

Groundwork Plus (SA) Pty Ltd

Native Vegetation Appraisal

Dublin Park Land Development

Prepared for: Leinad Land Development (Dublin) Pty Ltd

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DRAWINGS

Project Location	(Drawing No. 5251.DRG.001R1)
Proposed Development Area	(Drawing No. 5251.DRG.002R2)
Residential Land Area	(Drawing No. 5251.DRG.003R2)
Employment Land	(Drawing No. 5251.DRG.004R2)
Transition Investigation Area	(Drawing No. 5251.DRG.005R2)
Conservation Zone	(Drawing No. 5251.DRG.006R2)
Threatened Fauna Species	(Drawing No. 5251.DRG.007R2)
Threatened Flora Species	(Drawing No. 5251.DRG.008R2)

ATTACHMENTS

Attachment 1	<i>Environmental Protection and Biodiversity Conservation Act 1999 Protected Matters Reports</i>
Attachment 2	Threatened Fauna Species Summary
Attachment 3	Introduced Flora Species

1 Introduction

1.1 Background

Groundwork Plus (SA) Pty Ltd (Groundwork Plus) have been engaged by Leinad Land Developments (Dublin) Pty Ltd (Leinad) to undertake Native Vegetation Assessments for the Dublin Park Land Development. The proposed land is approximately 1373 hectares (ha) and is located 2.8 kilometres (km) south of the township of Dublin and approximately 60 km north of the Adelaide CBD (the Site). Refer to **Drawing No. 5258.DRG.001R1 – Project Location** for a visual representation of the Site location.

This report has been prepared to cover the entire Leinad land holding. We note that Leinad will be progressing rezoning of land for residential development as a separate process. The current Code Amendment is for rezoning of part of the Affected Area for employment land purposes.

1.1.1 Interim Biogeographical Regionalisation of Australia (IBRA)

A search of the Government of South Australia Enviro Data (2024) application *NatureMaps (NatureMaps)*, confirmed the Site is located within the Eyre Yorke Block Interim Biogeographical Regionalisation of Australia (IBRA) region and the St Vincent subregion. Eight (8) percent of the subregion has been mapped as remnant vegetation, of which five (5) percent is formally conserved within Department for Environment and Water (DEW) reserves and Heritage Agreements (HA) under the *Native Vegetation Act 1991*. The Eyre Yorke Block IBRA Region is described as “Low limestone dune ridges: small granitic islands with dunes” (*NatureMaps*).

1.1.2 Climate

Site climate data has been sourced from the Roseworthy Bureau of Meteorology (BoM) (Site No. 023122) located approximately 30 km south west of the Site. Climate is described as Mediterranean with majority of rainfall between the months of May and September. Mean daily maximum temperatures range from 31.8 degrees Celsius in January and 15.5 degrees Celsius for July, with mean minimum temperatures ranging from 15 degrees Celsius in January to 5.3 degrees Celsius in August. Review of *NatureMaps* climate data references mean annual rainfalls of approximately 352 millimetres (mm) across the Site.

1.2 General Location Map

The project area is located approximately 60 km north of Adelaide, South Australia, refer to **Drawing No. 5258.DRG.001R1 – Project Location** for a visual representation.

1.3 Details of the Proposal

Leinad are developing ‘Dublin Park’, a master planned community and South Australia’s first Green Circular Economy Precinct, refer to **Diagram 1 – Urban Framework Plan**.

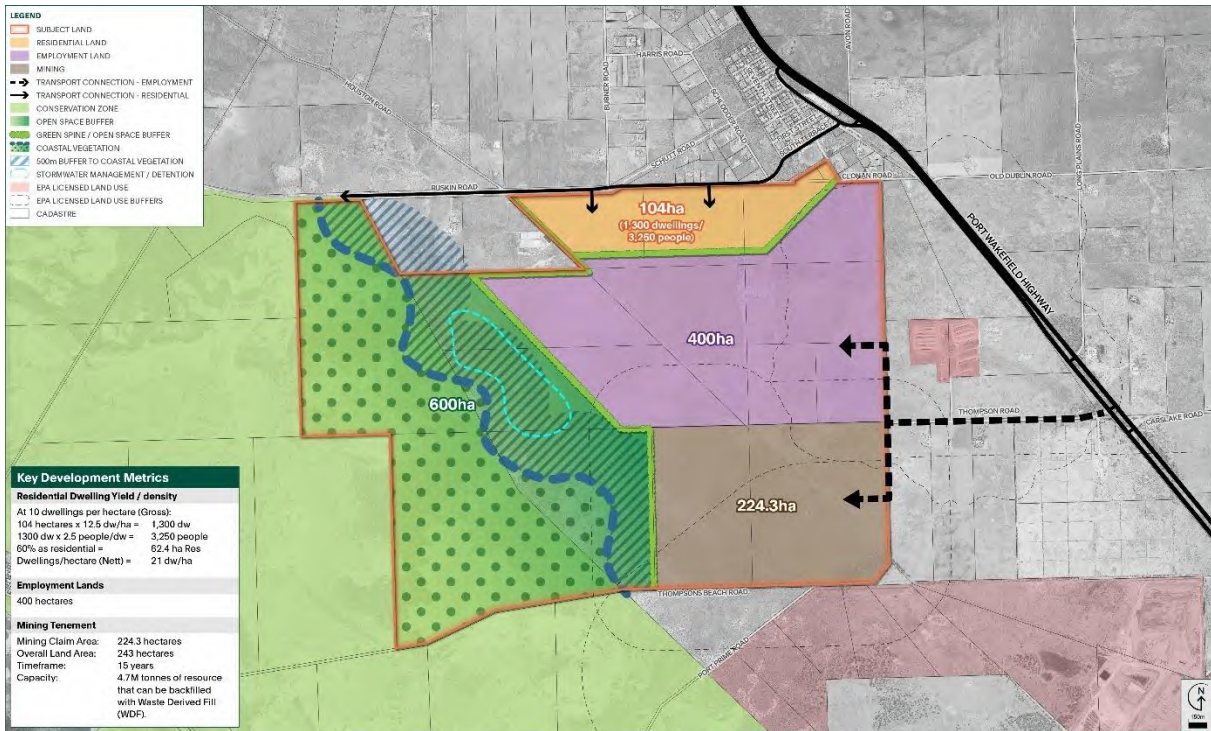


Diagram 1 - Urban Framework Plan

Leinad aims to position 'Dublin Park' at the forefront of sustainable residential and industrial development in Australia, through leveraging principles of circular economy and sustainability. The development will incorporate several key features, including:

- A master planned residential community (up to 1,300 dwellings),
- Employment land,
- Mining activities,
- Buffer areas between the different areas, and
- Conservation areas.

The residential community is proposed to be located in the northern section of the Site, adjacent to the existing township of Dublin, however, the residential component of the proposed Dublin Park development is proposed to be rezoned via a separate Code Amendment process to the proposed employment lands. The Site will transition south to a new central employment hub, which will provide opportunities for primary production, manufacturing, logistics, and warehousing. In the southern portion of the Site, a mineral claim has been established. The western portion of the Site will be designated as a conservation area for coastal vegetation with a buffer area incorporating storm water management between the coastal vegetation and the remaining development. Refer to **Drawing No. 5258.DRG.002R2 Proposed Development Area** for a visual representation of the development layout.

1.4 Legislative Framework

Legislation relevant to this assessment where approval may be required for the project include:

- The *Native Vegetation Act 1991*,
- The *National Parks and Wildlife Act 1972* (NP&W Act),
- The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act),

- *Planning, Development and Infrastructure Act 2016*, (PDI Act) (noting that the requirements of regulated and significant trees under the PDI Act are not applicable to the Site), and
- *Aboriginal Heritage Act 1988* - Approval is required if any sites, objects or remains are uncovered during the works

2 Method

2.1 Flora assessment

An online search was undertaken for EPBC Act Matters of National Environmental Significance (MNES) along with a review of the *NatureMaps* for historical record of any rare or endangered flora species within five (5) km of each of the development area.

Following review of the background information and literature, an assessment of each of the proposed development area was undertaken between 30 May – 03 June 2024 by Groundwork Plus involving a general assessment of the Site and identification of habitat for species of conservation significance. The designated mining area was not included for assessment as this has been subject to alternative assessments when seeking an Extractive Mineral Lease.

The proposed project area was surveyed for:

- Remnant and regrowth native vegetation
- Introduced plant species

The Site falls into the agricultural region of the state, and as such, the Native Vegetation Council's Bushland Assessment Methodology was utilised to capture baseline data representative of the Site. Multiple sample points were used to capture data across the Site, with some grouped together where appropriate.

Representative photographs of the vegetation within the Site are provided within **Section 3.1 Vegetation Assessment**.

2.2 Fauna assessment

An online search was undertaken for EPBC Act MNES, as well as a review of *NatureMaps* to determine the presence of any rare or endangered flora and fauna species historically recorded within five (5) km of each of the development area and identify potential Threatened Ecological Communities (TEC) that may occur.

To determine the likelihood of threatened species or communities occurring, an assessment of each area was undertaken between 30 May – 03 June 2024 by Groundwork Plus to capture opportunistic fauna records and identify habitat suitability for the listed species identified within the desktop searches.

3 Assessment Outcomes

3.1 Future Residential Lands

The 'Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment' does not include rezoning of land for residential purposes which will be undertaken via a separate Code Amendment process.

Notwithstanding, the following Flora and Fauna assessment of potential future residential lands to the immediate south of the Dublin township has been undertaken to ensure a holistic and comprehensive assessment of all land within the Affected Area of the 'Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment'

3.1.1 Vegetation Assessment

The topography of the identified future residential land area is characterised by relatively flat land with shallow soil over rock. The Site generally slopes from east to west with height elevations ranging from 14 metres Australian Height Datum (mAHD) to eight (8) mAHD located to the west of the area.

The closest Heritage Agreement (HA) to the Site is located less than 100 metres (m) north of the area (HA 687). Adelaide International Bird Sanctuary National Park – Winaityinaityi Pangkara is located approximately 1.3 kilometres (km) west of the area.

A desktop search of *NatureMaps* identified one (1) threatened flora species, *Tecticornia flabelliformis* (Bead Samphire), recorded within the preceding 20 years and within a five (5) km radius of the area, refer to **Drawing No.5258.DRG.008R2 Threatened Flora Species** for a visual representation of locations of previous records. An EPBC Act protected matters search report listed four (4) threatened flora species additional to that identified through *NatureMaps* that may occur within proximity (five (5) km buffer applied) to the area. Of these, it is considered unlikely any would occur within the Residential land area. No threatened flora species were recorded during the field assessments.

One (1) Threatened Ecological Community (TEC), the Subtropical and Temperate Coastal Saltmarsh, was identified as 'likely to occur' within the five (5) km buffer applied to the area. Refer to **Attachment 1 – Environmental Protection and Biodiversity Conservation Act 1999 Protected Matters Reports** for full EPBC Act search results. The TEC was not found to be present during the field assessments.

The Residential land area within the northern portion of the Site consisted of a mix of agricultural land and horticulture. The vegetation has been categorised into three (3) separate Vegetation Associations:

- Cultivated Paddocks with introduced pasture and/or crops
- Degraded *Nitraria billardierei* low shrubland
- Planted non-native and non-local native trees and shrubs for screening/amenity

Refer to **Table 1 – Details of the Vegetation Associations within the Residential land area** for descriptions of the vegetation and representative photographs and **Drawing No. 5258.DRG.003R2 Residential Land Area** for a visual representation of the area.

Table 1 - Details of the Vegetation Associations within the Residential land area

Vegetation Association	Vegetation Association 1 – Cultivated Paddocks with introduced pasture and/or crops
	 <p>Photo 1 – Vegetation Association 1, sample point 18</p>
	 <p>Photo 2 – Vegetation Association 1, sample point 16</p>
<p>General description</p>	<p>Historically cleared land with no remaining native vegetation. Land currently managed for cropping and grazing.</p>

Vegetation Association	Vegetation Association 1 – Cultivated Paddocks with introduced pasture and/or crops
Threatened species or community	No threatened species or communities recorded within Vegetation Association 1. May be used for opportunistic foraging by two (2) threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraaetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Refer to Attachment 3 – Threatened Fauna Species Summary for further details.

Vegetation Association	Vegetation Association 2 – Degraded <i>Nitraria billardierei</i> low shrubland
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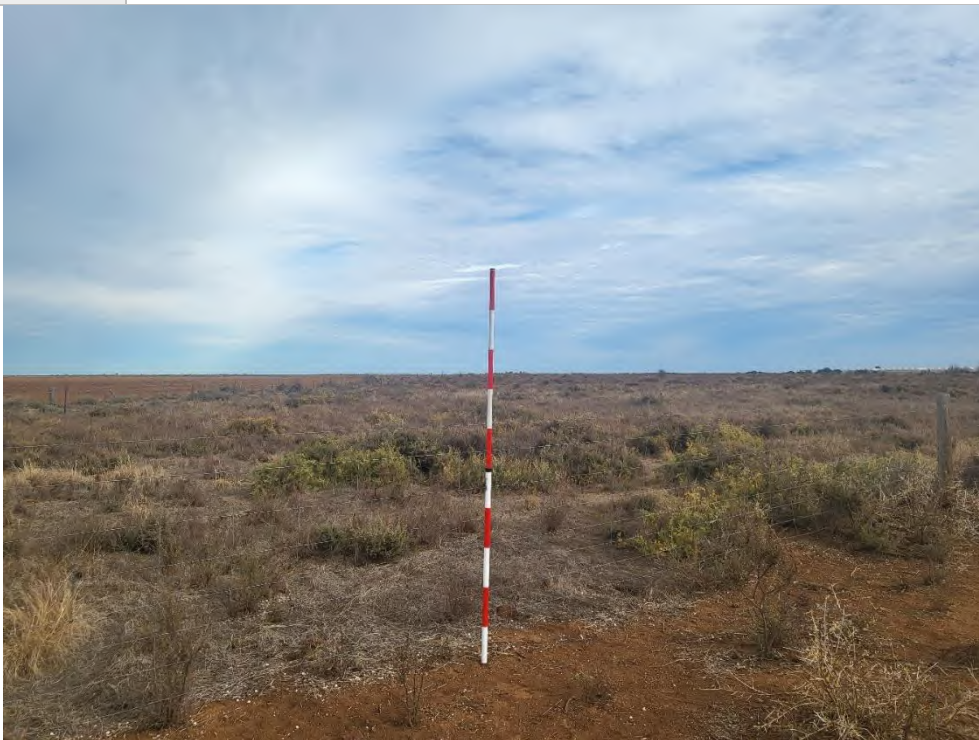


Photo 3 – Vegetation Association 2, sample point 11

General description	<p>Vegetation likely previously cleared for grazing or cropping. Limited native vegetation consisting of common, colonising species including <i>Nitraria billardierei</i>, <i>Maireana brevifolia</i>, <i>Enchylaena tomentosa</i>, <i>Austrostipa sp.</i> and <i>Salsola australis</i>.</p> <p>Area likely to have been <i>Nitraria billardierei</i> +/- <i>Atriplex spp.</i> low shrubland prior to historical clearance. Vegetation association now modified with limited species diversity and structural lifeforms as compared to benchmark vegetation community.</p> <p>Vegetation likely to provide very limited habitat to any fauna species and may only be utilised by bird species passing through area.</p> <p>Introduced pasture/cropping flora species present, with several weed species noted, including <i>Carthamus lanatus</i> (Saffron Thistle) and <i>Malva parviflora</i> (Marshmallow Weed).</p>
Threatened species or community	No threatened species or communities recorded within Vegetation Association 4. May be used for opportunistic foraging by two (2) threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraaetus morphnoides</i> (Little Eagle) that are both

Vegetation Association	Vegetation Association 2 – Degraded <i>Nitraria billardierei</i> low shrubland
	considered 'likely' to occur. Refer to Attachment 2 – Threatened Fauna Species Summary for further details.

Vegetation Association	Vegetation Association 3 – Planted non-native and non-local native trees and shrubs for screening/amenity
General description	Planted vegetation for screening and amenity located around current dwelling and associated shedding. Primarily a mixture of <i>Eucalyptus sp.</i> and <i>Pinus halepensis</i> (Aleppo Pine). Area likely to have been <i>Nitraria billardierei</i> +/- <i>Atriplex spp.</i> low shrubland prior to historical clearance, with no resemblance to pre-European vegetation.
Threatened species or community	No threatened species or communities recorded within Vegetation Association 3. May be used for opportunistic perching by two (2) threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraaetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Refer to Attachment 3 – Threatened Fauna Species Summary for further details.

3.1.2 Threatened Fauna Assessment

A desktop search of *NatureMaps* identified 26 threatened fauna species recorded within the preceding 20 years and within a five (5) km radius of the Residential land area, refer to **Drawing No. 5258.DRG.007R2 Threatened Fauna Species** for a visual representation of locations of previous records. An EPBC Act protected matters search report listed 27 threatened fauna species additional to those identified through *NatureMaps* that may occur within proximity (five (5) km buffer applied) to the area. Refer to **Attachment 2 – Threatened Species Summary** and **Attachment 1 –Environmental Protection and Biodiversity Conservation Act 1999 Protected Matters Reports**.

Aquatic fauna species were excluded from the results as only terrestrial environments were recorded. Sub-species with known distribution outside of the project area were also excluded from the results.

A detailed assessment of likelihood of presence of threatened species is provided in **Attachment 2 – Threatened Species Summary**. Only species identified through *NatureMaps* where location and record date are known have been included in the summary. In summary, two (2) species were considered 'likely' to occur as follows:

- *Falco subniger* (Black Falcon), listed as Rare under the NP&W Act, considered 'likely' to occur and
- *Hieraaetus morphnoides* (Little Eagle), listed as Vulnerable under the NP&W Act, considered 'likely' to occur.

Both these species, if present, would be expected to use the Residential land area for opportunistic foraging and perching on available trees with no habitat critical to the survival of either species found within the area.

3.1.3 Declared Weeds

A desktop search of *NatureMaps* identified 47 introduced flora species recorded within the preceding 20 years and within a five (5) km radius of the Residential land area. Of these, one (1) species is listed as a Weed of National Significance and as a declared weed under the *Landscape South Australia Act 2019* (Landscape Act), and a further three (3) species are listed as declared weeds under the Landscape Act. Declared weed species are required to be controlled under the Landscape Act and may require other management actions, as specified by the individual plant policy (refer to Department of Primary Industries and Regions Declared Weeds in SA website: URL: <https://pir.sa.gov.au/biosecurity/weeds/declared-weeds> for details on individual species requirements). Refer to **Attachment 3 – Introduced Flora Species** for full list.

Field assessments recorded a total of three (3) weed species, as presented in Table 2 – Residential Land Area Recorded Weed Species.

Table 2 – Residential Land Area Weed Species

Species	Common Name	Landscape Act	Weed of National Significance	Vegetation Association Recorded within
<i>Lycium ferocissimum</i>	African Boxthorn	✓	✓	VA 2
<i>Oxalis pes-caprae</i>	Soursob			VA 2
<i>Mesembryanthemum crystallinum</i>	Common Ice-plant			VA 2

3.2 Proposed Employment Land

The 'Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment' seeks to rezoning the proposed employment land from the 'Rural Zone' to an employment type zone.

3.2.1 Vegetation Assessment

The topography of the proposed employment land is characterised by relatively flat land with shallow soil over rock. The Site generally slopes from east to west with height elevations ranging from 15 metres Australian Height Datum (mAHD) to seven (7) mAHD located to the west of the Zone.

The closest Heritage Agreement (HA) to the Site is located approximately 750 m north of the proposed employment land (HA 687). Adelaide International Bird Sanctuary National Park – Winaityinaityi Pangkara is located approximately 1.3 km west of the land.

A desktop search of *NatureMaps* identified one (1) threatened flora species, *Tecticornia flabelliformis* (Bead Samphire), recorded within the preceding 20 years and within a five (5) km radius of the land, refer to **Drawing No.5258.DRG.008R2 Threatened Flora Species** for a visual representation of locations of previous records. An EPBC Act protected matters search report listed five (5) threatened flora species additional to that identified through *NatureMaps* that may occur within proximity (five (5) km buffer applied) to the employment land. Of these, it is considered unlikely any would occur within the Employment land. Further to this, no threatened flora species were recorded during the field assessments.

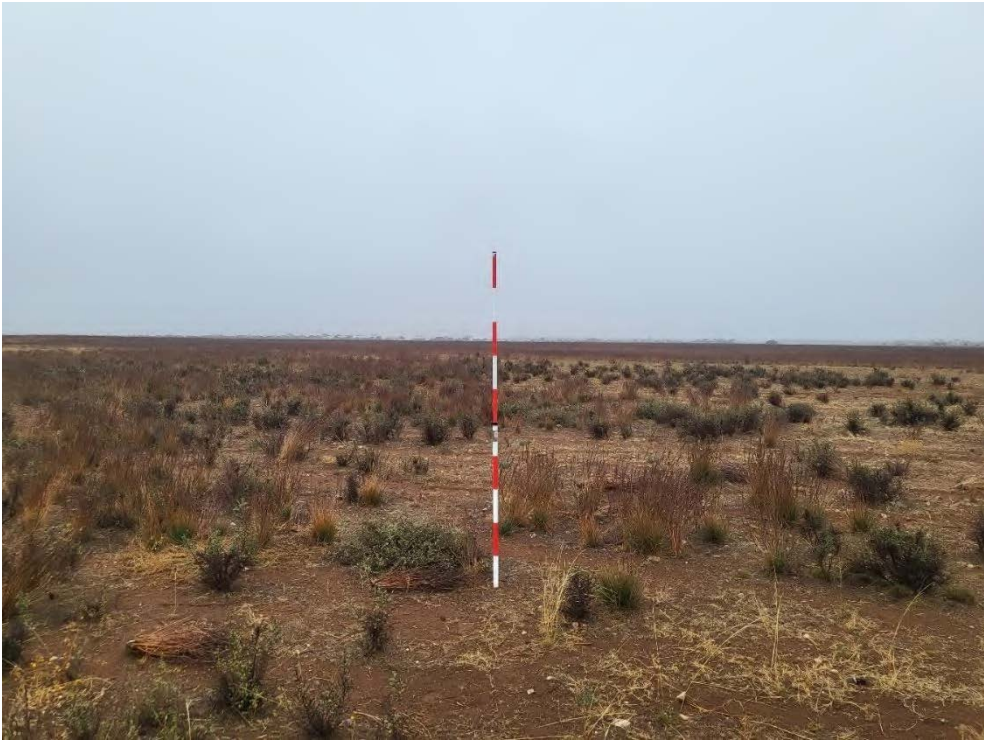
One (1) Threatened Ecological Community (TEC), the Subtropical and Temperate Coastal Saltmarsh, was identified as 'likely to occur' within the five (5) km buffer applied to the land. Refer to **Attachment 1 – Environmental Protection and Biodiversity Conservation Act 1999 Protected Matters Reports** for full EPBC Act search results. The TEC was not found to be present during the field assessments.

The Employment land consisted of a mix of grazing and cropping land. The vegetation has been categorised into eight (8) separate Vegetation Associations:


- Cultivated Paddocks with introduced pasture and/or crops (consistent with Residential land area Vegetation Association 1)
- Degraded *Nitraria billardiarei* low shrubland (consistent with Residential land area Vegetation Association 2)
- Planted non-native and non-local native trees and shrubs for screening/amenity (consistent with Residential land area Vegetation Association 3)
- Degraded *Maireana brevifolia* low shrubland
- Regenerating *Maireana brevifolia* low shrubland in grazed paddocks
- Highly degraded *Eucalyptus spp.* Mallee over *Maireana brevifolia* and introduced flora species
- Planted *Atriplex nummularia* fodder shrubs over regenerating chenopods
- Planted Olive trees over regenerating chenopods


Some scatted *Myoporum platycarpum* remnant trees were also recorded along a fence line within the Employment land. Refer to **Table 3 – Details of the Vegetation Associations within the Employment Land** for descriptions of the vegetation and representative photographs and **Drawing No. 5258.DRG.004R2 Employment Land** for a visual representation of the area. For vegetation associations consistent with what has been recorded within the Residential land area, refer to **Table 1 – Details of the Vegetation Associations within the Residential Land Area** for descriptions and photographs.


Table 3 - Details of the Vegetation Associations within the Employment Land

Vegetation Association	Vegetation Association 4 – Degraded <i>Maireana brevifolia</i> low shrubland
 <p style="text-align: center;">Photo 5 – Vegetation Association 4, sample point 3</p>	
<p>General description</p>	<p>Vegetation previously cleared for cropping or grazing. Some native vegetation regeneration of colonising, common, species including <i>Maireana brevifolia</i>, <i>Salsola australis</i>, and <i>Austrostipa sp.</i></p> <p>Area likely to have been <i>Nitraria billardierei</i> +/- <i>Atriplex spp.</i> low shrubland prior to historical clearance. Vegetation association now much modified with very limited species diversity and structural lifeforms as compared to benchmark vegetation community.</p> <p>Vegetation likely to provide very limited habitat to any fauna species and may only be utilised by bird species passing through area.</p> <p>Introduced pasture/cropping flora species present, with several weed species noted, including <i>Lycium ferocissimum</i> (African Boxthorn), <i>Solanum elaeagnifolium</i> (Silver Nightshade), and <i>Aspodelus fistulosus</i> (Onion Weed).</p>
<p>Threatened species or community</p>	<p>No threatened species or communities recorded within Vegetation Association 3.</p> <p>May be used for opportunistic foraging by two (2) threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraaetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Refer to Attachment 2 – Threatened Fauna Species Summary for further details.</p>

<p>Vegetation Association</p>	<p>Vegetation Association 5 – Regenerating <i>Maireana brevifolia</i> low shrubland in grazed paddocks</p>
	
<p>Photo 6 – Vegetation Association 5, sample point 2</p>	
<p>General description</p>	<p>Vegetation previously cleared for cropping or grazing. Very little native vegetation consisting of regenerating <i>Maireana brevifolia</i>. Area likely to have been <i>Nitraria billardierei</i> +/- <i>Atriplex spp.</i> low shrubland prior to historical clearance. Vegetation association now much modified with extremely limited species diversity and structural lifeforms as compared to benchmark vegetation community. Vegetation likely to provide very limited habitat to any fauna species and may only be utilised by bird species passing through area. Introduced pasture/cropping flora species present, with several weed species noted, including <i>Carthamus lanatus</i> (Saffron Thistle) and <i>Malva parviflora</i> (Marshmallow Weed).</p>
<p>Threatened species community or</p>	<p>No threatened species or communities recorded within Vegetation Association 2. May be used for opportunistic foraging by two (2) threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Refer to Attachment 2 – Threatened Fauna Species Summary for further details.</p>

<p>Vegetation Association</p>	<p>Vegetation Association 6 – Highly degraded <i>Eucalyptus spp.</i> Mallee over <i>Maireana brevifolia</i> and introduced flora species</p>
	
<p>Photo 7 – Vegetation Association 6, sample point 6</p>	
<p>General description</p>	<p>Small patch of remnant Mallee trees located around ruin of historical dwelling. Likely left on site to provide shade and shelter. Mixed with historically planted <i>Schinus molle</i> (Pepper Tree). Understorey consisting of regenerating chenopod shrubs, particularly <i>Maireana brevifolia</i> and introduced species. Mature tree density much reduced compared to what would be natural.</p> <p>Currently subject to sheep grazing. Area likely to have been <i>Eucalyptus spp.</i> Mallee over a chenopod understorey prior to historical clearance. Vegetation association now modified with limited species diversity and structural lifeforms as compared to benchmark vegetation community.</p> <p>Vegetation likely to provide limited habitat to any fauna species and may only be utilised by bird species passing through area. No nests noted within tree canopies, although a <i>Falco cenchroides</i> (Nankeen Kestrel) was seen perching within the ruin.</p>
<p>Threatened species or community</p>	<p>No threatened species or communities recorded within Vegetation Association 5. May be used for opportunistic foraging by two (2) threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraaetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Refer to Attachment 2 – Threatened Fauna Species Summary for further details.</p>

<p>Vegetation Association</p>	<p>Vegetation Association 7 – Planted <i>Atriplex nummularia</i> fodder shrubs over regenerating chenopods</p>
	
<p>Photo 8 – Vegetation Association 7, sample point 10</p>	
<p>General description</p>	<p>Uniform rows of <i>Atriplex nummularia</i> planted to provide fodder and shelter for sheep. Subject to current grazing, resulting in very limited presence of native vegetation, particularly <i>Maireana brevifolia</i> and <i>Nitraria billardierei</i> that has recolonised since original clearance.</p> <p>Area likely to have been <i>Eucalyptus spp.</i> Mallee over a chenopod understorey prior to historical clearance. Vegetation association highly modified with limited species diversity and structural lifeforms as compared to benchmark vegetation community.</p> <p>Vegetation likely to provide limited habitat to any fauna species and may only be utilised by bird species passing through area.</p>
<p>Threatened species or community</p>	<p>No threatened species or communities recorded within Vegetation Association 6.</p> <p>May be used for opportunistic foraging by two (2) threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraaetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Refer to Attachment 2 – Threatened Fauna Species Summary for further details.</p>

<p>Vegetation Association</p>	<p>Vegetation Association 8 – Planted Olive trees over regenerating chenopods</p>
	
<p>Photo 9 – Vegetation Association 8, sample point 5</p>	
<p>General description</p>	<p>Uniform rows of <i>Olea europaea ssp. europaea</i> (Olive) planted for olive production (not currently utilised). Subject to current sheep grazing. Small number of regenerating native plant species colonising between rows, particularly <i>Maireana brevifolia</i> and <i>Nitraria billardierei</i>. Row of planted non-local native species along fence lines, consisting of <i>Eucalyptus sp.</i>, <i>Melaleuca sp.</i> and <i>Acacia sp.</i></p> <p>Area likely to have been <i>Nitraria billardierei</i> +/- <i>Atriplex spp.</i> low shrubland prior to historical clearance. Vegetation association highly modified with limited species diversity and structural lifeforms as compared to benchmark vegetation community.</p> <p>Vegetation likely to provide limited habitat to any fauna species and may only be utilised by bird species passing through area.</p>
<p>Threatened species or community</p>	<p>No threatened species or communities recorded within Vegetation Association 7.</p> <p>May be used for opportunistic foraging by two (2) threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraaetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Refer to Attachment 2 – Threatened Fauna Species Summary for further details.</p>

3.2.2 Threatened Fauna Assessment

A desktop search of *NatureMaps* identified 26 threatened fauna species recorded within the preceding 20 years and within a five (5) km radius of the Employment land, refer to **Drawing No. 5258.DRG.007R2 Threatened Fauna Species** for a visual representation of locations of previous records. An EPBC Act protected matters search report listed 26 threatened fauna species additional to those identified through *NatureMaps* that may occur within proximity (five (5) km buffer applied) to the land. Refer to **Attachment**

2 – Threatened Species Summary and Attachment 1 –Environmental Protection and Biodiversity Conservation Act 1999 Protected Matters Reports.

Aquatic fauna species were excluded from the results as only terrestrial environments were recorded. Sub-species with known distribution outside of the project area were also excluded from the results.

A detailed assessment of likelihood of presence of threatened species is provided in **Attachment 2 – Threatened Species Summary**. Only species identified through *NatureMaps* where location and record date are known have been included in the summary. In summary, two (2) species were considered ‘likely’ to occur as follows:

- *Falco subniger* (Black Falcon), listed as Rare under the NP&W Act, considered ‘likely’ to occur and
- *Hieraetus morphnoides* (Little Eagle), listed as Vulnerable under the NP&W Act, considered ‘likely’ to occur.

Both these species, if present, would be expected to use the Employment land for opportunistic foraging and perching on available trees with no habitat critical to the survival of either species found within the land.

3.2.3 Declared Weeds

A desktop search of *NatureMaps* identified 48 introduced flora species recorded within the preceding 20 years and within a five (5) km radius of the Employment land. Of these, two (2) species are listed as both Weeds of National Significance and as declared weeds under the Landscape Act, and a further four (4) species are listed as declared weeds under the Landscape Act. Declared weed species are required to be controlled under the Landscape Act and may require other management actions, as specified by the individual plant policy (refer to Department of Primary Industries and Regions Declared Weeds in SA website: URL: <https://pir.sa.gov.au/biosecurity/weeds/declared-weeds> for details on individual species requirements). Refer to **Attachment 3 – Introduced Flora Species** for full list.

Field assessments recorded a total of 17 weed species, as presented in **Table 4 – Employment Land Recorded Weed Species**.

Table 4 – Employment Land Recorded Weed Species

Species	Common Name	Declared under the Landscape Act	Weed of National Significance	Vegetation Association Recorded within
<i>Lycium ferocissimum</i>	African Boxthorn	✓	✓	VA 2, VA 4, VA 6, VA 8
<i>Oxalis pes-caprae</i>	Soursob			VA 2
<i>Mesembryanthemum crystallinum</i>	Common Ice-plant			VA 2
<i>Sonchus oleraceus</i>	Common Sow-thistle			VA 2
<i>Avena barbata</i>	Wild Oat			VA 2

<i>Aizoon pubescens</i>	Coastal Galenia			VA 2, VA 5
<i>Heliotropium europaeum</i>	Potato Weed			VA 2
<i>Carthamus lanatus</i>	Saffron Thistle			VA 5
<i>Malva parviflora</i>	Marshmallow			VA 5
<i>Graminae sp.</i>	Introduced Grass			VA 5
<i>Asphodelus fistulosus</i>	Onion Weed			VA 4
<i>Solanum elaeagnifolium</i>	Silverleaf Nightshade	✓	✓	VA 4
<i>Eragrostis sp.</i>	Lovegrass			VA 4
<i>Onopordum acaulon</i>	Stemless Thistle			VA 4
<i>Atriplex prostrata</i>	Creeping Saltbush			VA 2
<i>Olea europaea</i>	Olive	✓		VA 8 (planted)
<i>Schinus molle</i>	Pepper Tree			VA 6 (historically planted)

3.3 Transition Investigation Area

3.3.1 Vegetation Assessment

The topography of the Transition Investigation Area is characterised by relatively flat land with shallow soil over rock. The Site generally slopes from east to west with height elevations ranging from 10 metres Australian Height Datum (mAHD) to seven (7) mAHD.

The closest Heritage Agreement (HA) to the Site is located approximately 2.2 km north east of the Zone (HA 687). Adelaide International Bird Sanctuary National Park – Winaityinaityi Pangkara is located approximately 750 m west of the Zone.

A desktop search of *NatureMaps* identified one (1) threatened flora species, *Tecticornia flabelliformis* (Bead Samphire), recorded within the preceding 20 years and within a five (5) km radius of the Transition Investigation Area, refer to **Drawing No.5258.DRG.008R2 Threatened Flora Species** for a visual representation of locations of previous records. An EPBC Act protected matters search report listed five (5) threatened flora species additional to that identified through *NatureMaps* that may occur within proximity (five (5) km buffer applied) to the area. Of these, it is considered possible that the threatened species, Bead Samphire may occur within the samphire shrublands within the Transition Investigation Area, and unlikely any of the other listed species would occur. No threatened flora species were recorded during the field assessments.

One (1) Threatened Ecological Community (TEC), the Subtropical and Temperate Coastal Saltmarsh, was identified as 'likely to occur' within the five (5) km buffer applied to the area. Refer to **Attachment 1 – Environmental Protection and Biodiversity Conservation Act 1999 Protected Matters Reports** for full EPBC Act search results. According to the EPBC Act approved Conservation Advice, the TEC has the key diagnostic criteria of the following points:

- occurs south of 23° 37' S latitude,
- occurs on the coastal margin,
- occurs on places with at least some tidal connection,
- occurs on sandy or muddy substrate,
- consists of dense to patchy areas of characteristic coastal saltmarsh plant species and
- proportional cover by tree canopy is not greater than 50%, nor is proportional ground cover by seagrass greater than 50%.

Exclusions from the TEC listed within the Conservation Advice include "saltmarsh occurring on inland saline soils with no tidal connection" and "patches of saltmarsh (possibly senescent) within the coastal margin that are disconnected (either naturally or artificially) from a tidal regime but were once connected."

Site assessments have found no evidence of tidal connection with patches of vegetation containing saltmarsh plant species. Several low-lying salt claypans with fringing saltmarsh plants exist within the western portion of the Site, but these appear to be localised catchments that may drain westward towards the ocean, but do not receive tidal water. It is possible that these were historically once connected but are no longer subject to tidal inundation. Therefore, the TEC is not considered to be present within the Site.

The Transition Investigation Area consisted of a mix of grazing and cropping land. The vegetation has been categorised into six (6) separate Vegetation Associations:

- Cultivated Paddocks with introduced pasture and/or crops (consistent with Residential land area Vegetation Association 1)
- Highly degraded *Eucalyptus spp.* Mallee over *Maireana brevifolia* and introduced flora species (consistent with Employment land Vegetation Association 6)
- Planted *Atriplex nummularia* fodder shrubs over regenerating chenopods (consistent with Employment land Vegetation Association 7)
- *Hakea carnata* +/- *Exocarpus aphyllus* +/- introduced *Lycium ferocissimum* on low ancient sand dunes
- *Nitraria billardierei* +/- *Atriplex paludosa* +/- *Tecticonia spp.* low shrubland
- *Tecticonia spp.* low shrubland

Refer to **Table 5 – Details of the Vegetation Associations within the Transition Investigation Area** for descriptions of the vegetation and representative photographs and **Drawing No. 5258.DRG.004R2 Transition Investigation Area** for a visual representation of the area. For vegetation associations consistent with what has been recorded within the Residential and Employment lands, refer to **Table 1 – Details of the Vegetation Associations within the Residential Land Area** and **Table 2 – Details of the Vegetation Associations within the Employment land** for descriptions and photographs.

Table 5 - Details of the Vegetation Association within the Transition Investigation Area

Vegetation Association	Vegetation Association 9 – <i>Callitris gracilis</i> +/- <i>Hakea carnata</i> +/- <i>Exocarpus aphyllus</i> +/- introduced <i>Lycium ferocissimum</i> on low ancient sand dunes
	
<p>Photo 10 – Vegetation Association 9, sample point 13</p>	
General description	Vegetation located on isolated low ancient sand dunes with small clay washouts. Generally infested with <i>Lycium ferocissimum</i> (African Boxthorn) and <i>Aspodelus fistulosus</i> (Onion Weed) with very limited native vegetation remaining. Overstorey layer reduced to <i>Callitris gracilis</i> , <i>Hakea carnata</i> , and <i>Exocarpus aphyllus</i> of limited individuals and understorey reduced to scattered <i>Maireana spp.</i> and <i>Nitraria billardierei</i> .

Vegetation Association	Vegetation Association 9 – <i>Callitris gracilis</i> +/- <i>Hakea carnata</i> +/- <i>Exocarpus aphyllus</i> +/- introduced <i>Lycium ferocissimum</i> on low ancient sand dunes
	<p>Pre-European vegetation mapping suggests the vegetation would have been either <i>Nitraria billardierei</i> +/- <i>Atriplex spp.</i> low shrubland or <i>Eucalyptus spp.</i> Mallee over a chenopod understorey, however, given landform and remnant species, likely to have been isolated pockets of <i>Callitris gracilis</i> woodlands over chenopod understorey.</p> <p>Boxthorn plants providing harbour for introduced rabbits, with active burrows noted throughout vegetation association.</p> <p>Potential cultural heritage sites, given landform, soil, and landscape context.</p>
Threatened species or community	<p>No threatened species or communities recorded within Vegetation Association 9.</p> <p>May be used for opportunistic foraging by two (2) threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraaetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Refer to Attachment 2 – Threatened Fauna Species Summary for further details.</p>


Vegetation Association	Vegetation Association 10 – <i>Nitraria billardierei</i> +/- <i>Atriplex paludosa</i> +/- <i>Tecticonia spp.</i> low shrubland
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Photo 11 – Vegetation Association 10, sample point 7

General description	<p>Low chenopod shrubland with occasional emergent <i>Eucalyptus sp.</i> on higher ground. Vegetation consistent and uniform with little weed invasion. Vegetation located on less productive saline soil, so unlikely to have been historically cleared for cropping. Currently grazed by sheep, so likely to be missing herbaceous and more palatable plant species.</p> <p>Pre-European vegetation mapping suggests the vegetation would have been a mix of <i>Atriplex paludosa ssp.</i> +/- <i>Maireana brevifolia</i> low shrubland and <i>Eucalyptus spp.</i> Mallee over a chenopod understorey.</p>
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Vegetation Association	Vegetation Association 10 – <i>Nitraria billardierei</i> +/- <i>Atriplex paludosa</i> +/- <i>Tecticonia spp.</i> low shrubland
	Vegetation likely to provide habitat to fauna species, particularly birds, through connecting coastal vegetation.
Threatened species or community	No threatened species or communities recorded within Vegetation Association 10. Vegetation may provide habitat for two (2) threatened fauna species, <i>Neophema elegans elegans</i> (Elegant Parrot, considered 'highly likely' to occur) and <i>Acanthiza iredalei rosinae</i> (Slender-billed Thornbill Gulf St Vincent, considered 'possible' to occur). May also be used for opportunistic foraging by two (2) further threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Refer to Attachment 2 – Threatened Fauna Species Summary for further details.

Vegetation Association	Vegetation Association 11 – <i>Tecticornia spp.</i> low shrubland
	
<p align="center">Photo 12 – Vegetation Association 11, sample point 19</p>	

<p>Vegetation Association</p>	<p>Vegetation Association 11 – <i>Tecticornia spp.</i> low shrubland</p>
	
<p>Photo 13 – Vegetation Association 11, sample point 12</p>	
<p>General description</p>	<p>Low <i>Tecticornia spp.</i> shrubland on saline clay flats. Vegetation consistent and uniform with little weed invasion. Vegetation located on less productive saline soil and edges of saline water bodies, so unlikely to have been historically cleared for cropping. Currently grazed by sheep, so likely to be missing herbaceous and more palatable plant species. Pre-European vegetation mapping suggests the vegetation would have been a mix of <i>Atriplex paludosa ssp.</i> +/- <i>Maireana brevifolia</i> low shrubland and <i>Tecticornia spp.</i> low shrubland.</p> <p>May have been historically connected to ocean and subject to tidal inundation, however, no evidence of connection now and likely to have been disconnected for a considerable amount of time.</p> <p>Vegetation provides direct connection with coastal vegetation, allowing fauna movement between the two.</p>
<p>Threatened species or community</p>	<p>No threatened species or communities were recorded within Vegetation Association 11 during the field assessments.</p> <p>Historical records have shown the State listed Vulnerable species, <i>Tecticornia flabelliformis</i> (Bead Samphire) has been recorded at several locations in the western portion of the vegetation association in 2011, with the spatial accuracy of the records generally being between five (5) to 50 m.</p> <p>Vegetation may provide habitat for two (2) threatened fauna species, <i>Neophema elegans elegans</i> (Elegant Parrot, considered 'highly likely' to occur) and <i>Acanthiza iredalei rosinae</i> (Slender-billed Thornbill Gulf St Vincent, considered 'possible' to occur). May also be used for opportunistic foraging by two (2) further threatened fauna species, <i>Falco subniger</i> (Black Falcon) and <i>Hieraetus morphnoides</i> (Little Eagle) that are both considered 'likely' to occur. Saline clay flats may be used by six (6) shorebirds that have been considered 'possible' to occur, particularly when</p>

Vegetation Association	Vegetation Association 11 – <i>Tecticornia spp.</i> low shrubland
	inundated. Refer to Attachment 2 – Threatened Fauna Species Summary for further details.

3.3.2 Threatened Fauna Assessment

A desktop search of *NatureMaps* identified 28 threatened fauna species recorded within the preceding 20 years and within a five (5) km radius of the Transition Investigation Area, refer to **Drawing No. 5258.DRG.007R2 Threatened Fauna Species** for a visual representation of locations of previous records. An EPBC Act protected matters search report listed 25 threatened fauna species additional to those identified through *NatureMaps* that may occur within proximity (five (5) km buffer applied) to the area. Refer to **Attachment 2 – Threatened Species Summary** and **Attachment 1 – Environmental Protection and Biodiversity Conservation Act 1999 Protected Matters Reports**.

Aquatic fauna species were excluded from the results as only terrestrial environments were recorded. Sub-species with known distribution outside of the project area were also excluded from the results.

A detailed assessment of likelihood of presence of threatened species is provided in **Attachment 2 – Threatened Species Summary**. Only species identified through *NatureMaps* where location and record date are known have been included in the summary. In summary, one species was considered ‘highly likely’ to occur, two (2) species were considered ‘likely’ to occur, and one (1) species was considered ‘possible’ to occur as follows:

- *Neophema elegans elegans* (Elegant Parrot), listed as Rare under the NP&W Act, considered ‘highly likely’ to occur,
- *Falco subniger* (Black Falcon), listed as Rare under the NP&W Act, considered ‘likely’ to occur,
- *Hieraaetus morphnoides* (Little Eagle), listed as Vulnerable under the NP&W Act, considered ‘likely’ to occur, and
- *Acanthiza iredalei rosinae* (Slender-billed Thornbill Gulf St Vincent), listed as Vulnerable under the EPBC Act and Vulnerable under the NP&W Act, considered ‘possible’ to occur.

All species, if present, would be expected to use the Transition Investigation Area for opportunistic foraging and perching on available trees with no habitat critical to the survival of any of the species found within the Zone.

3.3.3 Declared Weeds

A desktop search of *NatureMaps* identified 54 introduced flora species recorded within the preceding 20 years and within a five (5) km radius of the Transition Investigation Area. Of these, one (1) species is listed as both a Weed of National Significance and a declared weed under the Landscape Act, and a further three (3) species are listed as declared weeds under the Landscape Act. Declared weed species are required to be controlled under the Landscape Act and may require other management actions, as specified by the individual plant policy (refer to Department of Primary Industries and Regions Declared Weeds in SA website: URL: <https://pir.sa.gov.au/biosecurity/weeds/declared-weeds> for details on individual species requirements). Refer to **Attachment 3 – Introduced Flora Species** for full list.

Field assessments recorded a total of five (5) weed species, as presented in **Table 6 – Transition Investigation Area Recorded Weed Species**.

Table 6 – Transition Investigation Area Recorded Weed Species

Species	Common Name	Declared under the Landscape Act	Weed National Significance	of Vegetation Association Recorded within
<i>Lycium ferocissimum</i>	African Boxthorn	✓	✓	VA 2, VA 4, VA 6, VA 8
<i>Heliotropium europaeum</i>	Potato Weed			VA 2, VA 7
<i>Carthamus lanatus</i>	Saffron Thistle			VA 5, VA 7
<i>Hordeum marinum</i>	Sea Barley-grass			VA 11
<i>Schinus molle</i>	Pepper Tree			VA 6 (historically planted)

3.4 Conservation Zone

The Dublin Green Circular Economy Precinct Employment Areas Code Amendment does not seek to amend the Planning and Design Code for the portion of the land within the 'Conservation Zone'.

Notwithstanding, the following Flora and Fauna assessment has been undertaken to ensure a holistic and comprehensive assessment of all land within the Affected Area of the 'Dublin Green Circular Economy Precinct (Employment Areas) Code Amendment'

3.4.1 Vegetation Assessment

The topography of the Conservation Zone is characterised by relatively flat land with shallow soil over rock. The Site generally slopes from east to west with height elevations ranging from nine (9) metres Australian Height Datum (mAHD) to two (2) mAHD in the south west of the Zone.

The closest Heritage Agreement (HA) to the Site is located approximately 3.2 km north east of the Zone (HA 687). Adelaide International Bird Sanctuary National Park – Winaityinaityi Pangkara is located immediately adjacent to the west of the Zone.

A desktop search of *NatureMaps* identified one (1) threatened flora species, *Tecticornia flabelliformis* (Bead Samphire), recorded within the preceding 20 years and within a five (5) km radius of the Zone, refer to **Drawing No.5258.DRG.008R2 Threatened Flora Species** for a visual representation of locations of previous records. An EPBC Act protected matters search report listed five (5) threatened flora species additional to that identified through *NatureMaps* that may occur within proximity (five (5) km buffer applied) to the Zone. Of these, Bead Samphire has been recorded previously within the south western section of the Conservation Zone. It unlikely any of the other listed species would occur. No threatened flora species were recorded during the field assessments.

One (1) Threatened Ecological Community (TEC), the Subtropical and Temperate Coastal Saltmarsh, was identified as 'likely to occur' within the five (5) km buffer applied to the Zone. Refer to **Attachment 1 – Environmental Protection and Biodiversity Conservation Act 1999 Protected Matters Reports** for full EPBC Act search results. According to the EPBC Act approved Conservation Advice, the TEC has the key diagnostic criteria of the following points:

- occurs south of 23° 37' S latitude,
- occurs on the coastal margin,
- occurs on places with at least some tidal connection,
- occurs on sandy or muddy substrate,
- consists of dense to patchy areas of characteristic coastal saltmarsh plant species and
- proportional cover by tree canopy is not greater than 50%, nor is proportional ground cover by seagrass greater than 50%.

Exclusions from the TEC listed within the Conservation Advice include "saltmarsh occurring on inland saline soils with no tidal connection" and "patches of saltmarsh (possibly senescent) within the coastal margin that are disconnected (either naturally or artificially) from a tidal regime but were once connected."

Site assessments have found no evidence of tidal connection with patches of vegetation containing saltmarsh plant species. Several low-lying salt claypans with fringing saltmarsh plants exist within the western portion of the Site, but these appear to be localised catchments that may drain westward towards the ocean, but do not receive tidal water. It is possible that these were historically once

connected but are no longer subject to tidal inundation. Therefore, the TEC is not considered to be present within the Site.

The Conservation Zone consisted predominantly of grazed chenopod shrublands. The vegetation has been categorised into six (6) separate Vegetation Associations:

- *Hakea carnata* +/- *Exocarpus aphyllus* +/- introduced *Lycium ferocissimum* on low ancient sand dunes (consistent with Transition Investigation Area Vegetation Association 9)
- *Nitraria billardierei* +/- *Atriplex paludosa* +/- *Tecticonia spp.* low shrubland (consistent with Transition Investigation Area Vegetation Association 10)
- *Tecticonia spp.* low shrubland (consistent with Transition Investigation Area Vegetation Association 11)

For vegetation associations consistent with what has been recorded within the Transition Investigation Area, refer to **Table 5 – Details of the Vegetation Associations within the Transition Investigation Area** for descriptions and photographs. Refer to **Drawing No. 5258.DRG.004R2 Conservation Zone** for a visual representation of the zone.

3.4.2 Threatened Fauna Assessment

A desktop search of *NatureMaps* identified 29 threatened fauna species recorded within the preceding 20 years and within a five (5) km radius of the Conservation Zone, refer to **Drawing No. 5258.DRG.007R2 Threatened Fauna Species** for a visual representation of locations of previous records. An EPBC Act protected matters search report listed 25 threatened fauna species additional to those identified through *NatureMaps* that may occur within proximity (five (5) km buffer applied) to the Zone. Refer to **Attachment 3 – Threatened Species Summary** and **Attachment 1 –Environmental Protection and Biodiversity Conservation Act 1999 Protected Matters Reports**.

Aquatic fauna species were excluded from the results as only terrestrial environments were recorded. Sub-species with known distribution outside of the project area were also excluded from the results.

A detailed assessment of likelihood of presence of threatened species is provided in **Attachment 2 – Threatened Species Summary**. Only species identified through *NatureMaps* where location and record date are known have been included in the summary. In summary, one (1) species was considered 'highly likely' to occur, two (2) species were considered 'likely' to occur, and seven (7) species were considered 'possible' to occur within the project area as follows:

- *Neophema elegans elegans* (Elegant Parrot), listed as Rare under the NP&W Act, considered 'highly likely' to occur,
- *Falco subniger* (Black Falcon), listed as Rare under the NP&W Act, considered 'likely' to occur,
- *Hieraaetus morphnoides* (Little Eagle), listed as Vulnerable under the NP&W Act, considered 'likely' to occur,
- *Acanthiza iredalei rosinae* (Slender-billed Thornbill Gulf St Vincent), listed as Vulnerable under the EPBC Act and Vulnerable under the NP&W Act, considered 'possible' to occur,
- *Calidris acuminata* (Sharp-tailed Sandpiper), listed as Vulnerable under the EPBC Act, considered 'possible' to occur,
- *Calidris canutus rogersi* (Red Knot), listed as Vulnerable under the EPBC Act (at the species level) and Endangered under the NP&W Act, considered 'possible' to occur,
- *Calidris ferruginea* (Curlew Sandpiper), listed as Critically Endangered under the EPBC Act and Endangered under the NP&W Act, considered 'possible' to occur,

- *Calidris melanotos* (Pectoral Sandpiper), listed as Rare under the NP&W Act, considered 'possible' to occur,
- *Cladorhynchus leucocephalus* (Banded Stilt), listed as Vulnerable under the NP&W Act, considered 'possible' to occur, and
- *Egretta garzetta nigripes* (Little Egret), listed as Rare under the NP&W Act, considered 'possible' to occur.

All species, if present, would be expected to use the Conservation Zone for opportunistic foraging and perching on available trees or shrubs with no habitat critical to the survival of any of the species found within the Zone.

3.4.3 Declared Weeds

A desktop search of *NatureMaps* identified 44 introduced flora species recorded within the preceding 20 years and within a five (5) km radius of the Conservation Zone. Of these, one (1) species is listed as both a Weed of National Significance and a declared weed under the Landscape Act, and a further two (2) species are listed as declared weeds under the Landscape Act. Declared weed species are required to be controlled under the Landscape Act and may require other management actions, as specified by the individual plant policy (refer to Department of Primary Industries and Regions Declared Weeds in SA website (URL: <https://pir.sa.gov.au/biosecurity/weeds/declared-weeds> for details on individual species requirements). Refer to **Attachment 3 – Introduced Flora Species** for full list.

Field assessments recorded a total of four (4) weed species, as presented in **Table 7 – Conservation Zone Recorded Weed Species**.

Table 7 – Conservation Zone Recorded Weed Species

Species	Common Name	Declared under the Landscape Act	Weed of National Significance	Vegetation Association Recorded within
<i>Lycium ferocissimum</i>	African Boxthorn	✓	✓	VA 9
<i>Oxalis pes-caprae</i>	Soursob			VA 9
<i>Carthamus lanatus</i>	Saffron Thistle			VA 9
<i>Asphodelus fistulosus</i>	Onion Weed			VA 9

4 Summary

Native Vegetation across the Affected Area was found to be in a variety of condition classes, grading from absent in the currently cropped and grazed paddocks to moderate condition within the proposed Conservation Zone. The long agricultural history of the Site has influenced native vegetation within the Site and therefore dictated the available fauna habitat within the Site. A summary of each proposed development area is provided below:

Residential land area

The proposed land for the development of the Residential land area is largely confined to historically cleared land currently used for cropping, grazing, and horticulture. Native Vegetation present within the Zone is of low quality, with only a limited diversity of common, colonising species and a few scattered trees in poor health. It is considered that the vegetation within the Residential land area may be utilised by two (2) listed threatened fauna species (both considered 'likely' to occur, but not recorded on Site). Both species are birds of prey which have broad habitat preferences for foraging behaviours. As such, vegetation within the Zone is limited to providing opportunistic resources for fauna species. Habitat resources important for maintaining fauna species, such as hollow-bearing trees, leaf litter, fallen timber, and connected or stepping stone vegetation patches, are missing. This Zone provides a good option for the proposed development as native vegetation clearance would be minimal and reduced to low quality vegetation.

Employment land

The proposed land for the development of the Employment land consists of the middle section of the larger Site, currently used for cropping and grazing, with some residential dwellings. Native Vegetation present within the area is restricted to poor quality chenopod shrublands, with the majority of paddocks currently grazed. Like the Residential land area, two (2) listed threatened bird species may utilise the vegetation within the Employment land, however, vegetation is limited to providing opportunistic resources for fauna species as crucial habitat resources for fauna species are missing. Neither threatened species were recorded within the field assessments. Other vegetation within the area consists of planted amenity and fodder species. The area provides a good option for the proposed development as native vegetation clearance would be minimal and reduced to low quality vegetation.

Transition Investigation Area

This area is a mix of historically cleared cropped and grazed paddocks and grazed chenopod shrublands not subject to historical clearance. Land is gently sloping towards the west with some lower saline clay pans occurring, particularly in the southern part of the area. Native Vegetation is generally in low to moderate condition; however, it is possible the threatened flora species, *Tecticornia flabelliformis* (Bead Samphire), may be found within the saline samphire sections of the area. Vegetation may provide some habitat for four (4) listed threatened fauna species but if present, it is likely the species would use the Transition Investigation Area for opportunistic foraging and perching on available trees with no habitat critical to the survival of any of the species found within the area. None of the threatened species were found within the field assessments. The land designated for the Transition Investigation Area will benefit from the proposed development through the discontinuation of grazing and cropping and allowing native vegetation to regenerate.

Conservation Zone

The Conservation Zone is located along the western side of the larger Site, adjacent to the Adelaide International Bird Sanctuary National Park – Winaityinaityi Pangkara. Vegetation consists of low chenopod shrublands, with a few isolated ancient sand dunes with higher shrubs. The majority of the land has been left open for sheep grazing, although it provides limited feed options. The dunes have largely been colonised by the Weed of National Significance, *Lycium ferocissimum* (African Boxthorn) as well as *Aspodelus fistulosus* (Onion Weed). Native Vegetation is generally in low to moderate condition; however, the threatened flora species, *Tecticornia flabelliformis* (Bead Samphire), has previously been recorded within the saline samphire sections of the Zone. Vegetation may provide some habitat for 10 listed threatened fauna species but if present, it is likely the species would use the Zone for opportunistic foraging and perching on available higher shrubs with no habitat critical to the survival of any of the species found within the Zone. None of the threatened species were found within the field assessments. The Conservation Zone adjacent the Affected Area will benefit from the proposed development through the discontinuation of grazing, the removal of weed species, and allowing native vegetation to regenerate.

Approval for vegetation clearance, where necessary, would be required under the *Native Vegetation Act 1991*, with the development likely to be undertaken within the provisions of clearance of native vegetation provided under the *Native Vegetation Regulations 2017*, with Regulation 12(34) – Infrastructure and Regulation 12(35) – Residential Subdivision likely to be relevant. The likelihood of approval is determined by the adherence to the Mitigation Hierarchy and the appropriateness of a significant environmental benefit (SEB) to off-set the clearance being achieved.

It is recommended a Self-Assessment for MNES under the EPBC Act be completed to determine if a referral under the EPBC Act would be required. This will allow the development to be assessed against the EPBC Act significant impact criteria to determine the likelihood of a referral having regard to the context of the Site, the scale of the proposed development, the impacts to Native Vegetation and therefore available habitat, and the habitat requirements of each species.

It is recommended that the current land use, poor condition and limited extent of native vegetation, unlikelihood of improvement over time due to continued land practises, and limited habitat value for threatened species be considered when assessing the proposed Code Amendment.

DRAWINGS



REV	DESCRIPTION	DATE	BY
1	Revised drawing following client comments	July 2024	LJ

Legend:
 Site Boundary

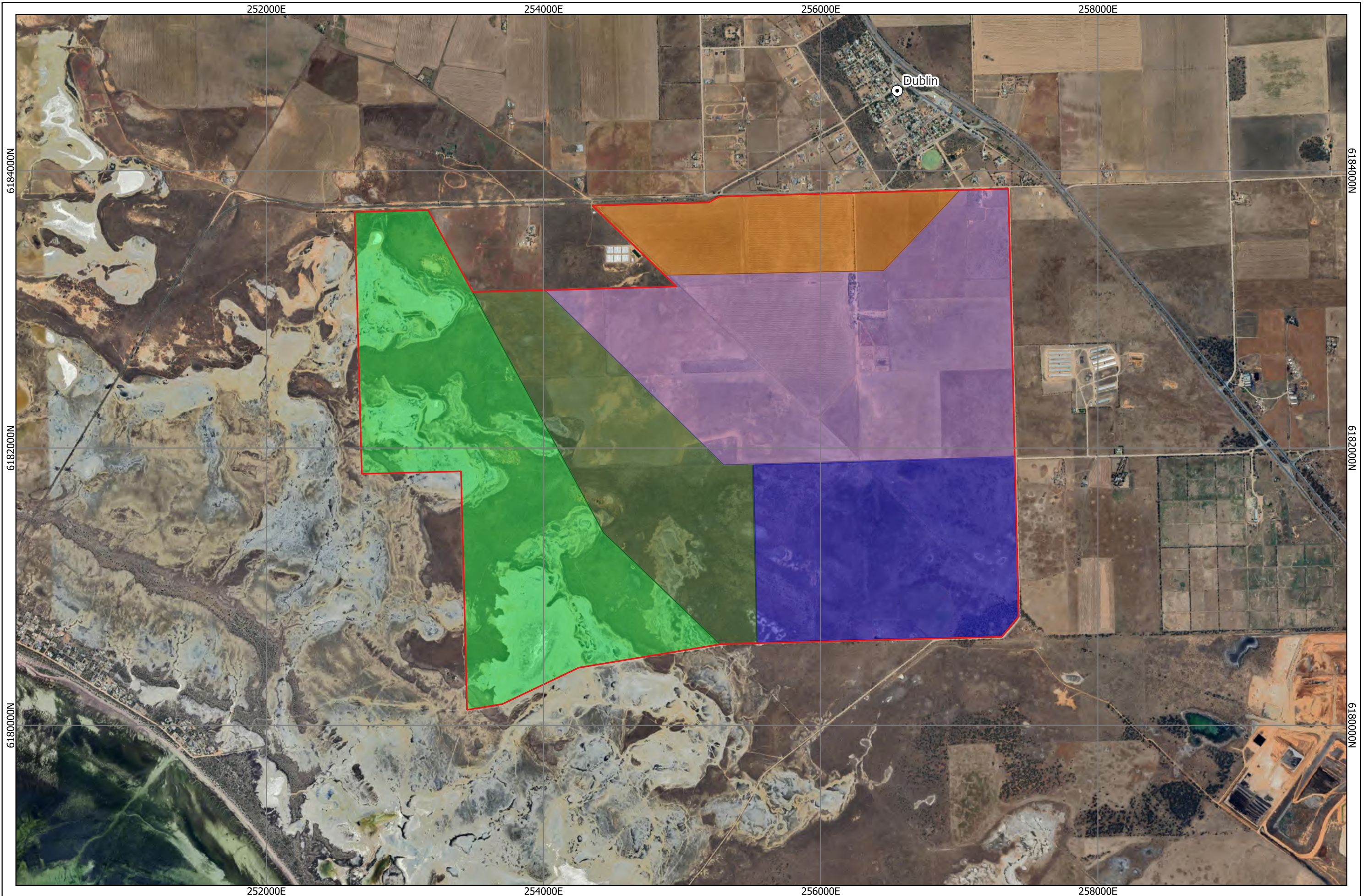
Data Sources:
 Photography: Google Satellite Imagery accessed: 08-July-2024
 Topography: Google Satellite Imagery
 Cadastre: Data sa.gov.au. Boundaries are indicative only, not all boundaries shown.



PROJECT:
Dublin Park Land Development

CLIENT:
Leinad Land Developments (Dublin) Pty Ltd

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DATE: 08-July-2024 PRINTED: 08-July-2024	DRAWN: LJ CHECKED:	DATUM: HORIZONTAL / VERTICAL / ZONE MGA / AHD / 54		



REV	DESCRIPTION	DATE	BY
1	Investments following client comments	July 24	LJ
2	Name amendment to Transitional Investigation Area	2024	LJ

Legend:

Site Boundary	Transitional Investigation Area
Residential Land	Conservation Zone
Employment Area	Mining Area

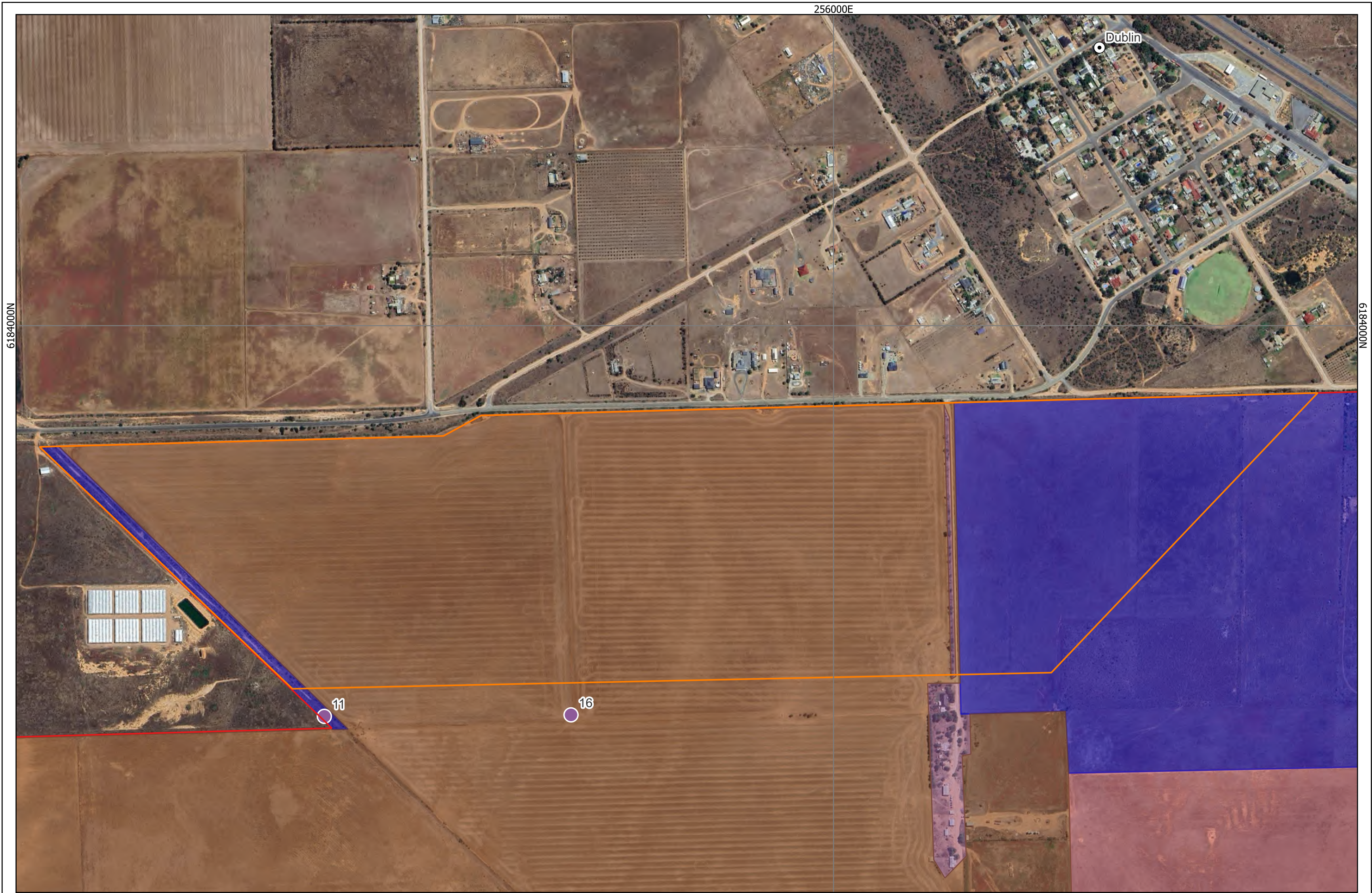
PROJECT: **Dublin Park Land Development**
 CLIENT: **Leinad Land Developments (Dublin) Pty Ltd**

TITLE: **Proposed Development Area**
GROUNDWORK
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PH 461 3871 0611
WWW.GROUNDWORKPLUS.COM.AU

SCALE: **1:25,000**
When Printed On A3

 DATE: 26-July-2024 DRAWN: LJ
 PRINTED: 26-July-2024 CHECKED:

DRAWING NUMBER: 5258.DRG.002	REVISION: 2
DATUM: HORIZONTAL / VERTICAL /	EPSG:7834
MGA / AHD / 54	



REV	DESCRIPTION	DATE	BY
1	Revised following client comments	July 24	LJ
2	Issue amendment to Transitional Investigation Area	2024	LJ

Legend:

- Sample Points
- Site Boundary
- VA 2 Degraded Nitrebrush Shrubland
- VA 3 Amenity Vegetation
- Residential Land
- VA 5 Regenerating Maireana Shrubland in grazed paddocks
- VA 1 Cultivated Paddocks

PROJECT: Dublin Park Land Development
 CLIENT: Leinad Land Developments (Dublin) Pty Ltd

TITLE: Residential Land Area

SCALE: 1:7,250
 When Printed On A3

DATE: 26-July-2024
 PRINTED: 26-July-2024

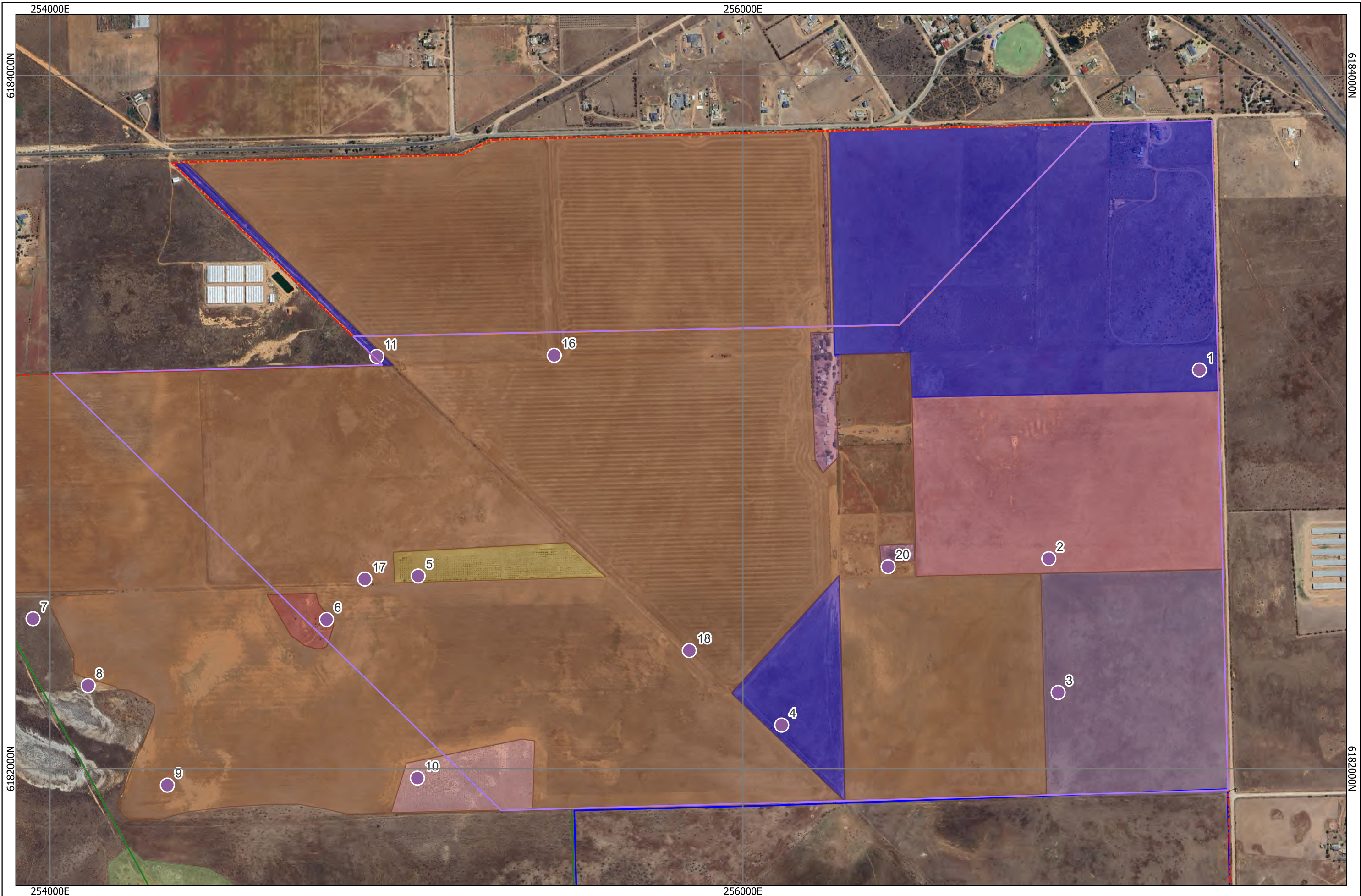
DRAWN: LJ
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DRAWING NUMBER: 5258.DRG.003
 REVISION: 2

DATUM: HORIZONTAL / VERTICAL /
 MGA / AHD / 54

GROUNDWORK PART OF SLR
 PH: 461 3871 0411
 WWW.GROUNDWORKPLUS.COM.AU

Data
 Photography: Google Satellite Imagery accessed: 26-July-2024
 Topography: Google Satellite Imagery
 Cadastre: Data.sa.gov.au. Boundaries are indicative only, not all boundaries shown.



REV	DESCRIPTION	DATE	BY
1	Revised following client comments	July 24	LJ
2	Minor amendment to Transitional Investigation Area	2024	LJ

Legend:

- Sample Points
- Site Boundary
- Residential Land
- Employment Area
- Transitional Investigation Area
- Conservation Zone
- Mining Area
- VA 1 Cultivated Paddocks
- VA 2 Degraded Nitrebush Shrubland
- VA 3 Amenity Vegetation
- VA 4 Degraded Maireana Shrubland
- VA 5 Regenerating Maireana Shrubland in grazed paddocks
- VA 6 Highly Degraded Eucalyptus Mallee
- VA 7 Atriplex Planting
- VA 8 Olive Plantation
- VA 9 Sand Dunes

PROJECT: Dublin Park Land Development
 CLIENT: Leinad Land Developments (Dublin) Pty Ltd

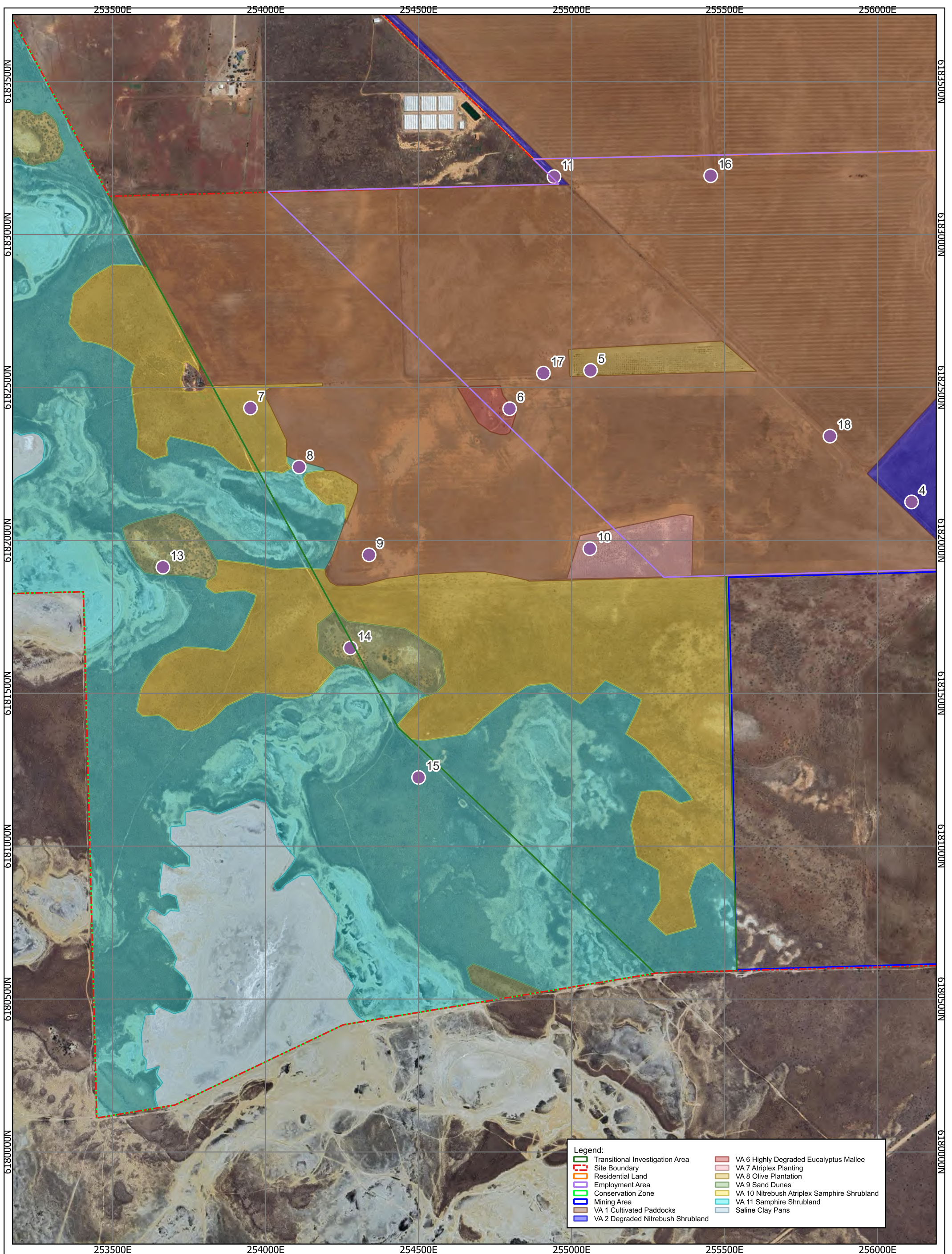
TITLE: Employment Area

SCALE: 1:10,000
 When Printed On A3

DRAWING NUMBER: 5258.DRG.004
 REVISION: 2

DATE: 26-July-2024
 PRINTED: 26-July-2024

DATUM: HORIZONTAL / VERTICAL /
 MGA / AHD / 54



REV	DESCRIPTION	DATE	BY
1	Amendments following client comments	July 2024	LJ
2	Name amendment to Transitional Investigation Area	Sept 2024	LJ

Data Sources:
 Photography: Google Satellite Imagery accessed 26-July-2024
 Topography: Google Satellite Imagery
 Cadastre: Data.sa.gov.au; Boundaries shown are indicative only
 Elevation: Other: SARG, 2023



PROJECT: Dublin Park Land Development
 CLIENT: Leinad Land Developments (Dublin) Pty Ltd

TITLE: Transitional Investigation Area

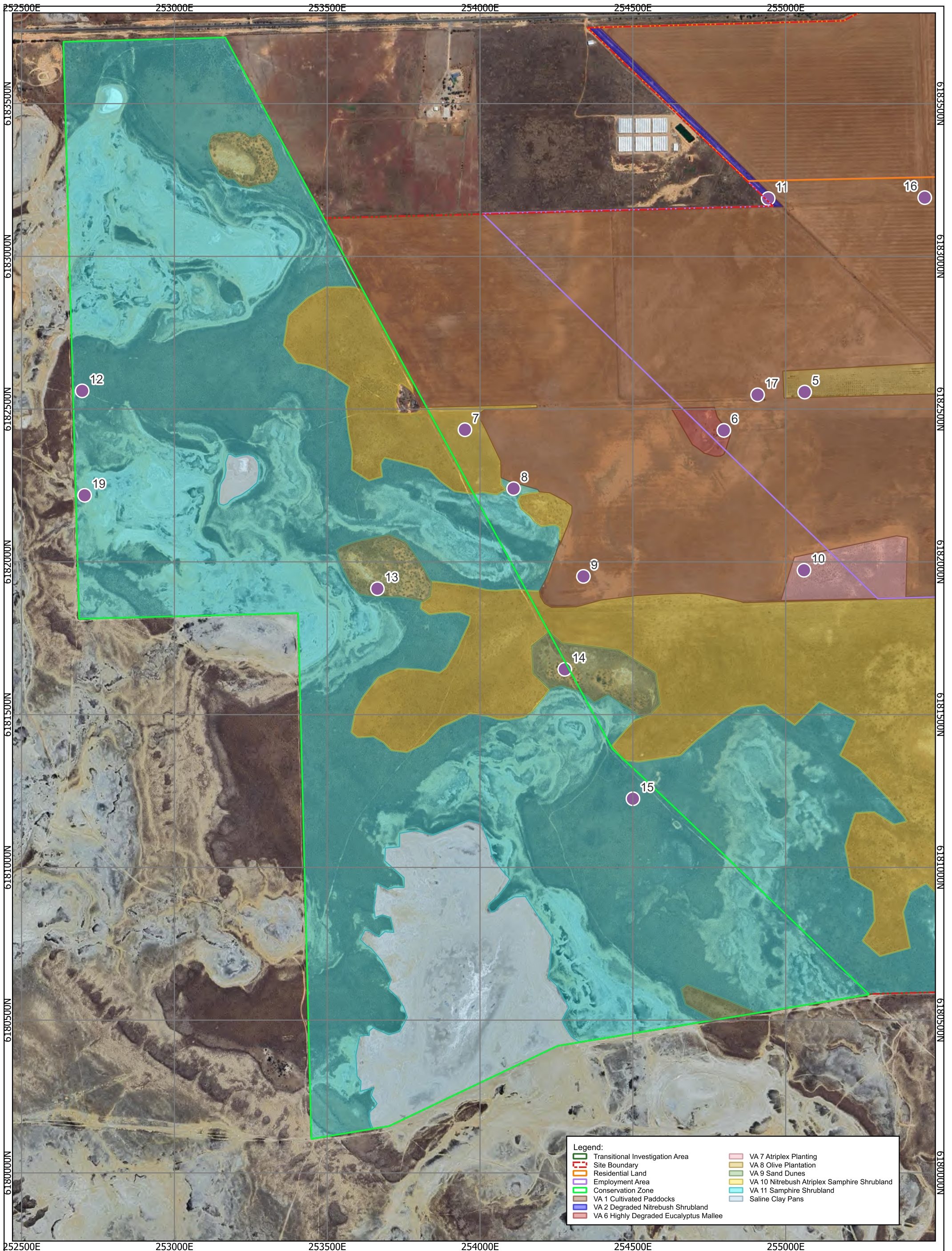
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 WWW.GROUNDWORK.COM.AU

SCALE: 1:11,000.000011
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DATE: 26-July-2024
 PRINTED: 26-July-2024

DRAWN: LJ
 CHECKED:

DRAWING NUMBER: 5258.DRG.005
 REVISION: 2
 DATUM: HORIZONTAL / VERTICAL / ZONE
 MGA / AHD / 54
 EPSG:2604



REV	DESCRIPTION	DATE	BY
1	Amendments following client comments	July 2024	LJ
2	Name amendment to Transitional Investigation Area	Sept 2024	LJ

Data Sources:
 Photography: Google Satellite Imagery accessed 26-July-2024
 Topography: Google Satellite Imagery
 Cadastre: Data.sa.gov.au; Boundaries shown are indicative only
 Ecosystem: Oter: SARIG, 2023

N

Dublin Park Land Development

Leinad Land Developments (Dublin)
Pty Ltd

PROJECT: Dublin Park Land Development

CLIENT: Leinad Land Developments (Dublin) Pty Ltd

GROUNDWORK PART OF SLR

PH: +61 3871 0411
WWW.GROUNDWORK.COM.AU

TITLE: Conservation Zone

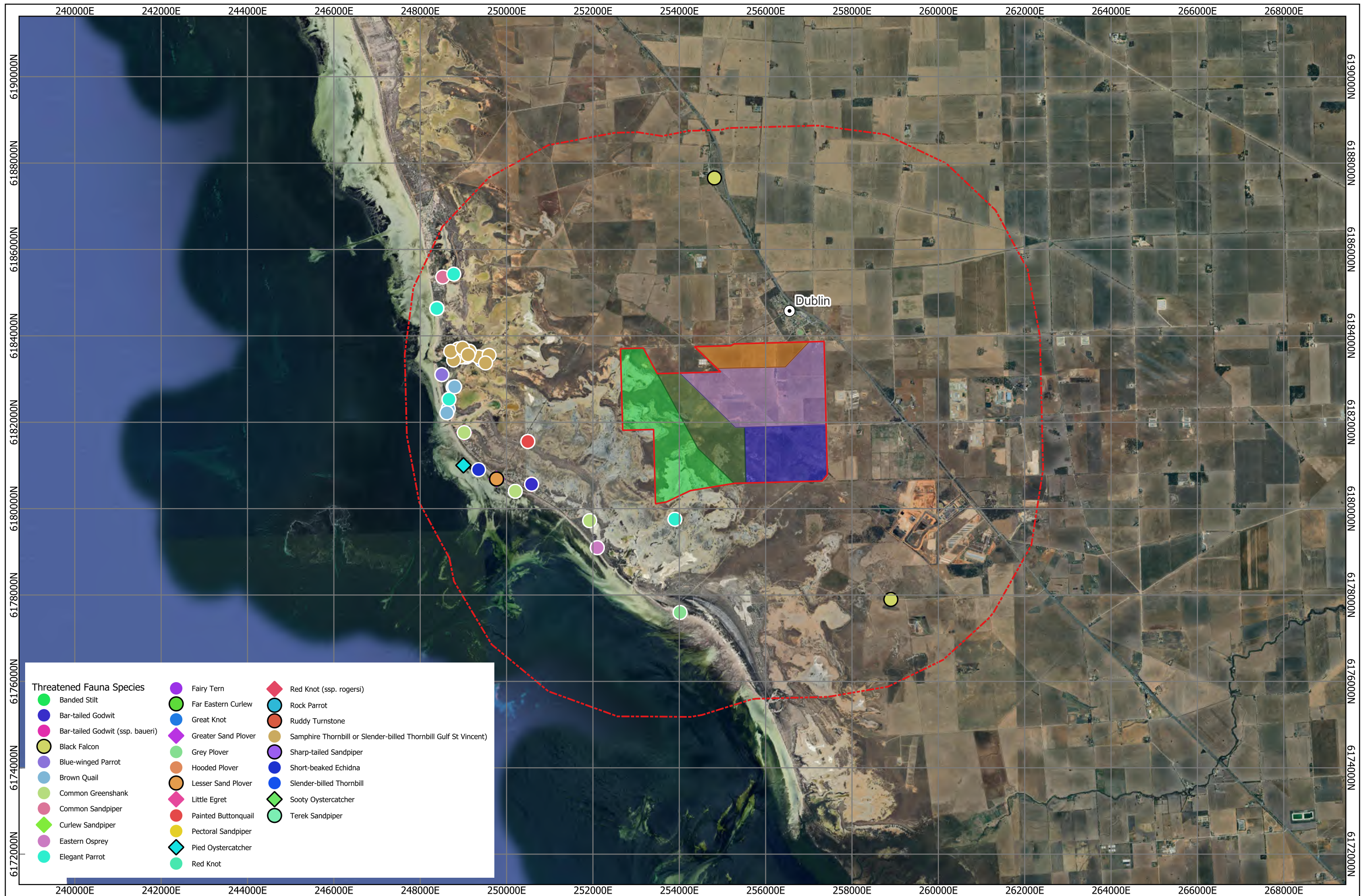
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DATE: 26-July-2024
DRAWN: LJ
PRINTED: 26-July-2024
CHECKED:

DRAWING NUMBER: 5258.DRG.006

REVISION: 2

DATUM: HORIZONTAL / VERTICAL / ZONE
MGA / AHD / 54



Threatened Fauna Species	
● Banded Stilt	● Fairy Tern
● Bar-tailed Godwit	● Far Eastern Curlew
● Bar-tailed Godwit (ssp. baueri)	● Great Knot
● Black Falcon	● Greater Sand Plover
● Blue-winged Parrot	● Grey Plover
● Brown Quail	● Hooded Plover
● Common Greenshank	● Lesser Sand Plover
● Common Sandpiper	● Little Egret
● Curlew Sandpiper	● Painted Buttonquail
● Eastern Osprey	● Pectoral Sandpiper
● Elegant Parrot	● Pied Oystercatcher
	● Red Knot
◆ Red Knot (ssp. rogersi)	● Rock Parrot
	● Ruddy Turnstone
	● Samphire Thornbill or Slender-billed Thornbill (Gulf St Vincent)
	● Sharp-tailed Sandpiper
	● Short-beaked Echidna
	● Slender-billed Thornbill
	◆ Sooty Oystercatcher
	● Terek Sandpiper

REV	DESCRIPTION	DATE	BY
1	Investments following client comments	July 24	LJ
2	Minor amendment to Transitional Investigation Area	2024	LJ

Legend:		
--- 5 km buffer	■ Employment Area	■ Mining Area
■ Site Boundary	■ Transitional Investigation Area	
■ Residential Land	■ Conservation Zone	



PROJECT: Dublin Park Land Development
 CLIENT: Leinad Land Developments (Dublin) Pty Ltd

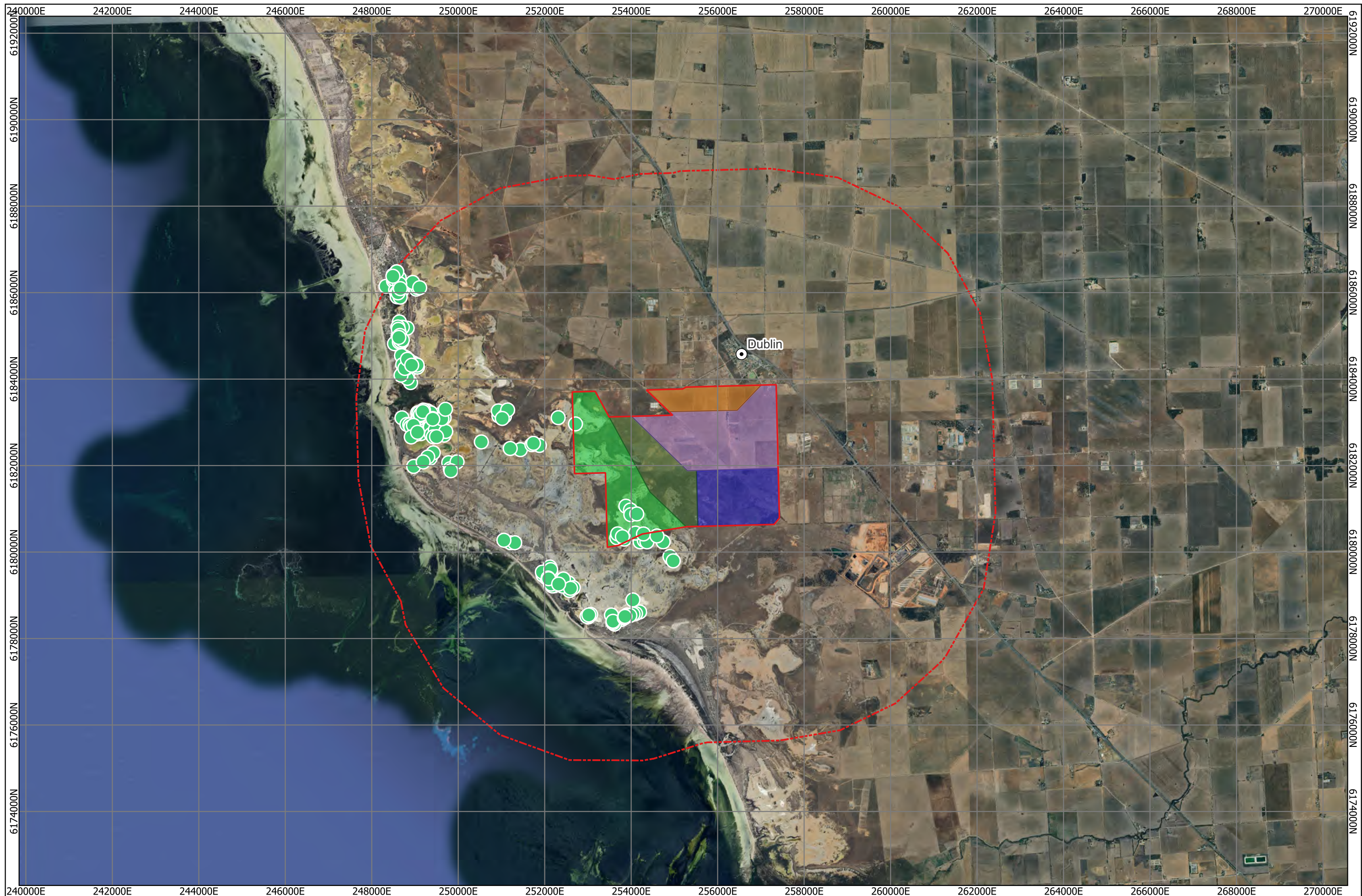
TITLE: Threatened Fauna Species
 SCALE: 1:80,000
 DATE: 26-July-2024
 DRAWN: LJ
 PRINTED: 26-July-2024

DRAWING NUMBER	REVISION
5258.DRG.007	2

Data
 Photography: Google Satellite Imagery accessed: 26-July-2024
 Topography: Google Satellite Imagery
 Cadastre: Data.sa.gov.au/Boundaries are indicative only, not all boundaries shown

GROUNDWORK PART OF SLR
 PH 461 3871 0611
 WWW.GROUNDWORKPLUS.COM.AU

DATUM: HORIZONTAL / VERTICAL / EPSG:7824
 MGA / AHD / 54



REV	DESCRIPTION	DATE	BY
1	Investments following client comments	July 24	UJ
2	Minor amendment to Transitional Investigation Area	2024	UJ

Legend:

- 5 km buffer
- Transitional Investigation Area
- Threatened Flora Species
- Site Boundary
- Conservation Zone
- Bead Samphire
- Residential Land
- Mining Area
- Employment Area

PROJECT: Dublin Park Land Development
 CLIENT: Leinad Land Developments (Dublin) Pty Ltd

TITLE: Threatened Flora Species

SCALE: 1:80,000
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GROUNDWORK PART OF SLR
 PH 461 3871 0611
 WWW.GROUNDWORKPLUS.COM.AU

DRAWING NUMBER: 5258.DRG.008
 REVISION: 2

DATE: 26-July-2024
 PRINTED: 26-July-2024

DATUM: HORIZONTAL / VERTICAL / EPSG:7824
 MGA / AHD / 54

Data
 Photography: Google Satellite Imagery accessed: 26-July-2024
 Topography: Google Satellite Imagery
 Cadastre: Data.sa.gov.au. Boundaries are indicative only, not all boundaries shown

ATTACHMENTS

Attachment 1

*Environmental Protection and Biodiversity Conservation
Act 1999 Protected Matters Report*



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: 27-Jun-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	55
Listed Migratory Species:	61

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:	98
Whales and Other Cetaceans:	8
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:	5
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	3
Key Ecological Features (Marine):	None
Biologically Important Areas:	2
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[\[Resource Information \]](#)

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

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

Community Name	Threatened Category	Presence Text	Buffer Status
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			
Acanthiza iredalei rosinae Slender-billed Thornbill (Gulf St Vincent) [67080]	Vulnerable	Species or species habitat may occur within area	In feature area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
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 tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Falco hypoleucos Grey Falcon [929]	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 likely to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat likely to occur within area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may 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 likely to occur within area	In buffer area only
Pedionomus torquatus Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area	In feature area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to 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
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Thinornis cucullatus cucullatus Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area	In buffer area only
FISH			
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
MAMMAL			
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
PLANT			
Caladenia tensa Greencomb Spider-orchid, Rigid Spider-orchid [24390]	Endangered	Species or species habitat likely to occur within area	In feature area
Dodonaea subglandulifera Peep Hill Hop-bush [11956]	Endangered	Species or species habitat may occur within area	In buffer area only
Pterostylis xerophila Desert Greenhood [7997]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Senecio macrocarpus Large-fruit Fireweed, Large-fruit Groundsel [16333]	Vulnerable	Species or species habitat may occur within area	In feature area
Swainsona pyrophila Yellow Swainson-pea [56344]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tecticornia flabelliformis Bead Glasswort, Bead Samphire [82664]	Vulnerable	Species or species habitat known to occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
SHARK			
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
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
Ardena carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardena grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Migratory Marine Species

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area
Calidris alba Sanderling [875]		Roosting known to occur within area	In buffer area only
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 pugnax as Philomachus pugnax Ruff [91256]		Roosting known to occur within area	In buffer area only
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area	In buffer area only
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Roosting known to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely 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
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area	In buffer area only
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 known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Phalaropus lobatus Red-necked Phalarope [838]		Roosting known to occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area	In buffer area only
Tringa brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area	In buffer area only
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardena carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardena grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
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 alba Sanderling [875]		Roosting known to occur within area	In buffer area only
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
Calidris pugnax as Philomachus pugnax Ruff [91256]		Roosting known to occur within area overfly marine area	In buffer area only

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
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area overfly marine area	In buffer area only
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Charadrius bicinctus Double-banded Plover [895]		Roosting 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 known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting 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]		Roosting 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 buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely 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]		Species or species habitat likely to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Roosting known to occur within area overfly marine area	In buffer area only
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area overfly marine area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area overfly marine area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area overfly marine area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may 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 known to occur within area overfly marine area	In buffer area only
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Phalacrocorax fuscescens Black-faced Cormorant [59660]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phalaropus lobatus Red-necked Phalarope [838]		Roosting known to occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Recurvirostra novaehollandiae Red-necked Avocet [871]		Roosting known to occur within area overfly marine area	In buffer area only
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
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 buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

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 buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat known to occur within area overfly marine area	In buffer area only
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 buffer area only
Tringa brevipes as Heteroscelus brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area overfly marine area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Fish			
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only
Campichthys tryoni Tryon's Pipefish [66193]		Species or species habitat may occur within area	In buffer area only
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In buffer area only
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In buffer area only
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In buffer area only
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area	In buffer area only
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area	In buffer area only
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In buffer area only
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In buffer area only
Vanacampus poecilolaemus Longsnout Pipefish, Australian Longsnout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In buffer area only
Vanacampus vercoi Verco's Pipefish [66286]		Species or species habitat may occur within area	In buffer area only
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Whales and Other Cetaceans [Resource Information]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves [Resource Information]

Protected Area Name	Reserve Type	State	Buffer Status
Adelaide International Bird Sanctuary-Winaityinaityi Pangkara	National Park	SA	In buffer area only
Unnamed (No.HA1164)	Heritage Agreement	SA	In buffer area only
Unnamed (No.HA1440)	Heritage Agreement	SA	In buffer area only
Unnamed (No.HA687)	Heritage Agreement	SA	In feature area

Protected Area Name	Reserve Type	State	Buffer Status
Upper Gulf St Vincent	Marine Park	SA	In buffer area only

Nationally Important Wetlands [\[Resource Information \]](#)

Wetland Name	State	Buffer Status
Clinton	SA	In buffer area only

EPBC Act Referrals [\[Resource Information \]](#)

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Biologically Important Areas [\[Resource Information \]](#)

Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Phalacrocorax fuscescens			
Black-faced Cormorant [59660]	Foraging	Known to occur	In buffer area only
Sternula nereis			
Fairy Tern [82949]	Foraging	Known to occur	In buffer area only

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

Where data 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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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: 27-Jun-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	55
Listed Migratory Species:	61

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:	98
Whales and Other Cetaceans:	8
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:	5
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	3
Key Ecological Features (Marine):	None
Biologically Important Areas:	2
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[\[Resource Information \]](#)

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

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

Community Name	Threatened Category	Presence Text	Buffer Status
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			
Acanthiza iredalei rosinae Slender-billed Thornbill (Gulf St Vincent) [67080]	Vulnerable	Species or species habitat may occur within area	In feature area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
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 tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Falco hypoleucos Grey Falcon [929]	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 likely to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat likely to occur within area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may 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 likely to occur within area	In buffer area only
Pedionomus torquatus Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area	In feature area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to 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
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Thinornis cucullatus cucullatus Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area	In buffer area only
FISH			
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
MAMMAL			
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
PLANT			
Caladenia tensa Greencomb Spider-orchid, Rigid Spider-orchid [24390]	Endangered	Species or species habitat likely to occur within area	In feature area
Dodonaea subglandulifera Peep Hill Hop-bush [11956]	Endangered	Species or species habitat may occur within area	In buffer area only
Pterostylis xerophila Desert Greenhood [7997]	Vulnerable	Species or species habitat may occur within area	In feature area
Senecio macrocarpus Large-fruit Fireweed, Large-fruit Groundsel [16333]	Vulnerable	Species or species habitat may occur within area	In feature area
Swainsona pyrophila Yellow Swainson-pea [56344]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tecticornia flabelliformis Bead Glasswort, Bead Samphire [82664]	Vulnerable	Species or species habitat known to occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
SHARK			
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
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
Ardena carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardena grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Migratory Marine Species

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area
Calidris alba Sanderling [875]		Roosting known to occur within area	In buffer area only
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 pugnax as Philomachus pugnax Ruff [91256]		Roosting known to occur within area	In buffer area only
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area	In buffer area only
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Roosting known to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely 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
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area	In buffer area only
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 known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Phalaropus lobatus Red-necked Phalarope [838]		Roosting known to occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area	In buffer area only
Tringa brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area	In buffer area only
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
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 alba Sanderling [875]		Roosting known to occur within area	In buffer area only
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
Calidris pugnax as Philomachus pugnax Ruff [91256]		Roosting known to occur within area overfly marine area	In buffer area only

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
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area overfly marine area	In buffer area only
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Charadrius bicinctus Double-banded Plover [895]		Roosting 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 known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting 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]		Roosting 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 buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely 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]		Species or species habitat likely to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Roosting known to occur within area overfly marine area	In buffer area only
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area overfly marine area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area overfly marine area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area overfly marine area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may 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 known to occur within area overfly marine area	In buffer area only
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Phalacrocorax fuscescens Black-faced Cormorant [59660]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phalaropus lobatus Red-necked Phalarope [838]		Roosting known to occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Recurvirostra novaehollandiae Red-necked Avocet [871]		Roosting known to occur within area overfly marine area	In buffer area only
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
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 buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

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 buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat known to occur within area overfly marine area	In buffer area only
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 buffer area only
Tringa brevipes as Heteroscelus brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area overfly marine area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Fish			
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only
Campichthys tryoni Tryon's Pipefish [66193]		Species or species habitat may occur within area	In buffer area only
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In buffer area only
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In buffer area only
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In buffer area only
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area	In buffer area only
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area	In buffer area only
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In buffer area only
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In buffer area only
Vanacampus poecilolaemus Longsnout Pipefish, Australian Longsnout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In buffer area only
Vanacampus vercoi Verco's Pipefish [66286]		Species or species habitat may occur within area	In buffer area only
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Whales and Other Cetaceans [Resource Information]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves [Resource Information]

Protected Area Name	Reserve Type	State	Buffer Status
Adelaide International Bird Sanctuary-Winaityinaityi Pangkara	National Park	SA	In buffer area only
Unnamed (No.HA1164)	Heritage Agreement	SA	In buffer area only
Unnamed (No.HA1440)	Heritage Agreement	SA	In buffer area only
Unnamed (No.HA687)	Heritage Agreement	SA	In feature area

Protected Area Name	Reserve Type	State	Buffer Status
Upper Gulf St Vincent	Marine Park	SA	In buffer area only

Nationally Important Wetlands [\[Resource Information \]](#)

Wetland Name	State	Buffer Status
Clinton	SA	In feature area

EPBC Act Referrals [\[Resource Information \]](#)

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Biologically Important Areas [\[Resource Information \]](#)

Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Phalacrocorax fuscescens			
Black-faced Cormorant [59660]	Foraging	Known to occur	In buffer area only
Sternula nereis			
Fairy Tern [82949]	Foraging	Known to occur	In buffer area only

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

Where data 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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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: 28-Jun-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	55
Listed Migratory Species:	61

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:	98
Whales and Other Cetaceans:	8
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:	5
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	3
Key Ecological Features (Marine):	None
Biologically Important Areas:	2
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[\[Resource Information \]](#)

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

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

Community Name	Threatened Category	Presence Text	Buffer Status
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			
Acanthiza iredalei rosinae Slender-billed Thornbill (Gulf St Vincent) [67080]	Vulnerable	Species or species habitat may occur within area	In feature area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
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 tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Falco hypoleucos Grey Falcon [929]	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 likely to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat likely to occur within area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may 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 likely to occur within area	In buffer area only
Pedionomus torquatus Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area	In feature area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to 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
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Thinornis cucullatus cucullatus Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area	In buffer area only
FISH			
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
MAMMAL			
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
PLANT			
Caladenia tensa Greencomb Spider-orchid, Rigid Spider-orchid [24390]	Endangered	Species or species habitat likely to occur within area	In feature area
Dodonaea subglandulifera Peep Hill Hop-bush [11956]	Endangered	Species or species habitat may occur within area	In buffer area only
Pterostylis xerophila Desert Greenhood [7997]	Vulnerable	Species or species habitat may occur within area	In feature area
Senecio macrocarpus Large-fruit Fireweed, Large-fruit Groundsel [16333]	Vulnerable	Species or species habitat may occur within area	In feature area
Swainsona pyrophila Yellow Swainson-pea [56344]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tecticornia flabelliformis Bead Glasswort, Bead Samphire [82664]	Vulnerable	Species or species habitat known to occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
SHARK			
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
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
Ardena carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardena grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Migratory Marine Species

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area
Calidris alba Sanderling [875]		Roosting known to occur within area	In buffer area only
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 pugnax as Philomachus pugnax Ruff [91256]		Roosting known to occur within area	In buffer area only
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area	In buffer area only
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In buffer area only
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area	In buffer area only
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In buffer area only
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Roosting known to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely 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
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area	In buffer area only
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 known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Phalaropus lobatus Red-necked Phalarope [838]		Roosting known to occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area	In buffer area only
Tringa brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area	In buffer area only
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting 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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In buffer area only
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 alba Sanderling [875]		Roosting known to occur within area	In buffer area only
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
Calidris pugnax as Philomachus pugnax Ruff [91256]		Roosting known to occur within area overfly marine area	In buffer area only

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
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area overfly marine area	In buffer area only
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Charadrius bicinctus Double-banded Plover [895]		Roosting 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 known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting 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]		Roosting 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 buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely 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]		Species or species habitat likely to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Roosting known to occur within area overfly marine area	In buffer area only
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area overfly marine area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In buffer area only
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area overfly marine area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area overfly marine area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may 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 known to occur within area overfly marine area	In buffer area only
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Phalacrocorax fuscescens Black-faced Cormorant [59660]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phalaropus lobatus Red-necked Phalarope [838]		Roosting known to occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In buffer area only
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Recurvirostra novaehollandiae Red-necked Avocet [871]		Roosting known to occur within area overfly marine area	In buffer area only
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
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 buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

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 buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat known to occur within area overfly marine area	In buffer area only
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 buffer area only
Tringa brevipes as Heteroscelus brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In buffer area only
Tringa glareola Wood Sandpiper [829]		Roosting known to occur within area overfly marine area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat known to occur within area overfly marine area	In feature area
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area overfly marine area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area overfly marine area	In buffer area only
Fish			
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only
Campichthys tryoni Tryon's Pipefish [66193]		Species or species habitat may occur within area	In buffer area only
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In buffer area only
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In buffer area only
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In buffer area only
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area	In buffer area only
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area	In buffer area only
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In buffer area only
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In buffer area only
Vanacampus poecilolaemus Longsnout Pipefish, Australian Longsnout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In buffer area only
Vanacampus vercoi Verco's Pipefish [66286]		Species or species habitat may occur within area	In buffer area only
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Whales and Other Cetaceans [Resource Information]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves [Resource Information]

Protected Area Name	Reserve Type	State	Buffer Status
Adelaide International Bird Sanctuary-Winaityinaityi Pangkara	National Park	SA	In feature area
Unnamed (No.HA1164)	Heritage Agreement	SA	In buffer area only
Unnamed (No.HA1440)	Heritage Agreement	SA	In buffer area only
Unnamed (No.HA687)	Heritage Agreement	SA	In buffer area only

Protected Area Name	Reserve Type	State	Buffer Status
Upper Gulf St Vincent	Marine Park	SA	In buffer area only

Nationally Important Wetlands [\[Resource Information \]](#)

Wetland Name	State	Buffer Status
Clinton	SA	In feature area

EPBC Act Referrals [\[Resource Information \]](#)

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Biologically Important Areas [\[Resource Information \]](#)

Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Phalacrocorax fuscescens			
Black-faced Cormorant [59660]	Foraging	Known to occur	In buffer area only
Sternula nereis			
Fairy Tern [82949]	Foraging	Known to occur	In buffer area only

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

Where data 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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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: 28-Jun-2024

[Summary](#)

[Details](#)

[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	55
Listed Migratory Species:	61

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:	98
Whales and Other Cetaceans:	8
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:	5
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	3
Key Ecological Features (Marine):	None
Biologically Important Areas:	2
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[\[Resource Information \]](#)

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

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

Community Name	Threatened Category	Presence Text	Buffer Status
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			
Acanthiza iredalei rosinae Slender-billed Thornbill (Gulf St Vincent) [67080]	Vulnerable	Species or species habitat may occur within area	In feature area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Ardenna grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Roosting known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
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 tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Falco hypoleucos Grey Falcon [929]	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 likely to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa lapponica baueri Nunivak Bar-tailed Godwit, Western Alaskan Bar-tailed Godwit [86380]	Endangered	Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting 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 buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat likely to occur within area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may 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 likely to occur within area	In feature area
Pedionomus torquatus Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area	In feature area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Thinornis cucullatus cucullatus Eastern Hooded Plover, Eastern Hooded Plover [90381]	Vulnerable	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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area	In feature area
FISH			
Seriolella brama Blue Warehou [69374]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat known to occur within area	In buffer area only
MAMMAL			
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
PLANT			
Caladenia tensa Greencomb Spider-orchid, Rigid Spider-orchid [24390]	Endangered	Species or species habitat likely to occur within area	In feature area
Dodonaea subglandulifera Peep Hill Hop-bush [11956]	Endangered	Species or species habitat may occur within area	In buffer area only
Pterostylis xerophila Desert Greenhood [7997]	Vulnerable	Species or species habitat may occur within area	In feature area
Senecio macrocarpus Large-fruit Fireweed, Large-fruit Groundsel [16333]	Vulnerable	Species or species habitat may occur within area	In feature area
Swainsona pyrophila Yellow Swainson-pea [56344]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Tecticornia flabelliformis Bead Glasswort, Bead Samphire [82664]	Vulnerable	Species or species habitat known to occur within area	In feature area
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
SHARK			
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
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
Ardena carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardena grisea Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sternula albifrons Little Tern [82849]		Species or species habitat may occur within area	In buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Migratory Marine Species

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat likely to occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In buffer area only
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area	In feature area
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting 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 alba Sanderling [875]		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 pugnax as Philomachus pugnax Ruff [91256]		Roosting known to occur within area	In feature area
Calidris ruficollis Red-necked Stint [860]		Roosting known to occur within area	In feature area
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area	In feature area
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In feature area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Roosting known to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely 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
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting known to occur within area	In feature area
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat known to occur within area	In feature area
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting 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 known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Phalaropus lobatus Red-necked Phalarope [838]		Roosting known to occur within area	In feature area
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In feature area
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area	In feature area
Tringa brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In feature area
Tringa glareola Wood Sandpiper [829]		Roosting 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
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area	In feature area
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area	In feature area

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

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardena carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardena grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Arenaria interpres Ruddy Turnstone [872]	Vulnerable	Roosting known to 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 alba Sanderling [875]		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
Calidris pugnax as Philomachus pugnax Ruff [91256]		Roosting 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 feature area
Calidris subminuta Long-toed Stint [861]		Roosting known to occur within area overfly marine area	In feature area
Calidris tenuirostris Great Knot [862]	Vulnerable	Roosting known to occur within area overfly marine area	In feature area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Charadrius bicinctus Double-banded Plover [895]		Roosting known to occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius mongolus Lesser Sand Plover, Mongolian Plover [879]	Endangered	Roosting known to occur within area	In feature area
Charadrius ruficapillus Red-capped Plover [881]		Roosting known to occur within area overfly marine area	In feature area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Roosting known to occur within area overfly marine area	In feature area
Diomedea antipodensis Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely 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]		Species or species habitat likely to occur within area	In feature area
Himantopus himantopus Pied Stilt, Black-winged Stilt [870]		Roosting known to occur within area overfly marine area	In feature area
Limicola falcinellus Broad-billed Sandpiper [842]		Roosting 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
Limosa limosa Black-tailed Godwit [845]	Endangered	Roosting known to occur within area overfly marine area	In feature area
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat may occur within area overfly marine area	In feature area
Neophema chrysogaster Orange-bellied Parrot [747]	Critically Endangered	Species or species habitat may 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 known to occur within area overfly marine area	In feature area
Numenius phaeopus Whimbrel [849]		Roosting known to occur within area	In feature area
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Phalacrocorax fuscescens Black-faced Cormorant [59660]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phalaropus lobatus Red-necked Phalarope [838]		Roosting known to occur within area	In feature area
Phoebastria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pluvialis fulva Pacific Golden Plover [25545]		Roosting known to occur within area	In feature area
Pluvialis squatarola Grey Plover [865]	Vulnerable	Roosting known to occur within area overfly marine area	In feature area
Recurvirostra novaehollandiae Red-necked Avocet [871]		Roosting 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
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 buffer area only
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

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 buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]		Species or species habitat known to occur within area overfly marine area	In buffer area only
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 buffer area only
Tringa brevipes as Heteroscelus brevipes Grey-tailed Tattler [851]		Roosting known to occur within area	In feature area
Tringa glareola Wood Sandpiper [829]		Roosting 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
Tringa stagnatilis Marsh Sandpiper, Little Greenshank [833]		Roosting known to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Xenus cinereus Terek Sandpiper [59300]	Vulnerable	Roosting known to occur within area overfly marine area	In feature area
Fish			
Acentronura australe Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only
Campichthys tryoni Tryon's Pipefish [66193]		Species or species habitat may occur within area	In buffer area only
Filicampus tigris Tiger Pipefish [66217]		Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippocampus abdominalis Big-belly Seahorse, Eastern Potbelly Seahorse, New Zealand Potbelly Seahorse [66233]		Species or species habitat may occur within area	In buffer area only
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In buffer area only
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In buffer area only
Hypselognathus rostratus Knifesnout Pipefish, Knife-snouted Pipefish [66245]		Species or species habitat may occur within area	In buffer area only
Kaupus costatus Deepbody Pipefish, Deep-bodied Pipefish [66246]		Species or species habitat may occur within area	In buffer area only
Leptoichthys fistularius Brushtail Pipefish [66248]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
Notiocampus ruber Red Pipefish [66265]		Species or species habitat may occur within area	In buffer area only
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only
Solegnathus robustus Robust Pipehorse, Robust Spiny Pipehorse [66274]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Stipecampus cristatus Ringback Pipefish, Ring-backed Pipefish [66278]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In buffer area only
Vanacampus poecilolaemus Longsnout Pipefish, Australian Longsnout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In buffer area only
Vanacampus vercoi Verco's Pipefish [66286]		Species or species habitat may occur within area	In buffer area only
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat may occur within area	In buffer area only
Arctocephalus pusillus Australian Fur-seal, Australo-African Fur-seal [21]		Species or species habitat may occur within area	In buffer area only
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Whales and Other Cetaceans [Resource Information]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves [Resource Information]

Protected Area Name	Reserve Type	State	Buffer Status
Adelaide International Bird Sanctuary-Winaityinaityi Pangkara	National Park	SA	In feature area
Unnamed (No.HA1164)	Heritage Agreement	SA	In buffer area only
Unnamed (No.HA1440)	Heritage Agreement	SA	In buffer area only
Unnamed (No.HA687)	Heritage Agreement	SA	In buffer area only

Protected Area Name	Reserve Type	State	Buffer Status
Upper Gulf St Vincent	Marine Park	SA	In buffer area only

Nationally Important Wetlands [\[Resource Information \]](#)

Wetland Name	State	Buffer Status
Clinton	SA	In feature area

EPBC Act Referrals [\[Resource Information \]](#)

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Biologically Important Areas [\[Resource Information \]](#)

Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Phalacrocorax fuscescens			
Black-faced Cormorant [59660]	Foraging	Known to occur	In buffer area only
Sternula nereis			
Fairy Tern [82949]	Foraging	Known to occur	In buffer area only

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

Where data 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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Attachment 2

Threatened Fauna Species Summary

Threatened Species Summary

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
<i>Acanthiza iredalei rosinae</i> (Slender-billed Thornbill Gulf St Vincent)	V	VU	2020	<p>The slender-billed thornbill (Gulf St Vincent) is mainly restricted to chenopod shrublands, particularly samphire dominated by shrubby glasswort (<i>Sclerostegia arbuscula</i>), on narrow coastal saline mudflats usually within 20m of a tidal channel or saline lake.</p> <p>It mostly forages in dense, tall samphire, but occasionally forages from the surface of mud and among smaller samphires, and in grey mangrove (<i>Avicennia marina</i>) adjacent to samphire shrublands (Approved Conservation Advice, Australian Government Department of the Environment, 2015).</p>	<p>Possible.</p> <p>Based upon previous records, it appears the species has predominately been recorded along a tidal inlet to the north west of the project area. This would indicate the species is within the area, but it is less likely to be travelling from known populations to utilise the vegetation within the project area, given the available vegetation along the coastal area that would more closely match its requirements.</p> <p>Vegetation Associations within the project area with suitable habitat include Vegetation Association 10 (<i>Nitraria billardiarei</i> +/- <i>Atriplex paludosa</i> +/-</p>	Transitional Investigation Area Conservation Zone

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
					<i>Tecticonia spp.</i> low shrubland) and Vegetation Association 11 (<i>Tecticonia spp.</i> low shrubland).	
<i>Actitis hypoleucos</i> (Common Sandpiper)	R		2014	In Australia, the Common Sandpiper is found in coastal or inland wetlands, both saline and fresh. It is found mainly on muddy edges or rocky shores (Birds in Backyards, 2024, URL: https://www.birdsinbackyards.net/species/Actitis-hypoleucos)	Unlikely. Has only been recorded within very close proximity to the coastline. Unlikely the vegetation within the project area would provide suitable habitat for the species, given the disconnect from tidal influences.	
<i>Arenaria interpres interpres</i> (Ruddy Turnstone)	R	VU (sp.)	2017	Shorebird. Found in most coastal regions, with occasional records of inland populations. It strongly prefers rocky shores or beaches where there are large deposits of rotting seaweed (Approved Conservation Advice, Department of Climate Change, Energy, the Environment and Water, 2024).	Unlikely. Has only been recorded within very close proximity to the coastline. Unlikely the vegetation within the project area would provide suitable habitat for the species, given the disconnect from tidal influences.	
<i>Calidris acuminata</i> (Sharp-tailed Sandpiper)		VU	2012	The species utilises fresh and hypersaline environments, feeding along the edge of water on mudflats, coastal and inland wetlands, and sewage ponds. After rainfall events, the species may also feed on areas of agricultural pasture (Approved Conservation Advice,	Possible. While most sightings of the species have been along the coast, there are a	Conservation Zone

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
				Department of Climate Change, Energy, the Environment and Water, 2024).	few scattered records within the saline clay flats such as what is found within the project area. However, as water is seasonal within the project area, it is unlikely to provide habitat resources for long periods of time. Vegetation Associations within the project area with suitable habitat include Vegetation Association 11 (<i>Tecticornia spp.</i> low shrubland) only.	
<i>Calidris canutus rogersi</i> (Red Knot)	E	VU (sp.)	2012	In Australasia the Red Knot mainly inhabit intertidal mudflats, sandflats and sandy beaches of sheltered coasts, in estuaries, bays, inlets, lagoons and harbours; sometimes on sandy ocean beaches or shallow pools on exposed wave-cut rock platforms or coral reefs. They are occasionally seen on terrestrial saline wetlands near the coast, such as lakes, lagoons, pools and pans, and recorded on sewage ponds and saltworks, but rarely use freshwater swamps. They rarely use inland lakes or swamps (Species Profile and Threats Database, Department of Climate Change, Energy, the Environment and Water, 2024).	Possible. While most sightings of the species have been along the coast, there are a few scattered records within the saline clay flats such as what is found within the project area. However, as water is seasonal within the project area, it is unlikely to provide habitat resources for long periods of time.	Conservation Zone

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
					Vegetation Associations within the project area with suitable habitat include Vegetation Association 11 (<i>Tecticornia spp.</i> low shrubland) only.	
<i>Calidris ferruginea</i> (Curlew Sandpiper)	E	CR	2017	Curlew Sandpipers often feed in mixed flocks with other species of shorebirds, pecking at invertebrates on the surface of the mud or making shallow probes below its surface. They generally forage within mudflats and nearby shallow water. In non-tidal wetlands, they usually wade, mostly in water 15–30 mm, but up to 60 mm deep. In intertidal areas, they forage at the edge of shallow pools and drains, and along sandy shores, often following the receding tide to forage near the water edge (Approved Conservation Advice, Department of Climate Change, Energy, the Environment and Water, 2023).	Possible. While most sightings of the species have been along the coast, there are a few scattered records within the saline clay flats such as what is found within the project area. However, as water is seasonal within the project area, it is unlikely to provide habitat resources for long periods of time. Vegetation Associations within the project area with suitable habitat include Vegetation Association 11 (<i>Tecticornia spp.</i> low shrubland) only.	Conservation Zone
<i>Calidris melanotos</i> (Pectoral Sandpiper)	R		2017	In Australasia, the Pectoral Sandpiper prefers shallow fresh to saline wetlands. The species is found at coastal lagoons, estuaries, bays, swamps, lakes, inundated	Possible. While most sightings of the species have been along the coast, there are a	Conservation Zone

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
				<p>grasslands, saltmarshes, river pools, creeks, floodplains and artificial wetlands.</p> <p>The species is usually found in coastal or near coastal habitat but occasionally found further inland. It prefers wetlands that have open fringing mudflats and low, emergent or fringing vegetation, such as grass or samphire. The species has also been recorded in swamp overgrown with lignum. They forage in shallow water or soft mud at the edge of wetlands (Species Profile and Threats Database, Department of Climate Change, Energy, the Environment and Water, 2024).</p>	<p>few scattered records within the saline clay flats such as what is found within the project area. However, as water is seasonal within the project area, it is unlikely to provide habitat resources for long periods of time. Vegetation Associations within the project area with suitable habitat include Vegetation Association 11 (<i>Tecticornia spp.</i> low shrubland) only.</p>	
<i>Calidris tenuirostris</i> (Great Knot)	E	VU	2012	<p>The species typically roosts along sheltered coastal habitats such as inlets, bays, harbours, estuaries, and lagoons. Selected areas tend to be associated with nearby large intertidal mud and sandflats which are utilised for feeding (Approved Conservation Advice, Department of Climate Change, Energy, the Environment and Water, 2024).</p>	<p>Unlikely.</p> <p>Has only been recorded within very close proximity to the coastline. Unlikely the vegetation within the project area would provide suitable habitat for the species, given the disconnect from tidal influences.</p>	
<i>Charadrius leschenaultii leschenaultii</i>	R	VU (sp.)	2006	<p>Greater sand plovers usually roost on sand-spits and banks on beaches or in tidal lagoons. They occasionally roost on rocky points or in adjacent areas of saltmarsh or claypans. Feeding usually takes place within</p>	<p>Unlikely.</p> <p>Has only been recorded within very close proximity to the coastline. Unlikely</p>	

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
(Greater Sand Plover)				sheltered sandy, shelly, or muddy coastal areas, as well as around large intertidal mudflats, sandbanks, saltmarshes, estuaries, coral reefs, rocky islands tidal lagoons and dunes near the coast (Approved Conservation Advice, Department of Climate Change, Energy, the Environment and Water, 2023).	the vegetation within the project area would provide suitable habitat for the species, given the disconnect from tidal influences.	
<i>Charadrius mongolus mongolus</i> (Lesser Sand Plover)	E	EN (sp.)	2006	During the non-breeding season, the species is almost strictly coastal, preferring sandy beaches, mudflats of coastal bays and estuaries, sand-flats and dunes near the coast and occasionally frequenting mangrove mudflats in Australia (Approved Conservation Advice, Threatened Species Scientific Committee, 2016).	Unlikely. Has only been recorded within very close proximity to the coastline. Unlikely the vegetation within the project area would provide suitable habitat for the species, given the disconnect from tidal influences.	
<i>Cladorhynchus leucocephalus</i> (Banded Stilt)	V		2016	Banded Stilts are found mainly in saline and hypersaline (very salty) waters of the inland and coast, typically large, open and shallow (Birdlife Australia, 2024, URL: https://birdlife.org.au/bird-profiles/banded-stilt/)	Possible. While most sightings of the species have been along the coast, there are a few scattered records within the saline clay flats such as what is found within the project area. However, as water is seasonal within the project area, it is unlikely to provide habitat resources for long periods of time.	Conservation Zone

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
					Vegetation Associations within the project area with suitable habitat include Vegetation Association 11 (<i>Tecticornia spp.</i> low shrubland) only.	
<i>Coturnix ypsilophora australis</i> (Brown Quail)	V		2006	Cryptic species that occurs in dense crops (especially oats), irrigated pastures, rank grasslands and sedgeland, especially where native species predominate, and often bordering swamps. Prefers dense grasslands, often on the edges of open forests and bracken (Threatened Species Profile, Department for Environment and Heritage, 2008).	Unlikely. Current vegetation with the project area does not include any dense grasslands or crops, particularly with current grazing regime. Could possibly occur if site conditions changed (i.e. removal of grazing).	
<i>Egretta garzetta nigripes</i> (Little Egret)	R		2020	The Little Egret frequents tidal mudflats, saltwater and freshwater wetlands, and mangroves.	Possible. While most sightings of the species have been along the coast, there are a few scattered records within the saline clay flats such as what is found within the project area. However, as water is seasonal within the project area, it is unlikely to provide habitat resources for long periods of time.	Conservation Zone

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
					Vegetation Associations within the project area with suitable habitat include Vegetation Association 11 (<i>Tecticornia spp.</i> low shrubland) only.	
<i>Falco subniger</i> (Black Falcon)	R		2014	The Black Falcon is found along tree-lined watercourses and in isolated woodlands, mainly in arid and semi-arid areas. It roosts in trees at night and often on power poles by day (Birds in Backyards, 2024, URL: https://www.birdsinbackyards.net/species/Falco-subniger)	Likely. Scattered historical recordings through the area, with closest most recent sighting approximately three (3) km to the south east of the site, recorded 10 years ago. If present, unlikely to use site for more than opportunistic foraging. May use all Vegetation Associations for foraging over. Vegetation Associations with trees (5, 8, 9, and 10) may provide perching opportunities.	Residential Land, Employment Area, Transitional Investigation Area, Conservation Zone
<i>Haematopus fuliginosus fuliginosus</i> (Sooty Oystercatcher)	R		2014	The Sooty Oystercatcher is strictly coastal, usually within 50 m of the ocean. It prefers rocky shores, but will be seen on coral reefs or sandy beaches near mudflats. It breeds on offshore islands and isolated rocky headlands (Birds in Backyards, 2024, URL:	Unlikely. Has only been recorded within very close proximity to the coastline. Unlikely the vegetation within the project area would provide	

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
				https://www.birdsinbackyards.net/species/Haematopus-fuliginosus).	suitable habitat for the species, given the disconnect from tidal influences.	
<i>Haematopus longirostris</i> (Pied Oystercatcher)	R		2017	The Pied Oystercatcher prefers mudflats, sandbanks and sandy ocean beaches and is less common along rocky or shingle coastlines. Although rarely recorded far from the coast, the Pied Oystercatcher may occasionally be found in estuarine mudflats and short pasture (Birds in Backyards, 2024, URL: https://www.birdsinbackyards.net/species/Haematopus-longirostris).	Unlikely. Has only been recorded within very close proximity to the coastline. Unlikely the vegetation within the project area would provide suitable habitat for the species, given the disconnect from tidal influences.	
<i>Hieraaetus morphnoides</i> (Little Eagle)	V		2014	The Little Eagle is seen over woodland and forested lands and open country, extending into the arid zone. It tends to avoid rainforest and heavy forest (Birds in Backyards, 2024, URL: https://www.birdsinbackyards.net/species/Hieraaetus-morphnoides).	Likely. Scattered historical recordings through the area, with the closest record being approximately 1.8 km south west of the Site in 2014. If present, unlikely to use site for more than opportunistic foraging. May use all Vegetation Associations for foraging over. Vegetation Associations with trees (5,	Residential Land, Employment Area, Transitional Investigation Area, Conservation Zone

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
					8, 9, and 10) may provide perching opportunities.	
<i>Limosa lapponica baueri</i> (Bar-tailed Godwit)	R	EN	2016	The 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, saltlakes 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 (Species Profile and Threats Database, Department of Climate Change, Energy, the Environment and Water, 2024).	Unlikely. Has only been recorded within very close proximity to the coastline. Unlikely the vegetation within the project area would provide suitable habitat for the species, given the disconnect from tidal influences.	
<i>Neophema chrysostoma</i> (Blue-winged Parrot)	V	VU	2014	Blue-winged parrots inhabit 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 (Approved Conservation Advice, Department of Climate Change, Energy, the Environment and Water, 2023).	Unlikely. Very few records within the area, has not been recorded since 2014.	
<i>Neophema elegans elegans</i> (Elegant Parrot)	R		2020	This parrot lives in open forests, woodlands, mallee, mulga, salt marsh (Birds in Backyards, 2024, URL: https://www.birdsinbackyards.net/species/Neophema-elegans).	Highly Likely. The species has been recorded through the area, with closest most recent	Transitional Investigation Area, Conservation Zone

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
					sighting in 2020 within 500 m to the south of the project area. Vegetation Associations within the project area with suitable habitat include Vegetation Association 10 (<i>Nitraria billardierei</i> +/- <i>Atriplex paludosa</i> +/- <i>Tecticonia</i> spp. low shrubland) and Vegetation Association 11 (<i>Tecticornia</i> spp. low shrubland).	
<i>Neophema petrophila zietzi</i> (Rock Parrot)	R		2005	The Rock Parrot is restricted to coastlines and offshore rocky islands, frequenting windswept coastal dunes, mangroves, saline swamps and rocky islets. It is seldom seen more than a few hundred metres from the sea (Birds in Backyards, 2024, URL: https://www.birdsinbackyards.net/species/Neophema-petrophila).	Unlikely. Has only been recorded within very close proximity to the coastline.	
<i>Numenius madagascariensis</i> (Far Eastern Curlew)	E	CR	2017	During the non-breeding season, the Far Eastern Curlew mainly forages around sheltered intertidal sandflats or mudflats that are open and without vegetation or seagrass. The species often also forages near mangroves, on saltflats or saltmarsh, around rockpools, amongst rubble on coral reefs, and on ocean beaches near the tideline. In the non-breeding season, the species' distribution is essentially coastal, occurring in sheltered estuaries,	Unlikely. Has only been recorded within very close proximity to the coastline. Unlikely the vegetation within the project area would provide suitable habitat for the species, given the	

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
				mangrove swamps, saltmarshes, and intertidal flats, particularly those with extensive seagrass meadows	disconnect from tidal influences.	
<i>Pandion haliaetus cristatus</i> (Eastern Osprey)	E		2014	<p>Eastern Ospreys occur in littoral and coastal habitats and terrestrial wetlands of tropical and temperate Australia and offshore islands.</p> <p>They are mostly found in coastal areas but occasionally travel inland along major rivers, particularly in northern Australia. They require extensive areas of open fresh, brackish or saline water for foraging. They frequent a variety of wetland habitats including inshore waters, reefs, bays, coastal cliffs, beaches, estuaries, mangrove swamps, broad rivers, reservoirs and large lakes and waterholes.</p> <p>They exhibit a preference for coastal cliffs and elevated islands in some parts of their range, but may also occur on low sandy, muddy or rocky shores and over coral cays.</p> <p>They may occur over atypical habitats such as heath, woodland or forest when travelling to and from foraging sites (<i>Pandion haliaetus</i> in Species Profile and Threats Database, Department of the Environment, 2024).</p>	<p>Unlikely.</p> <p>Very few records within the area, has not been recorded since 2014.</p>	
<i>Pluvialis squatarola squatarola</i> (Grey Plover)		VU	2017	<p>Grey plovers usually roost in sandy areas such as on unvegetated sandbanks or sand-spits along sheltered beaches, or around other sheltered environments such as estuaries or lagoons.</p> <p>In general, feeding takes place over the whole tidal range; however, most subpopulations will likely spend disproportionately large amounts of time foraging on</p>	<p>Unlikely.</p> <p>Has only been recorded in recent times (within previous 20 years) within very close proximity to the coastline. Unlikely the vegetation within the</p>	

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
				the upper tidal flats (Approved Conservation Advice, Department of Climate Change, Energy, the Environment and Water, 2024).	project area would provide suitable habitat for the species, given the disconnect from tidal influences.	
<i>Sternula nereis nereis</i> (Fairy Tern)	E	VU	2016	Fairy Terns utilise a variety of habitats including offshore, estuarine or lacustrine (lake) islands, wetlands, beaches and spits. Fairy Terns nest above the high water mark often in clear view of the water and on sites where the substrate is sandy and the vegetation low and sparse (Approved Conservation Advice, Department of Sustainability, Environment, Water, Population and Communities, 2011).	Unlikely. Strongly associated with coast. Previous records within the area have been found very close to coastline.	
<i>Thinornis cucullatus cucullatus</i> (Hooded Plover)	V	VU	2013	The Hooded Plover inhabits ocean beaches, particularly wide beaches backed by dunes with large amounts of seaweed, creek mouths and inlet entrances. It may also occur on near-coastal saline and freshwater lakes and lagoons, tidal bays and estuaries, on rock platforms, or on rocky or sandy reefs close to shore (Approved Conservation Advice, Department of the Environment, 2014).	Unlikely. Very few records within the area, has not been recorded since 2013.	
<i>Tringa nebularia</i> (Common Greenshank)		EN	2020	The common greenshank forages at the edge of wetlands, in soft mud on mudflats, in channels, or within shallows around the edge of waterbodies. These locations are often situated near or among mangroves or other sparse, emergent or fringing vegetation such as sedges or saltmarsh. The bird occasionally feeds amongst seagrass beds.	Unlikely. Has only been recorded in recent times (within previous 20 years) within very close proximity to the coastline. Unlikely the vegetation within the	

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
				Common greenshanks roost both on the coast and inland, in estuaries and mudflats, mangrove swamps and lagoons, and in billabongs, swamps, sewage farms, and flooded crops (Approved Conservation Advice, Department of Climate Change, Energy, the Environment and Water, 2024).	project area would provide suitable habitat for the species, given the infrequency of inundation of the saline clay pans.	
<i>Turnix varius varius</i> (Painted Buttonquail)	R		2006	Temperate and eastern tropical forests and woodlands form the habitats of this species. They appear to prefer closed canopies with some understory and deep leaf litter on the ground (Birds in Backyards, 2024, URL: https://www.birdsinbackyards.net/species/Turnix-varius).	Unlikely. Very few records within the area, has not been recorded since 2006.	
<i>Xenus cinereus</i> (Terek Sandpiper)	R	VU	2005	Terek sandpipers are one of the commoner shorebird species in tropical mangrove-lined estuaries. They often occur in small numbers on the mudflats among much larger flocks of other migratory shorebirds, especially red-necked stints and curlew sandpipers. Terek sandpipers will use the supralittoral or upper littoral zone, where a film of water covers the sand. However, on exposed rock platforms, the species forages in the lower littoral zone and not the supralittoral or upper littoral zones. Terek sandpipers often roost in sheltered coastal mudflats, including muddy sections of mangrove swamps (Approved Conservation Advice, Department of Climate Change, Energy, the Environment and Water, 2024).	Unlikely. Very few records within the area, has not been recorded since 2005.	
NP&W Act; E= Endangered, V = Vulnerable, R= Rare						

Species (common name)	NP&W Act	EPBC Act	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments	Area
EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable						

Table 5 – Criteria for the Likelihood of Occurrence of Species Within the Study Area

Likelihood	Criteria
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is present and falls within the known range of the species distribution or; The species was recorded as part of field surveys.
Likely	Recorded within the previous 20 years, the area falls within the known distribution of the species and the area provides habitat or feeding resources for the species.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provides limited habitat or feeding resources for the species. Recorded within 20 - 40 years, survey effort is considered adequate, habitat and feeding resources present, and species of similar habitat needs have been recorded in the area.
Unlikely	Recorded within the previous 20 years, but the area provides no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter. Recorded within 20 - 40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area. No records despite adequate survey effort.

Attachment 3

Introduced Flora Species

Introduced Flora Species

Species	Common Name	Declared (Landscape Act)	WoNS	Previous Records – Area*
<i>Acer sp.</i>	Maple			E, T
<i>Aeonium arboreum</i>	Tree Aeonium			R, E, T, C
<i>Aeonium sp.</i>				R, E
<i>Aira sp.</i>	Hair-grass			R, E, T, C
<i>Aloe maculata</i>	Broad-leaf Aloe			R, E, T, C
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass			E, T, C
<i>Asphodelus fistulosus</i>	Onion Weed			R, E, T, C
<i>Avellinia festucoides</i>	Avellinia			R, E, T, C
<i>Avena barbata</i>	Bearded Oat			E, T
<i>Avena fatua</i>	Wild Oat			E, T
<i>Brassica tournefortii</i>	Wild Turnip			E, T
<i>Bromus diandrus</i>	Great Brome			R, E, T
<i>Bromus madritensis</i>	Compact Brome			R, E, T, C
<i>Cakile maritima ssp. maritima</i>	Two-horned Sea Rocket			E, T, C
<i>Cenchrus ciliaris</i>	Buffel Grass	✓		R, E, T, C
<i>Centaurea melitensis</i>	Malta Thistle			R, E, T, C
<i>Chenopodium album</i>	Fat Hen			E, T, C
<i>Cotyledon orbiculata var.</i>	Cotyledon			R, E, T, C
<i>Cucumis myriocarpus ssp. myriocarpus</i>	Paddy Melon			R, E, T, C
<i>Diptotaxis sp.</i>	Rocket			R, E, T, C
<i>Dittrichia graveolens</i>	Stinkweed			R, E, T, C
<i>Ehrharta calycina</i>	Perennial Veldt Grass			R, E, T, C
<i>Ehrharta longiflora</i>	Annual Veldt Grass			R, E, T, C
<i>Eragrostis barrelieri</i>	Pitted Love-grass			R, E, T, C
<i>Eragrostis minor</i>	Small Stink-grass			R, E, T, C
<i>Eragrostis trichophora</i>	Hairyflower Lovegrass			R, E, T, C
<i>Euphorbia paralias</i>	Sea Spurge			R, E, T, C
<i>Euphorbia terracina</i>	False Caper	✓		R, E, T
<i>Hirschfeldia incana</i>	Hoary Mustard			R, E, T, C
<i>Hordeum marinum</i>	Sea Barley-grass			E, T, C
<i>Hyparrhenia hirta</i>	Tambookie Grass	✓		R, E, T, C
<i>Hypochaeris sp.</i>	Cat's Ear			R, E, T
<i>Lagurus ovatus</i>	Hare's Tail Grass			R, E
<i>Limonium companyonis</i>	Sea-lavender			R, E, T, C
<i>Limonium sinuatum</i>	Notch-leaf Sea-lavender			E, C
<i>Limonium sp.</i>	Sea-lavender			E, T

<i>Lolium sp.</i>	Ryegrass			R, E, T, C
<i>Lycium ferocissimum</i>	African Boxthorn	✓	✓	R, E, T, C
<i>Lysimachia arvensis</i>	Pimpernel			R, E, T, C
<i>Matthiola incana</i>	Common Stock			R, E, T, C
<i>Medicago polymorpha</i>	Burr-medic			R, E, T, C
<i>Moraea setifolia</i>	Thread Iris			R, E, T, C
<i>Olea europaea ssp.</i>	Olive			R, E, T, C
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	✓		E
<i>Oxalis pes-caprae</i>	Soursob			R, E, T, C
<i>Reichardia tingitana</i>	False Sowthistle			R, E, T, C
<i>Reseda luteola</i>	Wild Mignonette			R, E
<i>Rostraria cristata</i>	Annual Cat's-tail			R, E, T
<i>Sabulina mediterranea</i>	Slender Sandwort			R, E, T
<i>Sedum sp.</i>	Stonecrop			R, E, T, C
<i>Sisymbrium erysimoides</i>	Smooth Mustard			R, E, T, C
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	✓	✓	E
<i>Solanum nigrum</i>	Black Nightshade			R, E, T, C
<i>Sonchus oleraceus</i>	Common Sow- thistle			R, E, T, C
<i>Spergularia sp.</i>	Sand-spurrey			R, E, T, C
<i>Thinopyrum junceiforme</i>	Sea Wheat-grass			E, T, C
<i>Trifolium dubium</i>	Suckling Clover			R, E, T, C
<i>Vulpia muralis</i>	Wall Fescue			R, E, T, C
<i>Vulpia myuros f.</i>	Fescue			R, E, T, C
<i>Yucca gloriosa</i>	Yucca			R, E, T, C

* R= Residential Land, E= Employment Area, T= Transitional Investigation Area, C= Conservation Zone