

# **EPBC Act Protected Matters Report**

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 02-Feb-2023

**Summary** 

**Details** 

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

**Caveat** 

**Acknowledgements** 

# **Summary**

#### Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	10
Listed Threatened Species:	59
Listed Migratory Species:	14

### 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 <a href="https://www.dcceew.gov.au/parks-heritage/heritage">https://www.dcceew.gov.au/parks-heritage/heritage</a>

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 Lands:	9
Commonwealth Heritage Places:	1
Listed Marine Species:	20
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

#### **Extra Information**

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

State and Territory Reserves:	2
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	11
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	1
Geological and Bioregional Assessments:	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.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text Buffer Status	
Castlereagh Scribbly Gum and Agnes Banks Woodlands of the Sydney Basin Bioregion	Endangered	Community may occurIn feature area within area	
Coastal Swamp Sclerophyll Forest of New South Wales and South East Queensland	Endangered	Community may occurIn feature area within area	
Coastal Upland Swamps in the Sydney Basin Bioregion	Endangered	Community may occurIn buffer area only within area	
Cooks River/Castlereagh Ironbark Forest of the Sydney Basin Bioregion	Critically Endangered	Community may occurIn feature area within area	
Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest	Critically Endangered	Community likely to In feature area occur within area	
Elderslie Banksia Scrub Forest in the Sydney Basin Bioregion	Critically Endangered	Community may occurIn buffer area only within area	
River-flat eucalypt forest on coastal floodplains of southern New South Wales and eastern Victoria	Critically Endangered	Community may occurIn feature area within area	
Shale Sandstone Transition Forest of the Sydney Basin Bioregion	Critically Endangered	Community likely to In feature area occur within area	
Upland Basalt Eucalypt Forests of the Sydney Basin Bioregion	Endangered	Community may occurln buffer area only within area	
Western Sydney Dry Rainforest and Moist Woodland on Shale	Critically Endangered	Community likely to In feature area occur within area	

### **Listed Threatened Species**

[ Resource Information ]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
RIRD			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Dasyornis brachypterus Eastern Bristlebird [533]	Endangered	Species or species habitat may occur within area	In buffer area only
Erythrotriorchis radiatus Red Goshawk [942]	Vulnerable	Species or species habitat may occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat known to occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
FISH			
Macquaria australasica Macquarie Perch [66632]	Endangered	Species or species habitat known to occur within area	In feature area
FROG			
Heleioporus australiacus			
Giant Burrowing Frog [1973]	Vulnerable	Species or species habitat known to occur within area	In feature area
Litoria aurea Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Litoria littlejohni</u> Littlejohn's Tree Frog, Heath Frog [64733]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<u>Litoria watsoni</u> Watson's Tree Frog [91509]	Endangered	Species or species habitat may occur within area	In buffer area only
Mixophyes balbus Stuttering Frog, Southern Barred Frog (in Victoria) [1942]	Vulnerable	Species or species habitat may occur within area	In buffer area only
INSECT			
Austrocordulia leonardi Sydney Hawk Dragonfly [84741]	Endangered	Species or species habitat known to occur within area	In feature area
MAMMAL			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Vulnerable	Species or species habitat known to occur within area	In feature area
Dasyurus maculatus maculatus (SE main Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	nland population) Endangered	Species or species habitat known to occur within area	In feature area
Isoodon obesulus obesulus Southern Brown Bandicoot (eastern), Southern Brown Bandicoot (southeastern) [68050]	Endangered	Species or species habitat may occur within area	In feature area
Notamacropus parma Parma Wallaby [89289]	Vulnerable	Species or species habitat may occur within area	In feature area
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat likely to occur within area	
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat may occur within area	In feature area
Phascolarctos cinereus (combined popul	ations of Qld, NSW and th	ne ACT)	
Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
PLANT			
Acacia bynoeana Bynoe's Wattle, Tiny Wattle [8575]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Acacia pubescens  Downy Wattle, Hairy Stemmed Wattle [18800]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Allocasuarina glareicola [21932]	Endangered	Species or species habitat may occur within area	In feature area
Caladenia tessellata Thick-lipped Spider-orchid, Daddy Longlegs [2119]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Cryptostylis hunteriana Leafless Tongue-orchid [19533]	Vulnerable	Species or species habitat may occur within area	In feature area
Cynanchum elegans White-flowered Wax Plant [12533]	Endangered	Species or species habitat likely to occur within area	In feature area
Genoplesium baueri Yellow Gnat-orchid, Bauer's Midge Orchid, Brittle Midge Orchid [7528]	Endangered	Species or species habitat likely to occur within area	In feature area
Grevillea parviflora subsp. parviflora Small-flower Grevillea [64910]	Vulnerable	Species or species habitat known to occur within area	In feature area
Haloragis exalata subsp. exalata Wingless Raspwort, Square Raspwort [24636]	Vulnerable	Species or species habitat may occur within area	In feature area
Leucopogon exolasius Woronora Beard-heath [14251]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Melaleuca deanei Deane's Melaleuca [5818]	Vulnerable	Species or species habitat known to occur within area	In feature area
Persicaria elatior Knotweed, Tall Knotweed [5831]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Persoonia bargoensis Bargo Geebung [56267]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Persoonia hirsuta Hairy Geebung, Hairy Persoonia [19006]	Endangered	Species or species habitat known to occur within area	In feature area
Persoonia nutans Nodding Geebung [18119]	Endangered	Species or species habitat may occur within area	In feature area
Pimelea curviflora var. curviflora [4182]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pimelea spicata Spiked Rice-flower [20834]	Endangered	Species or species habitat likely to occur within area	In feature area
Pomaderris brunnea Rufous Pomaderris, Brown Pomaderris [16845]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pomaderris cotoneaster Cotoneaster Pomaderris [2043]	Endangered	Species or species habitat may occur within area	In feature area
Pterostylis saxicola Sydney Plains Greenhood [64537]	Endangered	Species or species habitat likely to occur within area	In feature area
Pultenaea aristata [18062]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Rhizanthella slateri Eastern Underground Orchid [11768]	Endangered	Species or species habitat may occur within area	In feature area
Rhodamnia rubescens Scrub Turpentine, Brown Malletwood [15763]	Critically Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Syzygium paniculatum  Magenta Lilly Pilly, Magenta Cherry, Daguba, Scrub Cherry, Creek Lilly Pilly, Brush Cherry [20307]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thelymitra kangaloonica Kangaloon Sun Orchid [81861]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
Delma impar			
Striped Legless Lizard, Striped Snake- lizard [1649]	Vulnerable	Species or species habitat may occur within area	In feature area
Hoplocephalus bungaroides Broad-headed Snake [1182]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Listed Migratory Species		[ Res	source Information ]
Lioted imgratery operate		<u>[ 1 (0 (</u>	<u>scarco imormation j</u>
Scientific Name	Threatened Category	Presence Text	Buffer Status
	Threatened Category	•	-
Scientific Name	Threatened Category	•	-
Scientific Name  Migratory Marine Birds  Apus pacificus  Fork-tailed Swift [678]	Threatened Category	Presence Text  Species or species habitat likely to occur	Buffer Status
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678]  Migratory Terrestrial Species	Threatened Category	Presence Text  Species or species habitat likely to occur	Buffer Status
Scientific Name  Migratory Marine Birds  Apus pacificus  Fork-tailed Swift [678]	Threatened Category	Presence Text  Species or species habitat likely to occur	Buffer Status
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678]  Migratory Terrestrial Species Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo	Threatened Category  Vulnerable	Species or species habitat likely to occur within area  Species or species habitat may occur within area	Buffer Status In feature area
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678]  Migratory Terrestrial Species Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]  Hirundapus caudacutus		Species or species habitat likely to occur within area  Species or species habitat may occur	In feature area  In feature area
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678]  Migratory Terrestrial Species Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]  Hirundapus caudacutus		Species or species habitat likely to occur within area  Species or species habitat may occur within area  Species or species habitat known to	In feature area  In feature area
Scientific Name Migratory Marine Birds Apus pacificus Fork-tailed Swift [678]  Migratory Terrestrial Species Cuculus optatus Oriental Cuckoo, Horsfield's Cuckoo [86651]  Hirundapus caudacutus White-throated Needletail [682]		Species or species habitat likely to occur within area  Species or species habitat may occur within area  Species or species habitat known to	In feature area  In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area	In feature area
<u>Calidris ferruginea</u>			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Calidris melanotos			
Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii			
Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area	In feature area
Numenius madagascariensis			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Tringa nebularia			
Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area	In feature area

# Other Matters Protected by the EPBC Act

#### Commonwealth Lands

### [ Resource Information ]

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

Commonwealth Land Name

Communications, Information Technology and the Arts - Telstra Corporation Limited

**Buffer Status** 

Commonwealth Land Name		State	Buffer Status
Commonwealth Land - Australian Teleco	on [12199]NSW	In buffer area only	
Commonwealth Land - Australian Teleco	on [12156]NSW	In buffer area only	
Commonwealth Land - Australian Teleco	on [12119]NSW	In buffer area only	
Commonwealth Land - Telstra Corporation	NSW	In buffer area only	
Commonwealth Land - Telstra Corporation Limited [12200] NSW			In buffer area only
Unknown			
Commonwealth Land - [12918]		NSW	In buffer area only
Commonwealth Land - [15679]		NSW	In buffer area only
Commonwealth Land - [15678]		NSW	In buffer area only
Commonwealth Land - [15677]		NSW	In buffer area only
Commonwealth Heritage Places		ſ Da	esource Information 1
Name	State	Status	Buffer Status
Indigenous	State	Status	Duller Status
Cubbitch Barta National Estate Area	NSW	Listed place	In buffer area only
Listed Marine Species		[ Re	esource Information 1
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird	3 ,		
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occuwithin area overfly marine area	In feature area r
Bubulcus ibis as Ardea ibis			
Cattle Egret [66521]		Species or species habitat may occur within area overfly	In feature area

Species or species habitat known to

occur within area

In feature area

Calidris acuminata

Sharp-tailed Sandpiper [874]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Chalcites osculans as Chrysococcyx osc	<u>culans</u>		
Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Gallinago hardwickii			
Latham's Snipe, Japanese Snipe [863]		Species or species habitat known to occur within area overfly marine area	In feature area
Haliaeetus leucogaster			
White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus			
White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
<u>Lathamus discolor</u>			
Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Merops ornatus			
Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis			
Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Motacilla flava			
Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca			
Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysostoma			
Blue-winged Parrot [726]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Rhipidura rufifrons			
Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Poetratula quetralie de Poetratula hangh	alancia (cancu lata)		
Rostratula australis as Rostratula bengha Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area overfly marine area	In feature area

## Extra Information

State and Territory Reserves			[ Resource Information ]
Protected Area Name	Reserve Type	State	Buffer Status
Dharawal	State Conservation Area	a NSW	In buffer area only
Dharawal	National Park	NSW	In buffer area only

EPBC Act Referrals		[ Resource Information ]
Title of referral	Reference	Referral Outcome Assessment Status Buffer Status
Controlled action		

Title of referral  Controlled action	Reference	Referral Outcome	Assessment Statu	s Buffer Status
Construction of a ventilation shaft and access Road to service underground operations	2010/5722	Controlled Action	Post-Approval	In buffer area only
Extension of Underground Mining Operations at The Bulli Seam Operations	2010/5350	Controlled Action	Post-Approval	In feature area
Mt Gilead residential development, NSW	2015/7599	Controlled Action	Post-Approval	In buffer area only
Mt Gilead Stage 2 Residential  Development	2019/8587	Controlled Action	Further Information Request	n In feature area
Residential Development, St Helens Park, NSW	2009/5015	Controlled Action	Further Information Request	n In buffer area only
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Realignment of Link Road and residential development adjacent to Camden Bypass	2005/2181	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manne	er)			
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Referral decision				
Northern Expansion of the Camden Gas Project	2012/6638	Referral Decision	Completed	In buffer area only
Residential development, Lot 61 off Appin Road, Mt Gilead	2016/7830	Referral Decision	Completed	In buffer area only
Bioregional Assessments				
SubRegion	BioRegion	Websit	e E	uffer Status
Sydney	Sydney Basir			n feature area

#### Caveat

#### 1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

#### 2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

#### 3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

#### 4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

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

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

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

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

# Acknowledgements

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

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

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

# Please feel free to provide feedback via the **Contact us** page.

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