PREPARED FOR

Great Eastern Offshore Wind Farm Project Co Pty Ltd

Great Eastern Offshore Wind

Preliminary Terrestrial Ecology Report

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Great Eastern Offshore Wind

Preliminary Terrestrial Ecology Report

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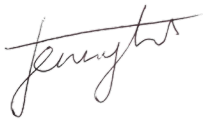

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ACRONYMS AND ABBREVIATIONS

Name	Description
AC	Alternating Current
AEMO	Australian Energy Market Operator
CaLP Act	*Catchment and Land Protection Act 1994* (Victorian)
CMA	Catchment Management Authority
Corio	Corio Generation Limited
CSA	Cross-Sectional Area
DCCEEW	Commonwealth Department of Climate Change, Energy, the Environment and Water (Commonwealth)
DEECA	Department of Energy, Environment and Climate Action (Victorian)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
EES	Environmental Effects Statement
EIS	Environmental Impact Statement
EE Act	*Environment Effects Act 1978* (Victorian)
ERM	Environmental Resources Management Australia Pty Ltd
ESRI	Environmental Systems Research Institute
EVC	Ecological Vegetation Class
FFG Act	*Flora and Fauna Guarantee Act 1988* (Victorian)
GBS	Gravity Base Structure
GEOW	Great Eastern Offshore Wind
GIS	Geographic Information System
GREZ	Gippsland Renewable Energy Zone
HDD	Horizontal Directional Drilling
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IBRA	Interim Biographic Regionalisation of Australia
IEC	International Electrotechnical Commission
kV	Kilovolts
LiDAR	Light Detection and Ranging
MNES	Matters of National Environmental Significance
MW	Megawatts
NEM	National Electricity Market
NSW	New South Wales
NVIM	Native Vegetation Information Management

Name	Description
O&M	Operations and Maintenance
OEM	Original Equipment Manufacturers
OWF	Offshore Wind Farm
PMST	Protected Matters Search Tool
ROV	Remotely Operated Vehicle
SPMTs	Self-Propelled Modular Transporters
Study Area	The Onshore Transmission Envelope
TEC	Threatened Ecological Communities
TJB	Transition Joint Bay
VBA	Victorian Biodiversity Atlas
VIC	Victoria
WTGs	Wind Turbine Generators

1. INTRODUCTION

Corio Generation (Corio) is proposing to develop the Great Eastern Offshore Wind (GEOW, or the "Project") in Commonwealth waters offshore from the Shires of Wellington in Victoria. Corio will lead and develop the Project by through its project entity Great Eastern Offshore Wind Farm Project Co Pty Ltd (ACN 664 379 168) as trustee of the Great Eastern Offshore Wind Farm Asset Trust (the Proponent).

1.1 PROJECT LOCATION

The Project comprises both onshore and offshore components and is located in the Gippsland region of south-east Victoria. The Project Area generally extends from the inland Giffard region to the coast covering McGaurans Beach and Woodside Beach, within the Wellington Shire local government area. The Project Area also extends across State waters (three nautical miles from the Victorian coast), Commonwealth Waters (12 nautical miles from the coast) and the contiguous zone (24 nautical miles from the coast) (Figure 1-3).

1.2 PROJECT DESCRIPTION

The Project Area comprises the following key components and investigation areas, shown in Figure 1-3, conceptually illustrated in Figure 1-1, and described below:

- Offshore Wind Farm (OWF) Site (667 km^2), located in Commonwealth waters, where the offshore turbines, substations and inter-array cabling will be located.
- Offshore Cable Envelope (148 km^2), located within Commonwealth waters.
- Nearshore cable envelope (20 km^2), located within Victorian State waters.
- Onshore Transmission Envelope (31 km^2), located inland, where onshore export cables will be installed between the landfall Transition Joint Bay (TJB) and VicGrid's Coordinated Connection Point.

Within each cable envelope there will be a defined cable corridor. The Onshore Transmission Envelope will provide for the development of a cable corridor 80 m wide (including a 40 m construction footprint and 20 m buffer either side), the location of which will be informed by both design and operational constraints and the findings of on-ground ecological surveys.

The Project will be developed with a total nameplate capacity of approximately 2,500 megawatts (MW), subject to final Project design and grid capacity, likely comprising a total of up to 172 turbines. Each turbine is envisaged to be installed on fixed-bottom offshore foundations. The Project will be developed in stages to align with the development of the industry and its supporting infrastructure.

The baseline electrical configuration envisaged for the Project is to be high voltage alternating current (HVAC), which will utilise inter array cables connected to offshore substations that will transform the voltage. Export cables from the offshore substations will export electricity to shore, connecting at the cable TJB at landfall. From the cable TJB, onshore export cables will carry the electricity to the grid via a connecting substation located at or close to the VicGrid Coordinated Connection Point.

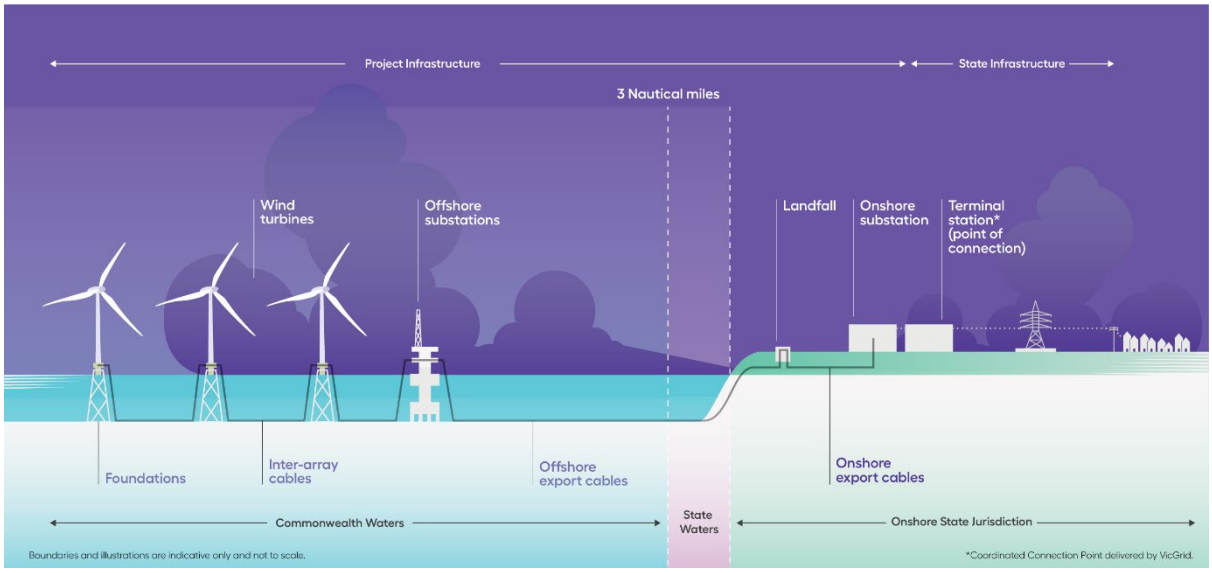
A Project concept design is presented in Figure 1-1 where the Project's onshore substation equipment is assumed to be located within VicGrid's Coordinated Connection Point.

VicGrid is leading the development of transmission infrastructure that provides a Coordinated Connection point(s) for offshore wind development in the Gippsland region (VicGrid Coordinated Connection Point). Per the Victorian Government's Offshore Wind Implementation Statement 3 (dated December 2023), the VicGrid Coordinated Connection Point is intended to avoid un-coordinated transmission development in the Gippsland region, which Corio understands through its early stakeholder engagement is a key concern for both local communities and Traditional Owners.

The proposed Onshore Transmission Envelope is located within the Offshore Wind Energy Transmission area released by VicGrid in March 2024. Corio's base case will involve connecting into VicGrid's Coordinated Connection Point.

The Project design will be further developed in parallel with the results of environmental and technical feasibility studies, and stakeholder consultation, and will be confirmed during the pre-construction phase of the Project.

FIGURE 1-1 PROJECT COMPONENT CONCEPTUAL ILLUSTRATION



1.3 OBJECTIVES OF THE DESKTOP ECOLOGICAL ASSESSMENT

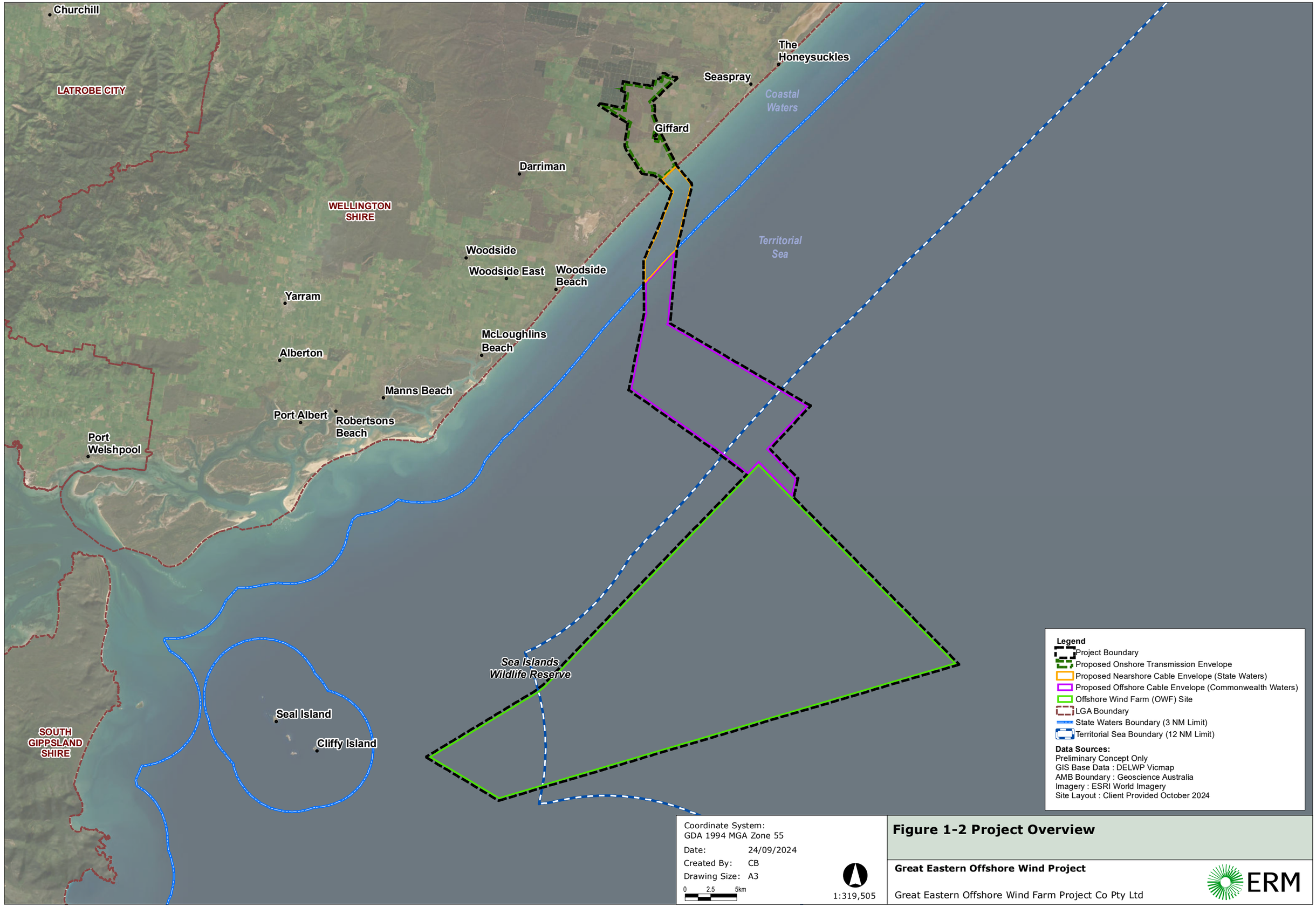
This Preliminary Terrestrial Ecology Report is a desktop assessment concerned with the area contained within the Onshore Transmission Envelope only, herein referred to as the 'Study Area' which includes the following key Project components:

- Shore crossing
- Cable Transition Joint Bay (TJB), and
- Export cables.

The location of the Onshore Transmission Envelope, herein referred to as the 'Study Area', is shown relative to the offshore components of the Project in Figure 1-2. The Study Area encompasses the broadest possible area where the final cable alignment and associated infrastructure may be located. This equates to approximately 3,100 ha and is shown in Figure 1-3. Detailed alignment and placement of the above infrastructure will be informed by preliminary engineering design and environmental studies in later stages of Project development.

This report presents the findings of a high-level desktop study that relates to a broad area that could be potentially impacted. It has been prepared to assist in the Project's decision-making process and inform the next stages of the ecological survey effort required to comply with relevant regulatory guidelines.

The objective of this Preliminary Terrestrial Assessment Report is to identify potential biodiversity values within the Study Area, discuss the constraints that these may have on the Project, inform avoidance and mitigation opportunities in the development design phase, highlight the associated approvals required relating to any impacts to these matters, and provide recommendations for next steps towards an appropriate final ecological assessment. Specifically, this report investigations biodiversity matters relating to the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and State considerations in accordance with the *Environment Effects Act 1978 (*EE Act), *Flora and Fauna Guarantee Act 1988* (FFG Act), and Victorian Planning Scheme.



Coordinate System:
GDA 1994 MGA Zone 55

Date: 24/09/2024

Created By: CB

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Figure 1-2 Project Overview

Great Eastern Offshore Wind Project

Great Eastern Offshore Wind Farm Project Co Pty Ltd

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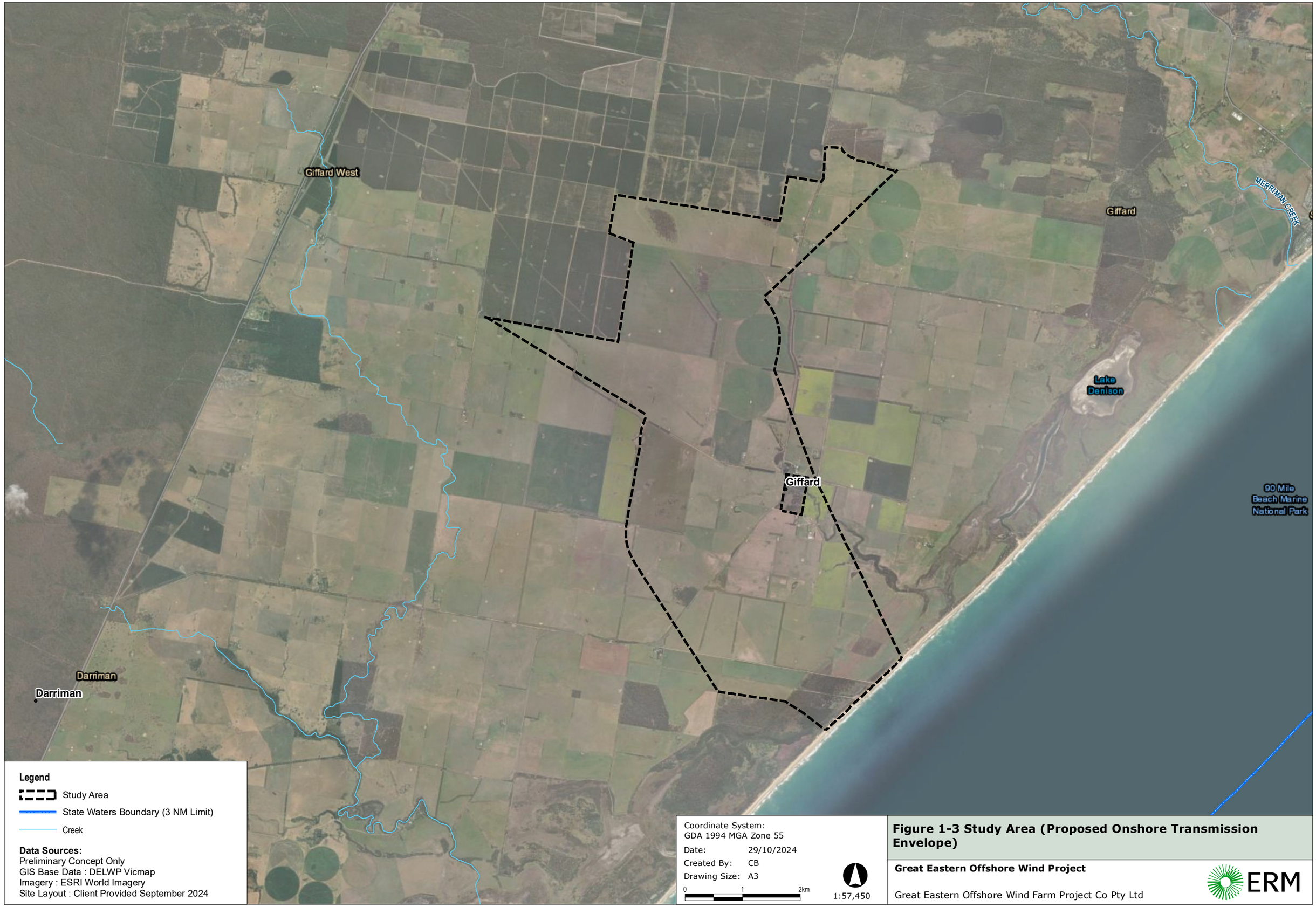

Figure 1-3 Study Area (Proposed Onshore Transmission Envelope)

Great Eastern Offshore Wind Project

Great Eastern Offshore Wind Farm Project Co Pty Ltd

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2. METHODOLOGY

The following section describes the methods used to undertake the Preliminary Terrestrial Ecological Assessment. Key steps included:

- A desktop review of existing information using both database searches, relevant published research and online government sources
- Description of the existing environment
- Likelihood of occurrence assessment
- Implications of the findings under relevant Commonwealth and Stage legislation, and
- Recommendations of next steps for the ecological assessments and approvals process.

2.1 MARINE AND TERRESTRIAL CONSIDERATIONS

Preliminary ecological assessments for the Project have been addressed separately through the GEOW Preliminary Marine Assessment Report (ERM, 2024) and this terrestrial report. Some marine species and communities are relevant for both terrestrial and marine areas.

This report refers to only the terrestrial sections of the Study Area and the investigations focused on:

- Native vegetation and associated Ecological Vegetation Classes (EVCs)
- Terrestrial flora
- Terrestrial ecological communities
- Fauna including:
  - Amphibians – amphibians that are found on land
  - Terrestrial birds – associated with woodland, forest, grassland or shrubland habitats or aerial species
  - Wetland/coastal birds – associated with coastal, estuarine, wetlands or freshwater habitats (e.g., migratory shorebirds, wader species)
  - Freshwater/Diadromous fish – associated with freshwater environments or spend part of their life cycle in freshwater environments (i.e., diadromous)
  - Invertebrates – crayfish, insects, etc.
  - Terrestrial mammals – associated with woodland, grassland, shrubland or forest habitats, and
  - Terrestrial reptiles – lizards, snakes, etc.

2.1.1 MARINE SPECIES

Where marine species have been identified in both marine and terrestrial desktop searches but are unlikely to occur or to be affected by activities within the Onshore Transmission Envelope (such as cetaceans, sharks, and pelagic seabirds), these have been addressed within the marine report.

2.1.2 TIDAL AND COASTAL SPECIES

Where tidal and coastal species or communities have been identified that could potentially be impacted by both onshore and offshore activities, these species and communities have been addressed in both the marine and terrestrial reports.

2.2 DESKTOP REVIEW

A desktop assessment of ecological values known or predicted to be present within the Study Area was undertaken using the government databases and spatial datasets outlined in Table 2-1. A likelihood of occurrence assessment was then undertaken for all species and communities listed under the EPBC Act and FFG Act either previously recorded or with modelled habitat. To account for poor historical survey effort in the region, the potential for dispersal of species across the broader landscape, and the limitations of habitat and vegetation modelling, the data considered includes that within the Study Area and within a 10 km buffer.

2.2.1 DATABASE SEARCHES

Publicly available desktop sources shown in Table 2-1 were examined to review and document the ecological values potentially present within the Study Area. All searches were conducted 5 September 2024.

TABLE 2-1 DATABASE DESKTOP SEARCHES

Database	Description
*EPBC Act Protected Matters Search Tool**	The *EPBC Act Protected Matters Search Tool* (PMST) (DCCEEW 2024) provides predictive results on the occurrence of MNES based on mapping of known and potential species distribution, habitat, threatened ecological communities (TECs) and wetlands within a defined area. For assessments of large projects, areas with connectivity or habitat linkages to regions of high biodiversity, and potentially poorly studied areas, a standard buffer of 10 km is applied to the Study Area to capture a more comprehensive predictive dataset.
Victorian Biodiversity Atlas	The *Victorian Biodiversity Atlas* (VBA) database provides a list of flora and fauna species recorded within a 10 km radius of the Study Area. VBA searches were limited to the restricted 1M grid species and those VBA_25 database. VBA_100 database records were disregarded on the basis of locational uncertainty. This database has a locational uncertainty ranging from 500m-10km.
NatureKit	*NatureKit* provides GIS mapping, maintained by the Department of Energy, Environment and Climate Change (DECCA) including modelled mapping of extent and pre-1750 Ecological Vegetation Classes (EVCs) and known threatened species records.
VicPlan	*VicPlan* is an online tool maintained by the Victorian Department of Transport and Planning (DTP) that provides mapping of Planning Scheme controls and other resources including those related to property, administration, catchments and heritage.
Aerial imagery of the Study Area	Environmental Systems Research Institute (ESRI) World imagery provides visualisations of vegetation, topography and other habitat features.

*The *EPBC Act Protected Matters Report* is provided in Appendix A.

2.2.2 LIKELIHOOD OF OCCURRENCE ASSESSMENT

The likelihood of occurrence assessment was informed by desktop sources as outlined above. The likelihood of occurrence approach refines the desktop-generated list using site-specific and specific-species habitat information. Desktop sources are indicative only, and likelihood

rankings, particularly concerning the presence of preferred habitat, are conservative. The assessment ranks the likelihood of the species occurring within the Study Area through analysis of species distribution information and the presence of specific habitat attributes as identified through the desktop analysis. The criteria applied are outlined in Table 2-2 below.

TABLE 2-2 LIKELIHOOD OF OCCURRENCE CRITERIA

	Preferred habitat exists	**General habitat exists[2]**	**Habitat does not exist[3]**
Records[1] within the Study Area	Known	Known	Known
Records within the Locality[4]	Likely	Potential	Unlikely
No records within the Locality, but the Study Area is within known distribution	Potential	Potential	Unlikely
No records in the Locality, and the Study Area is outside of known distribution	Unlikely	Unlikely	Unlikely

1. Records considered are those that have been recorded in the last 30 years, as per VBA.
2. Habitat may be considered general, but not preferred because: some desired habitat features may be present, but not all; habitat may have poor connectivity; or habitat may be known to be disturbed.
3. Based on sources reviewed and/or field survey results.
4. 'Locality' refers to a 10 km buffer around the Study Area and is inclusive of the Study Area.

2.3 NOMENCLATURE AND CONSERVATION STATUS

2.3.1 FLORA

Unless otherwise noted, common and scientific names for flora follow the VBA (Version 3.2.6). Flora conservation status was determined in accordance with current listing under the EPBC Act and the FFG Act.

2.3.2 VEGETATION COMMUNITIES

Native vegetation in Victoria is mapped in units known as Ecological Vegetation Classes (EVCs) (DELWP 2019d). EVCs are described according to a combination of floristic, life form and ecological characteristics, and through an inferred fidelity to particular environmental attributes. Each EVC occurs under a common regime of ecological processes within a given biogeographic range and may contain multiple floristic communities.

Other classifications of vegetation types that occur in Victoria include communities listed as threatened under the EPBC Act and/or the FFG Act.

2.3.3 FAUNA SPECIES AND FAUNA COMMUNITIES

Unless otherwise noted, common and scientific names for fauna follow the VBA database (accessed May 2023).

Fauna conservation significance was determined in accordance with the FFG Act and the EPBC Act and includes migratory species listed under the latter.

The EPBC Act and the FFG Act list numerous threatened fauna communities, at a national or state scale, respectively. Fauna communities known to occur or have the potential to occur within the Study Area are only considered if they are listed under one or more of these Acts.

3. RESULTS

This section presents the results of the desktop assessment of existing values.

3.1 REGIONAL CONTEXT

The terrestrial Study Area is located within the West Gippsland Catchment Management Authority (CMA), and within the South East Coastal Plain (SCP01) Subregion within the Gippsland Plain Interim Biographic Regionalisation of Australia (IBRA) bioregion.

Gippsland Plain, located in southeast Victoria, includes flat low lying coastal and alluvial plains with a gently undulating terrain dominated by barrier dunes and floodplains and swampy flats. The soils associated with the undulating terrain are both texture contrast soils (Chromosols, Sodosols) and gradational texture soils (Dermosols), and typically support the Lowland Forest ecosystem. The barrier dunes are predominantly sandy soils (Podosols and Tenosols) supporting Heathy Woodland and Damp Sands Herb-rich Woodland ecosystems. The fertile floodplains and swamps are earths and pale yellow and grey texture contrast soils (Hydrosols) and support Swamp Scrub, Plains Grassy Woodland, Plains Grassy Forest, Plains Grassland and Gilgai Wetland ecosystems.

The bioregion is generally below 200 m above sea level while the coastline includes sandy beaches backed by dunes and cliffs, and shallow inlets with extensive mud and sand flats. The bioregion has a temperate climate, averaging between 500 to 1100 mm a year. Most rain falls in winter, and the Strzelecki Ranges create a rain-shadow to the east. Several rivers drain the bioregion including the Avon, Bass, Latrobe, Macalister, Mitchell, Tambo, Tarwin, Thompson and Yarra.

The largest and highest quality native vegetation remnants within the region are represented in Holey Plains State Park, Stradbroke Flora and Fauna Reserve, Jack Smith Lake Wildlife Reserve, Giffard (Rifle Range) Flora Reserve, McLoughlins Beach - Seaspray Coastal Reserve, Mullungdung State Forest and a range of smaller reserves. These areas support a continuous cover of native vegetation and lifeforms characteristic of the mosaic of EVCs modelled to occur in the Study Area. In addition, they also contain large trees, which are likely to provide essential habitat for a range of faunal species.

Outside these areas, moderate to high-quality remnant communities are also present in smaller reserves, private land, linear roadside verges, and streamside reserves. These smaller areas are predicated to support medium to high-quality vegetation.

Agricultural land, while essentially cleared of native vegetation, also provides low to moderate habitat and landscape connectivity value in the Study Area, through scattered trees in paddocks and small patches of native canopy trees and remnant understory.

3.2 NATIVE VEGETATION

DEECA mapping of remnant native vegetation and EVC distribution suggests eight EVCs, across a total of 193.18 ha, are modelled to occur within the Study Area (Table 3-1).

This accounts for only approximately 6.2 % of the total Study Area, indicating that most of the area has been historically cleared with only isolated pockets of native vegetation remaining inland and in a narrow band along the coast (Figure 3-1).

Endangered EVCs account for less than 0.04 % of the Study Area, represented solely by 1.09 ha of EVC 53 Swamp Scrub.

Remnant vegetation in the Study Area is likely to be dominated by EVC 16 Lowland Forest and potentially EVC 48 Heathy Woodland (the latter represented in the mapping as part of the EVC 398 mosaic, which intimates that the differentiation between and area covered by Lowland Forest and Heathy Woodland respectively is too variable and small-scale to map with confidence).

EVC 1 and Coastal Dune Scrub/Coastal Dune Grassland Mosaic and EVC 10 Estuarine Wetland are both likely to be present in narrow bands along the coast. These patches are likely to be the most contiguous across the Study Area and therefore most prone to impacts from the creation of a transmission corridor.

TABLE 3-1 NATIVE VEGETATION MODELLED TO OCCUR IN THE STUDY AREA

EVC	BCS*	Total area (ha)
EVC 1 Coastal Dune Scrub/Coastal Dune Grassland Mosaic	Depleted	5.93
EVC 10 Estuarine Wetland	Least Concern	10.73
EVC 16 Lowland Forest	Vulnerable	59.58
EVC 53 Swamp Scrub	Endangered	1.09
EVC 191 Riparian Scrub	Vulnerable	14.30
EVC 698 Lowland Forest/Heathy Woodland Mosaic	Vulnerable	101.55
Total		**193.18**

*BCS = Biodiversity Conservation Status.

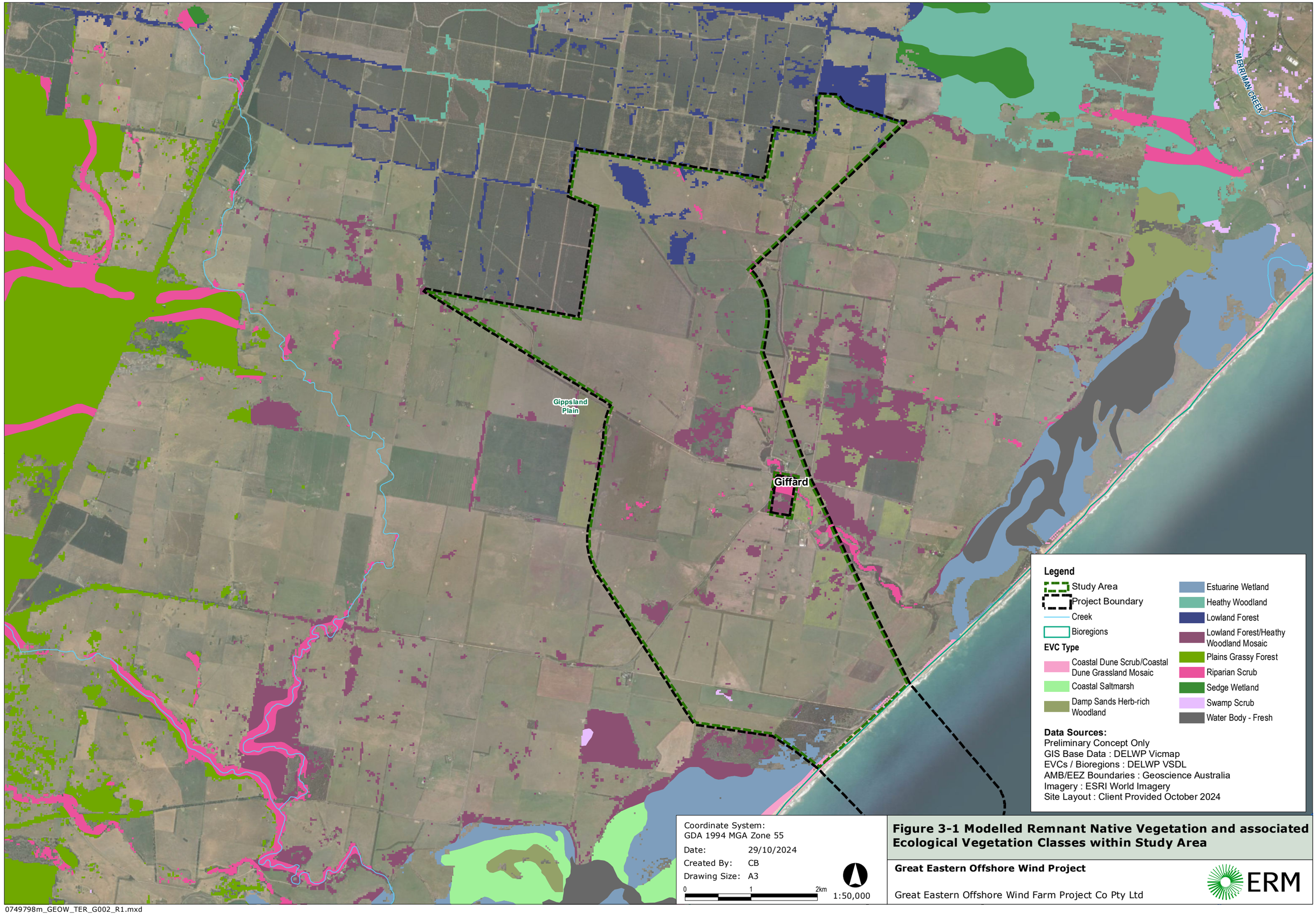

Figure 3-1 Modelled Remnant Native Vegetation and associated Ecological Vegetation Classes within Study Area

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3.3 THREATENED FLORA SPECIES

Records of flora listed under the EPBC Act and FFG Act are shown in Figure 3-2. The likelihood of occurrence of threatened flora (Appendix B) has identified five flora species listed under the EPBC Act and 18 listed under the FFG Act (with 3 species under both Acts) that are either known to occur or have at least a moderate likelihood of being present within the Study Area. These species are listed in Table 3-2 in and Table 3-3 respectively.

TABLE 3-2 FLORA LISTED UNDER THE EPBC ACT WITH AT LEAST THE POTENTIAL TO OCCUR IN THE STUDY AREA

Scientific name	Common name	EPBC Act status
Amphibromus fluitans	River Swamp Wallaby-grass	Vulnerable
Caladenia tessellata	Thick-lip Spider-orchid	Vulnerable
*Commersonia prostrata**	Dwarf Kerrawang	Endangered
*Pterostylis chlorogramma**	Green-striped Greenhood	Vulnerable
*Thelymitra epipactoides**	Metallic Sun-orchid	Endangered

* = species also listed under the FFG Act, as per Table 3-3 below.

TABLE 3-3 FLORA LISTED UNDER THE FFG ACT WITH AT LEAST THE POTENTIAL TO OCCUR IN THE STUDY AREA

Scientific name	Common name	FFG Act status
Acacia howittii	Sticky Wattle	Vulnerable
Caladenia aurantiaca	Orange-tip Finger-orchid	Endangered
Calochilus imberbis	Naked Beard-orchid	Critically Endangered
*Commersonia prostrata**	Dwarf Kerrawang	Endangered
Corybas fimbriates	Fringed Helmet-orchid	Endangered
Dianella longifolia var. *grandis s.l.*	Glaucous Flax-lily	Critically Endangered
Diuris punctata var. *punctata*	Purple Diuris	Endangered
Eucalyptus arenicola	Gippsland Lakes Peppermint	Endangered
Eucalyptus bosistoana	Coast Grey-box	Endangered
Grevillea chrysophaea	Golden Grevillea	Vulnerable
Leptorhynchos elongatus	Lanky Buttons	Endangered
Oxalis rubens	Dune Wood-sorrel	Endangered
Pomaderris discolor	Eastern Pomaderris	Endangered
Pomaderris pilifera subsp. *pilifera*	Striped Pomaderris	Endangered
Pseudanthus ovalifolius	Oval-leaf Pseudanthus	Vulnerable
*Pterostylis chlorogramma**	Green-striped Greenhood	Endangered
Pterostylis grandiflora	Cobra Greenhood	Endangered
*Thelymitra epipactoides**	Metallic Sun-orchid	Endangered

* = species also listed under the EPBC Act, as per Table 3-2 above.

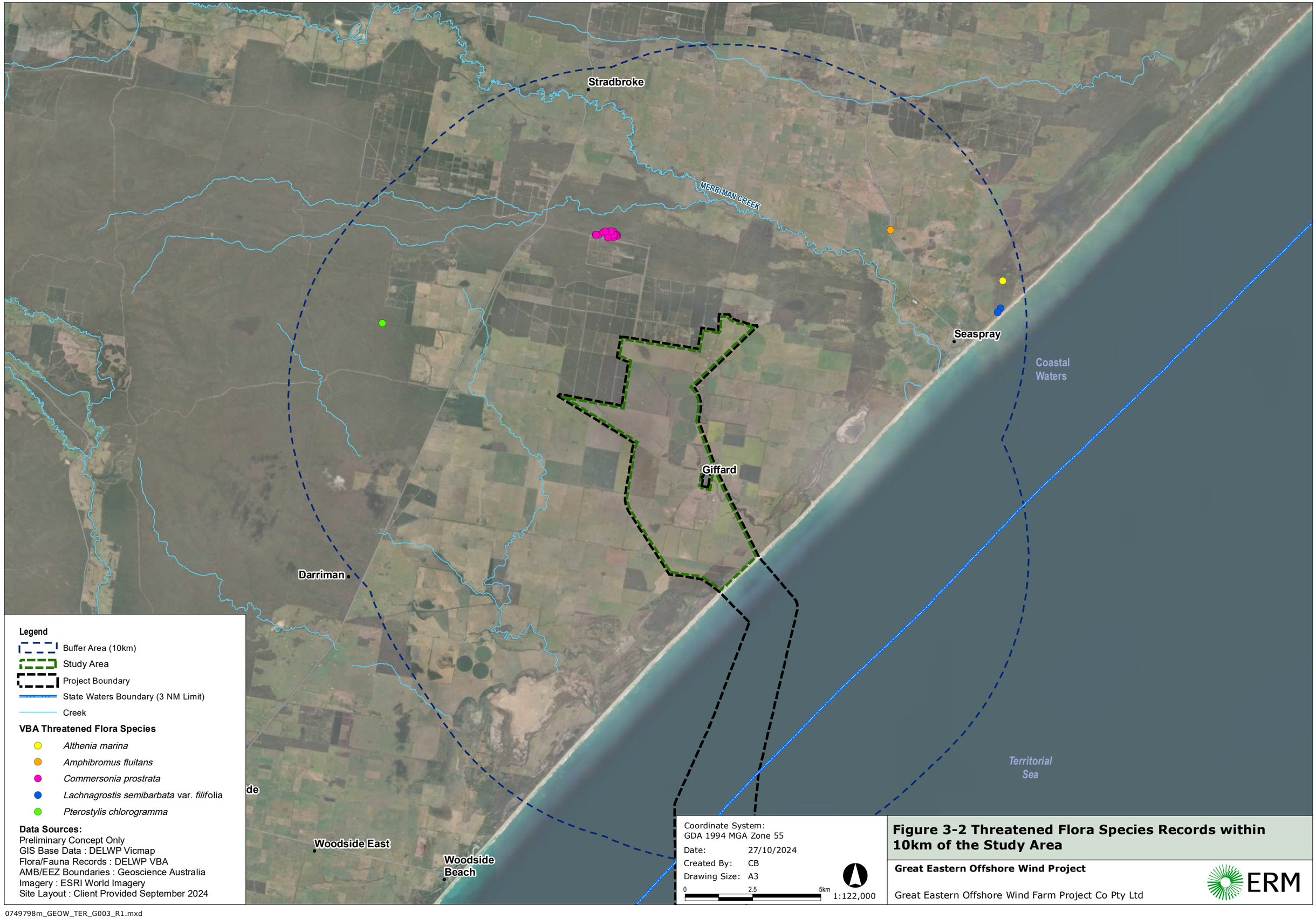

Figure 3-2 Threatened Flora Species Records within 10km of the Study Area

Great Eastern Offshore Wind Project

Great Eastern Offshore Wind Farm Project Co Pty Ltd

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3.4 THREATENED FAUNA SPECIES

Records of fauna listed under the EPBC Act and FFG Act are shown in Figure 3-3 for threatened species and Figure 3-4 for migratory species.

The likelihood of occurrence of threatened and migratory fauna (Appendix C) has identified 29 fauna species listed as threatened under the EPBC Act and 32 listed under the FFG Act that are either have existing records from or have the potential to occur within the Study Area. These species are listed in Table 3-4 in and Table 3-5 respectively. Twenty-one of the species listed as threatened or migratory under the EPBC Act are also listed as threatened under State legislation.

TABLE 3-4 FAUNA SPECIES LISTED UNDER THE EPBC ACT RECORDED FROM WITHIN OR WITH POTENTIAL TO OCCUR IN THE STUDY AREA

Scientific Name	Common Name	EPBC Act Status
Anthochaera phrygia	Regent Honeyeater	Critically Endangered
*Ardea alba modesta**	Eastern Great Egret	Migratory
Ardenna tenuirostris	Short-tailed Shearwater	Migratory
*Arenaria interpres**	Ruddy Turnstone	Vulnerable, Migratory
*Botaurus poiciloptilus**	Australasian Bittern	Endangered
Bubulcus coromandus	Eastern Cattle Egret	Migratory
Calidris acuminata	Sharp-tailed Sandpiper	Vulnerable, Migratory
*Calidris canutus**	Red Knot	Vulnerable, Migratory
*Calidris ferruginea**	Curlew Sandpiper	Critically Endangered, Migratory
Calidris ruficollis	Red-necked Stint	Migratory
*Calidris tenuirostris**	Great Knot	Vulnerable, Migratory
*Callocephalon fimbriatum**	Gang-gang Cockatoo	Endangered
Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo	Vulnerable
Charadrius bicinctus	Double-banded Plover	Migratory
Charadrius mongolus	Lesser Sand Plover	Endangered
Chlidonias leucopterus	White-winged Black Tern	Migratory
Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)	Vulnerable
Gallinago hardwickii	Latham's Snipe	Vulnerable, Migratory
*Haliaeetus leucogaster**	White-bellied Sea-Eagle	Migratory
*Hirundapus caudacutus**	White-throated Needletail	Vulnerable, Migratory
*Hydroprogne caspia**	Caspian Tern	Migratory
*Lathamus discolor**	Swift Parrot	Critically Endangered
*Limosa lapponica baueri**	Bar-tailed Godwit	Endangered, Migratory
*Lissolepis coventryi**	Swamp Skink	Endangered

Scientific Name	Common Name	EPBC Act Status
Litoria aurea	Green and Golden Bell Frog	Vulnerable
*Litoria raniformis**	Growling Grass Frog	Vulnerable
*Neophema chrysogaster**	Orange-bellied Parrot	Critically Endangered
Neophema chrysostoma	Blue-winged Parrot	Vulnerable
*Numenius madagascariensis**	Eastern Curlew	Critically Endangered, Migratory
Pachyptila turtur subantarctica	Fairy Prion (southern)	Vulnerable
*Pluvialis fulva**	Pacific Golden Plover	Migratory
*Prototroctes maraena**	Australian Grayling	Vulnerable
Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable
Stagonopleura guttata	Diamond Firetail	Vulnerable
Sternula nereis nereis	Australian Fairy Tern	Vulnerable
*Thinornis cucullatus cucullatus**	Eastern Hooded Plover	Vulnerable
*Tringa nebularia**	Common Greenshank	Endangered, Migratory
*Uperoleia martini**	Martin's Toadlet	Endangered

* = species also listed under the FFG Act, as per Table 3-5 below.

TABLE 3-5 FAUNA SPECIES LISTED UNDER THE FFG ACT RECORDED FROM WITHIN OR WITH POTENTIAL TO OCCUR IN THE STUDY AREA

Scientific Name	Common Name	FFG Act Status
*Ardea alba modesta**	Eastern Great Egret	Endangered
*Arenaria interpres**	Ruddy Turnstone	Endangered
Biziura lobata	Musk Duck	Vulnerable
*Botaurus poiciloptilus**	Australasian Bittern	Critically Endangered
Calamanthus pyrrhopygius	Chestnut-rumped Heathwren	Vulnerable
*Calidris canutus**	Red Knot	Endangered
*Calidris ferruginea**	Curlew Sandpiper	Critically Endangered
*Calidris tenuirostris**	Great Knot	Critically Endangered
*Callocephalon fimbriatum**	Gang-gang Cockatoo	Endangered
Egretta garzetta	Little Egret	Endangered
*Haliaeetus leucogaster**	White-bellied Sea-Eagle	Endangered
Hieraaetus morphnoides	Little Eagle	Vulnerable
*Hirundapus caudacutus**	White-throated Needletail	Vulnerable
*Hydroprogne caspia**	Caspian Tern	Vulnerable
Ixobrychus dubius	Australian Little Bittern	Endangered
*Lathamus discolor**	Swift Parrot	Critically Endangered

Scientific Name	Common Name	FFG Act Status
*Limosa lapponica baueri**	Bar-tailed Godwit	Vulnerable
*Lissolepis coventryi**	Swamp Skink	Endangered
*Litoria raniformis**	Growling Grass Frog	Vulnerable
Nannoperca sp. 1	Flinders Pygmy Perch	Vulnerable
*Neophema chrysogaster**	Orange-bellied Parrot	Critically Endangered
Ninox strenua	Powerful Owl	Vulnerable
*Numenius madagascariensis**	Eastern Curlew	Critically Endangered
*Pluvialis fulva**	Pacific Golden Plover	Vulnerable
*Prototroctes maraena**	Australian Grayling	Endangered
Pseudophryne semimarmorata	Southern Toadlet	Endangered
Spatula rhynchotis	Australasian Shoveler	Vulnerable
Stictonetta naevosa	Freckled Duck	Endangered
*Thinornis cucullatus cucullatus**	Eastern Hooded Plover	Vulnerable
*Tringa nebularia**	Common Greenshank	Endangered
*Uperoleia martini**	Martin's Toadlet	Critically Endangered
Varanus varius	Lace Monitor	Endangered

* = species also listed under the EPBC Act, as per Table 3-4 above.

3.4.1 MIGRATORY SPECIES

The fauna likelihood of occurrence analysis (Appendix C) has identified 19 species listed as migratory under the EPBC Act that are recorded from or considered to have the potential to occur in the Study Area (see Table 3-4 above).

Key areas of habitat for migratory shorebirds those on the coastal fringe, Corner Inlet, Gippsland Lakes and wetland areas. There are some scattered records of terrestrial migratory birds further inland within the Study Area. This is shown in Figure 3-4.

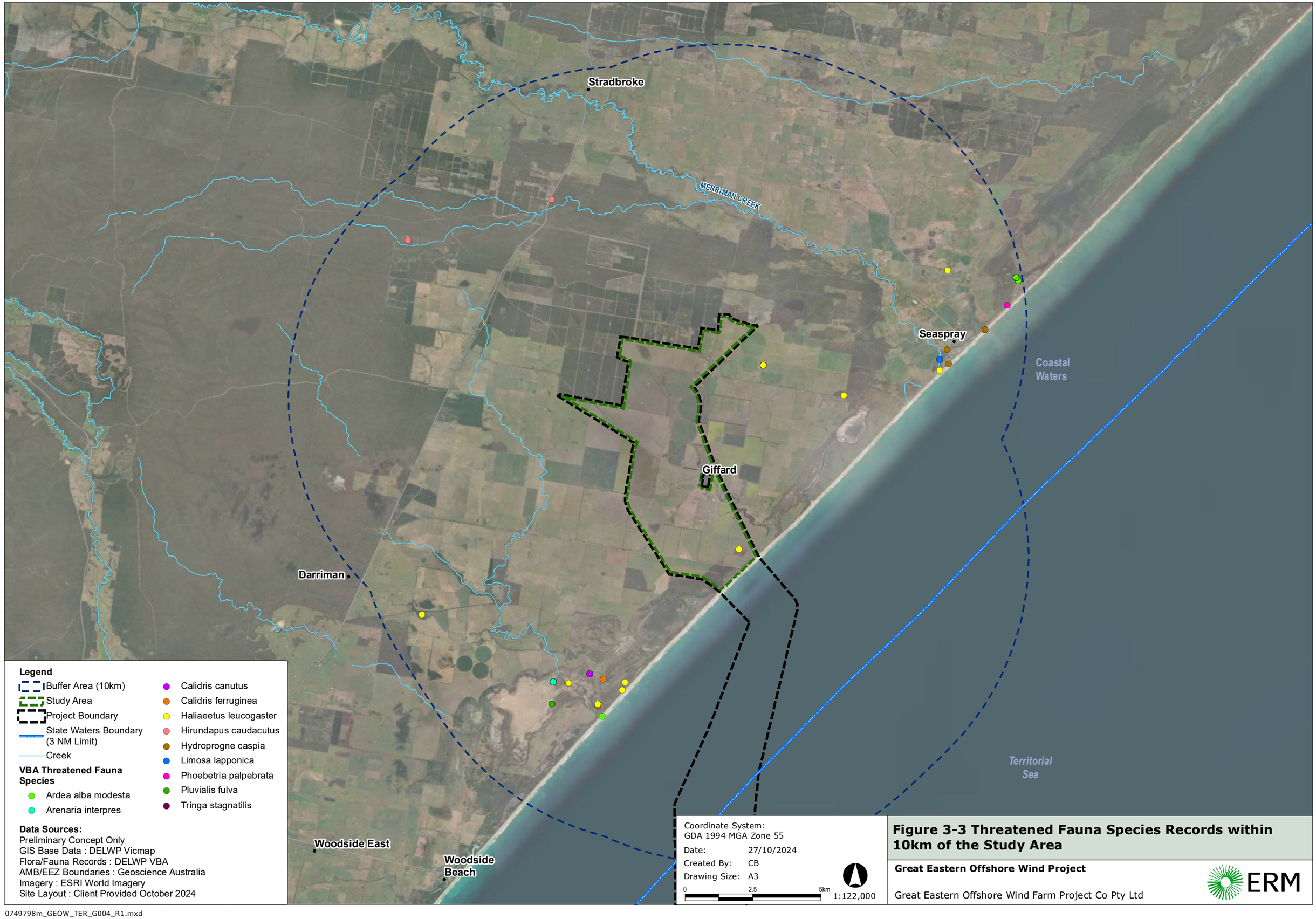

Figure 3-3 Threatened Fauna Species Records within 10km of the Study Area

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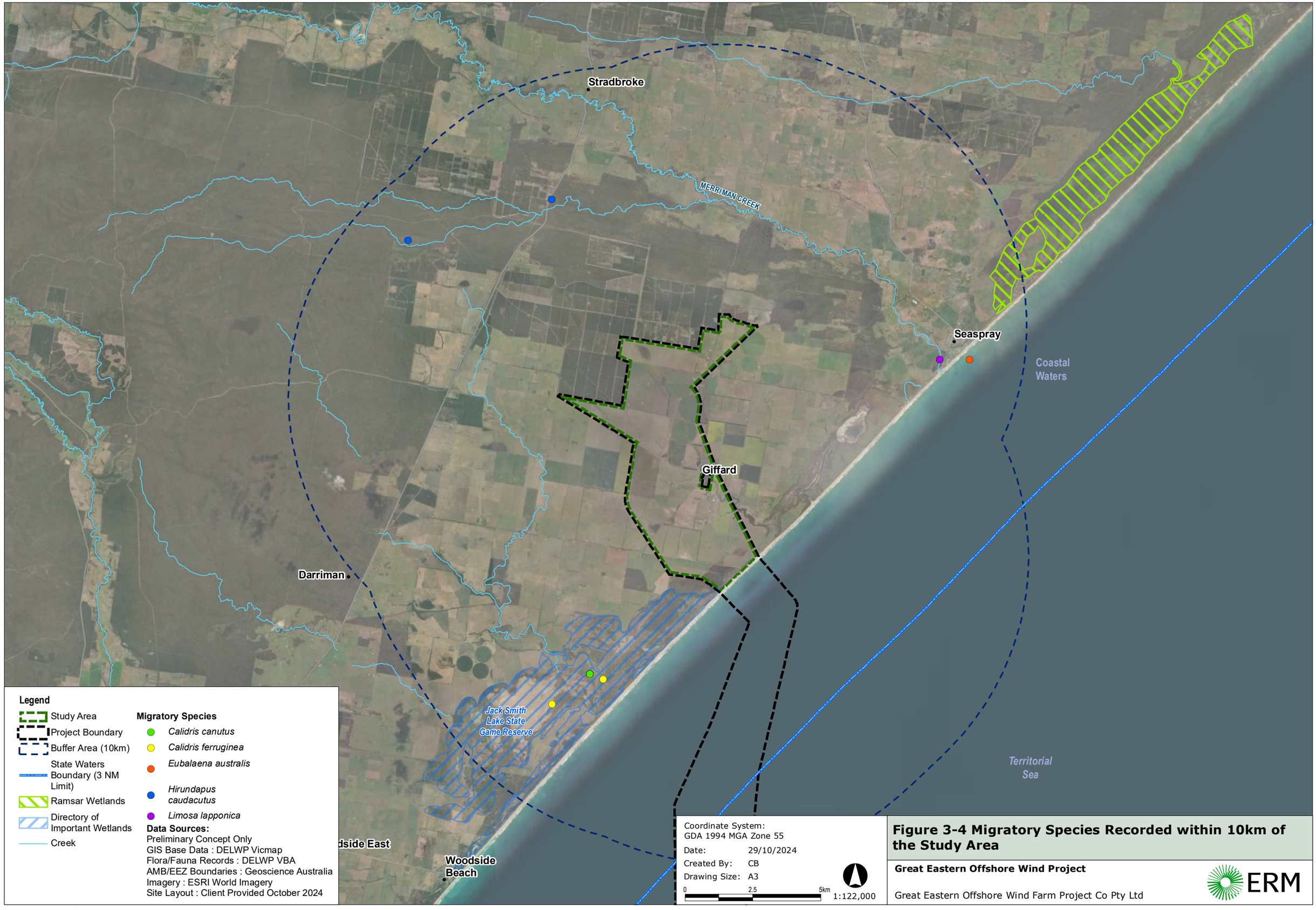

Figure 3-4 Migratory Species Recorded within 10km of the Study Area

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3.5 ECOLOGICAL COMMUNITIES

3.5.1 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

Commonwealth TECs are classified as MNES and are protected under Part 3 of the EPBC Act. TECs that are known or likely to occur within the Study Area as per the PMST (Appendix A) are shown in Table 3-6. Listing Advice published on the DCCEEW website lists equivalent EVCs for each TEC.

There are two TECs with potential to occur within the Study Area:

- *Natural Damp Grassland of the Victorian Coastal Plains*, and
- *Subtropical and Temperate Coastal Saltmarsh*.

The modelled occurrence of each of these TECs is shown in Figure 3-5. Areas of EVCs associated with TECs within the Study Area are displayed in Figure 3-1.

TABLE 3-6 EPBC LISTED THREATENED ECOLOGICAL COMMUNITIES

TEC	EPBC Act status	Presence (as per the PMST)	Equivalent EVCs (as per TEC listing advice)
Natural Damp Grassland of the Victorian Coastal Plains	Critically Endangered	Community likely to occur within area	• EVC 132 Plains Grassland • EVC 934 Brackish Grassland
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	Community likely to occur within area	• EVC 9 Coastal Saltmarsh • EVC 10 Estuarine Wetland

Natural Damp Grassland of the Victorian Coastal Plains

This ecological community is listed as Critically Endangered and consists of grasslands and open grassy woodlands with occasional scattered trees and shrubs. They are generally located upon heavy grey silty-loamy soils which are often waterlogged due to poor drainage (Department of the Environment, 2015). The floristic composition of the ecological community is generally dominated by tussock grasses, specifically Kangaroo Grass (*Themeda triandra*) on drier areas, and Common Tussock-grass (*Poa labillardierei*) where the sites have more moisture (Department of the Environment, 2015). Eucalypt species associated with damp sites (if trees are present) can include Manna Gum (*Eucalyptus viminalis*) or Swamp Gum (*E. ovata*). Other trees species that may be present include Drooping Sheoak (*Allocasuarina verticillata*), Blackwood (*Acacia melanoxylon*) and Black Wattle (*Acacia mearnsii*) (Department of the Environment, 2015).

This ecological community has a known distribution that is limited to the Southeast Coastal Plain IBRA bioregion in Victoria, predominately occurring in the Gippsland Plain subregion (Department of the Environment, 2015). Darriman Bushland Reserve and roadside patches along Stringybark Lane, near Jack Smith Lake Wildlife Reserve, are notable key grassland sites for this TEC (Department of the Environment, 2015).

This vegetation community within this TEC corresponds to the following EVCs:

- EVC 132 Plains Grassland, and
- EVC 934 Brackish Grassland.

Although these are not modelled to occur within the Study Area, there is potential for such to occur at a finer scale in depressions and otherwise unmapped areas of higher water retention or fed through drainage channels or groundwater that may support associated vegetation. Such patches may correspond to the TEC.

Subtropical and Temperate Coastal Saltmarsh

This TEC has also been addressed in the Marine report due to its relevance to both areas. It is listed as Vulnerable under the EPBC Act and consists of organisms including and associated with saltmarsh in coastal regions of sub-tropical and temperate Australia (DSEWPC, 2013). In Victoria, the lower saltmarsh zone is often dominated by succulent shrubs of the genera *Tecticornia* and *Salicornia*, while herbs and grasses are more commonly found in the landward, upper-intertidal zones (DSEWPC, 2013). The physical environment for the ecological community is coastal areas under regular or intermittent tidal influence but may also include areas that have groundwater connectivity to tidal water bodies (DSEWPC, 2013). The ecological community is mainly associated with the soft substrate shores of estuaries and embankments (sandy and/or muddy) and on some open, low wave energy coasts (DSEWPC, 2013).

This TEC can be associated with the following EVCs:

- EVC 9 Coastal Saltmarsh, and
- EVC 10 Estuarine Wetland.

Estuarine Wetland is modelled to occur in the Study Area landward of the coastal dunes. Examination of aerial imagery suggests the extent of this EVC is likely greater than that shown in Figure 3-1. Depending on the condition and relative cover of woody species in any Estuarine Wetland patches in the Study Area, this TEC is likely to be present wherever this EVC occurs.

3.5.2 FLORA AND FAUNA GUARANTEE ACT 1988

Victorian threatened communities of flora and fauna are protected under the FFG Act. DEECA's mapping of extant native vegetation indicated that one EVC likely to occur in the Study Area is associated with the presence of an ecological community listed under the FFG Act, as detailed Table 3-7. The potential extent of this community corresponds to that of EVC 1 in Figure 3-1.

TABLE 3-7 FFG ACT COMMUNITIES WITH POTENTIAL TO OCCUR WITHIN THE STUDY AREA

FFG Community	Associated EVCs*	Relevant EVC modelled to occur in the Study Area	Presence
*Coastal Moonah (*Melaleuca lanceolata *subsp.* lanceolata*) Woodland Community*	• EVC 160 Coastal Dune Scrub • EVC 858 Coastal Alkaline Scrub	• EVC 1 Coastal Dune Scrub/ Coastal Dune Grassland mosaic	Community has the potential to occur within the Study Area in association with coastal dunes.

*The presence of an associated EVC is indicative of the presence of the listed community.

EVC 1 Costal Dune Scrub is likely to occur wherever wooded dune vegetation occurs in the Study Area. On-ground assessment of this vegetation is required to determine if Moonah (*Melaleuca lanceolata* subsp. *lanceolata*) is present. If so, the listed community is also present because there is no condition thresholds applied to communities listed under the FFG Act.

Other listed communities may also be present in the Study Area in any patches of native vegetation representing EVCs not modelled to occur.

3.6 PROTECTED AREAS

One park was mapped partially within the Study Area (Figure 3-6). McLoughlins Beach – Seaspray Coastal Reserve occupies 9.65 ha of the Study Area along the south-eastern coastal boundary.

Additionally, the Study Area surrounds Darriman H29 Bushland Reserve, which protects 20 ha of isolated, remnant native vegetation that is likely to be important habitat for numerous biodiversity values in the region, including the potential for protected species and/or TECs.

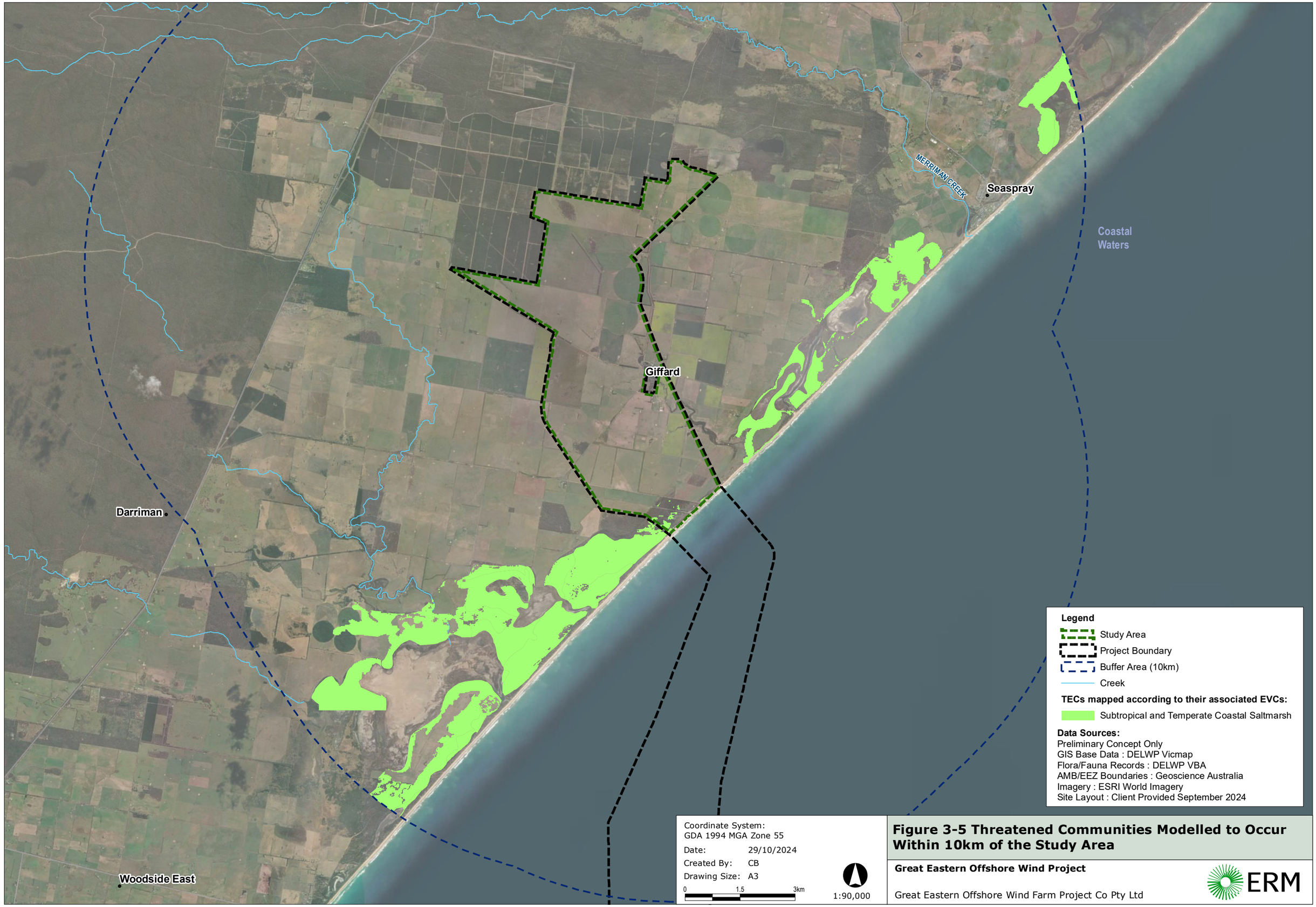

Figure 3-5 Threatened Communities Modelled to Occur Within 10km of the Study Area

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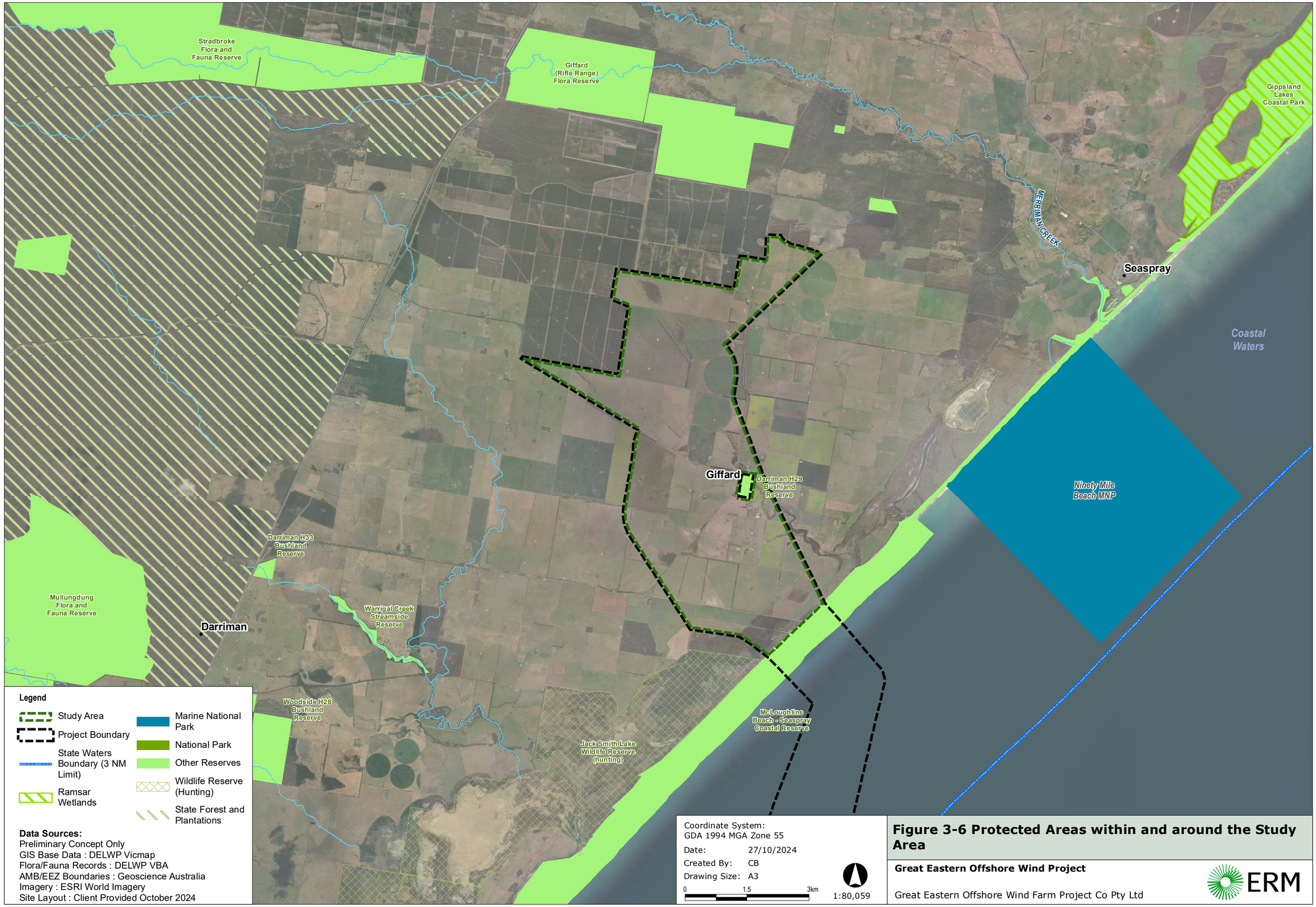

Figure 3-6 Protected Areas within and around the Study Area

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3.7 WETLANDS AND HYDROLOGY

3.7.1 STATE LISTED WETLANDS

According to the DEECA Current Wetlands dataset, the naturally occurring wetlands that have been mapped within the Study Area include:

- Jack Smith Lake (91056), and
- Three unnamed wetlands (91136, 91142, 91767).

Figure 3-7 shows all mapped wetlands and waterways within and around the Study Area.

3.7.2 NATIONALLY IMPORTANT WETLANDS

Jack Smith Lake State Game Reserve and Corner Inlet are recognised as nationally important wetlands in Victoria. Jack Smith Lake State Game Reserve is located south-west of the Study Area, with 2.16 ha of the wetland occurring within the Study Area. Corner Inlet is located 20 km south-west of the Study Area. They are listed in the 3rd Edition of *A Directory of Important Wetlands of Australia* (2001).

3.7.3 WETLANDS OF INTERNATIONAL IMPORTANCE

The PMST report has highlighted two Ramsar wetlands located in proximity to the Study Area. Ramsar sites are wetlands that are listed as having international importance under the 'Ramsar Convention on Wetlands'. Table 3-8 shows a summary of these results and Figure 3-8 shows the relative location of Wetlands of International Importance within to the Study Area.

TABLE 3-8 WETLANDS OF INTERNATIONAL IMPORTANCE (RAMSAR WETLANDS)

Ramsar Site No.	Ramsar Wetland Site Name	Proximity to the Study Area
13	Corner Inlet	Corner Inlet is located 20km south-west of the Study Area
21	Gippsland Lakes	Gippsland Lakes is 10km north-east of the Study Area

Corner Inlet

The Corner Inlet Ramsar site is a large tide-dominated embayment, adjacent to the southernmost tip of the Australian mainland (BMT WBM, 2011a). The inlet consists of a submerged plain covered by sand or mud flats with well-developed seagrass beds, and large sand islands (BMT WBM, 2011a). Due to its large area and the diversity of habitats present, Corner Inlet supports internationally significant populations of numerous aquatic and semi-aquatic species (BMT WBM, 2011a).

Gippsland Lakes

The Gippsland Lakes Ramsar site is situated east of the Latrobe Valley and south of the Eastern Highlands in the Southeast Coast Drainage Division (BMT WBM, 2011b). It consists of a group of coastal lagoons and marsh environments that are separated from the sea by a barrier system of sand dunes (BMT WBM, 2011b).

3.7.4 WATERWAYS

No major waterways are present within the Study Area. Several unnamed minor natural drainage channels are present throughout the Study Area. One runs west to east through the site and drains into the ocean through estuarine wetlands in McLoughlins Beach – Seaspray Coastal Reserve. A second unnamed creek also runs west to east through the site and passes through the Darriman H29 Bushland Reserve and the Giffard Plantation before draining to the ocean through estuarine wetlands in McLoughlins Beach-Seaspray Coastal Reserve. Riparian vegetation is fragmented but is modelled as riparian scrub and a lowland forest/heathy woodland mosaic. Figure 3-7 shows all mapped waterways within and around the Study Area.

3.7.5 GROUNDWATER DEPENDANT ECOSYSTEMS

Groundwater Dependent Ecosystems (GDEs) are ecosystems that are partially or completely dependent on groundwater for their existence or health. When groundwater is close to the surface, plant roots can access it as a steady water supply so they can thrive in times of low rainfall.

The plants then support the animal communities. When groundwater discharges to the surface it supports wetland and stream ecosystems. Underwater springs at the coast and in estuaries can provide nutrients for sea grasses and aquatic species.

3.7.5.1 IDENTIFIED GDES WITHIN THE STUDY AREA

GDEs within the Onshore Transmission Envelope were identified from the Bureau of Meteorology's (BoM) *Groundwater Dependent Ecosystem Atlas* (GDE Atlas). The GDE Atlas does not confirm individual entities of GDEs, however, does confirm the potential extent of terrestrial GDEs through the potential for native vegetation within the area to be reliant on the subsurface presence of groundwater.

Within the Study Area, the following terrestrial GDE occurrence is currently predicted to occur:

- High potential terrestrial GDE occurrence – 24.94 ha.
- Moderate potential terrestrial GDE occurrence – 87.46 ha.
- Low potential terrestrial GDE occurrence – 41.66 ha.

Potential terrestrial GDE extent as derived from the GDE Atlas is available in Figure 3-9.

Five ecosystem types within the Study Area that are mapped as GDEs have been identified:

- Estuarine Wetland
- Lowland Forest
- Lowland Forest/Heathy Woodland Mosaic
- Riparian Scrub, and
- Swamp Scrub.

These are illustrated within Figure 3-10.

Further assessment will be required once details regarding the location and nature of construction activities are available to determine GDEs that may potentially have relevance to the Project.

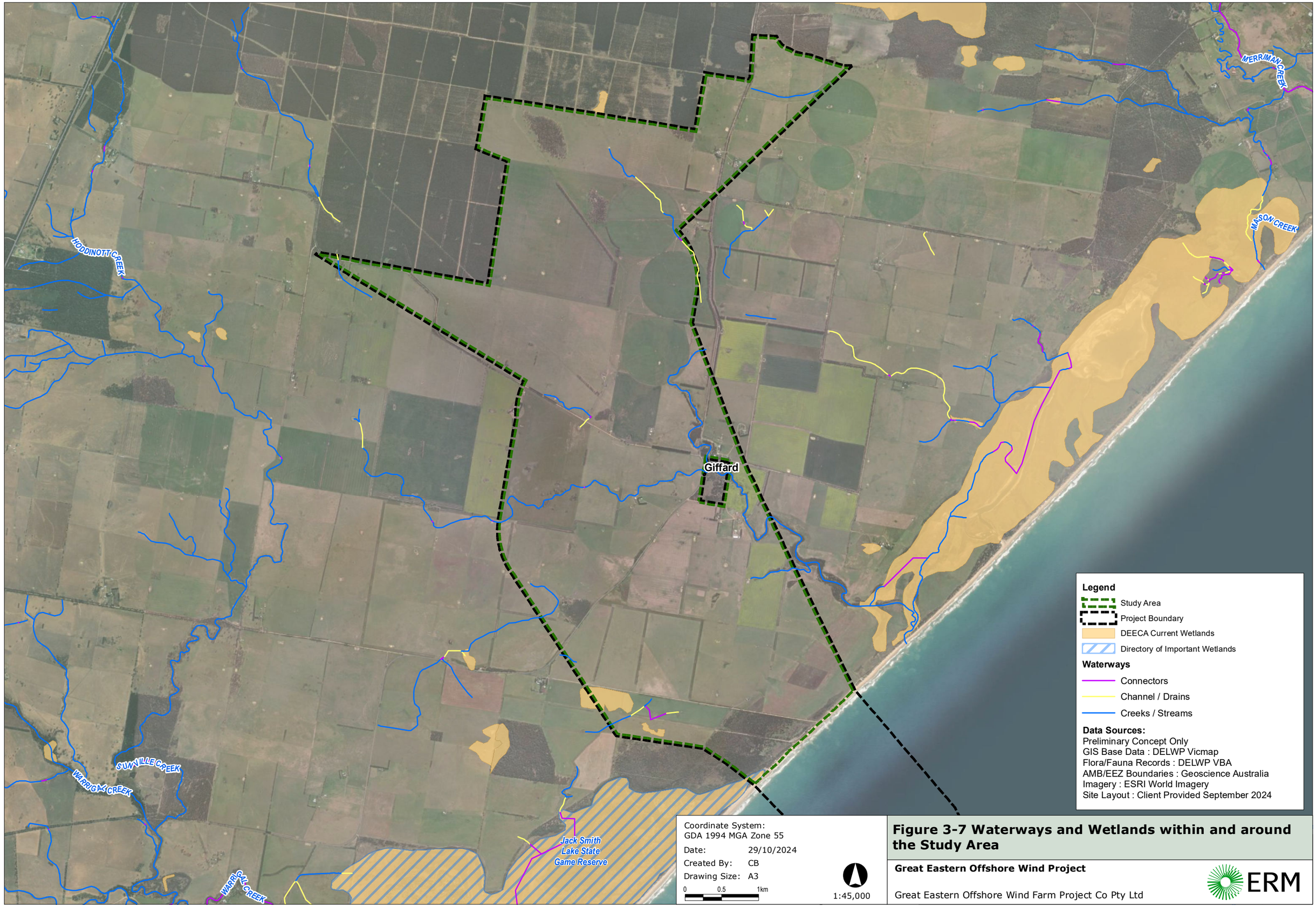

Figure 3-7 Waterways and Wetlands within and around the Study Area

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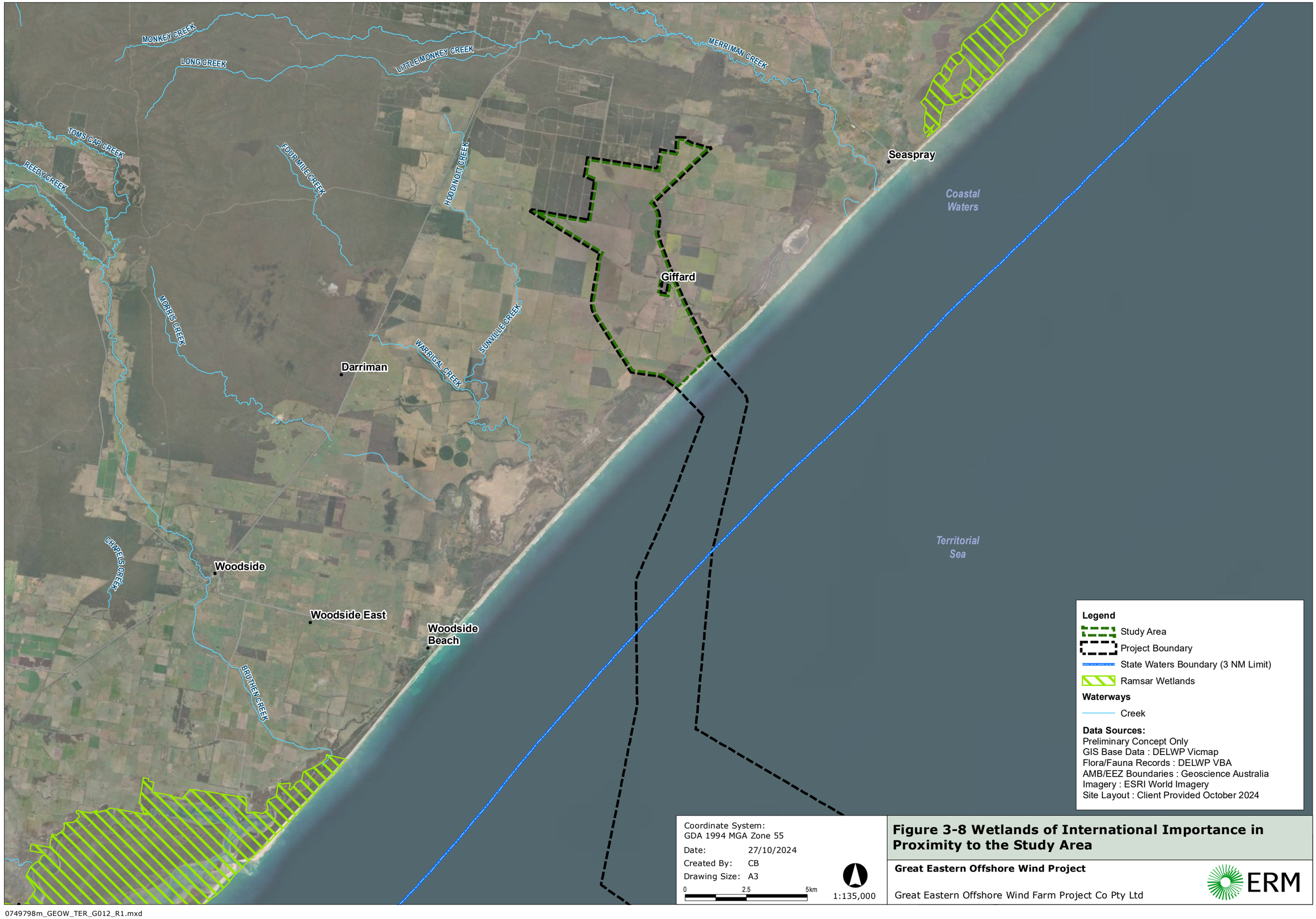

Figure 3-8 Wetlands of International Importance in Proximity to the Study Area

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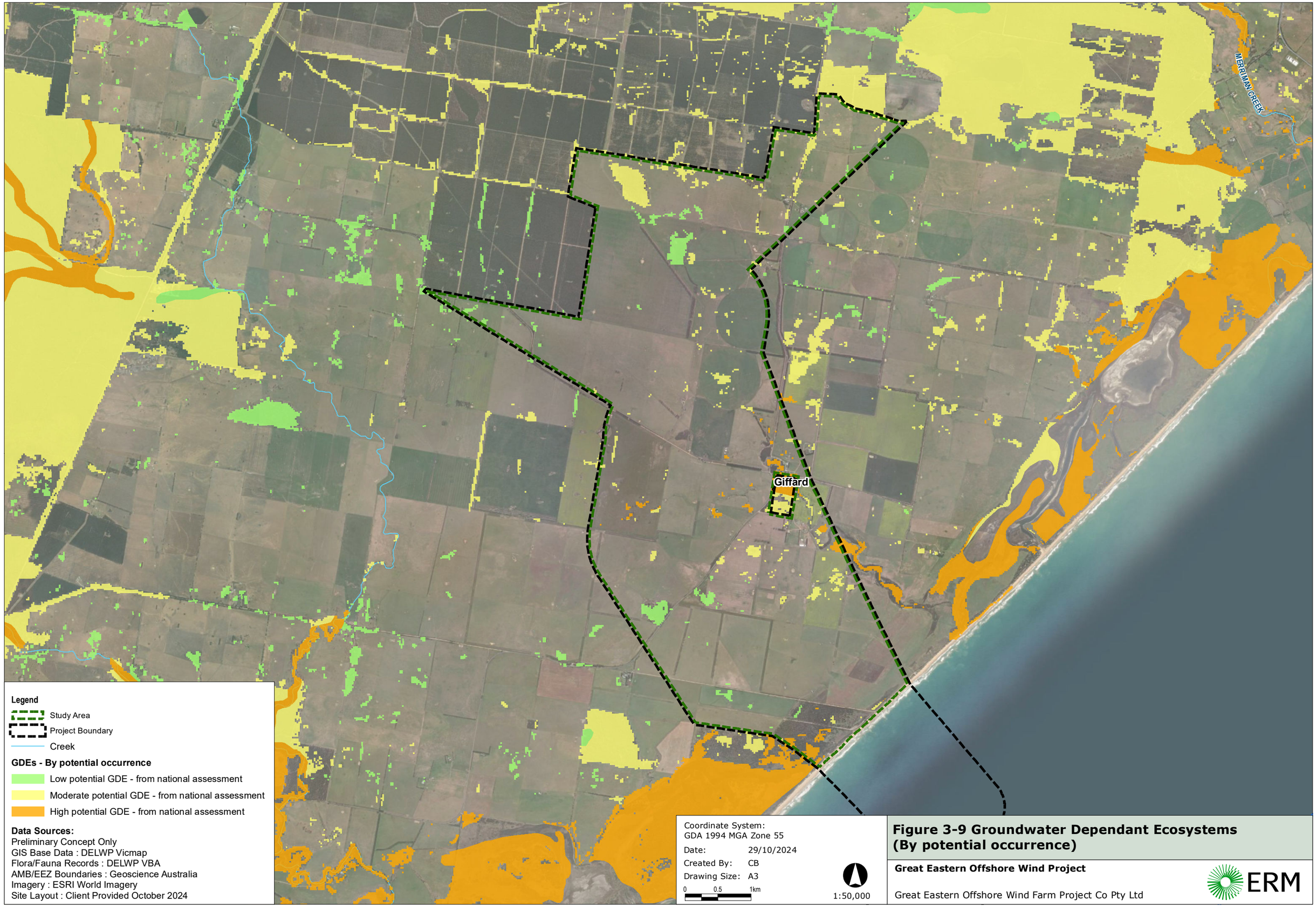

Legend

- Study Area
- Project Boundary
- Creek

GDEs - By potential occurrence

- Low potential GDE - from national assessment
- Moderate potential GDE - from national assessment
- High potential GDE - from national assessment

Data Sources:
Preliminary Concept Only
GIS Base Data : DELWP Vicmap
Flora/Fauna Records : DELWP VBA
AMB/EEZ Boundaries : Geoscience Australia
Imagery : ESRI World Imagery
Site Layout : Client Provided October 2024

Coordinate System:
GDA 1994 MGA Zone 55
Date: 29/10/2024
Created By: CB
Drawing Size: A3
0 0.5 1km
1:50,000

Figure 3-9 Groundwater Dependant Ecosystems (By potential occurrence)

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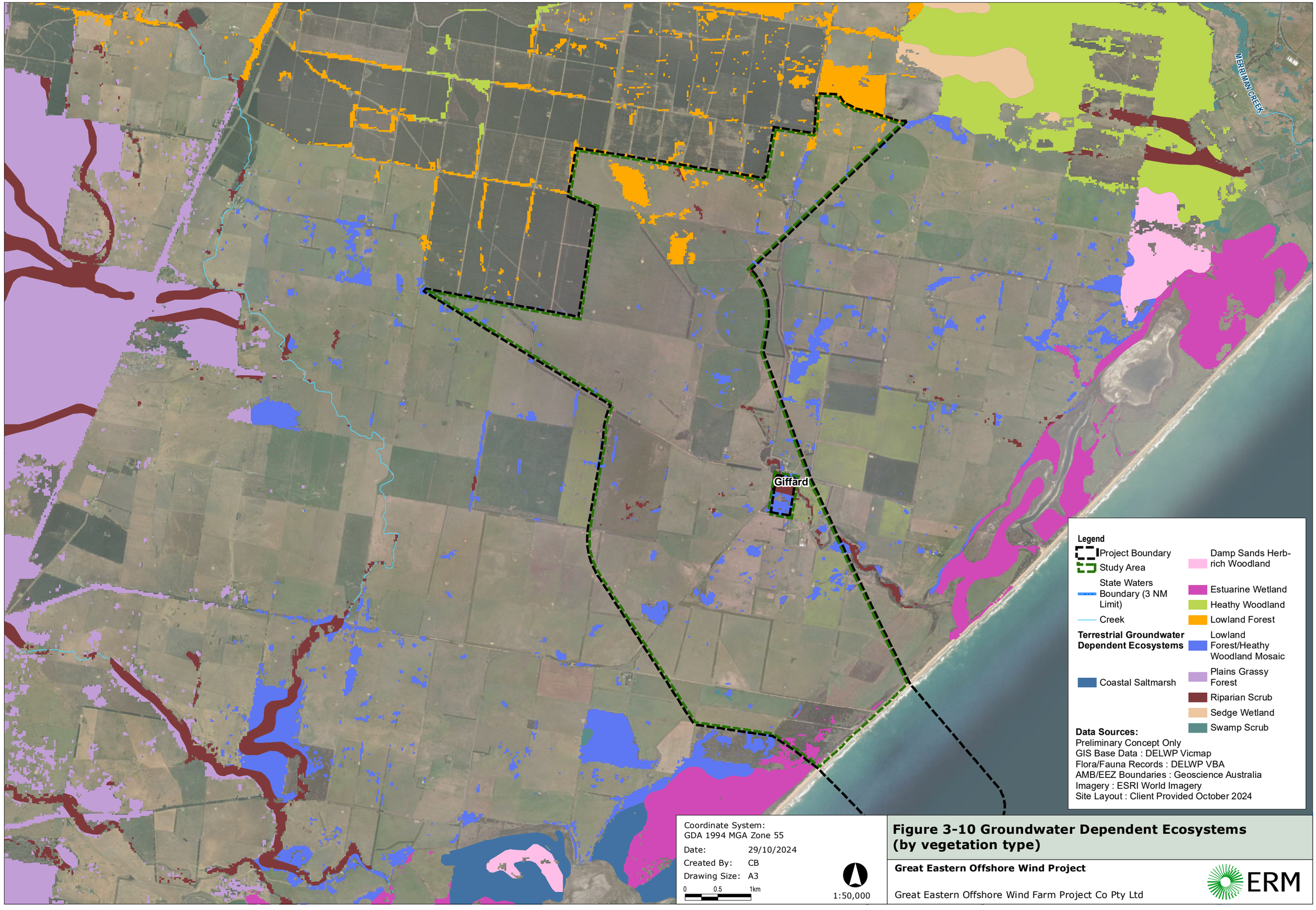

Figure 3-10 Groundwater Dependent Ecosystems (by vegetation type)

Great Eastern Offshore Wind Project

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4. IDENTIFICATION OF POTENTIAL EFFECTS AND MITIGATION MEASURES

This section summarises the Project's key aspects and potential effects. This includes both planned aspects and unplanned events (e.g., accidental take of native vegetation).

4.1.1 PROJECT ASPECTS

Key construction and operational activities that could result in impacts on the ecological values identified in the Onshore Transmission Envelope include:

- Construction activities:
  - Establishment of onshore construction sites (offices, laydown areas, etc).
  - Delivery of equipment.
  - Road upgrades and creation of site access and laydown areas (clearing and levelling).
  - Clearing and levelling along selected cable routes.
  - Clearing, levelling and construction of foundations for the Project area within VicGrid's Coordinated Connection Point (substation).
  - Excavation and preparation of the shore crossing site and cable TJB.
  - Excavation and preparation of the cable trenches and joint bays, within disturbance corridor of up to 80 m width.
  - Installation of underground cables and cable termination compounds.
  - Installation of Project's electrical equipment within VicGrid's Coordinated Connection Point (substation).
  - Electrical connection of cables and final system commissioning.
  - Removal of construction facilities and site tidy up.
- Operational and maintenance scheduled/periodic activities, typically using light vehicles, includes:
  - Cable Transition Joint Bay and onshore export cable route inspection to monitor and manage vegetation.
  - Testing and maintenance to check cable integrity, which requires access to the link pits along the cable route.
  - Inspections, testing and maintenance of Project's equipment within the VicGrid Coordinated Connection Point according to Original Equipment Manufacturer requirements.

4.1.2 TERRESTRIAL ECOLOGY ENVIRONMENTAL EFFECTS

This assessment has identified the following potential effects primarily relating to land and waterway disturbance:

- Loss of species habitat
- Loss of species diversity
- Fragmentation of native vegetation and habitat
- Decline in quality of native vegetation and ecological communities
- Increase in fragmentation of native vegetation and habitat
- Increase in plant and animal pathogens
- Erosion and sedimentation
- Dust pollution
- Soil contamination and compaction
- Decline in quality of GDE, and
- Waterway contamination.

5. LEGISLATIVE IMPLICATIONS

5.1 COMMONWEALTH LEGISLATION

5.1.1 ENVIRONMENT PROTECTION AND BIODIVERSITY CONSERVATION ACT 1999

The likelihood of occurrence analysis identified the following MNES with a moderate or greater potential to be present within the Study Area:

- Five species of threatened flora
- Twenty-nine species of threatened fauna
- Two TECs, and
- Nineteen migratory species (ten of which are also listed as threatened).

This analysis will be further refined once initial habit native vegetation assessments are completed, and the number of potentially present MNES may be reduced. Given the likely paucity of native vegetation within the Study Area, and the opportunities for avoidance and mitigation measures, there is potential to ensure that no MNES are significantly impacted by the Project.

The greatest risk to MNES is likely to be species or TECs associated with the coastal dunes and adjacent estuarine wetland vegetation. Careful development design and sensitive timing of construction activities (such as implementing restricted areas and/or controls during sensitive life-stages for priority shorebird habitats during shoreline construction activities) and construction/installation methods (for example the use of HDD) may reduce any impacts to acceptable levels. Subsequently, the project should be able to avoid impacts to MNES and therefore an EPBC referral would not be triggered by the onshore components of the Project.

5.2 VICTORIAN LEGISLATION

5.2.1 ENVIRONMENT EFFECTS ACT 1978

The *Ministerial Guidelines for Assessment of Environmental Effects under the Environment Effects Act 1978* (DSE, 2023) outlines the triggers for referral of a project to the Victorian Minister for Planning who determines if an Environment Effects Statement (EES) is required.

This section assesses the onshore areas of the Project against the relevant referral criteria under the EE Act to determine whether such a referral is warranted.

A referral under the Act should be prepared and submitted to the Minister for Planning if any:

- One of the criteria set out in Table 5-1 are met; or
- Two or more of the criteria listed set out in Table 5-2 are met.

Based on the assessment presented in the table below, a referral under the EE Act is unlikely to be triggered due to potential impacts of the Project on biodiversity values alone.

TABLE 5-1 REFERRAL CRITERIA - INDIVIDUAL POTENTIAL ENVIRONMENTAL EFFECTS

Referral Criteria	Referral Criteria Met?	Comments
Potential clearing of 10 ha or more of native vegetation from an area that: • Is of an EVC identified as Endangered within the Bioregion. • Is, or is likely to be, of Very High Conservation Significance; and • Is not authorised under an approved Forest Management Plan or Fire Protection Plan.	Unlikely	Given the historical land use and associated disturbance, most of the Study Area is unlikely to support native vegetation. Where native vegetation is present, it likely occurs in discreet, isolated fragments surrounded by cleared land, in narrow road reserves, and along drainage channels. Each of these areas can be easily avoided or will require removal of a small amount of native vegetation. The most significant area of native vegetation is likely to be along the coast. Mitigation measures including avoidance and construction techniques such as HDD are likely to reduce impacts to an amount well below 10 ha. Additionally, only one Endangered EVC—approximately 1 ha of EVC 53 Swamp Scrub—has been modelled to occur in the Study Area, and aerial imagery suggests this patch is no longer present.
Potential long-term loss of a significant proportion (e.g., 1 to 5 percent depending on the conservation status of the species) of known remaining habitat or population of a threatened species within Victoria.	Unlikely	The desktop assessment has identified the potential for threatened species and communities to be present within the Study Area. However, it is considered unlikely that a significant proportion of remaining habitat or population would be contained within the final construction envelope as the Project intends to avoid impacts to threatened species through the design and micro alignment of the construction corridor. Once detailed assessments have been undertaken, Project infrastructure will be aligned to ensure that areas containing threatened species or habitats will be avoided and minimised. A detailed site assessment will be undertaken to confirm presence of habitat or populations of threatened species and to assess potential impacts to inform location of final construction corridor.
Potential long-term change to the ecological character of a wetland Listed under the Ramsar Convention or in 'A Directory of Important Wetlands in Australia' (Environment Australia, 2001).	Unlikely	The two nearest Ramsar wetland sites—Gippsalnd Lakes and Corner Inlet—are approximately 9 km and 20 km from the boundary of the Study Area respectively. Given the likely minimal disturbance footprint of the Project and the implementation of suitable mitigation measures it is unlikely that construction or operation activities will impact these wetlands.
Potential extensive or major effects on health or biodiversity of aquatic, estuarine or marine ecosystems, over the long-term.	Unlikely	There may be effects on the health or biodiversity of aquatic ecosystems as a result of the Project, however, no significant waterways are likely to require crossings to install cable infrastructure. The estuarine environment in the coastal region of the Study Area may be impacted, but this is expected to be minimal and limited to the construction period and therefore not expected to be long-term. It is also expected that any effects will be able to be suitably managed with standard construction measures. It is recommended that an ecology assessment be undertaken to confirm the presence, condition, and potential impacts on the aquatic ecosystems as part of the detailed site assessment.

Referral Criteria	Referral Criteria Met?	Comments
		Marine and Estuarine aspects have been addressed in the Preliminary Marine Report (ERM, 2024).

TABLE 5-2 REFERRAL CRITERIA - COMBINATION OF POTENTIAL ENVIRONMENTAL EFFECTS

Referral Criteria	Referral Criteria Met?	Comments
Potential clearing of 10 ha or more of native vegetation, unless authorised under an approved Forest Management Plan or Fire Protection Plan.	Unlikely	As discussed in Table 5-1 above, the Project is unlikely to result in the removal of 10 ha of native vegetation due to the paucity of such within the Study Area and the opportunities for avoidance and mitigation to ensure impacts are minimised.
Matters listed under the *Flora and Fauna Guarantee Act 1988*: • Potential loss of a significant area of a Listed ecological community; or • Potential loss of genetically important population of an endangered or threatened species (Listed or nominated for listing), including as a result of fragmentation of habitats; or • Potential loss of critical habitat; or • Potential significant effects on habitat values of a wetland supporting migratory bird species.	Unlikely	The desktop assessment has identified the potential for FFG listed threatened species and communities to be present within the Study Area. It is considered unlikely but possible that the triggers in this section would be met. Once detailed assessments have been undertaken, Project infrastructure will be aligned to ensure that areas containing threatened species or habitats will be avoided and minimised. It is recommended that a detailed site assessment be undertaken to confirm presence of habitat or populations of threatened species and to assess potential impacts to inform location of the final construction corridor.

5.2.2 *FLORA AND FAUNA GAURANTEE ACT 1988*

The likelihood of occurrence analysis identified the following matters listed under the FFG Act with a moderate or greater potential to be present within the Study Area:

- Nineteen species of threatened flora
- Thirty-two species of threatened fauna, and
- One ecological community.

The FFG Act is the key piece of Victorian legislation for the conservation of threatened species and communities for the management of potentially threatening processes. Under this Act, a permit is required from DEECA to take (kill, injure, disturb or collect) threatened or protected flora species (including those associated with a listed ecological community) from public land.

Additionally, consideration of impacts to threatened flora and fauna is a requirement of any permit application under the Victorian Planning Scheme. This is covered in general terms via the *Planning and Environment Act 1987*, discussed in Section 5.2.3 below.

This analysis will be further refined once initial habit and native vegetation assessments are completed, and the number of species potentially may be significantly reduced.

5.2.3 PLANNING AND ENVIRONMENT ACT 1987

The Project will require a permit under the Wellington Planning Scheme. The permit application must address the requirements of numerous Clauses relating to ecological matters.

Clause 12.01 Biodiversity

Under the *Planning and Environment Act 1987* the Project must also consider Clause 12.01 – Biodiversity, whereby the objective of clause 12.01 is to consider biodiversity with an outcome to protect and enhance Victoria's biodiversity. Similar to the nature of the FFG Act, this provides the responsible authority the opportunity to raise matters of biodiversity under assessment which can include cumulative impacts, fragmentation, spread of pests and invasive species and impacts to important species and communities. Further, the clause states that the following policy documents must be considered as relevant:

- Any applicable biodiversity strategies, including the relevant *Regional Catchment Strategy* (prepared under Part 4 of the *Catchment and Land Protection Act 1994* (CaLP Act).
- *Guidelines for the removal, destruction or lopping of native vegetation* (DELWP, 2017).
- *Protecting Victoria's Environment – Biodiversity 2037* (DELWP, 2017).
- *Victorian Waterway Management Strategy (*DEPI, 2013).

Clause 52.17 Native Vegetation

Under Cl. 52.17, a permit is required to remove, destroy, or lop native vegetation. Assessment of a permit application will consider efforts to avoid and minimise any impacts, with appropriate offsets required to be secured prior to any approved native vegetation removal.

Clause 52.32 Wind Energy Facility

The application requirements for a permit to construct a wind energy facility include the provision of biodiversity information within and in the broader landscape of the site.

In relation to the site, this includes:

- existing vegetation types, condition, and coverage, and
- the presence of species of flora and fauna listed under the EPBC Act and FFG Act.

In relation to the surrounding area, this includes:

- sites of flora and fauna listed under the EPBC Act and FFG Act, including significant habitat corridors, and movement corridors for these fauna
- National Parks, State Parks, Coastal Reserves and other land subject to the *National Parks Act 1975*, and
- land declared a Ramsar wetland.

Clause 42.01 Environmental Significance Overlay

This overlay is mainly applicable to the coastal margin of the Study Area. Parts of the Study Area supporting wetlands are covered by Schedule 2 of the Environmental Significance Overlay (ESO2), which aims to protect ecological and other values of wetlands and requires a permit application to consider, among other matters:

- the integrity and long-term ecological and hydrological functioning of the wetland and areas surrounding the wetland, and
- the contribution of the proposal towards the ecological restoration of the wetland, or the potential for the proposal to reduce the capability for ecological restoration of the wetland.

Schedule 1 of ESO is applicable to the coastal fringe of the Study Area and is concerned with protection and enhancement of environmentally sensitive coastal areas. A permit application under this Schedule must include consideration of, among other matters:

- minimisation of ground disturbance
- Protection of sensitive coastal and foreshore vegetation, in particular heath-lands and dune vegetation, from clearing, pollution, grazing, and trampling, and
- provision for the retention of vegetation and fauna habitat.
- coastal processes for all construction and development on the coast.

Clause 44.06 Bushfire Management Overlay

Much of the Study Area is covered by a Bushfire Management Overlay (BMO), which may result in the need to balance bushfire risk and hazard management with retention of native vegetation and fauna habitat.

5.2.4 *WILDLIFE ACT 1975* AND *WILDLIFE REGULATIONS 2020*

Project activities may potentially result in injury and/or mortality during construction and operations. All native vertebrates are protected under the *Wildlife Act 1975* and the Project must ensure due care when conducting construction activities within the Study Area. A Construction Environment Management Plan should address the potential for interaction with wildlife during construction activities (such as fauna salvaging during clearing, exclusions zones, and traffic rules where appropriate).

5.2.5 *CATCHMENT AND LAND PROTECTION ACT 1994*

Primary considerations of the *Catchment and Land Protect Act 1994* (CaLP Act) relate to invasive plants and animals in Victoria, as well as matters relating to soil and water. Under the CaLP Act, all landowners are legally required to manage declared noxious weeds and pest animals on their land which means undertaking reasonable steps to:

- Eradicate regionally prohibited weeds.
- Prevent the growth and spread of regionally controlled weeds.
- Prevent the spread of – and as far as possible eradicate – established pest animals on their land.

A Weed Management Plan will be prepared as part of the Construction Environment Management Plan and approved by the responsible authority prior to commencement of any works, should a permit for the Project be granted.

5.2.6 *MARINE AND COASTAL ACT 2018*

The *Maine and Coastal Act 2018* provides an integrated approach to planning and managing the marine and coastal environment by enabling protection of the coastline and the ability to address the long-term challenges of climate change, population growth and ageing coastal structures. The project may require consent to undertake works on marine and coastal Crown land and would be required to align with requirements of any local coastal and marine management plans applicable to the Study Area.

6. CONCLUSIONS AND RECOMMENDATIONS

This investigation identifies broad terrestrial ecological values that the Project could potentially impact. The results of this assessment indicate that most of the Study Area is highly disturbed, being historically cleared for agriculture and timber production. While numerous biodiversity matters listed under Commonwealth and/or State legislation have the potential to occur in the Study Area, the extent of native vegetation and habitat for threatened flora and fauna or of listed ecological communities is limited to small, isolated remnant fragments that can be easily avoided. The main risk to biodiversity values is from impacts to coastal habitats including dunes and adjacent estuarine environments. Therefore, the design considerations for the Project route should focus on opportunities in this area to minimise impacts by informed siting of infrastructure and appropriate construction mitigation measures. In this way, there is scope to avoid triggering the need for a referral under the EPBC Act and EE Act with respect to impacts to terrestrial ecological values.

6.1 RECOMMENDATIONS TO AVOID AND MINIMISE IMPACTS

The Project will apply the following principles to Project design and impact assessment:

- Undertake a detailed flora and fauna assessment of the Study Area to determine on-ground biodiversity values and inform initial siting of the development footprint.
- Conduct further targeted seasonal fauna and flora surveys for threatened or protected species considered and ecological communities likely or potentially occurring within the construction footprint in accordance with relevant federal or State survey guidelines.
- Utilise avoid and minimise principles in determining the final Project envelope during each stage of the design process and ensure this process is adequately documented to demonstrate the efforts undertaken in response to identified biodiversity constraints. Allow for ecology input to inform design development to determine the optimal location of infrastructure that avoids the highest value and most sensitive locations.
- Specifically avoid impacts to native vegetation on the coastline south of McGaurans Beach Road.
- Prioritise avoidance of locations containing EPBC and/or FFG threatened communities, species, and their habitat. If avoidance is not possible, use appropriate technologies to mitigate impacts wherever these values are located. Such mitigation may also include implementing restricted areas and/or controls during sensitive life-stages for priority shorebird habitats during shoreline construction activities and consideration of migration patterns of other birds found to utilise habitat in the Study Area.
- Utilise existing power easements and already cleared land where possible.

6.2 PROPOSED PROGRAMME OF INVESTIGATIONS

Key knowledge gaps have been identified during the preparation of the preliminary assessment. Several baseline surveys and impact studies are recommended. These are summarised in Table 6-1 below.

TABLE 6-1 PROPOSED PROGRAMME OF INVESTIGATIONS

Study	Study Objectives	Methods	Timing
Conduct a detailed Flora and Fauna Assessment of the Study Area.	• Characterise the type, distribution, and condition of native vegetation, including large trees, terrestrial and aquatic habitat in the Study Area and broader habitat corridors and linkages that could be impacted by the Project. • Ground truth desktop data and provide more accurate information to base decisions regarding the selection of the optimal cable route and infrastructure location. Identify and describe any protected areas and other areas of biodiversity or conservation value within or in proximity to the Project. Calculate the Project impacts on native vegetation and associated offset requirements under the Cl. 52.17 of the Wellington Planning Scheme. • Determine targeted surveys that may be required to assess the presence of threatened flora, fauna and ecological communities.	• Detailed Flora and Fauna and Aquatic site assessment. • Vegetation Quality Assessments using the Habitat Hectare method.	Surveys should be undertaken at a time that is early enough in the Project development phase whereby they are able to inform decisions around location of the export cable options and selection of the final optimal alignment and location of any other terrestrial infrastructure. Assessment can commence at any time once a preliminary onshore export cable route is identified.
Seasonal/ targeted surveys for threatened flora and fauna.	Identify the existing and likely presence of any threatened or protected species or ecological communities listed under the EPBC Act and/or FFG Act. Determine unavoidable impacts to listed matters and associated offset requirements under Commonwealth legislation for any MNES significantly impacted.	• Targeted surveys for threatened flora species including orchid surveys in early spring, summer surveys for flowering grassland species and eucalypt surveys. • Targeted fauna surveys which may include wetland surveys (growling grass frogs, migratory waders and shorebirds, swamp antechinus), area transects for terrestrial and migratory birds and mammals and camera trapping for cryptic and small species. • Targeted surveys for aquatic species.	Timing of individual surveys to be determined by state and federal guidelines.
Prepare an MNES Report	Determine impacts to biodiversity values listed under the EPBC Act in accordance with the Matters of National Environmental Significant: Significant impact guidelines 1.1 (Department of the Environment 2013).	• Each species or TEC listed under the EPBC Act that is known to occur or has a moderate likelihood to occur within the Study Area will be assessed for impacts in accordance with the Significant Impact	The writing of the MNES report can commence at any time, but may require the completion of

Study	Study Objectives	Methods	Timing
		Guidelines 1.1 (Department of the Environment 2013). • The likelihood of occurrence will be informed by the detailed Flora and Fauna Assessment of the Area and the targeted surveys for threatened flora and fauna.	the detailed and targeted Flora and Fauna surveys.

7. REFERENCES

BMT WBM (2011a). Ecological Character Description of the Corner Inlet Ramsar Site – Final Report. Prepared for the Australian Government Department of Sustainability, Environment, Water, Population and Communities. Canberra.

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Department of Environment, Land, Water and Planning (2021). Characteristics of Victorian threatened communities. Accessed 28 February, from: https://www.environment.vic.gov.au/__data/assets/pdf_file/0018/50418/04072019-Flora-and-Fauna-Guarantee-Characteristics-of-Threatened-Communities-3.pdf

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Department of the Environment (2015). Approved Conservation Advice (including listing advice) for the *Natural Damp Grassland of the Victorian Coastal Plains*. Canberra: Department of the Environment. Available from: https://www.environment.gov.au/biodiversity/threatened/communities/pubs/133-conservation-advice.pdf.. In effect under the EPBC Act from 20-Feb-2015.

Department of Transport and Planning (2023). Ministerial guidelines for assessment of environmental effects under the *Environment Effects Act 1978*. Melbourne: Victorian Department of Transport and Planning.

Environment Australia (2001). A Directory of Important Wetlands in Australia, Third Edition. Environment Australia, Canberra.

APPENDIX A PROTECTED MATTERS SEARCH TOOL

EPBC Act Protected Matters Report

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

Report created: 05-Sep-2024

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:	1
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	83
Listed Migratory Species:	56

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:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	92
Whales and Other Cetaceans:	11
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:	13
Regional Forest Agreements:	1
Nationally Important Wetlands:	1
EPBC Act Referrals:	16
Key Ecological Features (Marine):	None
Biologically Important Areas:	10
Bioregional Assessments:	1
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
Corner inlet	Within 10km of Ramsar site	In buffer area only
Gippsland lakes	Within Ramsar site	In feature area

Commonwealth Marine Area [Resource Information]

Approval is required for a proposed activity that is located within the Commonwealth Marine Area which has, will have, or is likely to have a significant impact on the environment. Approval may be required for a proposed action taken outside a Commonwealth Marine Area but which has, may have or is likely to have a significant impact on the environment in the Commonwealth Marine Area.

Feature Name	Buffer Status
Commonwealth Marine Areas (EPBC Act)	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
Natural Damp Grassland of the Victorian Coastal Plains	Critically Endangered	Community likely to occur within area	In feature area
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	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			
Anthochaera phrygia			
Regent Honeyeater [82338]	Critically Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Ardenna grisea			
Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely 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 feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area	In buffer area only
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat may occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea antipodensis gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Diomedea epomophora](#) Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
[Diomedea exulans](#) Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
[Diomedea sanfordi](#) Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
[Falco hypoleucos](#) Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Fregetta grallaria grallaria](#) White-bellied Storm-Petrel (Tasman Sea), White-bellied Storm-Petrel (Australasian) [64438]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Gallinago hardwickii](#) Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Grantiella picta](#) Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Halobaena caerulea](#) Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Hirundapus caudacutus](#) White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Lathamus discolor](#) Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area	In feature area
[Limosa lapponica baueri](#) Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat may occur within area	In feature area

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 feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat may occur within area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat known to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In feature area
Pterodroma leucoptera leucoptera Gould's Petrel, Australian Gould's Petrel [26033]	Endangered	Species or species habitat may occur within area	In feature area
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat likely 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 feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche bulleri platei Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Thalassarche steadi](#) White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
[Thinornis cucullatus cucullatus](#) Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Tringa nebularia](#) Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
FISH			
[Galaxiella pusilla](#) Eastern Dwarf Galaxias, Dwarf Galaxias [56790]	Endangered	Species or species habitat likely to occur within area	In feature area
[Prototroctes maraena](#) Australian Grayling [26179]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Seriolella brama](#) Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In feature area
FROG			
[Heleioporus australiacus](#) Giant Burrowing Frog [1973]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Litoria aurea](#) Green and Golden Bell Frog [1870]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Litoria raniformis](#) Southern Bell Frog,, Growling Grass Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog [1828]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Uperoleia martini](#) Martin's Toadlet [1873]	Endangered	Species or species habitat known to occur within area	In feature area
MAMMAL			

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Antechinus minimus maritimus](#)			
Swamp Antechinus (mainland) [83086]	Vulnerable	Species or species habitat may occur within area	In feature area
[Balaenoptera musculus](#)			
Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
[Dasyurus maculatus maculatus (SE mainland population)](#)			
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat may occur within area	In feature area
[Eubalaena australis](#)			
Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area	In feature area
[Petaurus australis australis](#)			
Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Pseudomys novaehollandiae](#)			
New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Pteropus poliocephalus](#)			
Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In feature area
PLANT			
[Amphibromus fluitans](#)			
River Swamp Wallaby-grass, Floating Swamp Wallaby-grass [19215]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Caladenia tessellata](#)			
Thick-lipped Spider-orchid, Daddy Long-legs [2119]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Commersonia prostrata](#)			
Dwarf Kerrawang [87152]	Endangered	Species or species habitat known to occur within area	In feature area
[Dianella amoena](#)			
Matted Flax-lily [64886]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dodonaea procumbens Trailing Hop-bush [12149]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Glycine latrobeana Clover Glycine, Purple Clover [13910]	Vulnerable	Species or species habitat may occur within area	In feature area
Lepidium hyssopifolium Basalt Pepper-cress, Peppercress, Rubble Pepper-cress, Pepperweed [16542]	Endangered	Species or species habitat likely to occur within area	In feature area
Prasophyllum spicatum Dense Leek-orchid [55146]	Vulnerable	Species or species habitat may occur within area	In feature area
Prostanthera galbraithiae Wellington Mintbush [64959]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterostylis chlorogramma Green-striped Greenhood [56510]	Vulnerable	Species or species habitat known to occur within area	In feature area
Senecio psilocarpus Swamp Fireweed, Smooth-fruited Groundsel [64976]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thelymitra epipactoides Metallic Sun-orchid [11896]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat may occur within area	In feature area
Xerochrysum palustre Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Chelonia mydas](#) Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In feature area
[Dermochelys coriacea](#) Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In feature area
[Lissolepis coventryi](#) Swamp Skink, Eastern Mourning Skink [84053]	Endangered	Species or species habitat known to occur within area	In feature area
SHARK			
[Carcharodon carcharias](#) White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area	In feature area
[Galeorhinus galeus](#) School Shark, Eastern School Shark, Snapper Shark, Tope, Soupfin Shark [68453]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only
[Rhincodon typus](#) Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In feature area

Listed Migratory Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
[Ardenna carneipes](#) Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In feature area
[Ardenna grisea](#) Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In feature area
[Diomedea antipodensis](#) Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In feature area
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Migratory Marine Species			
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	In feature area
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Breeding known to occur within area	In feature area
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In feature area
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In feature area
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area	In feature area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In feature area
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area	In feature area
Rhincodon typus Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In feature area
Migratory Terrestrial Species			
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat may occur within area	In buffer area only
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Breeding known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Rhipidura rufifrons](#) Rufous Fantail [592]		Species or species habitat known to occur within area	In feature area
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat 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 feature area
[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 ruficollis](#) Red-necked Stint [860]		Roosting known to occur within area	In buffer area only
[Charadrius bicinctus](#) Double-banded Plover [895]		Species or species habitat known to occur within area	In buffer area only
[Charadrius leschenaultii](#) Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Charadrius mongolus](#) Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area	In buffer area only
[Charadrius veredus](#) Oriental Plover, Oriental Dotterel [882]		Species or species habitat known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	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
Gallinago stenura Pin-tailed Snipe [841]		Roosting likely to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known to occur within area	In feature area
Numenius minutus Little Curlew, Little Whimbrel [848]		Roosting likely to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Pluvialis fulva Pacific Golden Plover [25545]		Species or species habitat 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]		Species or species habitat known to occur within area	In buffer area only

Other Matters Protected by the EPBC Act

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
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within 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 feature area
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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area overfly marine area	In buffer area only
Charadrius bicinctus Double-banded Plover [895]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Species or species habitat known to occur within area	In buffer area only
Charadrius ruficapillus Red-capped Plover [881]		Roosting known to occur within area overfly marine area	In buffer area only
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea antipodensis gibsoni as Diomedea gibsoni Gibson's Albatross [82270]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
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]		Breeding known to occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Roosting known to occur within area overfly marine area	In buffer area only
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat may occur within area overfly marine area	In buffer area only
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Breeding known to occur within area overfly marine area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat known 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 known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area	In feature area
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In feature area
Pluvialis fulva Pacific Golden Plover [25545]		Species or species habitat known to occur within area	In buffer area only
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Stercorarius antarcticus as Catharacta skua Brown Skua [85039]		Species or species habitat may occur within area	In buffer area only
Sterna striata White-fronted Tern [799]		Foraging, feeding or related behaviour likely to occur within area	In feature area
Sternula albifrons as Sterna albifrons Little Tern [82849]		Species or species habitat may occur within area	In feature area
Thalassarche bulleri Buller's Albatross, Pacific Albatross [64460]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche bulleri platei as Thalassarche sp. nov. Northern Buller's Albatross, Pacific Albatross [82273]	Vulnerable	Species or species habitat may occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche chrysostoma Grey-headed Albatross [66491]	Endangered	Species or species habitat may occur within area	In feature area
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche salvini Salvin's Albatross [64463]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In feature area
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat known to occur within area overfly marine area	In feature area
Thinornis cucullatus cucullatus as Thinornis rubricollis rubricollis Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Tringa stagnatilis](#) Marsh Sandpiper, Little Greenshank [833]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Fish			
[Heraldia nocturna](#) Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In feature area
[Hippocampus abdominalis](#) Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In feature area
[Hippocampus breviceps](#) Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In feature area
[Hippocampus minotaur](#) Bullneck Seahorse [66705]		Species or species habitat may occur within area	In feature area
[Histiogamphelus briggsii](#) Crested Pipefish, Briggs' Crested Pipefish, Briggs' Pipefish [66242]		Species or species habitat may occur within area	In feature area
[Histiogamphelus cristatus](#) Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In feature area
[Hypselognathus rostratus](#) Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area	In feature area
[Kaupus costatus](#) Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area	In feature area
[Kimblaeus bassensis](#) Trawl Pipefish, Bass Strait Pipefish [66247]		Species or species habitat may occur within area	In feature area
[Leptoichthys fistularius](#) Brushtail Pipefish [66248]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In feature area
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In feature area
Mitotichthys semistriatus Halfbanded Pipefish [66261]		Species or species habitat may occur within area	In feature area
Mitotichthys tuckeri Tucker's Pipefish [66262]		Species or species habitat may occur within area	In feature area
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In feature area
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In feature area
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area	In feature area
Solegnathus spinosissimus Spiny Pipehorse, Australian Spiny Pipehorse [66275]		Species or species habitat may occur within area	In feature area
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In feature area
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In feature area
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Syngnathoides biaculeatus](#) Double-end Pipehorse, Double-ended Pipehorse, Alligator Pipefish [66279]		Species or species habitat may occur within area	In feature area
[Urocampus carinirostris](#) Hairy Pipefish [66282]		Species or species habitat may occur within area	In feature area
[Vanacampus margaritifer](#) Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In feature area
[Vanacampus phillipi](#) Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In feature area
[Vanacampus poecilolaemus](#) Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In feature area
Mammal			
[Arctocephalus forsteri](#) Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In feature area
[Arctocephalus pusillus](#) Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In feature area
Reptile			
[Caretta caretta](#) Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In feature area
[Chelonia mydas](#) Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In feature area
[Dermochelys coriacea](#) Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Species or species habitat known to occur within area	In feature area

Whales and Other Cetaceans			[Resource Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			

Current Scientific Name	Status	Type of Presence	Buffer Status
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In feature area
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In feature area
Caperea marginata Pygmy Right Whale [39]		Foraging, feeding or related behaviour may occur within area	In feature area
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In feature area
Eubalaena australis Southern Right Whale [40]	Endangered	Species or species habitat known to occur within area	In feature area
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In feature area
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In feature area
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat known to occur within area	In feature area
Orcinus orca Killer Whale, Orca [46]		Species or species habitat likely to occur within area	In feature area
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In feature area
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In feature area

Extra Information

State and Territory Reserves [Resource Information]

Protected Area Name	Reserve Type	State	Buffer Status
Darriman H29 B.R	Natural Features Reserve	VIC	In feature area
Darriman H33 B.R	Natural Features Reserve	VIC	In buffer area only
Giffard (Rifle Range) F.R.	Nature Conservation Reserve	VIC	In buffer area only
Giffard H30 B.R	Natural Features Reserve	VIC	In buffer area only
Giffard H31 B.R	Natural Features Reserve	VIC	In buffer area only
Gippsland Lakes Coastal Park	Conservation Park	VIC	In buffer area only
Holey Plains	State Park	VIC	In buffer area only
Jack Smith Lake W.R	Natural Features Reserve	VIC	In feature area
Lake Denison W.R	Natural Features Reserve	VIC	In buffer area only
Ninety Mile Beach	Marine National Park	VIC	In buffer area only
Stradbroke F.F.R.	Nature Conservation Reserve	VIC	In buffer area only
Warrigal Creek SS.R.	Natural Features Reserve	VIC	In buffer area only
Woodside H28 B.R	Natural Features Reserve	VIC	In buffer area only

Regional Forest Agreements [Resource Information]

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State	Buffer Status
Gippsland RFA	Victoria	In feature area

Nationally Important Wetlands [Resource Information]

Wetland Name	State	Buffer Status
Jack Smith Lake State Game Reserve	VIC	In feature area

EPBC Act Referrals [Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Blue Marlin Offshore Wind Energy Project	2023/09532		Referral Decision	In feature area
Gippsland Offshore Wind Farm Marine Survey Investigations	2023/09682		Completed	In feature area
Gippsland Renewable Energy Zone Project	2022/09346		Assessment	In feature area
Greater Gippsland Offshore Wind Project	2022/09379		Assessment	In feature area
Greater Gippsland Offshore Wind Project Initial Marine Field Investigations	2022/09374		Completed	In feature area
Preliminary Site Investigations for Great Eastern Offshore Wind Project	2024/09890		Referral Decision	In buffer area only
Seadragon Offshore Wind, Early Marine Surveys	2023/09670		Completed	In feature area
Seadragon Offshore Wind Farm	2022/9163		Completed	In feature area
Controlled action				
Star of the South Offshore Wind Farm Project	2020/8650	Controlled Action	Guidelines Issued	In feature area
Not controlled action				
Development of Turrum Oil Field and associated infrastructure	2003/1204	Not Controlled Action	Completed	In feature area
Gippsland Basin Seismic Programme	2004/1866	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
Not controlled action (particular manner)				
Golden Beach gas field development	2003/1031	Not Controlled Action (Particular	Post-Approval	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action (particular manner)				
		Manner)		
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
Southern Flanks 2D Marine Seismic Survey	2010/5288	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

Biologically Important Areas			[Resource Information]
Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Ardenna tenuirostris Short-tailed Shearwater [82652]	Foraging	Known to occur	In feature area
Diomedea exulans (sensu lato) Wandering Albatross [1073]	Foraging	Known to occur	In buffer area only
Pelecanoides urinatrix Common Diving-petrel [1018]	Foraging	Known to occur	In feature area
Thalassarche bulleri Bullers Albatross [64460]	Foraging	Known to occur	In buffer area only
Thalassarche cauta cauta Shy Albatross [82345]	Foraging likely	Likely to occur	In feature area
Thalassarche chlororhynchos bassi Indian Yellow-nosed Albatross [85249]	Foraging	Known to occur	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Foraging	Known to occur	In buffer area only
Thalassarche melanophris impavida Campbell Albatross [82449]	Foraging	Known to occur	In buffer area only
Sharks			
Carcharodon carcharias White Shark [64470]	Breeding (nursery area)	Known to occur	In feature area
Whales			

Scientific Name	Behaviour	Presence	Buffer Status
Balaenoptera musculus brevicauda Pygmy Blue Whale [81317]	Foraging	Likely to be present	In feature area

Bioregional Assessments [Resource Information]

SubRegion	BioRegion	Website	Buffer Status
Gippsland	Gippsland Basin	BA website	In feature area

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

4 LIMITATIONS

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

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

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

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

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

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

Acknowledgements

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

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

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

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

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APPENDIX B LIKELIHOOD OF OCCURRENCE - FLORA

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
Acacia howittii	Sticky Wattle	-	Vulnerable	Sticky Wattle is a graceful large shrub or small tree of dense, weeping habit reaching a height of 5-8 m. Confined to eastern Victoria from the upper Macalister River area near Mt Howitt south to near Yarram and east to near Tabberabbera. Grows in moist forest. Widely cultivated and naturalising in some areas.	VBA	3	27/06/2023	• Project Area is within the distribution for this species. • 3 records exist for this species within the locality • Limited suitable habitat (eucalypt forest, dense riparian shrubland) may exist in the Project Area. **Potential to occur**
Amphibromus fluitans	River Swamp Wallaby-grass	Vulnerable	-	River Swamp Wallaby-grass is an aquatic perennial with 1 m long decumbent culms (aerial stems growing horizontally with tips turned up at the end) and often only the inflorescence is above water. River Swamp Wallaby-grass is largely confined to permanent swamps, principally along the Murray River between Wodonga and Echuca, uncommon to rare in the south (e.g. Casterton, Moe, Yarram), probably due to historic drainage of wetlands. Sometimes forming loose turf-like colonies at the edge of receding waters and then spikelets tend to be smaller than typical.	VBA, PMST	3	18/11/2004	• Project Area is within the distribution for this species. • 3 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable habitat (wetlands) may exist in the Project Area **Potential to occur**
Caladenia aurantiaca	Orange-tip Finger-orchid	-	Endangered	Orange-tip Finger-Orchid is a small perennial orchid that sprouts annually from a n underground tuber. On mainland Australia, Orange-tip Finger-Orchid occurs in well-drained peaty sand and sandy loams in heathland, heathy forest and coastal scrub at elevations below 80 m.	VBA	6	26/08/2003	• Project Area is within the distribution for this species. • 6 records exist for this species within the locality • Potential suitable habitat (coastal dune and scrub) may exist in the Project Area **Potential to occur**
Caladenia tessellata	Thick-lip Spider-orchid	Vulnerable	-	Thick-lipped Spider-orchid is a perennial orchid that sprouts annually from an underground tuber. It has a single slender flowering stem which bears one or two 3 cm yellow-green flowers (with maroon stripes and suffusions), is hairy and grows to 30 cm in height. Thick-lipped Spider-orchid is confined to eastern Victoria from near-coastal healthy woodlands to open forests on well-drained sandy soils.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Potential suitable habitat (woodland and forest) may exist in the Project Area **Potential to occur**
Calochilus imberbis	Naked Beard-orchid	-	Critically Endangered	The Naked Beard-orchid is a perennial orchid that sprouts annually from an underground tuber. It has 1-4 green and purple flowers and grows to 45cm tall. It is coextensive with *C. robertsonii* but is much rarer. Grows in dry open woodland, forests, and heaths.	VBA	1	1/11/2000	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Potential suitable habitat (woodland and forest) may exist in the Project Area **Potential to occur**
Commersonia prostrata	Dwarf Kerrawang	Endangered	Endangered	Dwarf Kerrawang is a prostrate, mat-forming shrub with trailing branches to 2 m long and ovate to cordate leaves 10–35 mm long and 5–25 mm wide, with serrate to crenate margins, the upper leaf surface is sparsely sprinkled with stellate hairs, more densely below, and the petiole is 3–20 mm long. In Victoria, the Dwarf Kerrawang grows on swampy, sometimes ephemeral, wetlands and lake margins, often dominated by *Lepidosperma* spp.	VBA, PMST	29	10/11/2010	• Project Area is within the distribution for this species. • 29 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable habitat (wetlands) may exist in the Project Area **Potential to occur**
Corybas fimbriatus	Fringed Helmet-orchid	-	Endangered	Fringed Helmet-orchid is a perennial orchid that sprouts annually from an underground tuber. It is a small helmet shaped orchid that flowers from May to August. Typically forms colonies on moist, shaded sandy soil near the coast and generally east of Western Port.	VBA	1	27/06/2023	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Potential suitable habitat (coastal vegetation) may exist in the Project Area **Potential to occur**
Dianella amoena	Matted Flax-lily	Endangered	Critically Endangered	Matted Flax-lily is a perennial, tufted, mat-forming lily. Plants are rhizomatous and can form loose clumps up to 5 m wide. This species generally found in drier grassy woodland and grassland communities south of the Dividing Range.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable habitat (woodland) may exist in the Project Area **Unlikely to occur**

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
Dianella longifolia var. grandis s.l.	Glaucous Flax-lily	-	Critically Endangered	Raspy leaved lily with pale green tufting leaves in loose clump to 60 cm high. Leaves are upright and flat with a strong central rib. Occurs in lowland plains grassland and grassy woodlands.	VBA	1	20/09/2000	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Limited suitable habitat (woodland) may exist in the Project Area **Potential to occur**
Diuris punctata var. punctata	Purple Diuris	-	Endangered	Purple Diuris is endemic to south-eastern continental Australia. It has two grass-like leaves and up to ten purple or mauve flowers, often with darker, sometimes yellow marks. Formerly widespread and common in Victoria, occurring in the open forests, woodlands and grasslands of the fertile lowlands, now much reduced through clearing for agriculture and restricted to relatively few, isolated sites, but sometimes locally abundant.	VBA	2	1/09/2003	• Project Area is within the distribution for this species. • 2 records exist for this species within the locality • Potential suitable habitat (woodland and forest) may exist in the Project Area **Potential to occur**
Dodonaea procumbens	Trailing Hop-bush	Vulnerable	-	Trailing Hop-bush is a small prostrate shrub growing to about 1.5 m diameter and 20 cm tall. It has angular or flattened, sometimes weakly ribbed branches covered in minute soft, erect hairs and often rooting at nodes. Victorian populations have been recorded in various plant communities including grassy woodland dominated by River Red Gum in western Victoria, heathy dry forest in central Victoria, damp heath in far-western Victoria (Carter pers. obs. cited in Carter 2010c) and sedge wetland, healthy woodland and damp heathland in eastern Victoria.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable habitat (woodlands) may exist in the Project Area **Unlikely to occur**
Eucalyptus arenicola	Gippsland Lakes Peppermint	-	Endangered	Gippsland Lakes Peppermint is a rough fibrous-barked peppermint-scented woodland tree or a multi-stemmed mallee endemic to east Gippsland, Victoria, found growing from Yarram and Loch Sport north to Rosedale and almost to Bairnsdale. It occupies sandy sites on the low-lying old marine plain.	VBA	5	9/11/2000	• Project Area is within the distribution for this species. • 5 records exist for this species within the locality • Potential suitable habitat (coastal vegetation, woodlands) may exist in the Project Area **Potential to occur**
Eucalyptus bosistoana	Coast Grey-box	-	Endangered	A tall tree of Gippsland in Victoria and south-eastern New South Wales, south from Wolgan Valley, although a smaller form occurs on the Southern Tablelands, e.g. between Goulburn and Bungonia Gorge. Occurs mostly on loamy soils east from Woodside, around the Gippsland Lakes and near the coast.	VBA	31	27/07/2023	• Project Area is within the distribution for this species. • 31 records exist for this species within the locality • Potential suitable habitat (coastal vegetation, woodlands) may exist in the Project Area **Potential to occur**
Eucalyptus fulgens	Green Scentbark	-	Endangered	A small to medium-sized tree of restricted distribution on heavy soils over sandstone east of Melbourne, Victoria, from east of Healesville and Woori Yallock to the Latrobe Valley near Driffield. Green Scentbark has deeply furrowed rough bark like an ironbark and glossy green adult leaves.	VBA	2	10/04/2003	• Project Area is outside the distribution for this species. • 2 records exist for this species within the locality • Suitable habitat is unlikely to occur in the Project Area **Unlikely to occur**
Glycine latrobeana	Clover Glycine	Vulnerable	Vulnerable	This species is widespread but of sporadic occurrence and rarely encountered, growing mainly in grasslands and grassy woodlands.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable habitat (woodlands) may exist in the Project Area **Unlikely to occur**
Grevillea chrysophaea	Golden Grevillea	-	Vulnerable	Golden Grevillea is an open shrub reaching a height of 2.5 metres with a spread of 2 metres. There are two populations both in Victoria. One is found in the Brisbane Ranges, west of Melbourne. The other is in Gippsland, northern Victoria. It grows in sandy to silty soils, in open sclerophyll woodland and heathland.	VBA	3	1/11/2000	• Project Area is within the distribution for this species. • 3 records exist for this species within the locality • Potential suitable habitat (eucalypt woodland) may exist in the Project Area **Potential to occur**
Lachnagrostis robusta	Salt Blown-grass	-	Endangered	Salt Blown-grass is a tufted annual to perennial grass to 75 cm tall with rough, in-rolled leaves to 1 mm wide and to 30 cm long or more. Occurs around margins of salt lakes and saline depressions mostly	VBA	1	17/12/1998	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				across the Volcanic Plain, with eastern outliers near Tooradin and Seaspray and a few sites west of the Grampians.				• Suitable habitat is unlikely to occur in the Project Area **Unlikely to occur**
Lepidium hyssopifolium	Basalt Peppercress	Endangered	Endangered	Basalt Pepper-cress is an erect, multi-branched perennial herb that grows up to 1 m in height, with stems and stem leaves covered in fine short needle-shaped hairs. The Basalt Pepper-cress is found mostly west of Melbourne in the Victorian Midlands and Victorian Volcanic Plain Bioregions.	PMST	0	N/A	• Project Area is outside the distribution for this species. • No records exist for this species within the locality **Unlikely to occur**
Leptorhynchos elongatus	Lanky Buttons	-	Endangered	Lanky Buttons is a perennial herb in the daisy family. Largely confined in Victoria to eastern uplands (Benambra, Omeo, Wulgulmerang, Corryong areas) where occasional in grassy Eucalyptus pauciflora woodlands. Grows in woodland and grassland.	VBA	1	26/11/1994	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Potential suitable habitat (eucalypt woodland) may exist in the Project Area **Potential to occur**
Oxalis rubens	Dune Wood-sorrel	-	Endangered	Dune Wood-sorrel is a small perennial herb, with prostrate or ascending to scrambling stems. Confined to coastal dunes and scrub, growing on stabilised sand-dunes, in *Banksia integrifolia* woodland, and beaches among *Spinifex sericeus*.	VBA	2	16/04/2003	• Project Area is within the distribution for this species. • 2 records exist for this species within the locality, with one sighting in the Project Area • Potential suitable habitat (coastal dunes) may exist in the Project Area **Known to occur**
Pomaderris discolor	Eastern Pomaderris	-	Endangered	A shrub to potentially 5 metres, spreading to several metres wide with stems possessing dense white stellate hairs. It grows in open dry sclerophyll woodlands and forests often on sandy soils or rocky soils to enriched loams on rainforest edges. Confined in Victoria to moist lowland forests and rainforest margins from near Sale eastwards, but uncommon to rare.	VBA	1	1/11/2000	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Limited suitable habitat (lowland forest) may exist in the Project Area **Potential to occur**
Pomaderris pilifera subsp. pilifera	Striped Pomaderris	-	Endangered	Striped Pomaderris is a spreading to upright shrub with dense grey hairy young growth. Scattered from Warburton area eastwards, south of the Dividing Range with an isolated occurrence between Mitta Mitta and Tallangatta in the north-east of the State. Usually in dryish open-forest or woodland, usually on shallow soils, occasionally fringing watercourses.	VBA	1	1/11/2000	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Potential suitable habitat (woodland and forest) may exist in the Project Area **Potential to occur**
Prasophyllum spicatum	Dense Leek-orchid	Vulnerable	Critically Endangered	The Dense Leek-orchid *Prasophyllum spicatum* is a tall, slender, deciduous terrestrial orchid endemic to south-eastern Australia. It is distributed from the south Gippsland region of Victoria to the far south-east of South Australia. Dense Leek-orchid has been previously recorded within the study area and is largely found in coastal heath and sandhills. It is localised across southern Victoria in coastal heathland and near-coastal heathy forest on sandy soils.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable habitat (forest and shrubland) may exist in the Project Area **Unlikely to occur**
Prostanthera galbraithiae	Wellington Mint-bush	Vulnerable	Endangered	The Wellington Mint-bush is a small shrub that is endemic to the central Gippsland region of Victoria and is found growing in open heath forest, heathland, and heath woodland, usually on gravelly sand. Known populations occur in Holey Plains state park and an adjacent property 'Dusty Downs' which is managed as a waste disposal and treatment plant.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable habitat (forest and shrubland) may exist in the Project Area **Unlikely to occur**
Pseudanthus ovalifolius	Oval-leaf Pseudanthus	-	Vulnerable	The Oval-leaf Pseudanthus is a shrub to 0.60 m high, usually hairless. The leaves are usually alternating up the stems, occasionally almost opposite each other. Of disjunct occurrence in Victoria, usually found on dry sandy, or shallow, shaley soils. Occurs in dry forests and heaths.	VBA	1	1/11/2000	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Limited suitable habitat (forests and woodlands) may exist in the Project Area **Potential to occur**

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
Pterostylis chlorogramma	Green-striped Greenhood	Vulnerable	Endangered	Apparently localized in Victoria, but exact range uncertain due to confusion with closely allied species. Grows in moist areas of heathy and shrubby forest, on well-drained soils. Flowers July–September. The Green-striped Greenhood is a small, terrestrial deciduous herb that is summer-dormant and emerges annually from a spherical subterranean tuber. This species has been previously recorded growing in moist areas of heathy and shrubby forest, on well-drained soils.	VBA, PMST	79	28/07/2023	• Project Area is within the distribution for this species. • 79 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable habitat (shrubland, forest) may exist in the Project Area **Potential to occur**
Pterostylis grandiflora	Cobra Greenhood	-	Endangered	The Cobra Greenhood is a perennial herb rising from round tubers to form loose colonies. Generally restricted and uncommon in near-coastal eastern Victoria, growing on moist, shady slopes in open-forest, on well-drained soil.	VBA	176	28/07/2023	• Project Area is within the distribution for this species. • 176 records exist for this species within the locality • Potential suitable habitat (woodland and forest) may exist in the Project Area **Potential to occur**
Senecio psilocarpus	Swamp Fireweed	Vulnerable	-	Swamp Fireweed is an erect, native, rhizomatous perennial herb. It is restricted in Victoria to a few herb-rich winter-wet swamps throughout the south of the state, west from Sale, growing on volcanic clays or peaty soils.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Suitable habitat is unlikely to occur in the Project Area **Unlikely to occur**
Thelymitra epipactoides	Metallic Sun-orchid	Endangered	Endangered	The metallic sun-orchid is a rare orchid growing 21-52 cm tall with a single long, narrow leaf. The flowers are highly variable in size and colour and the way the colours infuse gives a bronzy or metallic appearance. Metallic Sun-orchid grows mostly in coastal heathland, grassland and woodland, but extending further inland into similar habitats in the western part of its range. Substrates may be moist or dry sandy soils. Flowers September–November, with flowers opening freely on warm days.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Potential suitable habitat (coastal vegetation, woodland) may exist in the Project Area **Potential to occur**
Thesium australe	Austral Toad-flax	Vulnerable	Endangered	The species is a hairless, yellowish-green perennial herb with slender, wiry stems to 40 cm high and tiny, white flowers. Currently only known in Victoria in Gippsland. Occurs in subtropical, temperate and subalpine climates on soils derived from sedimentary, igneous and metamorphic substrates on a range of soils. Found in open grassy heath with a range of dominant shrubs, *Themeda* spp. grassland surrounded by eucalypt woodland and *Cymbopogon refractus* dominated grassland.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable habitat (eucalypt woodland) may exist in the Project Area **Unlikely to occur**
Xerochrysum palustre	Swamp Everlasting	Vulnerable	Critically Endangered	Swamp Everlasting is a perennial, erect herb growing to 30-100 cm tall. The species occurs in lowland swamps, usually on black cracking clay soils, scattered from near the South Australian border north-west of Portland to Bairnsdale district, but rare due to habitat depletion.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable habitat (wetlands) may exist in the Project Area **Unlikely to occur**

APPENDIX C LIKELIHOOD OF OCCURRENCE - FAUNA

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				Birds				
Acrocephalus australis	Reed-Warbler	Migratory	-	Reed-Warbler is a small migratory songbird, inhabiting freshwater wetlands, with a preference for dense vegetation.	VBA	1	6/12/2009	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Potential suitable habitat is unlikely to occur in the Project Area **Unlikely to occur**
Anseranas semipalmata	Magpie Goose	-	Vulnerable	Magpie Goose is a waterbird found throughout coastal Australia. Preferred habitat includes wet grasslands, swamps, and marshlands.	VBA	1	1/07/1999	• Project Area is outside the distribution for this species. • 1 record exists for this species within the locality • Limited suitable habitat may occur in the Project Area **Unlikely to occur**
Anthochaera phrygia	Regent Honeyeater	Critically Endangered	-	Regent Honeyeater is a striking black and yellow bird that has a patchy distribution between south-east Queensland and central Victoria. Preferred habitat includes eucalypt forests and woodlands, particularly in blossoming trees and mistletoe.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Potential suitable habitat (eucalypt woodland and forest) exists in the Project Area **Potential to occur**
Ardea alba modesta	Eastern Great Egret	Migratory	Vulnerable	Eastern Great Egret is a large waterbird found throughout Australia. This species prefers shallow water habitats, but can inhabit a range of habitats including fresh, coastal, and saline wetlands, swamps, marshes, and lakes.	VBA	8	29/07/2018	• Project Area is within the distribution for this species. • 8 records exist for this species within the locality • Potential suitable habitat (wetlands, swamps) may exist in the Project Area **Potential to occur**
Ardenna grisea	Sooty Shearwater	Vulnerable, Migratory	-	Sooty Shearwater is a migratory seabird. This species forages at sea, and breeding habitat is generally located on offshore islands off NSW and Tasmania.	PMST	0	N/A	• Project Area is within the distribution for this species. • Limited suitable vegetation (coastal vegetation) may exist in the Project Area **Unlikely to occur**
Ardenna tenuirostris	Short-tailed Shearwater	Migratory	-	Short-Tailed Shearwater is a migratory seabird, with breeding occurring in Southern Australia. This species creates burrows in sandy headlands amongst low lying vegetation such as bower spinach and tussock grasses.	VBA	4	9/02/2008	• Project Area is outside the distribution for this species. • 4 records exist for this species within the locality • Potential suitable habitat may exist in the Project Area **Potential to occur**
Arenaria interpres	Ruddy Turnstone	Vulnerable, Migratory	Endangered	Migratory, journeying from the edge of the Artic across the Pacific to Australia. Stocky medium-sized wader with short orange-red legs. In Australia, Ruddy Turnstones are widespread around the coast of the mainland and offshore islands. In Australasia, the Ruddy Turnstone is mainly found on coastal regions with exposed rock coast-lines or coral reefs. It also lives near platforms and shelves, often with shallow tidal pools and rocky, shingle or gravel beaches. It can, however, be found on sand, coral or shell beaches, shoals, cays and dry ridges of sand or coral. It has occasionally been sighted in estuaries, harbours, bays and coastal lagoons, among low saltmarsh or on exposed beds of seagrass, around sewage ponds and on mudflats.	VBA	7	17/09/2017	• Project Area is within the distribution for this species. • 7 records exist for this species within the locality • Limited suitable habitat may exist in the Project Area **Potential to occur**

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
Biziura lobata	Musk Duck	-	Vulnerable	Musk Dusk is predominately found in water, and tends to avoid land as they are clumsy walkers. Preferred habitat includes deep freshwater lagoons with dense reed beds.	VBA	20	13/09/2007	• Project Area is within the distribution for this species. • 20 records exist for this species within the locality • Potential suitable habitat may exist in the Project Area **Potential to occur**
Botaurus poiciloptilus	Australasian Bittern	Endangered	Critically Endangered	Australasian bittern inhabits shallow, permanent freshwater wetlands and brackish swamps or lagoons that are densely vegetated (e.g., tall reeds, sedges, lignum).	PMST	0	N/A	• Project Area is within the distribution for this species. • Potential suitable habitat (wetlands) may exist in the Project Area **Potential to occur**
Bubulcus coromandus	Eastern Cattle Egret	Migratory	-	Eastern Cattle Egret is a migratory heron that visits Australia in the non-breeding seasons. This species forages in shallow water and is found in wet paddocks and pasture.	VBA	5	25/04/2021	• Project Area is within the distribution for this species. • 5 records exist for this species within the locality • Potential suitable habitat (wetlands, paddocks) exists in the Project Area **Potential to occur**
Calamanthus pyrrhopygius	Chestnut-rumped Heathwren	-	Vulnerable	A small woodland bird found in dense heathland and shrubland.	VBA	8	1/02/1999	• Project Area is within the distribution for this species. • 8 records exist for this species within the locality • Limited suitable vegetation (dense heathland and shrubland) may exist in the Project Area **Potential to occur**
Calidris acuminata	Sharp-tailed Sandpiper	Vulnerable, Migratory	-	Sharp-tailed Sandpiper spends the non-breeding season in Australia with small numbers occurring regularly in New Zealand. Most of the population migrates to Australia, mostly to the south-east and are widespread in both inland and coastal locations and in both freshwater and saline habitats. They are widespread in most regions of Victoria, especially in coastal areas, but they are sparse in north-east and north-central Victoria. They also occur occasionally inland and on Bass Strait islands.	VBA, PMST	16	16/03/2021	• Project Area is within the distribution for this species. • 16 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Calidris canutus	Red Knot	Vulnerable, Migratory	Endangered	Red Knot is a medium-sized, dumpy grey wader with a short neck and long body. Roosting habitat includes sandy beaches and mudflats. Other habitat includes terrestrial saline wetlands in coastal areas.	VBA, PMST	3	4/11/1998	• Project Area is within the distribution for this species. • 3 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Calidris ferruginea	Curlew Sandpiper	Critically Endangered, Migratory	Critically Endangered	Small, slim sandpiper that mainly occurs on intertidal mudflats in sheltered coastal areas and around non-tidal swamps, lakes and lagoons near the coast. They are also recorded inland around ephemeral and permanent waterbodies. Mostly occur in eastern Tasmania as well as several sites in Northwest Tasmania.	VBA, PMST	12	12/12/2020	• Project Area is within the distribution for this species. • 12 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Calidris ruficollis	Red-necked Stint	Migratory	-	It is distributed along most of the Australian coastline with large densities on the Victorian and Tasmanian coasts. Seven Victorian sites of importance have been identified. the Red-	VBA	30	7/05/2021	• Project Area is within the distribution for this species.

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				necked Stint is mostly found in coastal areas, including in sheltered inlets, bays, lagoons, and estuaries with intertidal mudflats, often near spits, islets and banks and, sometimes, on protected sandy or coralline shores. Occasionally they have been recorded on exposed or ocean beaches, and sometimes on stony or rocky shores, reefs, or shoals.				• 30 records exist for this species within the locality • Limited suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Calidris tenuirostris	Great Knot	Vulnerable, Migratory	Critically Endangered	Largest of the calidrid shorebirds. It is a medium-sized shorebird and grows to a length of 26–28 cm with a wingspan of approximately 58 cm. Females are slightly larger than males. It has a straight, slender bill that is black with a green tinge at the tip. The eye is brown, and legs and feet are dark greenish grey. The bird has noticeable breeding, non-breeding, and juvenile plumages. The great knot has been recorded around the entirety of the Australian coast, with a few scattered records inland. In Australasia, the species typically prefers sheltered coastal habitats, with large intertidal mudflats or sandflats.	VBA	1	4/11/1998	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Limited suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Callocephalon fimbriatum	Gang-gang Cockatoo	Endangered	Endangered	Gang-Gang Cockatoo is a small, stocky cockatoo, readily distinguished by their plumage (especially in males with their scarlet-coloured heads). This species occurs primarily within the temperate eucalypt forest and woodland of south-east Australia. It migrates from higher altitudes in summer, to lower altitudes in winter.	VBA, PMST	15	27/06/2023	• Project Area is within the distribution for this species. • 15 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable vegetation (eucalypt woodland and forest) may exist in the Project Area **Potential to occur**
Calyptorhynchus lathami lathami	South-eastern Glossy Black-Cockatoo	Vulnerable	-	Glossy Black-Cockatoo is a small brown-black cockatoo with a massive, bulbous bill and a short crest. Males have a prominent red tail panel, while that of females is yellow to orange-red. The coloured tail panel is barred black in juvenile birds, with the extent of barring decreasing with age. The female usually has irregular pale-yellow markings on the head and neck and may have yellow flecks on the underparts and underwing. They are usually seen in pairs or small groups feeding quietly in sheoaks.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Suitable habitat is unlikely to occur in the Project Area **Unlikely to occur**
Charadrius bicinctus	Double-banded Plover	Migratory	-	Double-banded Plover can be found in both coastal and inland areas. During the non-breeding season, it is common in eastern and southern Australia, mainly between the Tropic of Capricorn and western Eyre Peninsula. Seven Victorian sites are recognised as having Australian importance, and six of which are internationally significant. littoral, estuarine and fresh or saline terrestrial wetlands and saltmarsh, grasslands and pasture. It occurs on muddy, sandy, shingled or sometimes rocky beaches, bays and inlets, harbours, and margins of fresh or saline terrestrial wetlands such as lakes, lagoons and swamps, shallow estuaries and rivers. The species is sometimes associated with coastal lagoons, inland salt lakes and saltwork.	VBA	12	14/02/2020	• Project Area is within the distribution for this species. • 12 records exist for this species within the locality • Limited suitable vegetation may (wetlands) may exist in the Project Area **Potential to occur**
Charadrius leschenaultii	Greater Sand Plover	Vulnerable	-	Greater Sand Plover is a small-to-medium sized shorebird with a straight longish bill that bulges towards the end but has a pointed tip. The legs are long and olive-grey. Sexes are non-distinguishable from each other when in non-breeding plumage. However, sexes differ when in breeding plumage with males having a chestnut breast band and rufous Ongoing to the head and nape and with black on the face. Victoria - mostly recorded from Corner Inlet, Western Port and Port Phillip Bay.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Suitable habitat is unlikely to occur in the Project Area **Unlikely to occur**

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
Charadrius mongolus	Lesser Sand Plover	Endangered	-	Lesser Sand Plover is a small to medium-sized grey-brown and white shorebird. It has a dark eye-stripe, short stout black bill and short grey legs. Sexes differ when in breeding plumage but are inseparable when in non-breeding plumage. The lesser sand plover is widespread in coastal regions and has been recorded in all states. The breeding grounds are at high elevations (up to 5,500 m), above the tree line, in tundra on steppes and in flat, barren valleys and basins, usually in boggy areas.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • PMST: Species or species habitat known to occur in the locality • Suitable habitat is unlikely to occur in the Project Area **Unlikely to occur**
Chlidonias leucopterus	White-winged Black Tern	Migratory	-	In Australia the species mostly inhabits fresh, brackish or saline, and coastal or subcoastal wetlands. White-winged Black Tern frequents tidal wetlands, such as harbours, bays, estuaries and lagoons, and their associated tidal sandflats and mudflats. Terrestrial wetlands, including swamps, lakes, billabongs, rivers, floodplains, reservoirs, saltworks, sewage ponds and outfalls are also inhabited. They rarely occur on inland wetlands in Australia. Most breeding is on vegetated, freshwater inland wetlands. White-winged Black Tern mainly forages aerially, over water or over muddy or sandy edges of wetlands; and also forages over land adjacent to wetlands, especially if inundated, including rice paddies and dry paddocks and grassland.	VBA	3	4/11/1998	• Project Area is within the distribution for this species. • 3 records exist for this species within the locality • Limited suitable vegetation (wetlands and paddocks) may exist in the Project Area **Potential to occur**
Climacteris picumnus victoriae	Brown Treecreeper (south-eastern)	Vulnerable	-	Brown Treecreeper (south-eastern), Australia's largest treecreeper, is a grey-brown bird with black streaking on the lower breast and belly, and black bars on the undertail. Pale buff bands across the flight feathers are obvious in flight. The face is pale, with a dark line through the eye, and a dark crown. Habitat includes eucalypt woodlands and forests.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable vegetation (eucalypt woodlands and forests) may exist in the Project Area **Potential to occur**
Diomedea antipodensis	New Zealand Wandering Albatross	Vulnerable, Migratory		New Zealand Wandering Albatross is a large seabird. Breeding habitat in Australia including open patchy vegetation such as among shrubs or tussock grasslands.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable vegetation may exist in the Project Area **Unlikely to occur**
Egretta garzetta	Little Egret	-	Endangered	Little Egret is a small white egret found in coastal and inland areas across northern, eastern and south-eastern Australia. Habitat includes tidal mudflats, saltwater and freshwater wetlands, with nests built over water.	VBA	5	15/04/2017	• Project Area is within the distribution for this species. • 5 records exist for this species within the locality Limited suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Falco hypoleucos	Grey Falcon	Vulnerable	-	Grey Falcon is distributed sparsely over Australia's arid and semi-arid zones. It prefers arid and semi-arid Australia and frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined watercourses. This species has also been observed in treeless areas, frequenting tussock grassland and open woodland for foraging. Grey Falcon is noted as absent from south of the Great Dividing Range in Victoria.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable vegetation (woodland) may exist in the Project Area **Unlikely to occur**
Gallinago hardwickii	Latham's Snipe	Vulnerable, Migratory	-	Latham's Snipe is a non-breeding visitor to south-eastern Australia and is a passage migrant through northern Australia (i.e., it travels through northern Australia to reach non-breeding areas located further south). It is found in all regions of Victoria except for the north-west. usually inhabit open, freshwater wetlands with low, dense vegetation (e.g.,	VBA, PMST	7	13/09/2007	• Project Area is within the distribution for this species. • 7 records exist for this species within the locality • Potential suitable vegetation (wetlands and woodlands) may exist in the Project Area

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				swamps, flooded grasslands or heathlands, around bogs and other water bodies); however, may also occur inland and in artificial habitats and those located close to humans or human activity				**Potential to occur**
Grantiella picta	Painted Honeyeater	Vulnerable	-	Painted Honeyeater is endemic to Australia and is found across eastern and northern parts of the country. Over spring and summer its distribution stretches from inland central Victoria through scattered parts of much of New South Wales and the ACT and into southern Queensland. The species inhabits mistletoes in eucalypt forests/woodlands, riparian woodlands of Black Box and River Red-gum, box-ironbark-Yellow Gum woodlands, *Acacia*-dominated woodlands, paperbarks, casuarinas, *Callitris*, and trees on farmland or gardens.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable vegetation (eucalypt woodlands and forests) may exist in the Project Area **Unlikely to occur**
Haliaeetus leucogaster	White-bellied Sea-Eagle	Migratory	Endangered	White-bellied Sea-eagle is a large raptor with a widespread coastal and inland Australian distribution. Preferred habitat is associated with wetlands and waterways, and large trees are typically required for nesting.	VBA	34	17/05/2019	• Project Area is within the distribution for this species. • 34 records exist for this species within the locality, with one sighting in the Project Area • Potential suitable vegetation (eucalypt woodland and wetlands) may exist in the Project Area **Known to occur**
Hieraaetus morphnoides	Little Eagle	-	Vulnerable	Little Eagle is a small eagle with a widespread Australian distribution. Preferred habitat includes woodland, forests, and open areas.	VBA	4	23/06/2005	• Project Area is within the distribution for this species. • 4 records exist for this species within the locality • Potential suitable vegetation (eucalypt woodland and forests) may exist in the Project Area **Potential to occur**
Hirundapus caudacutus	White-throated Needletail	Vulnerable, Migratory	Vulnerable	Large swift with a thickset, cigar-shaped body, stubby tail and long pointed wings. Migratory species that is almost exclusively aerial within Australia. Occurs over most types of habitat but recorded most often above wooded areas including open forest and rainforest. Mainly occurs within Australia during non-breeding season from September to November.	VBA, PMST	10	9/02/2019	• Project Area is within the distribution for this species. • 10 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable vegetation (eucalypt woodland and forests) may exist in the Project Area **Potential to occur**
Hydroprogne caspia	Caspian Tern	Migratory	Vulnerable	The largest tern in Australia, Caspian Tern has long, slender backswept wings and a slightly forked tail. The heavy bill is red with a dusky tip. Caspian Tern has a white body, with a black and white streaked crown from bill to nape and a short shaggy crest. Preferred habitat includes sheltered coastal embayments and nearby terrestrial waterways and waterbodies.	VBA	31	25/04/2021	• Project Area is within the distribution for this species. • 31 records exist for this species within the locality • Potential suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Ixobrychus dubius	Australian Little Bittern	-	Endangered	A small heron with a southern Australian distribution. Habitat includes freshwater-bodies, with a preference for dense vegetation cover such as rushes, reeds, and Typha.	VBA	1	4/05/1996	• Project Area is within the distribution for this species. • 1 record exists for this species within the locality • Limited suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Lathamus discolor	Swift Parrot	Critically Endangered	Critically Endangered	Swift Parrot is a slim, medium-sized parrot with a streamlined shape in flight, angular pointed wings and a	VBA, PMST	2	16/04/2017	• Project Area is within the distribution for this species.

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				long-pointed purple-red tail. The body is mostly bright green, with a dark blue patch on the crown. The forehead to throat is crimson and there is a crimson patch at the bend of the wing. The female is slightly duller, with a creamy underwing bar. Habitat in Victoria is primarily associated with box-ironbark assemblages, however foraging and roosting can be in a variety of mature, reliably flowering eucalypts.				• 2 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Limited suitable vegetation (Eucalypt woodland present, however Box-Ironbark is less common) may exist in the Project Area **Potential to occur**
Limosa lapponica baueri	Bar-tailed Godwit	Endangered, Migratory	Vulnerable	Bar-tailed Godwit is found mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons, and bays. It is found often around beds of seagrass and, sometimes, in nearby saltmarsh. It has been sighted in coastal sewage farms and saltworks, salt lakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats. It is rarely found on inland wetlands or in areas of short grass, such as farmland, paddocks, and airstrips, although it is commonly recorded in paddocks at some locations overseas.	VBA, PMST	4	4/11/1998	• Project Area is within the distribution for this species. • 4 records exist for this species within the locality • Limited suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Melanodryas cucullata cucullata	Hooded Robin (south-eastern)	Endangered		Hooded Robin (south-eastern) occurs in south-eastern Australia from far south-east Queensland to Yorke Peninsula, South Australia, intergrading with *Melandodryas cucullata picata* in the southern Murray-Darling basin. They prefer dry eucalypt and acacia woodlands and shrublands with an open understorey, some grassy areas and a complex ground layer. They avoid woodlands with tall trees or dense tree cover but sometimes occur in tall, dense heaths with scattered open areas.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable vegetation (eucalypt woodlands and forests) may exist in the Project Area **Unlikely to occur**
Neophema chrysogaster	Orange-bellied Parrot	Critically Endangered	Critically Endangered	Orange-bellied Parrot is just bigger than a Budgerigar, with males and females varying slightly in appearance. The male is a bright grass-green on the head, back and most of the wings, fading to a yellowish green on throat and breast, to bright yellow to the vent and under the tail. The belly has a bright orange patch, and there is a deep blue band between the eyes, bordered above by a faint blue line. The species breeds in Tasmania and migrates in autumn to spend the winter on the mainland coast of south-eastern South Australia and southern Victoria. Winter habitat is mostly within 3 km of the coast in sheltered bays, lagoons, estuaries, coastal dunes, and saltmarshes. The species also occurs on small islands and peninsulas, saltworks, golf courses, low samphire herbland and taller coastal shrubland.	VBA, PMST	5	11/07/2020	• Project Area is within the distribution for this species. • 5 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Limited suitable vegetation (Eucalypt woodland) may exist in the Project Area **Potential to occur**
Neophema chrysostoma	Blue-winged Parrot	Vulnerable	-	Blue-winged Parrot inhabits a range of habitats from coastal, sub-coastal and inland areas, through to semi-arid zones. They tend to favour grasslands and grassy woodlands and are often found near wetlands both near the coast and in semi-arid zones. The species can also be seen in altered environments such as airfields, golf-courses and paddocks. Pairs or small parties of Blue-winged Parrot forages mainly near or on the ground for seeds of a wide range of native and introduced grasses, herbs and shrubs. During the breeding season (spring and summer), birds occupy eucalypt forests and woodlands. Blue-winged Parrot forms monogamous pairs. Nests are made in hollows, preferably with a vertical opening, in live or dead trees or stumps. In Victoria, birds are known to breed mainly in heathy forests and woodlands and in wetter forests soon after fire or logging. Before migrating from Tasmania in autumn, many	VBA, PMST	18	23/04/2019	• Project Area is within the distribution for this species. • 18 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable vegetation (woodlands, wetlands, paddocks) may exist in the Project Area **Potential to occur**

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				birds congregate on saltmarshes and agricultural land before departing north. While on the mainland, mobile flocks feed in saltmarsh and rough pasture in coastal Victoria. Birds are known to move more than 100 km inland during winter to feed in semi-arid chenopod shrubland and sparse grassland.				
Ninox strenua	Powerful Owl	-	Vulnerable	A large owl with an eastern Australian distribution. Powerful Owl is found in open forests and woodlands, as well as along sheltered gullies in wet forests with dense understoreys, especially along watercourses. Will sometimes be found in open areas near forests such as farmland and requires large old growth trees to nest.	VBA	10	29/04/2008	• Project Area is within the distribution for this species. • 10 records exist for this species within the locality • Potential suitable vegetation (eucalypt woodland and forest) may exist in the Project Area **Potential to occur**
Numenius madagascariensis	Eastern Curlew	Critically Endangered, Migratory	Critically Endangered	Largest migratory shorebird in the world. Rarely recorded inland. A summer migrant to Australia, the eastern curlew inhabits estuaries, bays, harbours, inlets and coastal lagoons, intertidal mudflats or sandflats, ocean beaches, coral reefs, rock platforms, saltmarsh, mangroves, freshwater/brackish lakes, saltworks and sewage farms.	VBA, PMST	2	2/08/2009	• Project Area is within the distribution for this species. • 2 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Limited suitable vegetation (coastal dune, wetlands) may exist in the Project Area **Potential to occur**
Pachyptila turtur subantarctica	Fairy Prion (southern)	Vulnerable	-	A small seabird. The species as a whole has a circumpolar distribution, and probably frequents subtropical waters during the non-breeding period. It has been recorded breeding on subantarctic and cool temperate islands in the Southern Hemisphere. Breeding habitat includes crevices and burrows.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Limited suitable habitat (coastal vegetation) may exist in the Project Area **Potential to occur**
Pluvialis fulva	Pacific Golden Plover	Migratory	Vulnerable	Pacific Golden Plover is a slender upright shorebird (wader), with a rounded head, slim neck, short fine bill and long legs. The Pacific Golden Plover is widespread in coastal regions in Victoria along the coast between Jack Smith Lake (south of Sale) and the Bellarine Peninsula, including Western Port and Port Phillip Bay. In non-breeding grounds in Australia this species usually inhabits coastal habitats, though it occasionally occurs around inland wetlands. Other terrestrial habitats inhabited include short (or, occasionally, long) grass in paddocks, crops or airstrips, or ploughed or recently burnt areas, and they are very occasionally recorded well away from water.	VBA	10	13/12/2017	• Project Area is within the distribution for this species. • 10 records exist for this species within the locality • Potential suitable vegetation (coastal dunes, wetlands) may exist in the Project Area **Potential to occur**
Pycnoptilus floccosus	Pilotbird	Vulnerable	Vulnerable	Pilotbirds are small, plump, ground-dwelling birds, about 18 cm long with a wingspan and weight of around 23 cm and 27 g. Pilotbirds are endemic to south-east Australia. Upland Pilotbirds occur above 600 m in the Brindabella Ranges in the Australian Capital Territory, and in the Snowy Mountains in New South Wales and north-east Victoria. Lowland Pilotbirds occur in forests from the Blue Mountains west of Newcastle, around the wetter forests of eastern Australia, to Dandenong near Melbourne Pilotbirds are strictly terrestrial, living on the ground in dense forests with heavy undergrowth. Largely sedentary, they are typically seen hopping briskly over the forest floor and foraging on damp ground or among leaf-litter. Flight is described as fairly weak, though, if disturbed, birds can sometimes ascend into shrubs.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records of the species within the locality. • Limited suitable vegetation (woodlands, likely without dense undergrowth) may exist in the Project Area **Unlikely to occur**

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
Rhipidura rufifrons	Rufous Fantail	Migratory	-	Rufous Fantail adults are medium sized birds, generally ranging from 14.5–18.5 cm in length. The forehead is a rich reddish-brown colour across the eyes. The eyes have a white arc underneath. The top of the head, back of the neck and the upper back, transition from an olive to reddish-brown colour, which then blends into a blackish-brown, long, fan-shaped tail. This blackish-brown tail, contrasts with the base of the tail, which is tipped with a paler colour, often white. In Australia this species is common and secure and there is no evidence of population change. All subspecies of Rufous Fantail inhabit moist, dense habitats, including mangroves, rainforest, riparian forests and thickets, and wet eucalypt forests. Structural features of suitable habitat include a moderately dense canopy cover often with two lower strata: a 2-6 m high layer and a shrubby or heath understorey 1-2 m high.	VBA	4	1/01/2000	• Project Area is within the distribution for this species. • 4 records exist for this species within the locality • Suitable habitat is unlikely to occur in the Project Area **Unlikely to occur**
Rostratula australis	Australian Painted Snipe	Endangered	-	The Australian Painted Snipe generally inhabits shallow terrestrial freshwater (occasionally brackish) wetlands, including temporary and permanent lakes, swamps and claypans. They also use inundated or waterlogged grassland or saltmarsh, dams, rice crops, sewage farms and bore drains. Typical sites include those with rank emergent tussocks of grass, sedges, rushes or reeds, or samphire; often with scattered clumps of lignum (*Muehlenbeckia* spp.) or Cane-grass (*Eragrostis australasica*) or sometimes tea-tree (*Melaleuca* spp.). Australian Painted Snipe sometimes utilises areas that are lined with trees, or that have some scattered fallen or washed-up timber	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Limited suitable vegetation (wetlands and paddocks) may exist in the Project Area **Unlikely to occur**
Spatula rhynchotis	Australasian Shoveler	-	Vulnerable	Australasian Shoveler is a dabbling duck with a wide beak. They have a southwestern and southeastern Australian distribution. Preferred habitat includes heavily vegetated swamps and large inland wetlands.	VBA	42	19/09/2020	• Project Area is within the distribution for this species. • 42 records exist for this species within the locality • Potential suitable vegetation (wetlands) may exist in the Project Area **Potential to occur**
Stagonopleura guttata	Diamond Firetail	Vulnerable	-	Diamond Firetail is a large (length 10 to 12 cm, weight 17 grams), striking finch with a bright red bill, and red eyes and rump. Diamond Firetail occurs in eucalypt, acacia or casuarina woodlands, open forests and other lightly timbered habitats, including farmland and grassland with scattered trees. They prefer areas with relatively low tree density, few large logs, and little litter cover but high grass cover.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Potential suitable vegetation (eucalypt woodland, paddocks) may exist in the Project Area **Potential to occur**
Sternula nereis nereis	Australian Fairy Tern	Vulnerable	-	A small piscivorous (fish-eating) bird, Fairy Tern is approximately 22–27 cm in length, 70 g in weight and has a wingspan of 44–53 cm. Fairy Tern is bulky and round bodied. The Fairy Tern (Australian) nests on sheltered sandy beaches, spits and banks above the high tide line and below vegetation. The subspecies has been found in embayments of a variety of habitats including offshore, estuarine or lacustrine (lake) islands, wetlands and mainland coastline. The bird roosts on beaches at night.	PMST	0	N/A	• Project Area is within the distribution for this species. • PMST: Species or species habitat known to occur in the Project Area • No records exist for this species within the locality • Potential suitable vegetation (wetlands, coastal dunes) may exist in the Project Area **Potential to occur**
Stictonetta naevosa	Freckled Duck	-	Endangered	A dark greyish-brown duck with a large head. Freckled Duck is found primarily in the south-east and south-west of Australia. The Freckled Duck prefers permanent fresh-water swamps and creeks with heavy growth of cumbungi (bullrushes), lignum or tea-tree. During drier times, Freckled Duck moves from ephemeral (not permanent) breeding	VBA	3	7/07/2017	• Project Area is within the distribution for this species. • 3 records exist for this species within the locality • Limited suitable vegetation (wetlands) may exist in the Project Area

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				swamps to more permanent waters such as lakes, reservoirs, farm dams and sewerage ponds. They generally rest in dense cover.				**Potential to occur**
Thinornis cucullatus cucullatus	Eastern Hooded Plover	Vulnerable	Vulnerable	Hooded Plover (eastern) is a small Australian beach-nesting bird. It mainly occurs on wide beaches backed by dunes with large amounts of seaweed and jetsam, creek mouths and inlet entrances. Nests are found above the high-water mark on flat beaches, on stony terraces, or on sparsely vegetated dunes. As the hooded plover occurs on beaches, it is easily disturbed by human activities, particularly off-leash domestic dogs.	VBA, PMST	10	18/05/2019	• Project Area is within the distribution for this species. • 10 records exist for this species within the locality • Limited suitable vegetation (coastal dunes) may exist in the Project Area **Potential to occur**
Tringa nebularia	Common Greenshank	Endangered, Migratory	Endangered	Common Greenshank is a large, rather heavily built wader. When not breeding, it is mainly grey-brown above and pale below. The head and neck are flecked with dark grey. Widespread in coastal regions, mainly between Gippsland Lakes and Port Phillip Bay. Inland the species is known mostly in the west and in the Murray River Valley. Widespread in coastal regions, mainly between Gippsland Lakes and Port Phillip Bay. Inhabits terrestrial wetlands (swamps, lakes, dams, rivers, creeks, billabongs, waterholes and inundated floodplains, claypans, salt flats, sewage farms and saltworks dams, inundated rice crops and bores) and sheltered coastal habitats (mudflats, saltmarsh, mangroves, embayments, harbours, river estuaries, deltas, lagoons, tidal pools, rock-flats and rock platforms). Small wetlands and swamps within study area. Limited records associated with estuaries.	VBA, PMST	5	9/02/2008	• Project Area is within the distribution for this species. • 5 records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Limited suitable vegetation (wetlands, coastal dunes) may exist in the Project Area **Potential to occur**
Fish								
Galaxiella pusilla	Dwarf Galaxias	Endangered	-	Dwarf Galaxias is a tiny, slender, freshwater fish that averages 30-40 mm in length. Like other Galaxiidae, it has all soft-rayed fins, a body lacking scales, and a single dorsal fin positioned well back on the body. Population distribution is patchy and unknown due to habitat being lowland, shallow and swampy.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Potential suitable habitat (waterways and wetlands) may exist in the Project Area **Potential to occur**
Nannoperca sp. 1	Flinders Pygmy Perch	-	Vulnerable	Flinders Pygmy Perch is a small, laterally compressed fish which grows to a maximum size of 85 mm. Inhabits slow or still waters with abundant aquatic vegetation, including lakes, ponds and slow-flowing rivers and creeks. along with pools in moderately flowing streams.	VBA	12	5/01/2023	• Project Area is within the distribution for this species. • 12 records exist for this species within the locality • Potential suitable habitat (waterways and wetlands) may exist in the Project Area **Potential to occur**
Prototroctes maraena	Australian Grayling	Vulnerable	Endangered	Dark green to dark grey fish with silvery sides and a dark mid-lateral stripe. Adults live and breed in freshwater rivers, and the larvae are swept downstream into coastal waters. Juveniles then remain in marine waters for about six months before returning to the freshwater adult habitat.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable habitat (waterways) may exist in the Project Area **Potential to occur**
Frogs								
Heleioporus australiacus	Giant Burrowing Frog	Vulnerable	-	The species is a rotund frog with muscular forearms and hindlimbs, growing to about 95 mm. Its back colouring is quite variable, ranging from steely blue-grey to black and	PMST	0	N/A	• Project Area is outside the distribution for this species.

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				dark chocolate brown. In the southern portion of its range, the Giant Burrowing Frog has been reported to occur in a wide range of forest communities including montane sclerophyll woodland, montane riparian woodland, as well as wet and dry sclerophyll forest. No Giant Burrowing Frog has been recorded from cleared land, but this may be due to limited survey effort.				• No records exist for this species within the locality • Suitable habitat is unlikely to occur in the Project Area **Unlikely to occur**
Litoria aurea	Green and Golden Bell Frog	Vulnerable	-	Green and Golden Bell Frog is a large dull olive to bright emerald-green frog reaching 85 mm in length. The frog has several distinguishable features which aid its identification. In Victoria, Green and Golden Bell Frog has been recorded in a range of lentic (still water) and terrestrial habitats in the coastal plains and low foothills of the hinterland including lowland forest, Banksia woodland, wet heath land, riparian scrub complex, riparian forest, damp forest, shrubby dry forest, limestone box woodland and cleared pastoral areas. Breeding habitat for Green and Golden Bell Frog in Victoria includes dams in both forested and cleared areas, swamps in farmlands, gravel pits, billabongs, marshes, coastal lagoon wetlands, wet swale herb lands and isolated streamside pools.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Potential suitable habitat (lowland forest, wetlands, paddocks, waterways) may exist in the Project Area **Potential to occur**
Litoria raniformis	Growling Grass Frog	Vulnerable	Vulnerable	Growling Grass Frog reaches up to 104 mm in length. They vary in colour and pattern but in general are olive to bright emerald green, with irregular gold, brown, black or bronze spotting. Their backs are warty and usually have a pale green mid-dorsal stripe. Growling Grass Frog is found mostly amongst emergent vegetation, including Bullrushes (*Typha* spp.), Common Reed (*Phragmites australis*) and Spike Rushes (*Eleocharis* spp.), in or at the edges of still or slow-flowing water bodies such as lagoons, swamps, lakes, ponds and farm dams. Grassland provides habitat for foraging, dispersal and shelter, and may also provide overwintering sites for the species. The species is also known to occur in lignum shrublands.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Potential suitable habitat (wetlands, paddocks, shrubland, waterways) may exist in the Project Area **Potential to occur**
Pseudophryne semimarmorata	Southern Toadlet	-	Endangered	Southern Toadlet is a small species characterised by its short limbs, fingers and toes. Their body is dark green or brown with an orange patch on their hind legs and throat. Southern Toadlet is generally found at lower elevations in damp areas usually under leaf litter, logs or rocks. It is recorded from forests, woodlands, heaths and grasslands but not necessarily near permanent water.	VBA	36	14/10/2020	• Project Area is within the distribution for this species. • 36 records exist for this species within the locality • Potential suitable habitat (woodland, forest, waterways, wetlands) may exist in the Project Area **Potential to occur**
Uperoleia martini	Martin's Toadlet	Endangered	Critically Endangered	A medium-sized species of frog reaching up to 3.5 cm in body length. It has a light grey or nearly black back, with dark brown or pale brown patches. Martin's Toadlet primarily occurs in moderately sized permanent or semipermanent swamps and ponds surrounded by woodland or coastal scrub but has also been found around dams and flooded grassland.	VBA, PMST	1	23/09/1998	• Project Area is within the distribution for this species. 3 record exists for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable habitat (wetlands, coastal dune to scrub, woodland) may exist in the Project Area **Potential to occur**
				Mammals				
Antechinus minimus maritimus	Swamp Antechinus	Vulnerable	-	Swamp Antechinus has a head to body length of 95-140 mm with a tail length 70% of the head to body length. It is a thickset antechinus with a long slender muzzle, long foreclaws, short ears that do not protrude far beyond the fur	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				and pale eye-rings. It mainly occurs in damp areas, particularly at sites with dense vegetation at about 1–2 m above ground level. Its habitat includes dense wet heathlands, tussock grasslands, sedgelands, damp gullies, swamps and some shrubby woodland.				• Limited suitable habitat (shrublands, woodlands) may exist in the Project Area **Unlikely to occur**
Dasyurus maculatus maculatus (SE mainland population)	Spot-tailed Quoll	Endangered	-	A medium carnivorous marsupial found in wet forest and coastal habitats across several discrete areas of Victoria. Spot-tailed Quoll is predominantly nocturnal and rests during the day in dens. Spot-tailed Quoll prefers mature wet forest habitat. Habitat requirements include suitable den sites such as hollow logs, tree hollows, rock outcrops or caves. Individuals also require an abundance of food, such as birds and small mammals, and large areas of relatively intact vegetation through which to forage.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Suitable habitat is unlikely to occur in the Project Area, due to fragmentation and age of vegetation. **Unlikely to occur**
Petaurus australis australis	Yellow-bellied Glider (south-eastern)	Vulnerable	-	Yellow-bellied Glider is a large, active, sociable and vocal glider, found along the eastern coast to the western slopes of the Great Dividing Range, from southern Queensland to Victoria. Occur in tall mature eucalypt forest generally in areas with high rainfall and nutrient rich soils. Forest type preferences vary with latitude and elevation; mixed coastal forests to dry escarpment forests in the north; moist coastal gullies and creek flats to tall montane forests in the south. Typically prefers mature old growth forest that provides suitable trees for foraging and shelter.	VBA, PMST	2	11/04/2006	• Project Area is within the distribution for this species. • PMST: Species or species habitat known to occur in the Project Area • Limited suitable habitat (forest, but potentially not old growth) may exist in the Project Area **Unlikely to occur**
Pseudomys novaehollandiae	New Holland Mouse	Vulnerable	-	A small, burrowing native rodent, New Holland Mouse is similar in size and appearance to the introduced House Mouse (Mus musculus), although it can be distinguished by its slightly larger ears and eyes, the absence of a notch on the upper incisors and the absence of a distinctive 'mousy odour'. Across the species' range New Holland Mouse is known to inhabit open heathlands, open woodlands with a heathland understorey, and vegetated sand dunes.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Potential suitable habitat (woodlands, coastal dunes) may exist in the Project Area **Potential to occur**
Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	-	Grey-headed Flying-Fox is one of the largest bats in the world with a head-body length of 230–289 mm. It has a collar of orange/brown fully encircling its neck and thick leg fur that extends to the ankle. As its name implies, the head is covered by light grey fur. The wing membranes are black, and the wingspan can be up to 1 m. Grey-headed Flying-fox requires foraging resources and roosting sites. It is a canopy-feeding frugivore and nectarivore, which utilises vegetation communities including rainforests, open forests, closed and open woodlands, Melaleuca swamps and *Banksia* woodlands. Roost sites are typically located near water, such as lakes, rivers or the coast.	PMST	0	N/A	• Project Area is within the distribution for this species. • No records exist for this species within the locality • Potential suitable habitat (eucalypt woodland, forests, wetlands, and coast) may exist in the Project Area **Potential to occur**
Reptiles								
Lissolepis coventryi	Swamp Skink	Endangered	Endangered	Swamp Skink is a moderate-sized skink and varies in dorsal colour which can be pale greenish-brown, olive-brown or yellow-brown. The head and limbs are often flecked and streaked with black, and limbs have scattered pale spots. A pale stripe occurs at the lips and throat and lower flanks are usually flushed with green. The ventral surfaces are whitish. Swamp Skink occupies densely vegetated freshwater and saltwater wetlands in south-eastern Australia which have natural hydrological regimes and contain shelter sites. Habitat typically has little to no overstorey. Swamp Skink is generally found in areas of poorly drained, peaty soils,	VBA, PMST	1	9/12/1997	Moderate • Project Area is within the distribution for this species. • No record exists for this species within the locality • PMST: Species or species habitat known to occur in the Project Area • Potential suitable habitat (wetlands) may exist in the Project Area **Potential to occur**

Scientific name	Common name	EPBC status	FFG status	Description	Source	No. of records	Last record	Likelihood of occurrence
				except for in coastal saltmarsh sites which often have sandy substrates.				
Varanus varius	Lace Monitor	-	Endangered	Lace Monitor is the second-largest monitor in Australia, native to eastern Australia. They are active lizards that forage over large areas. Their diet is varied, including insects, reptiles, small mammals, birds, eggs and carrion. They are a semi-arboreal species, mainly moving about in trees and sheltering in tree hollows. Preferred habitat includes dry sclerophyll forests and woodlands.	VBA, PMST	15	30/10/2017	• Project Area is within the distribution for this species. • 15 records exist for this species within the locality, with one sighting in the Project Area • Potential suitable habitat (woodland and forest) may exist in the Project Area **Known to occur**

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