

TECHNICAL MEMORANDUM

Likelihood of occurrence

EPBC Act Referral

New Youth Detention Facility

PROJECT NUMBER	EP23-053(09)	DOC. NO.	EP23-053(09)—015 FIK
PROJECT NAME	New Youth Detention Facility	CLIENT	Department of Finance
AUTHOR	FIK	REVIEWER	
VERSION	1	DATE	24/10/2024

1. INTRODUCTION

The Department of Finance (the Proponent) proposes to progress development of the New Youth Detention Facility (referred to herein as the Proposed Action). The proponent is referring the Proposed Action to the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

This technical memorandum provides a summary of the Matters of National Environmental Significance (MNES) relevant to the Proposed Action through a likelihood of occurrence assessment.

2. METHODS

As part of preparations for the ecological surveys completed over the Project Area, a search was conducted for MNES that may occur within a 10 km radius using the Protected Matters Search Tool (PMST) on 6 July 2024. An updated search using the PMST was conducted on 29 July 2024 as well as 24 October 2024 to ensure all MNES relevant to the Proposed Action were able to be addressed as part of the EPBC Act referral process. The most recent PMST report has been included as **Attachment A**.

The information contained within the following terrestrial flora and vegetation and fauna assessments completed within the Project Area have informed this likelihood of occurrence:

- *Detailed Flora and Vegetation Assessment - Lot 500 and Part 501 Warton Road, Canning Vale, Version 1* (Emerge Associates 2024).
- *Basic Fauna and Targeted Black Cockatoo Assessment - Parts Lot 500 and 501 Warton Road, Canning Vale, Version 1* (Emerge Associates 2023).

To determine likelihood of occurrence, information relating to the MNES identified using the most recent PMST was reviewed. This has included consideration of the species profiles, characteristics/habitat preferences, management plans, recovery plans as well as historic and the recent biological surveys indicated above. Species information was compared to existing environmental data available for the Project Area, from various public datasets and the ecological surveys undertaken within the Project Area. This included consideration of factors such as geomorphology, soils, vegetation types, and historic land use, to understand the potential for MNES to occur.

3. MNES RELEVANCE

The MNES relevance assessment is based on a search of the Commonwealth's EPBC PMST which identified MNES that could occur within a 10 km radius of the Project Area. A summary of the MNES relevant to the Project Area is provided based on the most recent likelihood of occurrence outcomes are outlined in **Table 1** below.

Table 1: Summary of MNES relevant to the Project Area.

Matters of National Environmental Significance	MNES identified within 10 km of the Project Area based on PMST	Relevance to the Project Area
World Heritage areas	There are no World Heritage areas in the vicinity of the Project Area.	Not relevant.
National Heritage Places	There are no National Heritage places in the vicinity of the Project Area.	Not relevant.
Wetlands of international importance (listed under the Ramsar convention)	Forrestdale Lakes occurs approximately 5 km south of the Project Area. Thomsons Lake occurs approximately 9 km south-west of the Project Area. The Peel-Yalgorup system occurs approximately 54 km south of the Project Area.	Not relevant.
Listed Threatened species	<ul style="list-style-type: none"> Sixty-eight (68) listed Threatened Species are identified within a 10 km buffer surrounding the Proposal area Thirty-nine (39) listed Threatened Migratory Species are identified within a 10 km buffer surrounding the Project Area. 	<ul style="list-style-type: none"> Two (2) Threatened fauna species pertinent to the EPBC Act were 'recorded' within the Project Area No threatened flora species pertinent to the EPBC Act were considered 'possible' or 'likely' to occur based on the habitat and results recorded during the ecological surveys. The assessment of likelihood of occurrence for all species identified in the PMST search is included below in Table 2.
Listed Threatened Ecological Communities	<ul style="list-style-type: none"> Seven (7) listed TEC are suggested to occur within the feature area, including: <ul style="list-style-type: none"> Banksia Woodlands of the Swan Coastal Plain ecological community (Endangered). Clay Pans of the Swan Coastal Plain (Critically Endangered) <i>Corymbia calophylla</i> – <i>Kingia australis</i> woodlands on heavy soils of the Swan Coastal Plain (Endangered) Empodisma peatlands of southwestern Australia (Endangered). Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion (Critically Endangered) Subtropical and Temperate Coastal Saltmarsh (Vulnerable) Tuart (<i>Eucalyptus gomphocephala</i>) Woodlands and Forests of the Swan Coastal Plain Ecological community (Critically Endangered). 	<ul style="list-style-type: none"> No TECs were identified during the ecological surveys to occur within the Project Area. The Project Area is not located in an area and/or contains suitable habitat which might suggest a TEC identified during the desktop searches would occur, but were determined to be unrepresentative and unlikely. Likelihood of occurrence for TEC's are considered further in Table 3.

Table 1: Summary of Matters of National Environmental Significance relevant to the Project Area.

Matters of National Environmental Significance	MNES identified within 10 km of the Project Area based on PMST	Relevance to the Project Area
Listed migratory species (protected under international agreements)	<ul style="list-style-type: none"> Thirty-nine (39) listed Migratory Species are identified within a 10 km buffer surrounding the Project Area. 	<ul style="list-style-type: none"> One (1) migratory bird species may possibly occur in the vicinity of the Project Area, significant impacts are unlikely. <ul style="list-style-type: none"> <i>Apus pacificus</i> – Pacific swift The assessment of likelihood of occurrence for all species identified in the PMST search is included below in Table 2.
Commonwealth marine areas	The Project Area is not located in a Commonwealth marine area.	Not relevant.
Great Barrier Reef Marine Park	The Project Area is not located in the Great Barrier Reef Marine Park.	Not relevant.
Nuclear actions (including uranium mines)	The Project Area is not likely to represent a significant impact to the environment resulting from a Nuclear Action.	Not relevant.
Water resources (that relate to coal seam gas development and large coal mining development)	The Project Area is not a coal seam gas or coal mining development.	Not relevant.

4. THREATENED SPECIES AND ECOLOGICAL COMMUNITIES

An assessment of the likelihood of occurrence for the listed threatened species and communities within the Project Area was undertaken for each species identified in the PMST search. Each species was assigned to one of the following categories:

- Recorded: the species has been previously recorded in the Project Area or was recorded during a field survey.
- Likely: suitable habitat for the species or community occurs and it is likely the species may occur based on recent a historical record within or nearby the Project Area.
- Possible: the Project Area contains marginal habitat and/or extent for the species and is located within the known distribution range for the species but there is no other information to suggest the species may occur within or nearby the Project Area.
- Unlikely: no suitable habitat for the species and/or recent literature records occur near the Project Area.

Table 2 outlines the threatened species and the potential to occur based on results from ecological surveys with consideration to relevant literature to factor habitat preference, sightings and historical records of the species. It should be noted that marine bird, marine mammal and migratory marine birds identified by the PMST were disregarded as part of this assessment given the distance of the Project Area from marine areas. MNES considered likely to occur or possible to occur have been highlighted in green.

Table 2: Threatened flora and fauna species and likelihood of occurrence

Scientific Name	Common Name	EPBC status	Habitat	Likelihood of occurrence	Justification
Birds					
<i>Actitis hypoleucos</i>	Common Sandpiper	Migratory	Edge of sheltered waters salt or fresh, e.g. estuaries, mangrove creeks, rocky coasts, near-coastal salt lakes (including saltwater ponds), river pools, lagoons, claypans, drying swamps, flood waters, dams and sewage ponds. Preferring situations where low perches are available (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Anous stolidus</i>	Common noddy	Migratory	Tropical and subtropical seas, cayes, reefs, buoys and piles (Pizzey and Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Apus pacificus</i>	Pacific swift	Migratory	Aerial, migratory species that is most often seen over inland plains and sometimes above open areas, foothills or in coastal areas. Sometimes occurs over settled areas, including towns, urban areas and cities (Pizzey and Knight 2012).	Possible	<ul style="list-style-type: none"> highly mobile and may opportunistically fly over or forage in the site for short periods of time as part of a much larger home range Would not breed within the site Any occurrence of pacific swift in the site would likely be in the air space and largely independent from terrestrial habitat.
<i>Botaurus poiciloptilus</i>	Australasian bittern	Endangered	In or over water, in tall reedbeds, sedges, rushes, cumbungi, lignum. Also occurs in ricefields, drains in tussocky paddocks and occasionally in saltmarshes and brackish wetlands (TSSC 2019).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Vulnerable (Migratory)	Habits tidal mudflats, saltmarshes and mangroves, plus shallow fresh, brackish or saline inland wetlands. Also recorded in floodwater areas, irrigated pastures and crops, sewage ponds, salt fields.	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Calidris canutus</i>	Red knot	Vulnerable (Migratory)	Mud and sand flats in estuaries and on sheltered coasts. Also near-coastal saltlakes, including saltwork ponds (Pizzey and Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Calidris ferruginea</i>	Curlew Sandpiper	Critically Endangered (Migratory)	Mainly shallows of estuaries and near-coastal saltlakes (including saltwork ponds) and drying near-coastal freshwater lakes and swamps. Also beaches and near-coastal sewage ponds (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Calidris melanotos</i>	Pectoral sandpiper	Migratory	Mainly fresh waters (swamps, lagoons, river pools, irrigation channels and sewage ponds); also samphire flats around estuaries and saltlakes (Johnstone & Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Calyptorhynchus banksii naso</i>	Forest red-tailed black cockatoo	Vulnerable	Eucalypt and Corymbia forests, often in hilly interior. More recently also observed in more open agricultural and suburban areas including Perth metropolitan area. Attracted to seeding <i>Corymbia calophylla</i> , <i>Eucalyptus marginata</i> , introduced <i>Melia azedarach</i> and <i>Eucalyptus spp.</i> trees (Johnstone <i>et al.</i> 2013).	Recorded	<ul style="list-style-type: none"> The site occurs within the modelled distribution of forest red-tailed black cockatoo FRTBC do not have defined breeding areas therefore the site has potential to support breeding of this species.
<i>Charadrius dubius</i>	Little Ringed Plover	Migratory	Open, muddy or sandy shores of lakes, swamps, tidal areas, sewage ponds or farm dams. Rare but regular summer migrant to Australia (Pizzey & Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Charadrius leschenaultii</i>	Great sand plover	Vulnerable (Migratory)	Wide sandy or shelly beaches, sandpits, tidal mudflats, reefs, sand cays, mangroves, saltmarsh, dune wilderness, bare paddocks, seldom far inland (Pizzey and Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Calidris ruficollis</i>	Red-necked Stint	Migratory	Tidal mudflats, saltmarshes, sandy or shelly beaches, saline and freshwater wetlands (coastal and inland), saltfields, sewage ponds (Pizzey and Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area

Table 2: Threatened flora and fauna species and likelihood of occurrence (continued)

Scientific Name	Common Name	EPBC Status	Habitat	Likelihood of occurrence	Justification
Birds (continued)					
<i>Calidris subminuta</i>	Long-toed stint	Migratory	Mainly freshwater swamps (especially when drying and where vegetation is short), river pools, lagoons and claypans; also brackish pools, sewage ponds and samphire flats around estuaries and saltlakes (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Diomedea amsterdamensis</i>	Amsterdam Island albatross	Endangered (Migratory)	The Amsterdam albatross is a marine, pelagic seabird. It nests in open patchy vegetation (among tussocks, ferns or shrubs) near exposed ridges or hillocks (Weimerskirch et al. 1985). It sleeps and rests on ocean waters when not breeding (Marchant and Higgins 1990).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Diomedea epomophora</i>	Southern royal albatross	Vulnerable (Migratory)	Rare visitor to Western Australian seas; it breeds on subantarctic islands south of New Zealand (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Diomedea exulans</i>	Wandering albatross	Vulnerable (Migratory)	Marine, pelagic and aerial species. It breeds on Macquarie Island and feeds in Australian portions of the Southern Ocean (DoE 2018).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Diomedea sanfordi</i>	Northern Royal Albatross	Endangered (Migratory)	Species is marine, pelagic and aerial. Habitat includes subantarctic, subtropical, and occasionally Antarctic waters (Marchant & Higgins 1990). A rare visitor to south Western Australian waters.	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Gallinago megala</i>	Swinhoe's Snipe	Migratory		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Gallinago stenura</i>	Pin-tailed Snipe	Migratory		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Leipoa ocellata</i>	Malleefowl	Vulnerable	Scrubs and thickets of Eucalyptus spp., Melaleuca lanceolata and Acacia linophylla; also other dense litter-forming shrublands. Attracted to fallen wheat in stubbles and along roads (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Limosa lapponica menzbieri</i>	Bar-tailed godwit	Critically Endangered	Mainly coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays. Has also been recorded in coastal sewage farms and saltworks, saltlakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats (Higgins and Davies 1996).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Limosa limosa</i>	Black-tailed Godwit	Endangered (Migratory)	Tidal mudflats, estuaries, sewage ponds, shallow river margins, brackish or saline inland lakes, flooded pastures, airfields (Pizzey & Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Macronectes giganteus</i>	Southern giant-petrel	Endangered (Migratory)	Breeds on southern subantarctic and antarctic islands. May visit Western Australian waters from February to December (mostly June to September) (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Macronectes halli</i>	Northern giant petrel	Vulnerable (Migratory)	Breeds on subantarctic islands. May visit Western Australian water from February to September (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Motacilla cinerea</i>	Grey wagtail	Migratory	In Australia mostly near running water in disused quarries, sandy and rocky streams in escarpments and rainforests, sewage ponds, ploughed fields and airfields (Pizzey and Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Numenius madagascariensis</i>	Eastern curlew	Critically Endangered (Migratory)	Mainly tidal mudflats; also reef flats, sandy beaches and rarely near-coastal lakes (including saltwork ponds) (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Numenius minutus</i>	Little Curlew, Little Whimbrel	Migratory		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area

Table 2: Threatened flora and fauna species and likelihood of occurrence (continued)

Scientific Name	Common Name	EPBC Status	Habitat	Likelihood of occurrence	Justification
Birds (continued)					
<i>Pachyptila turtur subantarctica</i>	Fairy prion	Vulnerable	Breeds on subantarctic islands and is presumed to frequent subtropical waters during non-breeding period (TSSC 2015).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Pandion haliaetus</i>	Osprey	Migratory	Coasts, estuaries, bays, inlets, islands, and surrounding waters; coral atolls, reefs, lagoons, rock cliffs, stacks (Pizzey and Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Phaethon rubricauda westralis</i>	Red-tailed tropicbird	Endangered	Spend most of their lives at sea and rarely venture near land. This bird is normally found in tropical and subtropical seas around northern Australia. Though rarely seen in colder areas, a few pairs breed on Sugarloaf Rock, south of Cape Naturaliste (DPAW 2017b). Are known to breed on Rottnest Island (DCCEEW 2023).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Philomachus pugnax</i>	Ruff (Reeve)	Migratory	Fresh, brackish and saline wetlands; tidal mudflats, saltfields, sewage ponds (Pizzey & Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Rostratula australis</i>	Australian painted snipe	Endangered	Mainly shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans (Marchant and Higgins 1993).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Sternula nereis nereis</i>	Australian fairy tern	Vulnerable	Sheltered blue-water seas close to land, estuaries (when free of silt) and near-coastal lakes (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Thalassarche impavida</i>	Campbell albatross	Vulnerable (Migratory)	Scarce visitor to south-western and western Australian seas. Breeds on Campbell Island (Pizzey and Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Thalassarche melanophris</i>	Black-browed albatross	Vulnerable (Migratory)	Seas of south and west coasts. Visitor to Western Australian mainland from January to early November (mostly May to September). Breeds on southern subantarctic and Antarctic islands (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Tringa nebularia</i>	Common greenshank, greenshank	Endangered (Migratory)	Found in a wide variety of inland wetlands and sheltered coastal habitats of varying salinity. It occurs in sheltered coastal habitats, typically with large mudflats and saltmarsh, mangroves or seagrass. Habitats include embayments, harbours, river estuaries, deltas and lagoons and are recorded less often in round tidal pools, rock-flats and rock platforms (Higgins & Davies 1996)	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Thalassarche steadi</i>	White-capped albatross	Vulnerable (Migratory)	Scarce visitor (late May to mid-October) to southwestern and western seas. Breeds on islands off Tasmania and south New Zealand (Johnstone and Storr 1998).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Tringa glareola</i>	Wood sandpiper	Migratory	Mainly shallow fresh waters (lagoons, swamps, claypans, river pools, dams, bore overflows and sewage ponds); occasionally brackish swamps, rarely saltlakes and estuaries (Pizzey and Knight 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Tringa stagnatilis</i>	Marsh sandpiper	Migratory	Mainly shallow fresh or brackish waters: swamps, lakes, river pools, soaks, sewage ponds and bore overflows. Occasionally estuaries and salt ponds, and rarely coasts.	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Zanda latirostris</i>	Carnaby's Black cockatoo, Short-billed Black-cockatoo	Endangered	Mainly proteaceous scrubs and heaths and adjacent eucalypt woodlands and forests; and plantations of <i>Pinus spp.</i> Attracted to seeding <i>Banksia spp.</i> , <i>Dryandra spp.</i> , <i>Hakea spp.</i> , <i>Eucalyptus spp.</i> , <i>Corymbia calophylla</i> , <i>Grevillea spp.</i> , and <i>Allocasuarina spp.</i> (Johnstone and Storr 1998).	Recorded	<ul style="list-style-type: none"> The site occurs within the modelled distribution of Carnaby's black cockatoo Carnaby's black cockatoo would not be expected to breed in the site as it occurs outside of their modelled breeding area

Table 2: Threatened flora and fauna species and likelihood of occurrence (continued)

Scientific Name	Common Name	EPBC Status	Habitat	Likelihood of occurrence	Justification
Birds (continued)					
<i>Zanda baudinii</i>	Baudin's Black-Cockatoo, Long-billed Black-cockatoo	Endangered	Mainly eucalypt forests. Attracted to seeding <i>Corymbia calophylla</i> , <i>Banksia</i> spp., <i>Hakea</i> spp., and to fruiting apples and pears (Johnstone and Storr 1998).	Possible	<ul style="list-style-type: none"> northwest most extent of Baudin's black cockatoo not expected to breed in the site as it occurs outside of their modelled breeding area
Invertebrates					
<i>Leiproctus douglasiellus</i>	Short-tongued bee	Critically Endangered	Life history and habits are poorly documented/ unknown. It has been recorded only on flowers of <i>Goodeniaceae</i> and possibly <i>Lechenaultia stenosepala</i> (Bamford 2003).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Neopasiphae simplicior</i>	A native bee	Critically Endangered	This species of native bee has been collected on flowers of <i>Goodenia filiformis</i> , <i>Lobelia tenuior</i> , <i>Angianthus preissianus</i> and <i>Velleia</i> sp. (Houston 2000).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
Reptiles					
<i>Caretta caretta</i>	Loggerhead Turtle	Endangered (Migratory)		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Chelonia mydas</i>	Green Turtle	Vulnerable (Migratory)		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Dermochelys coriacea</i>	Leatherback Turtle, Leathery Turtle, Luth	Endangered (Migratory)		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Natator depressus</i>	Flatback Turtle	Vulnerable (Migratory)		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
Shark					
<i>Lamna nasus</i>	Porbeagle, Mackerel Shark	Migratory		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Manta alfredi</i>	Reef Manta Ray, Coastal Manta Ray	Migratory		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Manta birostris</i>	Giant Manta Ray	Migratory		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Pristis pristis</i>	Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish	Vulnerable (Migratory)		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Sphyrna lewini</i>	Scalloped Hammerhead	Conservation Dependent		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area

Table 2: Threatened flora and fauna species and likelihood of occurrence (continued)

Scientific Name	Common Name	EPBC Status	Habitat	Likelihood of occurrence	Justification
Other					
<i>Westralunia carteri</i>	Carter's Freshwater Mussel, Freshwater Mussel	Vulnerable	Occurs in greatest abundance in slower flowing streams with stable sediments that are soft enough for burrowing amongst woody debris and exposed tree roots. Also occupies lentic systems including large water supply dams and even on-stream farm dams. Salinity tolerance quite low (Morgan et al. 2011).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
Mammals					
<i>Bettongia penicillata ogilbyi</i>	Woylie	Endangered	Woodlands and adjacent heaths with a dense understorey of shrubs, particularly <i>Gastrolobium</i> spp. (TSSC 2018).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Dasyurus geoffroii</i>	Chuditch	Vulnerable	Wide range of habitats from woodlands, dry sclerophyll forests, riparian vegetation, beaches and deserts. Appears to utilise native vegetation along roadsides in the wheatbelt (DEC 2012).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Pseudocheirus occidentalis</i>	Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit	Critically Endangered	Swan Coastal Plain <i>Agonis flexuosa</i> woodlands and <i>Agonis flexuosa</i> / <i>Eucalyptus gomphocephala</i> forests. Also <i>Eucalyptus marginata</i> forests (DPaW 2017).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Setonix brachyurus</i>	Quokka	Vulnerable	On the WA mainland this species requires dense, wet ground cover vegetation in forests or swampy flats (Menkhorst and Knight 2011). The understorey needs to be sufficiently thick and complex to provide a predation refuge (DEC 2013). On the south coast of Western Australia quokka may also utilise dense coastal heath of <i>Eucalyptus staeri</i> , <i>Allocasuarina fraseriana</i> , <i>Hakea elliptica</i> with <i>Melaleuca striatum</i> and <i>Anarthria scabrum</i> (DEC 2013).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
Plants					
<i>Acacia aphylla</i>	Leafless Rock Wattle	Endangered	Glaucous shrub, 0.9 to 2.5 m in height. Flowers are yellow in colour flowering from August to October. Occurs on loam, clay loam in areas with granite outcrops and hills (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Andersonia gracilis</i>	Slender Andersonia	Endangered	A Slender erect or open straggly shrub, 0.1-0.5(-1) m high. Flowers are white-pink-purple with flowering occurring between September and November. Found in seasonally damp, black sandy clay flats near or on the margins of swamps, often on duplex soils supporting low open heath vegetation with species such as <i>Calothamnus hirsutus</i> , <i>Verticordia densiflora</i> and <i>Kunzea recurva</i> over sedges (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Anthocercis gracilis</i>	Slender Tailflower	Vulnerable	Seasonally damp, black sandy clay flats near or on the margins of swamps, often on duplex soils supporting low open heath vegetation (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Austrostipa bronweniae</i> listed as <i>Austrostipa bronwenae</i>		Endangered	A perennial grass reaching up to 60 cm tall with green flowers that flower from October through to November. Habitat for this species occurs within wetlands consisting of muddy sand that are seasonally waterlogged (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Austrostipa jacobiana</i>		Critically Endangered	Perennial rhizomatous grass to 1.2 metres tall (with flower spikes). Leaves to 45 cm long, folded and swollen giving a terete appearance, abaxial surface strongly ribbed. Inflorescence 10-20 cm long. Flowering in October through November. Occurs on grey sandy clay (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area not found in targeted search

Table 2: Threatened flora and fauna species and likelihood of occurrence (continued)

Scientific Name	Common Name	EPBC Status	Habitat	Likelihood of occurrence	Justification
Plants (continued)					
<i>Banksia mimica</i>	Summer Honeypot	Endangered	Grows on flat to gentle slopes in grey and white sand in open woodlands. In the Whicher Range this species grows in closed shrubland with a <i>Banksia attenuata</i> overstorey. Associated vegetation includes <i>Andersonia sp.</i> , <i>Stirlingia latifolia</i> , <i>Xanthorrhoea preisii</i> , <i>Leucopogon sp.</i> , <i>Melaleuca thymoides</i> and <i>Petrophile sp.</i> (Kelly et al., 1999; Williams et al., 2001). In the Darling Range and Mogumber, it occurs in mixed low heath with a <i>Banksia attenuata/B. menziesii</i> open low woodland overstorey (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Caladenia huegelii</i>	King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid	Endangered	The King Spider-orchid grows in well-drained, deep sandy soils in low mixed woodlands of <i>Banksia attenuata</i> , <i>B. menziesii</i> , <i>B. ilicifolia</i> , <i>Allocasuarina fraseriana</i> (western sheoak) and <i>Eucalyptus marginata</i> (jarrah). It tends to favour areas of lush undergrowth. Soil is usually deep grey-white sand usually associated with the Bassendean sand-dune system. However, rare plants have been known to extend into the Spearwood system (in which calcareous yellow sands dominate) (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> detailed flora and vegetation assessment conducted targeted searches for <i>C. huegelii</i> and concluded it does not occur no suitable habitat within the Project Area
<i>Calytrix breviseta subsp. breviseta</i>	Swamp Starflower	Endangered	Shrub, 0.2 to 1 m in height. Flowers are purple to blue flowering from August to October. Associated with White or yellow sand and sandy loam (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Conospermum undulatum</i>	Wavy-leaved Smokebush	Vulnerable	Compact shrub, 0.6 to 2m in height. Flowers are white in colour with flowering occurring between May to October. Occurs on grey or yellow orange clayey sand (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Darwinia apiculata</i>	Scarp Darwinia	Endangered	Densley branched shrub up to 0.5 m in height. Flowers green and yellow to red in colour. Associated with lateritic soils. Flowering occurs in October to November (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Diuris drummondii</i>	Tall Donkey Orchid	Vulnerable	Terrestrial orchid and is Western Australia's tallest Donkey Orchid. It grows up to 105 cm tall and produces between three and eight widely spaced pale-yellow flowers. Found in low-lying winter depressions in peaty and sandy clay swamps. Flower between November to December or January (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Diuris micrantha</i>	Dwarf Bee-orchid	Vulnerable	Tuberous perennial herb 0.3 to 0.6 m in height. Flowers are yellow and brown in colour and flowers from September to October. Occurs on brown loamy clay in winter wet swamps in shallow water (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Diuris purdiei</i>	Purdie's Donkey-orchid	Endangered	Tuberous perennial herb 0.15 to 0.35 m in height. Flowers are yellow and flowers from September to October but only after a summer or early autumn fire. Occurs on Sand to sandy clay soils in areas subject to winter inundation. (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area not found in targeted search
<i>Drakaea elastica</i>	Glossy-leaved Hammer Orchid	Endangered	A slender flower stem up to 30 cm high with a single glossy green heart shaped leaf. Found in bare patches of sand within otherwise dense vegetation in-low lying areas alongside winterwet swamps. Typically, in banksia woodland or thickets of <i>Kunzea glabrescens</i> . Flowers late September to October to November (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area not found in targeted search

Table 2: Threatened flora and fauna species and likelihood of occurrence (continued)

Scientific Name	Common Name	EPBC Status	Habitat	Likelihood of occurrence	Justification
Plants (continued)					
<i>Drakaea micrantha</i>	Dwarf Hammer-orchid	Vulnerable	Typically found in open sandy patches often where disturbance has recently occurred and where competition from other plants has been removed. It grows in association with Jarrah (<i>Eucalyptus marginata</i>) and Common Sheoak (<i>Allocasuarina fraseriana</i>) woodland or forest associated with Banksia species on infertile grey sands (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area not found in targeted search
<i>Eleocharis keigheryi</i>	Keighery's Eleocharis	Vulnerable	Clay or sandy loam in freshwater creeks and transient waterbodies such as seasonally wet clay pans.	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area not found in targeted search
<i>Erempipila glabra subsp. chlorella</i>		Endangered	Prostrate and spreading shrub growing to 0.2m to 1 m in height. Flowers are green to yellow in colour and occurs on sandy clay in winter wet pressions. Flowering occurs from July to November (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Eucalyptus x balanites</i>	Cadda Road Mallee	Endangered	Mallee to 5m in height. Light coloured sandy soils over laterite. Habitat consists of gently sloping heathlands; open mallee woodland over shrubland (Population 2) or heathland with emergent mallees (Population 1) (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Goodenia arthrotricha</i>		Endangered	This species is an erect perennial herb with a blue and white corolla typically growing to 0.4 m in height and can occur in dense stands. This species occurs in association with granite and gneiss geology and is most likely a long-lived fire responsive reseeded. Flowering occurs October to November (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Grevillea curviloba subsp. incurva</i>	Narrow curved—lead Grevillea	Endangered	<i>Grevillea curviloba subsp. incurva</i> grows as a vigorous, sprawling shrub to 2.5 metres high and wide, with greyish-green leaves. Occurs on sand and sandy loam over limestone or ironstone in winter-wet heath (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Grevillea thelemanniana</i>	Spider Net Grevillea	Critically Endangered	Spreading, lignotuberous shrub, between 0.3-1.5 m in height. Flowering are pink to red, and flower between May to November. Typically occurs on sand, sandy clay in winter-wet low-lying flats (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area G. thelemanniana was recorded in a different veg unit (not within the project area)
<i>Lepidosperma rostratum</i>	Beaked Lepidosperma	Endangered	Rhizomatous, tufted perennial grasslike herb. 0.5m in height. Occurs on peaty sand and clay amongst low heath, in winter-wet swamps. Fruit are observed between June to August (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area not found in targeted search
<i>Macarthuria keigheryi</i>	Keighery's Macarthuria	Endangered	Erect or spreading perennial, herb or shrub, between 0.2-0.4 m in height and 0.3-0.6 m wide. Flowers from September to December or February to March. Typically occurs on white or grey sand (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Morelotia australiensis</i>	Southern Tetraria	Vulnerable	Perennial herb/sedge growing to 1m. The species flowers in early summer during November and December. Typically occurs on sand over clay, winter wet depressions and drainage lines. (Western Australian Herbarium 2024)	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area not found in targeted search
<i>Ptilotus pyramidus</i>	Pyramid Mulla-mulla	Critically Endangered	Small herbaceous, likely perennial plant growing to approximately 8cm. The stem is tufted, unbranched and finely striated. Flowers are white in colour. Flowering occurs in early October. Known to occur in sand to sandy-mud alluvium of the Pinjarra Plain (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area

Table 2: Threatened flora and fauna species and likelihood of occurrence (continued)

Scientific Name	Common Name	EPBC Status	Habitat	Likelihood of occurrence	Justification
Plants (continued)					
<i>Synaphea</i> sp. <i>Fairbridge Farm</i> <i>(D.Papenfus 696)</i>	Selena's Synaphea	Critically Endangered	A sub-shrub ranging from 0.25m to 0.65 m tall. Flowers are yellow in colour, narrow, hairy and are openly spaced. Flowering occurs from September to November. Found in low woodland on grey, clayey sand with lateritic pebbles (Pinjarra Plain) near winter wet flats (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none">no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Synaphea</i> sp. <i>Pinjarra Plain</i> <i>(A.S.George 17182)</i>		Endangered	A clumped shrub (sub-shrub), to 0.8 m high. Flowers are yellow in colour and flowering occurs September to November. Associated with grey sandy loam or clay, grey-brown clayey sand, brown clayey loam, laterite and flats, seasonally wet areas, railroad reserves often with wet depressions or drains (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none">no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Synaphea</i> sp. <i>Serpentine</i> <i>(G.R.Brand 103)</i>		Critically Endangered	A clumping shrub reaching a height of up to 0.6 m. Flowers are yellow in colour, narrow and are openly spaces. Flowering occurs from August to November. Habitat includes seasonally damp areas with loam-sand to clay soils (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none">no suitable habitat for the species and/or recent literature records occur near the Project Area
<i>Thelymitra stellata</i>	Star Sun-orchid	Endangered	Tuberous perennial herb to 0.25m in height. Flowers are yellow and brown flowering from October to November. Occurs on sandy loam, clay or gravel over laterite or gravel (Western Australian Herbarium 2024).	Unlikely	<ul style="list-style-type: none">no suitable habitat for the species and/or recent literature records occur near the Project Area

Table 3: Threatened Ecological Communities and likelihood of occurrence

Community Name	EPBC Status	Habitat/Description	Likelihood of occurrence	Reason
Ecological communities				
Banksia Woodlands of the Swan Coastal Plain	Endangered	The Conservation Advice (Threatened Species Scientific Committee 2016) states that Banksia Woodland TEC “typically occurs on well drained, low nutrient soil on sandplain landforms, particularly deep Bassendean and Spearwood sands and occasionally on Quindalup sands”, and that the community “is also common on sandy colluvium and aeolian sands of the Ridge Hill Shelf, Whicher Scarp and Dandaragan Plateau; and may also occur in other limited scenarios” (DoEE 2016).	Unlikely	<ul style="list-style-type: none"> Banksia woodlands TEC does occur in other areas surrounding Banksia Hill that were considered in other development options disturbance footprint does not encroach on Banksia woodlands TEC
Clay Pans of the Swan Coastal Plain	Critically Endangered		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
Corymbia calophylla - Kingia australis woodlands on heavy soils of the Swan Coastal Plain	Endangered		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion	Critically Endangered	The assemblage of plants, animals and other organisms associated with a type of warm temperate shrubland or heath, dominated by <i>Melaleuca huegelii</i> (chenille honeymyrtle), <i>M. systena</i> (coastal honeymyrtle), and/or <i>Banksia sessilis</i> (parrot bush) (Department of Climate Change 2023a). Occurs only in the southwest of Australia and is known from a small number of locations within slopes and tops of limestone ridges of the Swan Coastal Plain IBRA Bioregion. It is an ecological community dominated by shrubs, with sclerophyll shrubs forming thickets or heaths, above a typically diverse ground layer of herbs, including sedges, Restionaceae and occasional grasses (Department of Climate Change 2023a).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
Empodisma peatlands of southwestern Australia	Endangered	Occurs on an organosol within the southwest of western Australia that are typically saturated for at least a month during the year. The Empodisma peatlands of southwestern Australia mainly occur within the Warren IBRA bioregion and Southern Jarrah Forest subregion of the Jarrah Forest IBRA bioregion. Discrete occurrences may also be present in the Perth (SWA02) (Swan Coastal Plain), Northern Jarrah Forest (JAF01) (Jarrah Forest) and Fitzgerald (ESP01) (Esperance) IBRA subregions. Empodisma peatlands has a ground layer containing Emodisma gracillmum, whilst other sedge species are also typically present. Other associated plant species include Acacia hastulata, Callistemon glaucus, Gymnoschoenus anceps, Leptocarpus tenax and Schoenus multiglumis (Department of Climate Change 2023b).	Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable		Unlikely	<ul style="list-style-type: none"> no suitable habitat for the species and/or recent literature records occur near the Project Area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain	Critically Endangered	Tuart (Eucalyptus gomphocephala) woodland and forests of the Swan Coastal Plan TEC, listed in July 2019 as a Critically Endangered TEC under the EPBC Act and Priority 3 listed by DBCA. Mostly confined to Quindalup Dunes and Spearwood Dunes from Jurien Bay to the Sabina River, with outliers along some rivers and the Bassendean dunes and Pinjarra Plain. Tuart is the key dominant canopy species however Tuart communities comprise a variety of flora and fauna assemblages. Trees commonly co-occurring with Tuart include Agonis flexuosa (peppermint), Banksia grandis, Banksia attenuata, Eucalyptus marginata; and less commonly, Corymbia calophylla, Banksia menziesii and Banksia prionotes. An understorey of native plants is typically present, which may include grasses, herbs and shrubs. (DoEE 2019)	Likely	<ul style="list-style-type: none"> planted Tuart woodland TEC confirmed to occur in the Project Area

5. CONCLUSIONS

Information from available databases and recent comprehensive flora and fauna surveys were used to assess the likelihood of occurrence of each identified MNES.

None of the conservation significant flora species identified within the PMST database search were considered 'likely' or 'possible' to occur within the Project Area based on the lack of preferred habitat, historic and current disturbance and/or because they were not identified during the ecological surveys. Planted Tuart Woodland (TECs) was recorded within the Project Area however none of the other TECs identified in the MNES search are considered likely to occur within the Project Area.

Of the 57 fauna species identified in the PMST search, two threatened species were considered 'Likely' to occur within the Project Area:

- *Zanda latirostris* (Carnaby's black cockatoo) – Suitable foraging habitat was surveyed within the Project Area. Evidence of Carnaby's black cockatoo was recorded in the Project Area.
- *Calyptorhynchus banksia nasa* (Forest red-tailed black cockatoo) – Suitable foraging habitat was surveyed within the Project Area. Evidence of Carnaby's black cockatoo was recorded in the Project Area.

A further two fauna species were considered 'possible' to occur based on suitable habitat identified within the Project Area, and included:

- *Apus pacificus* (Pacific swift) – May opportunistically fly over the Project Area on commute or in search of prey.
- *Zanda baudinii* (Baudin's black cockatoo) - Suitable foraging habitat was surveyed within the Project Area.

The remainder of the conservation significant fauna species identified in the PMST were considered 'unlikely' to occur in the Project Area due to a lack of suitable or preferred habitat, because the Project Area lies outside of the species known distribution, or it has been confirmed through targeted survey that they do not occur within the Project Area.

6. References

The references listed below have been considered as part of preparing this document.

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Threatened Species Scientific Committee (TSSC) 2018, *Conservation advice for Bettongia penicillata (woylie)*, Department of the Environment, Canberra.

Threatened Species Scientific Committee (TSSC) 2019, *Conservation Advice: Botaurus poiciloptilus, Australasian bittern*, Department of the Environment and Energy, Canberra.

Western Australian Herbarium 2024, *Florabase-the Western Australian Flora*, Department of Biodiversity, Conservation and Attractions <<https://florabase.dbca.wa.gov.au/>>.

Attachment A: PMST Report





Australian Government

Department of Climate Change, Energy,
the Environment and Water

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: 24-Oct-2024

[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 [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	2
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	7
Listed Threatened Species:	68
Listed Migratory Species:	39

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 <https://www.dcceew.gov.au/parks-heritage/heritage>

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

Commonwealth Lands:	79
Commonwealth Heritage Places:	None
Listed Marine Species:	44
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:	16
Regional Forest Agreements:	None
Nationally Important Wetlands:	6
EPBC Act Referrals:	95
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands)			[Resource Information]
Ramsar Site Name	Proximity	Buffer Status	
Forrestdale and thomsons lakes	Within Ramsar site	In feature area	
Peel-yalgorup system	30 - 40km upstream from Ramsar site	In buffer area only	

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
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area	In feature area
Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area	In buffer area only
Corymbia calophylla - Kingia australis woodlands on heavy soils of the Swan Coastal Plain	Endangered	Community known to occur within area	In buffer area only
Empodisma peatlands of southwestern Australia	Endangered	Community may occur within area	In buffer area only
Honeymyrtle shrubland on limestone ridges of the Swan Coastal Plain Bioregion	Critically Endangered	Community may occur within area	In buffer area only
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area	In buffer area only
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area	In feature 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
BIRD			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Phaethon rubricauda westralis Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824]	Endangered	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
Zanda baudinii listed as Calyptorhynchus baudinii Baudin's Cockatoo, Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Roosting known to occur within area	In feature area
Zanda latirostris listed as Calyptorhynchus latirostris Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Breeding known to occur within area	In feature area
INSECT			
Leioproctus douglasiellus a short-tongued bee [66756]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Neopasiphae simplicior A native bee [66821]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
MAMMAL			
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat may occur within area	In buffer area only
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Setonix brachyurus Quokka [229]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
OTHER			
Westralunio carteri Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
PLANT			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Acacia aphylla Leafless Rock Wattle [13553]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat known to occur within area	In feature area
Anthocercis gracilis Slender Tailflower [11103]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Austrostipa bronweniae listed as Austrostipa bronwenae [92773]	Endangered	Species or species habitat may occur within area	In buffer area only
Austrostipa jacobsoniana [87809]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
Banksia mimica Summer Honeypot [82765]	Endangered	Species or species habitat likely to occur within area	In feature area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat known to occur within area	In feature area
Calytrix breviseta subsp. breviseta Swamp Starflower [23879]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Conospermum undulatum Wavy-leaved Smokebush [24435]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Darwinia apiculata Scarp Darwinia [8763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Diuris drummondii Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat known to occur within area	In feature area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat known to occur within area	In feature area
Drakaea elastica Glossy-leafed Hammer Orchid, Glossy-leafed Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat known to occur within area	In feature area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat known to occur within area	In feature area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Eremophila glabra subsp. chlorella [84927]	Endangered	Species or species habitat known to occur within area	In buffer area only
Eucalyptus x balanites Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat known to occur within area	In buffer area only
Goodenia arthrotricha [12448]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Grevillea curviloba subsp. incurva Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Grevillea thelemanniana Spider Net Grevillea [32835]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
Lepidosperma rostratum Beaked Lepidosperma [14152]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macarthuria keigheryi Keighery's Macarthuria [64930]	Endangered	Species or species habitat may occur within area	In buffer area only
Morelotia australiensis listed as Tetraria australiensis Southern Tetraria [92784]	Vulnerable	Species or species habitat known to occur within area	In feature area
Ptilotus pyramidatus Pyramid Mulla-mulla [18216]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
Synaphea sp. Fairbridge Farm (D.Papenfus 696) Selena's Synaphea [82881]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Synaphea sp. Pinjarra Plain (A.S.George 17182) [86878]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Synaphea sp. Serpentine (G.R.Brand 103) [86879]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
Thelymitra stellata Star Sun-orchid [7060]	Endangered	Species or species habitat known to occur within area	In buffer area only
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
SHARK			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sphyrna lewini Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only

Listed Migratory Species	[Resource Information]		
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Anous stolidus Common Noddy [825]		Species or species habitat likely to occur within area	In buffer area only
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Marine Species			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Pristis pristis Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area	In feature area
Calidris pugnax as Philomachus pugnax Ruff [91256]		Roosting known to occur within area	In buffer area only
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area	In buffer area only
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area	In buffer area only
Charadrius dubius Little Ringed Plover [896]		Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Gallinago megala Swinhoe's Snipe [864]		Roosting likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Gallinago stenura Pin-tailed Snipe [841]	Endangered	Roosting likely to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]		Roosting known to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]		Species or species habitat likely to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]	Endangered	Roosting likely to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area	In buffer area only

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]		
<p>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.</p>		
Commonwealth Land Name	State	Buffer Status
Defence		
Defence - AIRTC CANNINGTON [50229]	WA	In buffer area only
Defence - AIRTC CANNINGTON [50232]	WA	In buffer area only
Defence - AIRTC CANNINGTON [50233]	WA	In buffer area only
Defence - AIRTC CANNINGTON [50231]	WA	In buffer area only
Defence - AIRTC CANNINGTON [50230]	WA	In buffer area only
Unknown		

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50780]	WA	In buffer area only
Commonwealth Land - [51518]	WA	In buffer area only
Commonwealth Land - [50833]	WA	In buffer area only
Commonwealth Land - [51148]	WA	In buffer area only
Commonwealth Land - [51144]	WA	In buffer area only
Commonwealth Land - [50832]	WA	In buffer area only
Commonwealth Land - [51901]	WA	In buffer area only
Commonwealth Land - [51900]	WA	In buffer area only
Commonwealth Land - [50785]	WA	In buffer area only
Commonwealth Land - [50870]	WA	In buffer area only
Commonwealth Land - [50735]	WA	In buffer area only
Commonwealth Land - [50761]	WA	In buffer area only
Commonwealth Land - [50754]	WA	In buffer area only
Commonwealth Land - [50736]	WA	In buffer area only
Commonwealth Land - [50751]	WA	In buffer area only
Commonwealth Land - [50781]	WA	In buffer area only
Commonwealth Land - [50872]	WA	In buffer area only
Commonwealth Land - [51160]	WA	In buffer area only
Commonwealth Land - [51514]	WA	In feature area
Commonwealth Land - [50734]	WA	In buffer area only
Commonwealth Land - [50755]	WA	In buffer area only
Commonwealth Land - [50756]	WA	In buffer area only
Commonwealth Land - [50732]	WA	In buffer area only
Commonwealth Land - [50731]	WA	In buffer area only
Commonwealth Land - [50763]	WA	In buffer area only
Commonwealth Land - [51287]	WA	In buffer area only
Commonwealth Land - [50864]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [51143]	WA	In buffer area only
Commonwealth Land - [50866]	WA	In buffer area only
Commonwealth Land - [50865]	WA	In buffer area only
Commonwealth Land - [50745]	WA	In buffer area only
Commonwealth Land - [50867]	WA	In buffer area only
Commonwealth Land - [50848]	WA	In buffer area only
Commonwealth Land - [50835]	WA	In buffer area only
Commonwealth Land - [51421]	WA	In buffer area only
Commonwealth Land - [50272]	WA	In buffer area only
Commonwealth Land - [51149]	WA	In buffer area only
Commonwealth Land - [50749]	WA	In buffer area only
Commonwealth Land - [51975]	WA	In feature area
Commonwealth Land - [50729]	WA	In buffer area only
Commonwealth Land - [50779]	WA	In buffer area only
Commonwealth Land - [51163]	WA	In buffer area only
Commonwealth Land - [50725]	WA	In buffer area only
Commonwealth Land - [51376]	WA	In buffer area only
Commonwealth Land - [50788]	WA	In buffer area only
Commonwealth Land - [50789]	WA	In buffer area only
Commonwealth Land - [51147]	WA	In buffer area only
Commonwealth Land - [51146]	WA	In buffer area only
Commonwealth Land - [50790]	WA	In buffer area only
Commonwealth Land - [51427]	WA	In buffer area only
Commonwealth Land - [50782]	WA	In buffer area only
Commonwealth Land - [51899]	WA	In buffer area only
Commonwealth Land - [50836]	WA	In buffer area only
Commonwealth Land - [50837]	WA	In buffer area only

Commonwealth Land Name	State	Buffer Status
Commonwealth Land - [50786]	WA	In buffer area only
Commonwealth Land - [50787]	WA	In buffer area only
Commonwealth Land - [50784]	WA	In buffer area only
Commonwealth Land - [50838]	WA	In buffer area only
Commonwealth Land - [50741]	WA	In buffer area only
Commonwealth Land - [50740]	WA	In buffer area only
Commonwealth Land - [50792]	WA	In buffer area only
Commonwealth Land - [50793]	WA	In buffer area only
Commonwealth Land - [50844]	WA	In buffer area only
Commonwealth Land - [50809]	WA	In buffer area only
Commonwealth Land - [50796]	WA	In buffer area only
Commonwealth Land - [50843]	WA	In buffer area only
Commonwealth Land - [50794]	WA	In buffer area only
Commonwealth Land - [51151]	WA	In buffer area only
Commonwealth Land - [50795]	WA	In buffer area only
Commonwealth Land - [51153]	WA	In buffer area only
Commonwealth Land - [51152]	WA	In buffer area only
Commonwealth Land - [51150]	WA	In buffer area only
Commonwealth Land - [51155]	WA	In buffer area only
Commonwealth Land - [50762]	WA	In buffer area only

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Anous stolidus			
Common Noddy [825]		Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In buffer area only
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat known to occur within area overfly marine area	In feature area
Calidris pugnax as Philomachus pugnax Ruff [91256]		Roosting known to occur within area overfly marine area	In buffer area only
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area overfly marine area	In buffer area only
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area overfly marine area	In buffer area only
Charadrius dubius Little Ringed Plover [896]		Roosting known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius ruficapillus Red-capped Plover [881]		Roosting known to occur within area overfly marine area	In buffer area only
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Gallinago megala Swinhoe's Snipe [864]		Roosting likely to occur within area overfly marine area	In buffer area only
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area overfly marine area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Roosting known to occur within area overfly marine area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		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 likely to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area overfly marine area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Breeding known to occur within area	In buffer area only
Recurvirostra novaehollandiae Red-necked Avocet [871]		Roosting known to occur within area overfly marine area	In buffer area only
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area overfly marine area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area overfly marine area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Species or species habitat known to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
Balannup Lake	Nature Reserve	WA	In buffer area only
Canning River	Management Area	WA	In buffer area only
Forrestdale Lake	Nature Reserve	WA	In buffer area only
Gibbs Road	Nature Reserve	WA	In buffer area only
Harry Waring Marsupial Reserve	Nature Reserve	WA	In buffer area only
Kenwick Wetlands	Nature Reserve	WA	In buffer area only
Modong	Nature Reserve	WA	In buffer area only
Piara	Nature Reserve	WA	In buffer area only
Thomsons Lake	Nature Reserve	WA	In buffer area only
Unnamed WA49299	Nature Reserve	WA	In buffer area only
Unnamed WA49362	Nature Reserve	WA	In buffer area only
Unnamed WA49363	Conservation Park	WA	In buffer area only
Unnamed WA49561	Conservation Park	WA	In buffer area only
Unnamed WA53313	Conservation Park	WA	In buffer area only
Unnamed WA53649	Nature Reserve	WA	In buffer area only
Wandi	Nature Reserve	WA	In buffer area only
Nationally Important Wetlands			[Resource Information]
Wetland Name		State	Buffer Status
Booragoon Swamp		WA	In buffer area only
Brixton Street Swamps		WA	In buffer area only

Wetland Name	State	Buffer Status
Forrestdale Lake	WA	In buffer area only
Gibbs Road Swamp System	WA	In buffer area only
Swan-Canning Estuary	WA	In buffer area only
Thomsons Lake	WA	In buffer area only

EPBC Act Referrals [Resource Information]				
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
119 Hammond Road Residential Development	2023/09541		Completed	In buffer area only
Cockburn Surf Park	2022/09267		Completed	In buffer area only
Hammond Park Mixed Use Development	2024/09820		Assessment	In buffer area only
Jandakot Airport Expansion, Commercial Development and Clearing of Vegetation	2009/4796		Approval	In buffer area only
JANDAKOT EASTERN LINK ROAD	2022/09401		Completed	In buffer area only
Jandakot Horse Agistment	2022/09280		Assessment	In buffer area only
Kargotich Road Widening Project	2023/09716		Completed	In buffer area only
Lot 16 Barfield Road: Residential Development	2023/09450		Approval	In buffer area only
Residential Development, Wattleup Road, Hammond Park, WA	2021/8933		Post-Approval	In buffer area only
Southern Link Road Stage 3 City of Canning	2020/8809		Assessment	In buffer area only
Tree removal for road widening - Eighth Road, Armadale, WA	2023/09563		Completed	In buffer area only
Vegetation clearing (Cwlth land), Jandakot Airport, Cockburn, WA	2013/7032		Post-Approval	In buffer area only
Controlled action				
Byford Rail Extension, Byford, WA	2020/8764	Controlled Action	Post-Approval	In buffer area only
Clearing of Lots 2 and 10 Rowley Road, Mandogalup WA	2018/8182	Controlled Action	Assessment Approach	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Construction of Fiona Stanley Hospital	2008/3970	Controlled Action	Post-Approval	In buffer area only
Development of Kwinana Quay port facility	2008/4387	Controlled Action	Completed	In buffer area only
Garden Street road extension, Huntingdale, city of Gosnells, WA	2016/7735	Controlled Action	Post-Approval	In buffer area only
Hammond Park Secondary School development, WA	2016/7741	Controlled Action	Post-Approval	In buffer area only
Honeywood Estate Development	2010/5476	Controlled Action	Post-Approval	In buffer area only
Keane Road Strategic Link, proposed construction central portion of Keane Road	2009/5035	Controlled Action	Completed	In buffer area only
Lots 13, 14 & 18 Barfield Rd & Lots 48-51 Rowley Rd, Hammond Park	2012/6524	Controlled Action	Post-Approval	In buffer area only
Mandogalup Urban Development, Mandogalup, WA	2014/7308	Controlled Action	Post-Approval	In buffer area only
Natural Gas Pipeline Expansion	2006/2813	Controlled Action	Post-Approval	In buffer area only
Ranford Road Residential Development	2002/549	Controlled Action	Post-Approval	In buffer area only
Residential development and bushfire protection within part Lot 9006 Reilly Road, Harrisdale, WA	2016/7846	Controlled Action	Post-Approval	In buffer area only
Residential Development Lot 131 Jandakot Road, Treeby WA	2018/8205	Controlled Action	Further Information Request	In buffer area only
Residential developmnt, Lots 11 and 74 Beenyup Road, Banjup, WA	2017/7923	Controlled Action	Post-Approval	In buffer area only
Residential Estate at Lot 1580 Warton Road, Southern River	2004/1471	Controlled Action	Post-Approval	In buffer area only
Residential Estate Development, Lot 682 Rowley Road, Mandogalup, Western Australia	2014/7126	Controlled Action	Post-Approval	In buffer area only
Roe Highway extension, Kwinana Freeway to Stock Road, WA	2009/5031	Controlled Action	Post-Approval	In buffer area only
Roe Hwy Extension	2003/972	Controlled Action	Post-Approval	In buffer area only
Thornlie-Cockburn Link Project, WA	2018/8188	Controlled Action	Post-Approval	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Tonkin Highway Extension ??? Thomas Road to South Western Highway	2019/8608	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
'Looping 10' gas transmission pipeline from Kwinana to Hopelands	2005/2212	Not Controlled Action	Completed	In buffer area only
Armadale Road Duplication - Tapper to Anstey Road	2017/7972	Not Controlled Action	Completed	In buffer area only
Armadale Road to North Lake Road Bridge development, Jandakot, WA	2018/8284	Not Controlled Action	Completed	In buffer area only
Bibra Lake Aboriginal Cultural Centre Development	2020/8642	Not Controlled Action	Completed	In buffer area only
Burslem Drive Bridge Duplication Over Canning River, Maddington, WA	2014/7115	Not Controlled Action	Completed	In buffer area only
Bushfire hazard reduction, Lot 37 Barfield Road, Hammond Park, WA	2018/8204	Not Controlled Action	Completed	In buffer area only
Calleya Residential Development, Banjup, WA	2016/7708	Not Controlled Action	Completed	In buffer area only
Clearing of Native Vegetation, Hammond Park, WA	2011/6041	Not Controlled Action	Completed	In buffer area only
Commercial development of Lot 106 Wright Road, Forrestdale WA	2003/1255	Not Controlled Action	Completed	In feature area
Construction of Hammond Road Primary School, Hammond Park, WA	2012/6619	Not Controlled Action	Completed	In buffer area only
Construction of international rowing course and commercial/residential areas	2003/1034	Not Controlled Action	Completed	In feature area
Denny Avenue Level Crossing Removal, Kelmscott WA	2018/8377	Not Controlled Action	Completed	In buffer area only
Eighth Road and Forrest Road Upgrade, Armadale, WA	2019/8538	Not Controlled Action	Completed	In buffer area only
Eradication of the European House Borer, Perth metropolitan area, WA	2009/5027	Not Controlled Action	Completed	In feature area
extensions to minerals laboratory	2005/2285	Not Controlled Action	Completed	In buffer area only
Frankland Parks Oval project, Hammond Park, WA	2018/8369	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Gas-fired Power Station	2005/2213	Not Controlled Action	Completed	In buffer area only
Grazing of stock and associated works on Lot 1790 Passmore Street, Southern River Western Australia	2018/8176	Not Controlled Action	Completed	In buffer area only
Hammond West Urban Development, Hammond Park, WA	2017/7917	Not Controlled Action	Completed	In buffer area only
Hazard reduction and site access, Lot 682 Rowley Road, Mandogalup, WA	2018/8186	Not Controlled Action	Completed	In buffer area only
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
Jandakot Road Widening, Solomon Road to Berrigan Drive, Jandakot, WA	2020/8728	Not Controlled Action	Completed	In buffer area only
Kwinana Fwy southbound widening Roe Hwy to Armadale Rd and construction of farrington Rd off-ramp	2013/7062	Not Controlled Action	Completed	In buffer area only
Kwinana Gas-Fired Power Station	2005/2101	Not Controlled Action	Completed	In buffer area only
Lot 28 157 Barfield Road, Hammond Park - Proposed Residential Development	2021/9063	Not Controlled Action	Completed	In buffer area only
Lot 29 Barfield Road, Hammond Park	2017/7948	Not Controlled Action	Completed	In buffer area only
Lot 2 Nicholson Road, Forrestdale	2012/6561	Not Controlled Action	Completed	In buffer area only
Lots 12, 13 and 18 Hammond Road, Lot 80 Beeliar Drive and Lot 500 Hird Road	2012/6576	Not Controlled Action	Completed	In buffer area only
Murdoch University Sports Precinct, Melville, WA	2016/7823	Not Controlled Action	Completed	In buffer area only
Oakford Village development, Shire of Serpentine-Jarrahdale, WA	2018/8157	Not Controlled Action	Completed	In buffer area only
Perth Seawater Desalination Project: Thomsons Lake to Kogolup Pipeline	2005/1971	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Residential Development, Hilbert	2020/8675	Not Controlled Action	Completed	In buffer area only
Residential Development, Lot 12 Lyon Road, Aubin Grove, WA	2013/6852	Not Controlled Action	Completed	In buffer area only
Residential development, Lot 13 Lyon Road, Aubin Grove, WA	2014/7151	Not Controlled Action	Completed	In buffer area only
Residential development, Lot 33 Barfield Road, Hammond Park, WA	2015/7548	Not Controlled Action	Completed	In buffer area only
Residential development, Lot 74 Wattleup Road, Hammond Park, WA	2018/8273	Not Controlled Action	Completed	In buffer area only
Residential development, Lots 124 and 125, Wattleup Road, Hammond Park, WA	2015/7519	Not Controlled Action	Completed	In buffer area only
Residential development, Lots 1 and 7-11 Lyon Rd and Lot 88 De Haer Rd, Wandi, WA	2017/7908	Not Controlled Action	Completed	In buffer area only
Residential Development of Lots 76 and 107 Wattleup Road, Hamond Park	2020/8865	Not Controlled Action	Completed	In buffer area only
Residential estate, multiple lots, Mandogalup, WA	2018/8264	Not Controlled Action	Completed	In buffer area only
Road widening - Eighth Road Armadale between Gribble Avenue and Armadale Road	2021/8964	Not Controlled Action	Completed	In buffer area only
Roe Highway - Karel Avenue to Hope Road Bridge Project	2005/2061	Not Controlled Action	Completed	In buffer area only
Southern River Mixed Business Precinct F, City of Gosnells, WA	2013/6813	Not Controlled Action	Completed	In buffer area only
Southern River Precinct 3E	2017/7900	Not Controlled Action	Completed	In buffer area only
South Metropolitan Crop Research Hub, Murdoch WA	2018/8201	Not Controlled Action	Completed	In buffer area only
Stages 2-5 of primary school and assoc facilities development, Hammond Park, WA	2015/7407	Not Controlled Action	Completed	In buffer area only
Tonkin Highway Extension	2001/470	Not Controlled Action	Completed	In buffer area only
Translocation of orchids (Caladenia huegelii) from Roe Hway Reserve	2002/781	Not Controlled Action	Completed	In buffer area only

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Urban development, Lot 109 Wattleup Road, Hammond Park, WA	2015/7425	Not Controlled Action	Completed	In buffer area only
Urban development of Lot 107 Wattleup Road, Hammond Park, WA	2017/7890	Not Controlled Action	Completed	In buffer area only
Urban developmnet & associated infrastructure, Lot 4 Armadale Road, Banjup WA	2013/7049	Not Controlled Action	Completed	In buffer area only
Wandi South residential development Kenby Close & Lyon Rd, Wandi, WA	2014/7198	Not Controlled Action	Completed	In buffer area only
Wentworth West residential development, Bartram Road, Success, WA	2014/7245	Not Controlled Action	Completed	In buffer area only
Wungong Transfer Mains Project	2007/3532	Not Controlled Action	Completed	In buffer area only
Yule Brook Main Drain Flood Mitigation Works	2019/8572	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner)				
City of Cockburn Sporting Facilities	2005/2139	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
South West Metropolitan Railway Project	2003/1175	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Referral decision				
AIC Forrestdale Campus, Educational Establishment	2021/9134	Referral Decision	Referral Publication	In buffer area only
Commercial development of Lot 414 Grove Road, Kenwick	2021/9022	Referral Decision	Referral Publication	In buffer area only
Rezoning of Crown Reserve 39181 to facilitate future residential development	2005/2096	Referral Decision	Completed	In buffer area only

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 is 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 on the contents of this report.

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 point locations and environmental data layers.

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 when time permits.

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 breeding sites; and
- 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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Department of Climate Change, Energy, the Environment and Water

GPO Box 3090

Canberra ACT 2601 Australia

+61 2 6274 1111

