 115.779273, -31.708814\ 115.775325, -31.708814\ 115.775325$

Acknowledgements

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- -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
- -Parks and Wildlife Commission NT, Northern Territory Government
- -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, Atherton and Canberra
- -University of New England
- -Ocean Biogeographic Information System
- -Australian Government, Department of Defence
- Forestry Corporation, NSW
- -Geoscience Australia
- -CSIRO
- -Other groups and individuals

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

Please feel free to provide feedback via the Contact Us page.

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APPENDIX G

Fauna Database Search Results