

Appendix 09 Ecology Assessment

- A Battery Anode Material Facility Ecological Assessment
- B Native Vegetation Clearance Report



Battery Anode Material Facility Ecological Assessment June 2023



Document information and distribution

Document information		
Item	Detail	
Project number	K20609	
Document title	Battery Anode Material Facility Ecological Assessment, June 2023	
Client	JBS&G	
Prepared by	Ecosphere Ecological Solutions	
Document status	Final	
Version number	4	

Document distribution				
Authors	Document status	Version number	Date of issue	Issued to
Andrew Sinel	Draft	1	06/10/2022	Dr Nicole Patten, Senior Project Manager, JBS&G
Andrew Sinel	Draft	2	12/01/2023	Dr Nicole Patten, Senior Project Manager, JBS&G
Andrew Sinel, Imogen Marshall	Draft	3	05/06/2023	Dr Nicole Patten, Senior Project Manager, JBS&G
Andrew Sinel, Imogen Marshall	Final	4	22/06/2023	Dr Nicole Patten, Senior Project Manager, JBS&G

Disclaimer

This document may only be used for the purpose for which it was commissioned and in accordance with the contract between Ecosphere Ecological Solutions Pty Ltd and JBS&G Pty Ltd. Ecosphere Ecological Solutions Pty Ltd accept no liability or responsibility whatsoever for or in respect of any use of or reliance upon this document by any third party. Unauthorised use of this report in any form is prohibited.

The ecological assessment was undertaken on Kaurna country. Ecosphere Ecological Solutions acknowledge the traditional owners of this country and pay our respects to their Elders past, present and emerging.



Acronyms and definitions

Abbreviation	Description
BDBSA	Biological Databases of South Australia
BAM	Battery Anode Material
CBD	Central Business District
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DEW	Department for Environment and Water
Ecosphere	Ecosphere Ecological Solutions
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
На	Hectare
HV	High Voltage
IBRA	Interim Biogeographic Regionalisation for Australia
LSA Act	Landscape South Australia Act 2019
MNES	Matters of National Environmental Significance
NPW Act	National Parks and Wildlife Act 1972
NV Act	Native Vegetation Act 1991
NVC	Native Vegetation Council
NV Regulations	Native Vegetation Regulations 2017
NVIS	Native Vegetation Information System
PDI Act	Planning Development and Infrastructure Act 2016
PMST	Protected Matters Search Tool
PSG	Purified Spherical Graphite
Renascor	Renascor Resources Pty Ltd
SA	South Australia
SEB	Significant Environmental Benefit
TEC	Threatened Ecological Community
UBS	Unit Biodiversity Score
WWTP	Wastewater Treatment Plant

Contents

1	Intr	odu	ction	1
	1.1	Pro	ject overview	1
	1.2	Ob	jectives	1
2	Bad	ckgr	ound	3
	2.1	Clir	mate	6
	2.2	Int€	erim Biogeographical Regionalisation of Australia (IBRA)	6
	2.3	NV	'IS mapping	7
3	Leg	gislat	tive requirements	8
4	Me	thoo	ds	11
	4.1	De	sktop assessment	11
	4.1.	1	Protected Matters Search Tool (PMST) – EPBC Act	11
	4.1.	2	Biological Database of South Australia (BDBSA)	11
	4.1.	3	Assessment of the likelihood of occurrence	11
	4.1.	4	Desktop study limitations	12
	4.2	Fiel	ld survey	12
	4.2.	1	Vegetation survey	12
	4.2.	2	Fauna	12
5	Res	ults.		14
	5.1	De	sktop assessment	14
	5.1.	1	Threatened ecological communities	15
	5.1.	2	Nationally threatened flora	15
	5.1.	3	State threatened flora	15
	5.1.	4	Nationally threatened fauna	18
	5.1.	5	State threatened fauna	19
	5.1.	6	Commonwealth listed migratory species	19
	5.1.	7	Nationally listed marine species	19



	5.2	Fiel	d Assessment	0
	5.2	2.1	Vegetation associations	0
	5.2	2.2	Regionally significant flora species4	7
	5.2	2.3	Significant and Regulated Scattered Trees4	8
	5.2	2.4	Fauna species	1
	5.3	Cur	mulative impact5	1
	5.4	Ado	dress the Mitigation Hierarchy5	1
	5.5	Prin	ciples of Clearance (Schedule 1, Native Vegetation Act 1991)5	2
6	Of	fset re	equirements5	5
7	Summary			
8	References			
9	Ap	pend	dices5	8

Appendix 1. Regulated trees.	58
Appendix 2. PMST results summary	65
Appendix 3. BDBSA flora records	66
Appendix 4. BDBSA fauna records	69

List of Figures

Figure 1. General location of the proposed Renascor BAM facility at Bolivar2
Figure 2. Project boundary and infrastructure layout of BAM facility and pipeline4
Figure 3. Project boundary and infrastructure layout of BAM facility5
Figure 4. Average climatic conditions occurring at the BAM facility project site6
Figure 5.BDBSA records for conservation significant flora observations within 5km of project site.
Figure 6. National and state conservation significant fauna observations within 5km of project site
Figure 7. Threatened fauna species legend



Figure 8. Vegetation associations recorded within the BAM facility and pipeline sites
Figure 9. Vegetation associations recorded within the BAM facility site
Figure 10. Vegetation associations recorded along the eastern extent of the pipeline site33
Figure 11. Vegetation associations recorded along the north-eastern extent of the pipeline site.
Figure 12. Vegetation associations recorded along the north-western extent of the pipeline site
Figure 13. Vegetation associations recorded along the western extent of the pipeline site36
Figure 14. Locations of scattered regulated trees
Figure 15. Locations of scattered regulated trees
List of Tables
Table 1. Summary of relevant Commonwealth and state legislation. 8
Table 2. Criteria for the likelihood of occurrence of species within the project site11
Table 3. EPBC Act PMST report results summary (5km buffer from project extent)
Table 4. The threatened ecological communities identified by the PMST and their likelihood ofpresence within the project site15
Table 5. Threatened flora species potentially or known to occur within the project site identifiedfrom the PMST (DCCEEW 2022) and Naturemaps (DEW 2022)
Table 6. Threatened and migratory fauna species potentially or known to occur within the project site identified from the PMST (DCCEEW 2023) and Naturemaps (DEW 2022)20
Table 7. Vegetation association summary. 30
Table 8. Regionally significant flora species (Adelaide region) observed during assessment47
Table 9. Scattered regulated tree summary. 48

1 Introduction

1.1 Project overview

Ecosphere Ecological Solutions (Ecosphere) was engaged by JBS&G on behalf of Renascor Resources Pty Ltd (Renascor) to prepare an ecological assessment report for a proposed Battery Anode Material (BAM) Facility located at Bolivar, South Australia (The Project, Figure 1).

1.2 Objectives

The specific objectives of the ecological assessment were to:

- Record vegetation association and condition values of any vegetation subject to provisions of the *Native Vegetation Act 1991* (NV Act).
- Identify of any flora species of Commonwealth or state significance present or likely to occur within the project site either on a temporary or permanent basis.
- Identify any declared plants under the *Landscape South Australia Act 2019* (LSA Act) that may be significant in relation to the proposed BAM facility.
- Undertake an opportunistic fauna assessment to determine if any native fauna species, or fauna habitat, may be significantly impacted by the proposed BAM facility.
- Identify any areas where significant ecological constraints may occur and provide preliminary spatial data to describe these areas if relevant.
- Identify flora subject to regulated tree legislation under the *Planning Development* and *Infrastructure Act* 2016 (PDI Act).
- Calculate the Significant Environmental Benefit (SEB) requirement to offset any vegetation clearance as part of development of the proposed BAM facility.





Figure 1. General location of the proposed Renascor BAM facility at Bolivar.



2 Background

Renascor Resources Pty Ltd (Renascor) is a South Australian based exploration and development company, listed on the Australian Securities Exchange (ASX:RNU) with projects located on the Eyre Peninsula, South Australia. Renascor's flagship project is the Siviour Graphite Project located near Arno Bay in South Australia. Sitting over the world's second largest known Graphite Reserve and operating under Mining Lease (ML) 6495, the mine will produce high quality graphite concentrate products via an open cut mining operation. Critical to the Siviour Graphite Project is the need for a BAM Facility.

The proposed BAM Facility (the project) is located in South Australia, approximately 16 km northwest of the Adelaide CBD and located within the City of Playford council area (Figure 1). The BAM Facility will accept graphite concentrate from the Siviour Graphite Mine and process, refine and package the Purified Spherical Graphite (PSG) product, which will then be transported offsite for export.

The project is anticipated to cover an area of approximately 24.5 hectares (ha) and is comprised of the following components:

- micronisation and spheronisation plant
- water treatment plant
- administration and laboratory facilities
- warehousing
- electrical high voltage (HV) switchyard
- water pipelines
- stormwater channel and detention basin
- access roads.

Figure 2 and Figure 3 show further detail of the project components including the proposed water pipeline, stormwater channel and retention basin and infrastructure layout.





Figure 2. Project boundary and infrastructure layout of BAM facility and pipeline.





Figure 3. Project boundary and infrastructure layout of BAM facility with stormwater channels.



2.1 Climate

Local climatic historical records were gained through the Edinburgh RAAF weather station (station 023083, open since 1961), located approximately 6 km east of the project site (BOM, 2023). Edinburgh has an annual mean rainfall of 426.9 mm (Figure 4). This results in vegetation of moderate cover, typically comprised of Mallee, open woodlands or chenopod shrublands. The primary winter rainfall provides for periods of high annual species growth and generally is the highest weed risk period. At Bolivar, this also results in periods of inundation and soft soil conditions due to low lying topography and clay soils.



Figure 4. Average climatic conditions occurring at the BAM facility project site.

2.2 Interim Biogeographical Regionalisation of Australia (IBRA)

The Interim Biogeographical Regionalisation of Australia (IBRA) was developed as a key tool for identifying land for conservation under Australia's Strategy for the National Reserve System 2009-2030 (DoEE 2012). IBRA identifies geographically distinct bioregions based on common climate, geology, landform, native vegetation, and species information. The bioregions are further refined into subregions and environmental associations.



The project falls within the Eyre Yorke Block IBRA Bioregion, the St. Vincent Subregion, and both the Mallala and Parham environmental associations. Approximately 3% of the Mallala association and 44% of the Parham association is mapped as remnant vegetation of which 2% and 7% respectively is formally conserved and protected within National Parks and Wildlife reserves or private heritage agreements under the NV Act.

2.3 NVIS mapping

The Native Vegetation Floristic Areas - NVIS - Statewide South Australian government vegetation mapping shows the project site as non-indigenous vegetation communities. The following vegetation descriptions apply to areas within and surrounding the project site as an indicator of typical communities present in a pre-European environment.

• Tecticornia sp., Sarcocornia quinqueflora low open shrubland over Parapholis incurva, Disphyma crassifolium ssp. clavellatum, +/- Wilsonia humilis.

This association is a samphire/saltmarsh community and was confirmed within sections of the project site during the field assessment. This association is typically recorded in tidal and supra tidal zones. However, the presence of infrastructure has removed the connectivity of tidal influence and as a result the communities present are in poorer than average condition.



3 Legislative requirements

A summary of key legislation relating to flora and fauna consideration and their relevance to the proposed project is provided in Table 1 below.

Table 1. Summary	of relevant Commonwealth and state leg	islation.
Legislation	Summary	Relevance
Commonwealth		1
Environment Protection and Biodiversity Conservation Act 1999	 To protect 'matters of national environmental significance' (MNES): World Heritage properties National Heritage properties wetlands of international importance (Ramsar wetlands) listed threatened species and ecological communities. migratory species Commonwealth marine areas the Great Barrier Reef Marine Park nuclear actions (including uranium mining). a water resource, in relation to coal seam gas development and large coal mining development 	Where an activity may trigger requirements of the EPBC Act, this legislation must be considered. Any action that has, will have, or is likely to have a significant impact on a matter of national environmental significance requires referral and approval. Significant penalties apply. To determine whether an action is likely to have a significant impact on a matter of national environmental significance, refer to the Significant Impact Guidelines (Commonwealth of Australia 2009) at: <u>http://www.environment.gov.au/epbc/ publications/pubs/nes-guidelines.pdf</u> .
South Australia		1
National Parks and Wildlife Act 1972	Allows for the protection of habitat and wildlife through the establishment of parks and reserves (both on land and in State waters); provides for the protection of native flora and fauna; identifies flora and fauna species considered to be of conservation significance (under Schedules 7, 8, and 9 of the Act); and provides for the use of approved wildlife through a system of permits allowing certain actions, i.e. keeping and selling (s.58), harvesting (s.60G), farming (s.60C), hunting (s.68A), releasing (s.55) and undertaking scientific research (s.53) on/of native fauna species, and for the taking of plants (s.49).	A person must not "take" a native plant, protected animal or the eggs of a protected animal without approval (s.48A). Significant penalties apply. To take a native plant means to remove the plant or part of the plant, from the place in which it is growing: or to damage the plant. To take a protected animal means to remove, hunt, catch, restrain, kill or injure an animal, or attempt to do so. A person may take non-prescribed plant species from private land with the consent of the owner; however, these species may also be covered under the <i>Native Vegetation Act 1991</i> . There are several non-complying activities in parks and reserves that result in penalty (parts 4-6).
Native Vegetation Act 1991	To preserve, enhance and manage the State's native vegetation; provide a regulatory framework to control clearance of vegetation; and provide incentives and assistance to landowners to encourage them to	Persons wanting to clear native vegetation must apply for a permit from the Native Vegetation Council (NVC) (ss.7,14), unless exempt under the regulations. The NVC will consider the impacts of the proposed clearance and may grant consent, refuse consent or grant consent subject to certain

mmary of relevant Commonwealth and state legislativ Tabla 1 Su



Legislation	Summary	Relevance
	 preserve and enhance native vegetation. The Act protects all native vegetation that naturally occurs, i.e., vegetation which has not been planted. This includes all naturally occurring local native plants, from small ground covers and native grasses to mallee scrub and tall trees. It does not cover planted trees. Approval is required for the clearance of native vegetation. Clearance is defined as: the killing or destruction of native vegetation the removal of native vegetation the severing of branches, limbs, stems or trunks of native vegetation. the burning, poisoning and slashing of native vegetation including activities such as the draining for the reclamation of wetlands or flooding of land, grazing land where stock have been excluded for more than ten years. 	conditions (s.29). A net environment benefit is generally conditional on an approval being granted. Significant penalties apply if a person clears native vegetation without the permission of the NVC (s.26). The NVC can also take civil enforcement proceedings in the District Court for an order that the native vegetation be re- instated (s.31). The Act also provides the opportunity for landholders to enter into voluntary "Heritage Agreement(s)" to ensure vegetation on private land is protected for perpetuity (s.23). As the project will be assessed via an EIS under the <i>Planning, Development and</i> <i>Infrastructure Act 2016</i> , it is understood that Regulations 12 and 13 of the NV Regulations will apply. Under these Regulations and Schedule 1, Part 4 (clause 27) of the NV Regulations, vegetation clearance for major developments that are approved under an EIS (that was referred to the NVC for comment) is permitted, provided that it is undertaken in accordance with the development consent and an approved management plan (or a payment into the Native Vegetation Fund) which results in a significant environmental benefit.
Landscape South Australia Act 2019	From July 1, 2020, the Landscape South Australia Act 2019 (LSA Act) replaced the Natural Resources Management Act 2004, as the key framework for managing the state's land, water, pest plants and animals, and biodiversity across the state.	Under the South Australian LSA Act landholders have a legal responsibility to manage declared pest plants and animals and prevent land and water degradation. A key priority of landscape boards is to support local communities and landowners to be solely responsible for sustainably managing their region's landscapes with an emphasis on land and water management, pest animal and plant control, and biodiversity. This includes providing greater funding and partnership opportunities with local community organisations to deliver on ground works and projects.
Planning Development and Infrastructure Act 2016	The Planning and Design Code is the cornerstone of the new system and has replaced all council development plans to become the only source of planning policy for assessing development applications. The new Act has replaced the Development Act 1993 state-wide and is no longer operational. The Planning Development and Infrastructure Act 2016 provides	Any activity that damages a 'regulated tree' or 'significant tree' is 'development,' and as such requires a development approval. Specifically, development approval is required for removal, killing or destruction, branch or limb lopping, ringbarking, or topping, or any other substantial damage to a regulated or significant tree, including to its root system other than maintenance pruning. Significant fines apply if breaches are proven.



Legislation	Summary	Relevance
	provision for the protection of 'regulated trees' and 'significant trees.	



4 Methods

The desktop study involved searching Commonwealth and state databases which included the project footprint and an additional 5km buffer. This aims to identify threatened species, protected under the EPBC Act and NPW Act, either occurring or with the potential to occur within the project site. Following field survey work, the desktop study was updated to reflect habitat assessments.

4.1 Desktop assessment

4.1.1 Protected Matters Search Tool (PMST) - EPBC Act

A PMST report was generated on 23rd November 2022 with an updated report generated on the 29^{th of} May 2023 to identify MNES under the EPBC Act, relevant to the project site (DCCEEW, 2023). The PMST is maintained by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and was used to identify flora and fauna species or ecological communities of national environmental significance that may occur or likely to have suitable habitat within 5km of the project site.

4.1.2 Biological Database of South Australia (BDBSA)

Threatened species listed under the EPBC Act and NPW Act were assessed using the Naturemaps Supertable, obtained through the general query tool on Naturemaps. The dataset was obtained on 16th June 2022 and was used to identify threatened species that have been recorded within 5km of the project site (DEW 2020). Search criteria also included records since 1st January 1995 with a spatial reliability of <1km.

4.1.3 Assessment of the likelihood of occurrence

The likelihood of each threatened flora and fauna species potential of occurring within the project site was assessed. A likelihood of occurrence rating (Highly Likely / Known, Likely, Possible and Unlikely) was assigned to each threatened species identified in the desktop PMST and BDBSA search using the parameters as outlined below in Table 2.

Likelihood	Criteria
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is largely intact and falls within the known Project 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 species habitat which is largely intact.

Table 2. Criteria for the likelihood of occurrence of species within the project site.



Likelihood	Criteria
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area does not provide species habitat which is largely intact. Recorded within 20 -40 years, survey effort is considered adequate, habitat is present and intact, and species of similar habitat needs have been recorded in the area.
Unlikely	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 within the previous 40 years despite suitable habitat being known to occur in the area.

4.1.4 Desktop study limitations

The content of the desktop study was derived from existing datasets and references from a range of sources. Flora and fauna records were sourced from the Protected Matters Database via the PMST and the BDBSA via Naturemaps. The BDBSA only includes verified flora and fauna records submitted to Department for Environment and Wildlife (DEW) or partner organisations. It is recognised that drawing conclusions can be unreliable within areas that have been underrepresented in terms of biological studies. It is possible, therefore, that significant species occur within the project site that were not reflected by database records.

4.2 Field survey

The field survey was conducted on 29th June 2022 and 11th May 2023 by NVC accredited ecologists Andrew Sinel and Rob Kelman. The field survey included a vegetation survey and passive fauna assessment.

4.2.1 Vegetation survey

The vegetation survey for areas of native vegetation was undertaken in accordance with the NVC endorsed Bushland Assessment Method.

Vegetation within the individual associations was surveyed for national, state and regionally significant flora species that occurred within the area. A ramble survey method was adopted (i.e., randomly walking through areas of vegetation, attempting to cover different topography and habitats) to ensure best coverage of the individual associations.

The following information is recorded for any threatened flora observed:

- Location and extent of any populations (hand-held GPS); and
- Vegetation association and additional habitat observations where relevant.

4.2.2 Fauna



A focus of the on-ground fauna assessment was on avian species due to ability to passively identify and record species. For more inconspicuous fauna species, opportunistic observations were recorded, and fauna likelihood based largely on the presence and quality of habitat. The likelihood of specific species occurring within the project site included:

- Reviewing previous field survey results and database records
- assessing the habitat value of the vegetation during the field survey to determine the fauna species likely to occur within the project site.
- presence of any areas of significant fauna value such as fallen timber, areas for shelter such as caves or overhangs or permanent or casual water/wetlands.



5 Results

5.1 Desktop assessment

A total of 48 listed threatened species and 63 migratory species were identified by the EPBC Act PMST report as potentially occurring or having suitable habitat potentially occurring within 5 km of the project site (Table 3) (DECCEW 2023). The relevant MNES protected under the EPBC Act are discussed in detail below. Marine only species were not assessed as part of this desktop work due to a lack of connectivity of the project site to marine environments within the scope of the project option layouts.

Search area (5 km buffer)	Matters of national environmental significance under the EPBC Act	Identified within the search area
	World heritage properties	None
Vighia	National heritage properties	None
	Wetlands of international importance	None
Contraction of the State	Great Barrier Reef marine park	None
	Commonwealth marine area	None
	Threatened ecological communities	2
Rad	Listed Threatened species	48
So President Control The	Migratory species	63
C Ettion	Commonwealth land	22
No. 19	Commonwealth heritage places	None
	Listed marine species	97
	Whales and other cetaceans	8
Dowrs	Critical habitats	None
er Harbor Parafield Gardens	Commonwealth reserves terrestrial	None
	Commonwealth reserves marine	None
stores	State and Territory reserves	5
Marganista	Regional forest agreements	None
Largs North	Nationally important wetlands	2
Pooraka	Key Ecological Features	None
	Biologically Important Areas	None
	Key ecological features (marine)	None

Table 3. EPBC Act PMST report results summary (5km buffer from project extent).



5.1.1 Threatened ecological communities.

Two Threatened Ecological Communities (TEC's) were identified in the PMST as potentially occurring within 5 km of the project site. A summary of these communities and comment regarding their likelihood of occurrence in the project site are provided in Table 4 below.

Table 4. The threatened ecological communities identified by the PMST and their likelihood of presence within the project site.

Threatened Ecological Community	EPBC Status	Likelihood of Occurrence in the Project Site
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	The field survey recorded no areas with connectivity to supra tidal conditions. The presence of infrastructure and evaporation ponds associated with the WWTP ensure no flooding from tidal surges can occur within the project site. Tidal influence is a key criterion and therefore rules out the possibility any samphire shrublands in the area can fulfill conditions for the TEC.
Peppermint Box (Eucalyptus odorata) Grassy Woodland of South Australia	Critically Endangered	No indigenous intact Peppermint Box Woodlands recorded in project site. There were areas of <i>Eucalyptus odorata</i> planted within the project site as a screen along the boundary. A lack of understorey species richness and intact perennial grass stands meant that any areas of <i>E. odorata</i> woodland could not be considered part of the threatened ecological community.

5.1.2 Nationally threatened flora

Five flora species listed as threatened under the EPBC Act were identified in the PMST report as potentially occurring or having suitable habitat within the project site (Table 5 and Figure 5). One flora species of national conservation significance had historical records within 5km of the project site, *Tecticornia flabelliformis* (Bead Glasswort, VU:AUS). Bead Glasswort typically occupies a specific niche at the edge of the supra tidal zone where winter inundation from rainfall and storm surges creates a temporary wet zone. This species defoliates during winter and regains leaf cover during summer when surface water is largely not present. The locations of this population occur approximately 2 km west of the project site at St Kilda. No individuals of this species were recorded within the project site nor were they considered likely to occur based on the type and quality of habitat present.

5.1.3 State threatened flora.

One flora species of state conservation significance had historical records from the BDBSA. *Juncus radula* (Hoary Rush) was considered unlikely due to the lack of permanent water within the project site. A list of all flora species with records within 5km of the project site is provided in Appendix 3.

Table 5. Threatened flora species potentially or known to occur within the project site identified from the PMST (DCCEEW 2022) and Naturemaps (DEW 2022).

Scientific name	Common name	Conservation status		Source	BDBSA last	Distribution and preferred habitat	Likelihood of Occurrence
		Aus.	SA		(year)		within Project Site
Caladenia tensa	Green-comb Spider-orchid	EN	R	1	None	This species is considered to be widespread in SA from the west coast, throughout Eyre Peninsula and adjacent pastoral zone, the Flinders Ranges, rare in the Mt Lofty Ranges and more common in the Murray and upper south-east. The Green- comb Spider-orchid grows on red-brown sandy loams on rises in open woodland dominated by <i>Eucalyptus leucoxylon</i> (SA Blue gum) and <i>Callitris</i> <i>gracilis</i> (Native Pine).	Unlikely
Juncus radula	Hoary Rush		V	2	24/09/1999	Recorded in depressions and along seasonal drainage lines in a range of vegetation communities. Known to hybridize with <i>J. subsecundus.</i>	Unlikely
Prasophyllum pallidum	Pale Leek-orchid	VU	E	1	None	Grows in woodland on slopes and gullies. Limited to intact stratums not subject to disturbance.	Unlikely
Senecio macrocarpus	Large Fruit Fireweed	VU	V	1	None	Occurs in a variety of habitats, including grasslands, sedgelands, shrublands and woodlands, generally on sparsely vegetated sites on sandy loam to heavy clay soils, often in depressions that are waterlogged in winter.	Unlikely
Swainsona pyrophila	Yellow Swainson-pea	VU	R	1	None	Occurs in mallee vegetation communities on a variety of soil types including well-drained sands, sandy loams and heavier clay loams.	Unlikely
Tecticornia flabelliformis	Beaded Glasswort	VU	E	1,2	25/12/2001	Sub tidal and supra tidal zones. Several records within 5km of project site. Not likely to occur outside of known location.	Unlikely

Conservation status: Aus.: Australia (*Environment Protection and Biodiversity Conservation Act 1999*). SA: South Australia (*National Parks and Wildlife Act 1972*). Conservation codes: EN/E: Endangered. VU/V: Vulnerable, R: Rare.





Figure 5.BDBSA records for conservation significant flora observations within 5km of project site.



5.1.4 Nationally threatened fauna

A total of 43 fauna species listed as threatened under the EPBC Act were identified by the PMST as having suitable habitat potentially occurring within 5 km of the project site (Table 6 and Figure 6). This included three mammals, four reptiles, two fish and a shark with the remaining 33 being avian species. Ten nationally threatened fauna species had historical records since 1995 and within 5km of the project site from the BDBSA. The desktop assessment resulted in three species considered to possibly occur within the project site, these were:

- St Vincent Gulf Slender-billed Thornbill (Acanthiza iredalei rosinae, EPBC: VU, SA: V)
- Grey-headed Flying-fox (Pteropus Poliocephalus, EPBC: VU, SA: R)
- Blue-winged Parrot (Neophema chrysostoma, EPBC: VU, SA: V).

An additional species, the Fairy Tern (*Sternula nereis nereis* EPBC: VU, SA: E) was considered to possible fly over the site periodically but not utilise the habitat within the area.

The St Vincent Gulf Slender-billed Thornbill subspecies (*Acanthiza iredalei rosinae*) is known to inhabit samphire shrublands. There was a lack of low compact shrubs within the project site and coupled with the grazing of the area and a planted modified overstorey dominated by *Melaleuca halmaturorum* (Coast Tea-tree), resulted in an unlikely likelihood of this species occupying the project site. Further, a targeted survey did not identify the species within the project site (see Section 5.2.4). Based on the degraded quality of the vegetation within the project footprint and land use for sheep grazing, the potential for this species to utilise the habitat is very unlikely.

Grey-headed Flying-fox (*Pteropus Poliocephalus*) are known to roost in the Adelaide Botanic Park and forage over a wide area, with individuals capable of travelling 40 km between their roost and feeding sites in a night (Eby and Law, 2008), which places the project site well within their range. Grey-headed Flying Foxes consume fleshy fruits and blossoms, have been observed feeding on the fruits of the Moreton Bay Fig (*Ficus macrophylla*) and the blossoms of eucalypts (*Eucalyptus* spp. and *Corymbia* sp.). Although the species may fly through the project site, the field survey did not identify any habitat critical to the species within the project site.

Blue-winged Parrot (Neophema chrysostoma) are known to inhabit coastal, sub-coastal and inland areas. 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 is also known to be found in altered environments such as airfields, golf-courses and paddocks. Habitat within the project site is not deemed critical for the species given the project site is a previously degraded and marginally rehabilitated area that is subject to grazing by sheep and incurs ongoing disturbance occurs from heavy vehicles and machinery associated with the WWTP. No records occur within 5km of the project site. However, suitable habitat for the species is present within the wider area and this transient species is considered to possibly move through the project site to access areas of suitable habitat.



5.1.5 State threatened fauna.

A total of 32 state threatened fauna species have historical records within 5 km of the project site (Table 6). Three species were considered as possibly or likely to occur within the project site, these were:

- Elegant Parrot (Neophema elegans)
- Little Egret (Egretta garzetta nigripes)
- Brown Quail (Coturnix ypsilophora australis)

None of these species were considered likely to be impacted by the extent of the project as the Elegant Parrot and Little Egret are typically transient in nature and do not occupy habitats on a permanent basis (Table 6) and the Brown Quail requires dense undergrowth which is not present within the project site. A list of all fauna species with historical records within 5 km of the project site is provided in Appendix 4.

5.1.6 Commonwealth listed migratory species.

Sixty-three migratory species were highlighted as part of the search (Table 6) and most of these species were associated with the Adelaide International Bird Sanctuary National Park - Winaityinaityi Pangkara. The park is located at the southern end of the East Asian-Australasian Flyway (EAAF) which is used by more than 5 million birds every year. 27,000 of these birds stop and rest in the Adelaide International Bird Sanctuary (DEW 2022). Most of these species are unlikely to utilise the project site other than as a brief flyover as a result of the surrounding land use and high levels of disturbance from machinery and heavy vehicles.

5.1.7 Nationally listed marine species

Ninety-seven listed marine species listed under the EPBC Act were identified in the PMST as potentially occurring or having suitable habitat potentially occurring within 5 km of the project site. Thirty-two of these were marine mammals fish and reptiles and were not considered as part of this assessment being entirely terrestrial in nature. The remaining 65 avian species were likely to fly over the area or utilise saltmarsh areas associated with the gulf mangrove systems. The project site was considered unsuitable for migratory bird species due to a lack of foraging and coastal saltmarsh habitat.

Table 6. Threatened and migratory fauna species potentially or known to occur within the project site identified from the PMST (DCCEEW 2023) and Naturemaps (DEW 2022).

Scientific name	Common name	Conserv statu	Conservation status		Last record	Distribution and habitat preferences	Likelihood of Occurrence
		Aus.	SA	000,000	(year)		within Project Site
BIRDS			•	•	1	'	<u></u>
Acanthiza iredalei rosinae	Slender-billed Thornbill	VU	V	1, 2	06/11/2020	Open Chenopod shrublands and samphire shrublands. Historical record north of project site associated with intact samphire shrublands however the project site itself is a previously degraded and marginally rehabilitated area that is subject to grazing by sheep. The samphire shrubland stands have only extremely low cover and height and are mixed with planted coastal Tea-tree. The habitat within the project site is overall not suitable for this species and coupled with the existing land use and ongoing disturbance from heavy vehicles and machinery associated with the WWTP it is considered unlikely that the project site supports any suitable habitat for this species.	Unlikely
Aphelocephala leucopsis	Southern Whiteface	VU		1	None	Open woodlands and shrublands where there are an understorey of grasses or shrubs, or both. Favours habitat with low tree densities and herbaceous understorey litter cover.	Unlikely
Actitis hypoleucos	Common Sandpiper	Mi (W)	R	1, 2	13/12/2014	Coastal tidal salt marshes	Unlikely
Anhinga novaehollandiae	Australasian Darter		R	2	02/12/2012	Freshwater Wetlands	Unlikely
Apus pacificus	Fork-tailed Swift	Mi (M), Ma		1	None	Migratory and aerial species will roost in large tress	Unlikely
Ardea intermedia plumifera	Plumed Egret		R	2	19/01/2012	Wetlands and open grazing country	Unlikely
Ardenna carneipes	Flesh-footed Shearwater,	Mi.		1	None	Marine species, comes to islands to nest.	Unlikely
Ardenna grisea	Sooty Shearwater	Mi.		1	None	Marine species, comes to islands to nest.	Unlikely
Arenaria interpres	Ruddy Turnstone	MI (W)	R	1,2	26/02/2006	Coastal shorebird often found around high tide mark amongst wrack on beach	Unlikely

Scientific name	Common name	Conservation status		Source	Last record	Distribution and habitat preferences	Likelihood of Occurrence
		Aus.	SA		(year)		within Project Site
Biziura lobata menziesii	Musk Duck		R	2	13/12/2014	Freshwater wetland species	Unlikely
Botaurus poiciloptilus	Australasian Bittern	EN	E	1,2	25/08/2007	Freshwater wetland species, inhabits swamps and wetlands, largely nocturnal	Unlikely
Bubulcus ibis coromandus	Eastern Cattle Egret		R	2	08/08/2006	Wetlands and open paddocks	Unlikely
Calidris acuminata	Sharp-tailed Sandpiper	Mi (W)		1	None	Wading shorebird	Unlikely
Calidris alba	Sanderling	Mi (W)		1	None	Wading shorebird	Unlikely
Calidris canutus rogersi	Red Knot	EN, Mi (W)	E	1, 2	08/02/1998	Wading shorebird	Unlikely
Calidris ferruginea	Curlew Sandpiper	CE, Mi (W)		1,2	02/12/2012	Wading shorebird	Unlikely
Calidris melanotus	Pectoral Sandpiper	Mi (W)	R	1, 2	13/10/2015	Wading shorebird	Unlikely
Calidris pugnax	Ruff		R	2	13/01/2011	Wading shorebird	Unlikely
Calidris ruficollis	Red-necked Stint	Mi (W)		1	None	Wading shorebird	Unlikely
Calidris subminuta	Long-toed Stint	MI (W)	R	1,2	17/01/2006	Wading shorebird	Unlikely
Calidris tenuirostris	Great Knot	CE, Mi (W)	R	1	None	Wading shorebird	Unlikely
Cereopsis novaehollandiae	Cape Barren Goose		R	2	20/03/2004	Cape Barren Goose prefers offshore islands with scrub or pasture, ocean beaches, headlands, margins of lakes, swamps, farm pastures. Cape Barren geese live mostly on small, windswept and generally uninhabited offshore islands	Unlikely
Charadrius bicinctus	Double-banded Plover	Mi (W)		1	None	Wading shorebird	Unlikely
Charadrius leschenaultii	Greater Sand Plover	VU, Mi (W)	R	1	None	Wading shorebird	Unlikely
Charadrius mongolus	Lesser Sand Plover	EN, Mi (W)	R	1	None	Wading shorebird	Unlikely
Charadrius veredus	Oriental Plover	Mi (W)		1	None	Wading shorebird	Unlikely
Cladorhynchus leucocephalus	Banded Stilt		V	2	20/12/2015	Wading shorebird	Unlikely
Coturnix ypsilophora australis	Brown Quail		V	2	13/12/2014	Open flats and grassy plains	Possible
Diomedea antipodensis	Antipodean Albatross	VU, Mi		1	None	Pelagic marine species	Unlikely

Scientific name	Common name	Conserv statu	Conservation status		Last record	Distribution and habitat preferences	Likelihood of Occurrence
		Aus.	SA		(year)		within Project Site
Diomedea epomophora	Southern Royal Albatross	VU, Mi	V	1	None	Pelagic marine species	Unlikely
Diomedea exulans	Wandering Albatross	VU, Mi	V	1	None	Pelagic marine species	Unlikely
Diomedea sanfordi	Northern Royal Albatross	EN, Mi		1	None	Pelagic marine species	Unlikely
Egretta garzetta nigripes	Little Egret		R	2	14/10/2020	Wading bird, nearby record within samphire shrublands.	Possible
Falco hypoleucos	Grey Falcon	VU	R	1	None	Distributed sparsely over Australia's arid and semi-arid zones.	Unlikely
Falco subniger	Black Falcon		R	2	14/08/2007	Sparsely spread in the inland and across northern, eastern, southern and central Australia. The Black Falcon is found along tree-lined watercourses and in isolated woodlands, mainly in arid and semi-arid areas.	Unlikely
Gallinago hardwickii	Latham's Snipe	Mi (W)	R	1,2	23/09/2006	Wading bird, likely in salt fields areas but no samphire shrubland	Unlikely
Gallinago megala	Swinhoe's Snipe	Mi (W)		1	None	Wading bird	Unlikely
Gallinago stenura	Pin-tailed Snipe	Mi (W)		1	None	Wading bird	Unlikely
Grantiella picta	Painted Honeyeater	VU	V	1	None	Wading bird	Unlikely
Haematopus fuliginosus fuliginosus	Sooty Oystercatcher		R	2	26/11/2014	Coastal shorebird, likely to occur along coastal fringe and around nearby Torrens Island. Unlikely within project site.	Unlikely
Haematopus longirostris	Pied Oystercatcher		R	2	26/11/2014	Coastal shorebird, likely to occur along coastal fringe and around Torrens Island	Unlikely
Hieraaetus morphnoides	Little Eagle		V	2	19/06/2005	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.	Unlikely
Hirundapus caudacutus	White-throated Needletail	VU, Mi	V	1	None	Largely aerial species, may roost locally in large trees	Unlikely
Limicola falcinellus	Broad-billed Sandpiper	Mi (W)		1	None	Wading species, likely in salt pan areas	Unlikely

Scientific name	Common name	Conservation status		Source	Last record	Distribution and habitat preferences	Likelihood of Occurrence
		Aus.	SA		(year)		Project Site
Limosa lapponica baueri	Bar Tailed Godwit	VU, Mi (W)	R	1, 2	28/03/2010	Wading species, likely in salt pan areas	Unlikely
Limosa limosa	Black-tailed Godwit	Mi (W)	R	1,2	02/04/2011	Wading species, likely in salt pan areas	Unlikely
Macronectes giganteus	Southern Giant Petrel	EN, Mi	V	1	None	Pelagic marine species	Unlikely
Macronectes halli	Northern Giant Petrel	VU, Mi		1	None	Pelagic marine species	Unlikely
Melanodryas cucullata cucullata	South-eastern Hooded Robin	EN	R	1	None	Prefer dry eucalypt and acacia woodlands and shrublands with an open understorey, some grassy areas and a complex ground layer. Sometimes occur in tall, dense heaths with scattered open areas.	Unlikely
Melithreptus gularis gularis	Black-chinned Honeyeater		V	2	11/09/2007	Occupies mostly upper levels of drier open forests or woodlands dominated by box bark Eucalypts,	Unlikely
Motacilla cinerea	Grey Wagtail	Mi (T),		1	None	Vagrant only	Unlikely
Motacilla flava	Yellow Wagtail	Mi (T),		1	None	Vagrant only	Unlikely
Myiagra cyanoleuca	Satin Flycatcher	Mi (T)		1	None	Recorded in woodlands	Unlikely
Neophema chrysogaster	Orange-bellied Parrot	CE	E	1	None	Formerly widespread along coastal margins and samphire marshes now only recorded along the southern Victorian coastline mostly around the Bellarine Peninsula and breeding areas at Melaleuca Tasmania. Remnants important in the event that population recovers.	Unlikely
Neophema chrysostoma	Blue-winged Parrot	VU	V	1	None	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. Can also be seen in altered environments such as airfields, golf-courses and paddocks.	Possible

Scientific name	Common name	Conservation status		Source	Last record	Distribution and habitat preferences	Likelihood of Occurrence
		Aus.	SA		(year)		Project Site
Neophema elegans elegans	Elegant Parrot		R	2	13/01/2011	Occupies woodlands, mallee and open shrublands	Likely
Numenius madagascariensis	Eastern Curlew	CE, Mi (W)	E	1,2	02/12/2012	Coastal Shorebird	Unlikely
Numenius minutus	Little Whimbrel	Mi (W)		1	None	Coastal Shorebird	Unlikely
Numenius phaeopus variegatus	Whimbrel	Mi (W)	R	1,2	26/02/2006	Coastal Shorebird records in proximity to project site on samphire shrubland community.	Unlikely
Oxyura australis	Blue-billed Duck		R	2	02/12/2012	Wetlands	Unlikely
Pachyptila turtur subantarctica	Fairy Prion	VU		1	None	Pelagic marine species	Unlikely
Pandion haliaetus	Osprey	Mi (W),	E	1	None	Ospreys 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.	Unlikely
Pedionomus torquatus	Plains-wanderer	CE	E	1	None	Open plains in arid and semi-arid areas	Unlikely
Pezoporus occidentalis	Night Parrot	EN	E	1	None	Extinct in area	Unlikely
Phalaropus lobatus	Red-necked Phalarope	Mi (W)		1	None	Migratory wetland species	Unlikely
Philomachus pugnax	Ruff (Reeve)	Mi (W)		1	None	Migratory wetland species	Unlikely
Phoebetria fusca	Sooty Albatross	VU, Mi	E	1	None	Pelagic marine species	Unlikely
Plegadis falcinellus	Glossy Ibis		R	2	01/12/2004	The Glossy Ibis requires shallow water and mudflats, so is found in well-vegetated wetlands, floodplains, mangroves and rice fields	Unlikely
Pluvialis fulva	Pacific Golden Plover	Mi (W)	R	1,2	25/01/2007	Migratory wetlands species likely in adjacent salt pans and saline wetlands	Unlikely
Pluvialis squatarola	Grey Plover	Mi (W)		1	None	Migratory wetlands species likely in adjacent salt pans and saline wetlands	Unlikely
Podiceps cristatus cristatus	Great Crested Grebe		R	2	13/12/2014	Wetlands from rivers and lakes to estuaries and sheltered bays, but favours large, deep, open bodies of fresh water	Unlikely

Scientific name	Common name	Conservation status		Source	Last record	Distribution and habitat preferences	Likelihood of Occurrence
		Aus.	SA	000.00	(year)		within Project Site
Rostratula australis	Australian Painted Snipe	EN, Ma	E	1, 2	22/11/2004	Migratory wetlands species likely in adjacent salt pans and saline wetlands	Unlikely
Spatula rhynchotis	Australasian Shoveler		R	2	09/04/2016	Wetland's species	Unlikely
Stagonopleura guttata	Diamond Firetail	VU	V	1	None	Open grassy woodland, heath and farmland or grassland with scattered trees.	Unlikely
Sternula albifrons sinensis	Little Tern	Mi		1, 2	24/11/2005	The Little Tern is mainly coastal, being found on beaches, sheltered inlets, estuaries, lakes, sewage farms, lagoons, river mouths and deltas	Possible, as fly over
Sternula nereis nereis	Australian Fairy Tern	VU	E	1,2	02/12/2012	Found on coastal beaches, inshore and offshore islands, sheltered inlets, sewage farms, harbours, estuaries and lagoons. It favours both fresh and saline wetlands and near-coastal terrestrial wetlands, including lakes and salt-ponds.	Possible, as fly over only
Stictonetta naevosa	Freckled Duck		V	2	09/09/2017	Freshwater wetlands	Unlikely
Thalassarche carteri	Indian Yellow-nosed Albatross	VU, Mi		1	None	Pelagic marine species	Unlikely
Thalassarche cauta	Shy Albatross	EN, Mi	V	1	None	Pelagic marine species	Unlikely
Thalassarche impavida	Campbell Albatross,	VU, Mi		1	None	Pelagic marine species	Unlikely
Thalassarche melanophris	Black-browed Albatross	VU, MI	ssp.	1	None	Pelagic marine species	Unlikely
Thalassarche steadi	White-capped Albatross	VU, Mi	V	1	None	Pelagic marine species	Unlikely
Thinornis cucullatus cucullatus	Hooded Plover	VU	V	1	None	Occurs mainly on sandy ocean beaches, just on the tide line. Total population in SA is approx. 540 birds.	Unlikely
Tringa brevipes	Grey-tailed Tattler	Mi (W)	R	1, 2	20/03/2004	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely
Tringa glareola	Wood Sandpiper	Mi (W)	R	1,2	18/03/2006	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely
Tringa nebularia	Common Greenshank	Mi (W)		1	None	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely

Scientific name	Common name	Conservation status		Source	Last record	Distribution and habitat preferences	Likelihood of Occurrence
		Aus.	SA		(year)		within Project Site
Tringa stagnatilis	Marsh Sandpiper	Mi (W)		1	None	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely
Xenus cinereus	Terek Sandpiper	Mi (W)	R	1,2	04/04/2012	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely
REPTILES	·				•		
Caretta caretta	Loggerhead Turtle	EN, Mi (Ma)	E	1	None	Marine Species	Unlikely
Chelonia mydas	Green Turtle	VU, Mi (Ma)	V	1,2	22/12/2008	Marine Species	Unlikely
Dermochelys coriacea	Leatherback Turtle	EN, MI (Ma)	V	1	None	Marine Species	Unlikely
Tiliqua adelaidensis	Pygmy Blue-tongue Lizard	EN	E	1	None	Remnant native grassland or grassy woodland with a sparse overstorey of trees.	Unlikely
MAMMALS					·		
Balaenoptera edeni	Bryde's Whale	Mi (M)		1	None	Marine Species	Impossible
Caperea marginata	Pygmy Right Whale	Mi (M)		1	None	Marine Species	Impossible
Eubalaena australis	Southern Right Whale	EN	V	1	None	Marine Species	Impossible
Lagenorhynchus obscurus	Dusky Dolphin	Mi (M)		1	None	Marine Species	Impossible
Megaptera novaeangliae	Humpback Whale	VU, Mi (Ma)	V	1	None	Marine Species	Impossible
Neophoca cinerea	Australian Sea-lion,	VU	V	1	None	About 80 per cent of the world's Australian Sea-lion population occurs in SA. These animals travel large distances to find food but return to the same places to rest on land.	Unlikely

Scientific name	Common name	Conservation status		Source	Last record	Distribution and babitat preferences	Likelihood of Occurrence
		Aus.	SA		(year)		within Project Site
Pteropus poliocephalus	Grey-headed Flying-fox	VU	R	1,2	25/02/2020	The distribution of the Grey-headed Flying Fox has contracted in the north of Australia, and expanded in the south, with the roosting colony at Botanic Park first recorded in 2010. Grey-headed Flying Foxes forage over a wide area, with individuals capable of travelling 40 km between their roost and feeding sites in a night feeding on flowers fruits and nectar.	Possible
SHARKS							
Carcharodon carcharias	Great White Shark	VU, Mi (Ma)		1	None	Marine Species	Impossible
Lamna nasus	Porbeagle, Mackerel Shark	Mi (MA)		1	None	Marine Species	Impossible
FISH							
Thunnus maccoyii	Southern Bluefin Tuna	CD		1	None	Marine Species	Impossible
Seriolella brama	Blue Warehou	CD		1	None	Marine Species	Impossible

Conservation status: Aus.: Australia (Environment Protection and Biodiversity Conservation Act 1999). SA: South Australia (National Parks and Wildlife Act 1972). Conservation codes: CD: Conservation Dependent. CE: Critically Endangered. EN/E: Endangered. VU/V: Vulnerable. R: Rare. Mi: Migratory, Ma: Marine, T: Terrestrial, W: Wetland species.





Figure 6. National and state conservation significant fauna observations within 5km of project site.

🔘 Over lapping data cluster origin 😽 🖈	Glossy Ibis (Plegadis falcinellus) SA : R
Threatened fauna (BDBSA records, number of records 🛛 🖈	Great Crested Grebe (Podiceps cristatus australis) SA : R
 ▲ Australasian Bittern (Botaurus poiciloptilus) ★ AUS : EN, SA : E 	Green Sea Turtle (Chelonia mydas) AUS : VU, SA : V Grey-headed Flying-fox (Pteropus poliocephalus)
 Australasian Darter (Anhinga novaehollandiae novaehollandiae) SA : R 	AUS : VU, SA : R Grey-tailed Tattler (Tringa brevipes) SA : R
 Australasian Shoveler (Spatula rhynchotis) SA : R Australian Painted-snipe (Rostratula australis) AUS : EN, SA : E 	Latham's Snipe (Gallinago hardwickii) SA : R Little Eagle (Hieraaetus morphnoides) SA : V
▲ Banded Stilt (Cladorhynchus leucocephalus) SA : V	Little Egret (Egretta garzetta nigripes) SA : R Little Tern (Sternula albifrons sinensis) SA : E
▲ Black Falcon (Falco subniger) SA : R	Long-toed Stint (Calidris subminuta) SA : R
SA: R	Pacific Golden Plover (Pluvialis fulva) SA : R
O Black-tailed Godwit (Limosa limosa melanuroides) SA : R	Pectoral Sandpiper (Calidris melanotos) SA : R Pied Ovstercatcher (Haematonus longirostris) SA : R
 Blue-billed Duck (Oxyura australis) SA : R 	Plumed Egret (Ardea intermedia plumifera) SA : R
O Brown Quail (Coturnix ypsilophora australis) SA : V ▼	Red Knot (ssp. rogersi) (Calidris canutus rogersi) SA : E
 Cape Barren Goose (Cereopsis novaehollandiae novaehollandiae) SA : R 	Ruddy Turnstone (Arenaria interpres interpres) SA : R
Common Sandpiper (Actitis hypoleucos) SA : R	Ruff (Calidris pugnax) SA : R
 Curlew Sandpiper (Calidris ferruginea) AUS : CR, SA : E 	Samphire Thornbill or Slender-billed Thornbill Gulf St Vincent) (Acanthiza iredalei rosinae) AUS : VU, SA : V
🖌 Eastern Cattle Egret (Bubulcus ibis coromandus) SA : R 🕇	Sooty Oystercatcher (Haematopus fuliginosus fuliginosus) SA : R
★ Elegant Parrot (Neophema elegans elegans) SA : R	Terek Sandpiper (Xenus cinereus) SA : R
Fairy Tern (Sternula nereis nereis) AUS : VU, SA : E	Whimbrel (Numenius phaeopus variegatus) SA : R
AUS : CR, SA : E	Wood Sandpiper (Tringa glareola) SA : R

Figure 7. Threatened fauna species legend.

Freckled Duck (Stictonetta naevosa) SA : V


5.2 Field Assessment

Field assessments were undertaken within the project site on 29th June 2022 (BAM facility) and 11th May 2023 (Pipeline) (Figure 2). The vegetation was comprised of planted indigenous amenity shrub and tree species over an exotic understorey with low density emergent native indigenous shrubland vegetation. Plantings of amenity species were comprised of locally indigenous species however were planted in rows and likely to be as a functional stand for water take up or filtration rather than as a habitat area. Sheep were grazing this area as a pasture at the time of the assessment.

5.2.1 Vegetation associations

Ten vegetation associations were recorded within the project site and are summarised below in Table 7 and shown in to Figure 13 in more detail. The total area is 26.72 ha with 22.22 ha comprised of at least one stratum of native vegetation. These associations were observed to be in poor condition and providing low habitat value being present as emergent naturally regenerating species which are recognised as highly disturbance resistant and grow naturally in areas where high disturbance occurs such as around water points and roadsides.

Assoc #	Description	UBS	Area (ha)
1	Myoporum insulare (Boobialla) amenity plantings over exotic grassland and emergent chenopod shrubs.	3.14	0.64
2	Mixed Amenity plantings over emergent chenopod shrubs.	6.23	3.41
3	Sparsely planted <i>Eucalyptus largiflorens</i> (Black Box), <i>E. odorata</i> (Peppermint Box) Woodland +/- planted <i>Eucalyptus spathulata</i> (Swamp Mallet) over planted amenity species and emergent <i>Nitraria billardierei</i> (Nitre Bush) and <i>Maireana</i> <i>brevifolia</i> (Lobe Fruit Bluebush) shrubland.	22.23	3.13
4	Tecticornia pergranulata (Black See Samphire) emergent under planted Melaleuca halmaturorum (Swamp Paperbark) and Atriplex rhagodioides (Silver Saltbush).	29.60	0.75
5	Planted Melaleuca halmaturorum (Swamp Paperbark) over planted Atriplex rhagodioides (Silver Saltbush) and emergent chenopod shrubs	15.15	3.68
6	Mixed amenity shrubs over exotic grassland and emergent chenopod shrubs	7.79	9.65
7	Fallow land used for industrial or storage areas.	N/S*	4.49
8	Nitraria billardierei (Nitre Bush) Low Open Shrubland.	15.50	0.21
9	Myoporum insulare (boobialla) emergent shrubs over Threlkeldia diffusa (Coast Bonefruit) and Maireana brevifolia (Short leaved Bluebush).	4.16	0.65
10	Austrostipa spp. (Spear Grass), Chloris truncata (Windmill Grass) Open Grassland.	7.62	0.10
		Total	26.72

Table 7. Vegetation association summary.

*N/S denotes not scored as native vegetation or bushland.





Figure 8. Vegetation associations recorded within the BAM facility and pipeline sites.





Figure 9. Vegetation associations recorded within the BAM facility site.



Figure 10. Vegetation associations recorded along the eastern extent of the pipeline site.





Figure 11. Vegetation associations recorded along the north-eastern extent of the pipeline site.





Figure 12. Vegetation associations recorded along the north-western extent of the pipeline site.



Figure 13. Vegetation associations recorded along the western extent of the pipeline site.









General description		Area adjacent semi-intact samphire community and infrequently inundated by rainfall during the winter months. Good cover of samphire and lower weed invasion in this section due to annual wetting drowning many species not				
		toler	rant of wet and sa	aline conditions.		
Threatened specie	es or	This o	community is not	conservation sig	nificant at regional,	state or Federal
community		leve	l.			
			 Bubulcus ibis Cereopsis nov Melithreptus g Neophema e Coturnix ypsik Hieraaetus m Acanthiza ireg Gulf St Vincer 	coromandus (Ea vaehollandiae n gularis (Black-chi legans elegans ophora australis orphnoides (Littli dalei rosinae (Sa nt)	astern Cattle Egret) iovaehollandiae (Ca inned Honeyeater) (Elegant Parrot) (Brown Quail) e Eagle) amphire Thornbill or S	ape Barren Goose) Slender-billed Thornbill
Landscape context score	1.22		Vegetation Condition Score	22.06	Conservation significance score	1.10
Unit biodiversity 29.60 Score			Area (ha)	0.75	Total biodiversity Score	22.20





Vegetation association 6	Mixed amenity shrubs over exotic grassland and emergent chenopod shrubs
General description	Planted amenity overstorey over exotic cover, heavy clay loams mean that suitable for exotic annual grass and herbaceous species and grazing maintains fresh growth of chenopod shrubs at small stature and height. Most trees and particularly <i>Atriplex paludosa</i> (Marsh Saltbush) being heavily grazed.
Threatened species or community	 This site is not conservation significant at regional, state or Federal level. It may however provide temporary habitat for the following species: Bubulcus ibis coromandus (Eastern Cattle Egret) Cereopsis novaehollandiae (Cape Barren Goose) Melithreptus gularis (Black-chinned Honeyeater) Neophema elegans elegans (Elegant Parrot) Coturnix ypsilophora australis (Brown Quail) Hieraaetus morphnoides (Little Eagle)

Landscape context score	1.22	Vegetation Condition Score	5.81	Conservation significance score	1.10
Unit biodiversity Score	7.79	Area (ha)	9.52	Total biodiversity Score	74.16





2

Vegetation asso	ciation 8	Nitraria billardiere	ei (Nitre Bush) Low (Open Shrubland.	
General description Threatened species or community		Semi degraded of been altered by f in this area is a m natural stratum a grass, herbaceou This site is not con Unlikely to suppor provide transient Parrot). The adjacent san conservation valu	chenopod shrublar the presence of the ix of exotic and inc nd in poor conditions and woody spectors servation significant thabitat for threat habitat for Neoph aphire shrubland have ue but will not be in	nd where natural g e drain bank. The r ligenous species no on with elevated le cies. Int at regional, state rened species. It m ema elegans elegan as high ecological npacted by this pr	round level has esultant regrowth ot resembling a vels of exotic e or Federal level. ay potentially ans (Elegant and oject.
Landscape context score	1.20	Vegetation Condition Score	11.74	Conservation significance score	1.10
Unit biodiversity Score	15.50	Area (ha)	1.52	Total biodiversity Score	23.55





Vegetation association 10		Austrostipa spp. (Grassland.	Spear Grass), Chlo	ris truncata (Windr	nill Grass) Open
General description		Small disjunct pa poor condition. A contiguous with c change in condit	tch of native grassl approximately 50% other intact patche ion or spread to ot	and surrounded by native cover, this a and is therefore l her areas.	y other areas of area is not likely to not
Threatened species or community		This site is not con due to the small of connectivity to a	servation significar extent and quality ny other intact pat	nt at regional, state of the grassland. Le ches.	e or Federal level ow levels of
Landscape context score	1.20	Vegetation Condition Score	5.78	Conservation significance score	1.10
Unit biodiversity Score	7.62	Area (ha)	0.10	Total biodiversity Score	0.76



5.2.2 Regionally significant flora species

Flora species richness within the project site was low as a result of the site being grazed and has been almost entirely modified historically. As a result, all remnant native vegetation is present as reestablished or emergent shrubs only. No flora species of state or national significance were recorded within the project site and were not considered likely to occur based on the quality of the habitat present within the project site. At a regional context, remnant species rated vulnerable or rare in the Adelaide Mt Lofty Ranges (AMLR) region were recorded from within the project site (Table 8). *Maireana aphylla* (Cotton-bush) was present within amenity planted associations as remnant scattered individuals within density increasing with proximity to the intact samphire areas adjacent to the project site.

Species name	Common name	AMLR	Comment
Maireana aphylla	Cotton-bush	VU	Likely to be sparsely remnant in parts of the project site. Never in dense growth habit but present within planted amenity zones.
Nitraria billardierei	Nitre-bush	RA	Present sparsely within remnant communities and degraded areas. While listed as rare, this species is very disturbance resistant and a common component of disturbed roadsides and high traffic areas.
Tecticornia halocnemoides	Grey Samphire	VU	Associated within intact Samphire shrublands only in the south-eastern corner of project site.
Tecticornia pergranulata ssp.	Black-seed Samphire	RA	Associated within intact Samphire shrublands only in the south-eastern corner of project site.

Table 8. Regionally significant flora species (Adelaide region) observed during assessment.

AMLR conservation ratings: Vulnerable: VU, Rare: RA.



5.2.3 Significant and Regulated Scattered Trees

Eighteen regulated trees subject to provisions under the PDI Act were located within the project site. Stormwater drainage infrastructure is located around the site boundary however where possible, larger trees providing screening around the boundary will be retained as visual amenity for the Project. The locations of these trees are summarised below in Table 9 and shown in Figure 14 and Figure 15. Ten of these trees were significant by warrant of them having a circumference of greater than 3m. A high number of these trees were in less than optimum health with numerous broken limbs and dieback observed across the area. Each tree is summarised individually including images in Appendix 1.

Tree ID	Species	Height	Diameters	Average Circumference	Iotal Circumference	Regulated/ Significant
1	Eucalyptus spathulata	10	54, 19, 21	98.44	295.31	R
2	Eucalyptus odorata	11.4	71.5	224.62	224.62	R
3	Eucalyptus odorata	7.6	70.5	221.48	221.48	R
4	Eucalyptus nicholii	8.2	32, 28.5, 21, 24, 22	85.35	400.55	S
5	Melaleuca lanceolata	8.7	36, 35, 34	109.96	329.87	S
6	Eucalyptus spathulata	9.8	81.5, 28.5, 17	132.99	398.98	S
7	Eucalyptus spathulata	12.1	81, 35	182.21	364.42	S
8	Eucalyptus spathulata	9.7	82, 35, 25	148.70	446.11	S
9	Eucalyptus spathulata	5.7	48, 29, 29.5	111.53	334.58	S
10	Melaleuca lanceolata	4.7	46,34	125.66	251.33	R
11	Eucalyptus spathulata	11.2	87	273.32	273.32	R
12	Eucalyptus spathulata	7.7	53,27	125.66	251.33	R
13	Melaleuca lanceolata	8	43.5, 29, 22, 29, 20, 20,	99.48	515.22	S
14	Eucalyptus odorata	7.5	51,18	108.38	216.77	R
15	Eucalyptus spathulata	13.2	69	216.77	216.77	R
16	Eucalyptus spathulata	11.7	53,51	163.36	326.73	S
17	Eucalyptus spathulata	11.1	33, 25.5, 23, 40	85.35	381.70	S
18	Eucalyptus spathulata	13.0	112	351.85	351.85	S

Table 9. Scattered regulated tree summary.



Figure 14. Locations of scattered regulated trees.





Figure 15. Locations of scattered regulated trees.



5.2.4 Fauna species

A total of 31 fauna species were recorded during site specific fauna surveys within the project site and were all avian species. No species of conservation significance were recorded. A targeted survey for Slender billed Thornbill (*Acanthiza iredalei iredalei*) was undertaken and no individuals of any thornbill species were observed. Given the stable home range extents for this species and lack of records within the area, it is considered highly unlikely that this species occurs within the project site (also see Section 5.1.4 and Table 6).

5.3 Cumulative impact

Under the current proposal the entirety of the project site is included for clearance accounting for cumulative impacts associated with the operation of an industrial plant. Offsite impacts such as dust etc would only drift onto other areas used for industrial purposes and the WWTP. No cumulative impacts area expected from this proposal.

5.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

a) Avoidance - outline measures taken to avoid clearance of native vegetation.

The project has been designed to minimise clearance of native vegetation where practicable. The stormwater channel runs along the eastern boundary and with its current design, would require some vegetation clearance. However, the stormwater channel design is maturing with ongoing collaboration with stakeholders, including SA Water and Council. Collaboration with the City of Playford Council includes discussions with regard to how stormwater design along Robinson Road can fit within the Councils long term planning for broader stormwater management. Final siting and design of the stormwater channel will aim to minimise clearing of native vegetation and maintain the screen along the eastern boundary, where practicable.

b) Minimization – if clearance cannot be avoided, outline measures taken to minimize the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).

The surrounding land use means that adjoining vegetation is largely disturbed and that disturbance to surrounding areas is not likely to place added pressure on areas of vegetation.

c) Rehabilitation or restoration – outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimized, such as allowing for the re-establishment of the vegetation.



Any vegetation areas retained within the project footprint will be managed for weeds and enhanced through additional plantings of locally indigenous species in the absence of grazing pressure from sheep.

d) Offset – any adverse impact on native vegetation that cannot be avoided or further minimized should be offset by the achievement of a significant environmental benefit that outweighs that impact.

5.5 Principles of Clearance (Schedule 1, Native Vegetation Act 1991)

The Native Vegetation Council will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The Native Vegetation Council will consider all the principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016*. As this project is being approved via an EIS under the Planning, Development and Infrastructure Act, Native Vegetation Regulation 13 applies. It is understood that, as a consequence, only Principles 1b, 1c and 1d require addressing. However, for completeness, the remaining principles of clearance have been addressed where information is available.

Principle of clearance	Considerations
Principle 1a - it comprises a high level of diversity of plant species	<u>Relevant information</u> Very low species richness with only highly disturbance resistant species emergent as understorey to amenity shrub and tree plantings. Association 4 (native species diversity score: 16) has a higher coverage of samphire and lower weed invasion due to annual wetting drowning many species not tolerant of wet and saline conditions.
	Assessment against the principles Association 4 is at variance with this principle
	Moderating factors that may be considered by the NVC. Only a small patch (0.75ha) of habitat is present which is surrounded by highly disturbed land use.
Principle 1b - significance as a habitat for wildlife	Relevant information A total of 42 fauna species had historical BDBSA records within and surrounding the project site. No species of conservation significance were recorded during field assessments within the project footprint over two survey periods. Three species of national conservation significance were considered to possibly occur within the project site.
	 Grey-headed Flying-fox (<i>Pteropus Poliocephalus</i>) Blue-winged Parrot (<i>Neophema chrysostoma</i>) Fairy Tern (<i>Sternula nereis nereis</i>) (Flyover only)
	A further three species of state conservation significance were considered to possibly occur within the project site.
	 Elegant Parrot (Neophema elegans) Little Egret (Egretta garzetta nigripes) Brown Quail (Coturnix ypsilophora australis)
	Threatened Fauna Score – The threatened fauna score for all associations was 0.1.



	Unit biodiversity Scores ranged from 32.07 down to 3.12.
	Assessment against the principles Seriously at Variance
	Vegetation associations 4, 5, 6, 8, 9, 10 were seriously at variance with this principle.
	Moderating factors that may be considered by the NVC. While the area may provide habitat for some threatened fauna species it is likely to be as a transient period only. The surrounding land use of a WWTP and horticulture means that there is a very low remnancy surrounding the area and that species moving through the area are likely to preferentially use even degraded zones such as the project site despite it being grazed as a farming allotment and little care shown for its ongoing maintenance as a vegetation stratum. There is another large, vegetated area to the north of the project site and provided this is retained in the longer term, development of the project site is not likely to lead to a long-term decline in threatened species populations.
Principle 1c - plants of a rare,	Relevant information No threatened flora recorded or likely to ever utilise this area while being used as a farming allotment.
vulnerable or endangered species	Assessment against the principles Not At Variance
	Moderating factors that may be considered by the NVC
Principle 1d - the vegetation comprises the whole or	Relevant information No threatened ecological communities were recorded within the project site. The area has been subject to long term degradation and the only remnant communities within the local area are samphire and Mangroves associated with the coastal fringe. Threatened Community Score – 0, No threatened communities present.
community that is Rare, Vulnerable or	Assessment against the principles Not at variance
endangered:	Moderating factors that may be considered by the NVC
Principle 1e - it is significant as a remnant	<u>Relevant information</u> Remnancy in the St Vincent IBRA Subregion is 8%. Remnancy in the Mallala Environmental Association is 3% and, in the Parham, Environmental Association is 44%.
in an area	Total Biodiversity Score – Total biodiversity score 232.99
which has been	Assessment against the principles The clearance of vegetation within the Project is considered Seriously at Variance
cleared.	Moderating factors that may be considered by the NVC. This site has historically been mostly cleared and used for farming. The regeneration of disturbance resistant species is not unusual for areas such as this where heavy saline soils will grow little else other than annual grasses during winter.
Principle 1f - it is growing in, or in association with, a	<u>Relevant information</u> Prior to this area being highly modified through evaporation and salt pans, the project site was likely to be right at the edge of the supra tidal Zone. A 'sort of' wetland remains in the southern section of the project site however this is from rainfall collecting and having nowhere to naturally drain.
wetland	Assessment against the principles
environment.	Vegetation association 4 is theoretically a wetland and is evidenced by the persistence of Tecticornia shrubland that is the only species that can persist longer term in the area



	dependent on how wet each year is. The wetland composition is likely to flux from year-to- year dependent on the water depth and length of time that water remains in the wetland.
	Moderating factors that may be considered by the NVC.
	The wetland provides little to no habitat value as with the grazing that occurs in the site the
	bare ground is mud and is likely to provide little foraging value for wetland species.
Principle 1g -	Relevant information
it contributes	The boundary screen provides good amenity value however the useful lifespan of many of
significantly	these trees is nearing completion with many trees either falling over or shedding limbs.
to the	N/A
amenity of the	
area in which	Moderating factors that may be considered by the NVC.
it is growing or	The primary amenity value is provided by planted trees rather than the native vegetation
is situated.	which does not present as an attractive community.



6 Offset requirements

Unit biodiversity scores were highest in the southern section of the project site where temporary inundation from rainfall occurs adjacent to a semi-intact samphire community south of the project site. The indigenous cover in this area is moderate and evidence of emergent *Maireana brevifolia* being drowned out was observed during the field survey meaning there is a moderate disturbance level occurring where annual exotic species are unable to persist.

The lowest biodiversity scores were in the northern section of the project site where the majority of the cover was provided by planted amenity species.

Block	Site	Native species diversity score	Threatened Ecological	Threatened plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	Loadings	Reductions	SEB Points required	SEB payment	Admin Fee
1	1	6	1	0	0.1	3.12	0.64	2.00	1			2.10	\$1,200.17	\$66.01
1	2	6	1	0	0.1	6.23	3.41	21.24	1			22.31	\$12,768.77	\$702.28
1	3	8	1	0	0.1	22.23	3.13	69.58	1			73.06	\$41,820.61	\$2,300.13
1	4	16	1	0	0.1	29.6	0.75	22.20	1			23.31	\$13,343.19	\$733.88
1	5	10	1	0	0.1	15.15	3.68	55.75	1			58.54	\$33,509.43	\$1,843.02
1	6	6	1	0	0.1	7.79	9.65	75.17	1			78.93	\$45,182.61	\$2,485.04
1	8	10	1	0	0.1	17.66	0.21	3.71	1			3.89	\$2,229.03	\$122.60
1	9	10	1	0	0.1	4.23	0.65	2.75	1			2.89	\$1,652.57	\$90.89
1	10	6	1	0	0.1	7.75	0.1	0.78	1			0.81	\$465.81	\$25.62
						Total	22.22	253.1796				265.84	\$152,172.18	\$8,369.47

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	253.18	265.84	\$152,172.18	\$8,369.47	\$160,541.65



7 Summary

The biodiversity scores and the observed habitat value were contradictory, with the large majority of bird species being observed in the northern section of the project site where native vegetation cover was lowest. There were a number of reasons for this, however, overwhelmingly the density of the planted *Myoporum insulare* strips as well as the multiple structures present in terms of vegetation stratum levels was the key driver of bird diversity. The diversity of planted species was above which would be considered natural from an overstorey canopy perspective. There were five species each represented in the genus *Eucalyptus* and *Acacia* as well as *Santalum, Myoporum, Allocasuarina* and *Atriplex.* The eastern boundary strip had Western Australian wheatbelt tree species which added additional structural and floristic variability. This range of species provided for a wide band of flowering periods as well as nesting and roosting habitat. Notwithstanding this, the samphire habitats, while not rich from a floristic diversity perspective, provide potential habitat for species with specific niche requirements and in an area where increasing pressure is placed on these communities through development, climate change and other indirect impacts. As such, these remnant communities are of higher local conservation value.



8 References

- Bureau of Meteorology (2022) Climate statistics for Australian locations. Monthly climate statistics http://www.bom.gov.au/climate/averages/tables/cw_023083.shtml
- Department of Climate Change Energy, The Environment and Water (2023) Protected Matters Search Tool. Online Resource viewed 23 June 2023. http://www.environment.gov.au/epbc/protected-matters-search-tool.
- Department of the Environment and Energy (DotEE) (2012) Interim Biogeographic Regionalisation for Australia v. 7 (IBRA) [ESRI shapefile]. Available at: <u>http://intspat01.ris.environment.gov.au/fed/catalog/search/resource/details.page?uuid=%</u> <u>7B3C182B5A-C081-4B56-82CA-DF5AF82F86DD%7D</u>
- Department for Environment and Water (2022) National Parks and Wildlife Service SA, Adelaide International Bird Sanctuary National Park - Winaityinaityi Pangkara. Online resource viewed 11/10/2022. <u>https://www.parks.sa.gov.au/find-a-</u> <u>park/Browse_by_region/Adelaide/adelaide-international-bird-sanctuary-national-</u> <u>park?satcMcld=51807515214391299002527645387188816710</u>
- Department for Environment and Water (2022). BDBSA Supertable overview. http://www.environment.sa.gov.au/Science/Information_data/Biological_databases_of_So uth_Australia (23 November 2022).
- Eby, P., and Law, B. S. (2008). Ranking the feeding habitat of grey-headed flying-foxes for conservation management. Department of Environment, Heritage, Water and the Arts: Canberra



9 Appendices

Appendix 1. Regulated trees.

Tree ID - 1
Eucalyptus spathulata
Number of trees – 1
Height (m) – 10
Stems – Multi
Average Circumference – 98.44
Total Circumference – 295.31



Tree ID - 2
Eucalyptus odorata
Number of trees – 1
Height (m) – 11.4
Stems – Single
Average Circumference – 224.62
Total Circumforanco 224.62
Total Circumierence – 224.02
Total Circumerence - 224.02
Total Circumierence – 224.02
Total Circumerence - 224.02
Total Circumerence – 224.02



Tree ID - 3
Eucalyptus odorata
Number of trees – 1
Height (m) – 7.6
Stems – Multi
Average Circumference – 221.48
Total Circumference –221.48
Total Circumference -221.48
Total Circumference -221.48
Total Circumference –221.48
Total Circumference -221.48



Tree I	D -	4
--------	-----	---

Number of trees – 1

Height (m) – 8.2

Stems – Multi

Average Circumference – 85.35

Total Circumference – 400.55



IICCID 0	Tree	ID	- 5
----------	------	----	-----

Melaleuca lanceolata Number of trees – 1 Height (m) – 8.7 Stems – Multi Average Circumference – 109.96 Total Circumference – 329.87



Tree ID - 6
Eucalyptus spathulata
Number of trees – 1
Height (m) – 9.8
Stems – Multi
Average Circumference – 132.99
Total Circumference – 398.98



Tree ID - 7

- Number of trees 1
- Height (m) 12.1

Stems – Multi

Average Circumference - 182.21

Total Circumference – 364.42



Tree ID - 8
Eucalyptus spathulata
Number of trees – 1
Height (m) – 9.7
Stems – Multi
Average Circumference – 148.70
Total Circumference – 446.11



Tree ID - 9
Eucalyptus spathulata
Number of trees – 1
Height $(m) = 5.7$

Tree ID - 10

Stems – Multi

Average Circumference – 111.53 Total Circumference – 334.58

- Number of trees 1
- Height (m) 4.7

Stems – Multi

Average Circumference – 125.66

Total Circumference – 251.33



Tree ID - 11	
Eucalyptus spathulata	
Number of trees – 1	
Height (m) – 11.2	
Stems – Single	
Average Circumference – 273.32	
Total Circumference – 273.32	



_	

Tree ID - 12	
Eucalyptus spathulata	
Number of trees – 1	
Height (m) – 7.7	
Stems – Multi	
Average Circumference – 125.66	
Total Circumference – 125.66	



Tree ID - 13
Melaleuca lanceolata
Number of trees – 1
Height (m) – 8
Stems – Multi
Average Circumference – 99.48
Total Circumference – 515.22



Tree ID - 14
Eucalyptus odorata
Number of trees – 1
Height (m) – 7.5
Stems – Multi
Average Circumference – 108.38
Total Circumference – 216.77



Tree ID - 15
Eucalyptus spathulata
Number of trees – 1
Height (m) – 13.2
Stems – Single



Tree ID - 16
Eucalyptus spathulata
Number of trees – 1
Height (m) – 11.7
Stems – Multi
Average Circumference – 163.36
Total Circumference – 326.73

Average Circumference – 216.77 Total Circumference – 216.77



Tree ID - 17	
Eucalyptus spathulata	
Number of trees – 1	
Height (m) – 11.1	
Stems – Multi	
Average Circumference – 85.35	
Total Circumference – 381.70	





Tree ID - 18	
Eucalyptus spathulata	
Number of trees – 1	
Height (m) – 13	
Stems – Single	
Average Circumference – 351.85	
Total Circumference – 351.85	





Appendix 2. PMST results summary

Department of Agriculture, Water and the Environment

Protected Matters Search Tool

Report Generated - 3:25PM - 29 May 2023

Matters of National Environment Significance	Count
World Heritage Properties	0
National Heritage Places	0
Wetlands of International Importance (Ramsar Wetlands)	0
Great Barrier Reef Marine Park	0
Commonwealth Marine Area	0
Listed Threatened Ecological Communities	2
Listed Threatened Species	48
Listed Migratory Species	63

Extra Information	Count
State and Territory Reserves	5
Regional Forest Agreements	0
Nationally Important Wetlands	2
EPBC Act Referrals	13
Key Ecological Features	0
Biologically Important Areas	3
Bioregional Assessments	0
Geological and Bioregional Assessments	0

22
22
C
97
8
C
C
C
C

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 and is accurate at the time of generation. Please see the caveat for interpretation of information provided here. Consider carefully the age of information for decision making.

Report Metadata

Caveat
Appendix 3. BDBSA flora records

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Sighting
Acacia acinacea	Wreath Wattle			26/09/2010
Acacia cyclops	Western Coastal Wattle			14/02/2018
Acacia ligulata	Umbrella Bush			24/11/1999
Acacia sp.	Wattle			25/12/1997
Acacia victoriae ssp.	Elegant Wattle			20/08/2010
Aeonium arboreum	Tree Aeonium			18/04/2011
Aizoon pubescens	Coastal Galenia			14/02/2018
Aizoon sp.	Galenia			30/11/1999
Anredera cordifolia	Madeira Vine			11/04/2022
Arctotheca calendula	Cape Weed			28/09/2010
Arundo donax	Giant Reed			24/11/1999
Asphodelus fistulosus	Onion Weed			16/02/1999
Atriplex paludosa ssp.	Marsh Saltbush			20/08/2010
Atriplex paludosa ssp. cordata	Marsh Saltbush			24/11/1999
Atriplex paludosa ssp. paludosa	Marsh Saltbush			20/08/2010
Atriplex prostrata	Creeping Saltbush			14/02/2018
Atriplex semibaccata	Berry Saltbush			14/02/2018
Atriplex suberecta	Lagoon Saltbush			20/08/2010
Austrostipa nitida	Balcarra Spear-grass			26/09/2010
Austrostipa nodosa	Tall Spear-grass			20/08/2010
Austrostipa puberula	Fine-hairy Spear-grass			14/11/1996
Austrostipa scabra ssp.	Rough Spear-grass			28/09/2010
Austrostipa sp.	Spear-grass			23/11/1999
Avena barbata	Bearded Oat			30/11/1999
Avena sp.	Oat			14/02/2018
Avicennia marina ssp. marina	Grey Mangrove			27/11/2018
Brassica sp.				16/02/1999
Brassica tournefortii	Wild Turnip			20/08/2010
Bromus diandrus	Great Brome			10/11/2013
Bromus sp.	Brome			16/02/1999
Casuarinaceae sp.	Sheoak Family			16/02/1999
Cenchrus ciliaris	Buffel Grass			20/03/2015
Cenchrus clandestinus	Kikuyu			24/11/1999
Chenopodium album	Fat Hen			18/04/2011
Chenopodium sp.	Goosefoot			24/11/1999
Chloris truncata	Windmill Grass			13/08/2010
Compositae sp.	Daisy Family			25/12/1997
Convolvulus erubescens complex				20/08/2010
Conyza canadensis var. canadensis	Canadian Fleabane			20/08/2010
Critesion sp. (NC)	Barley-grass			17/12/1997
Cynara cardunculus ssp. flavescens	Artichoke Thistle			25/06/2021
Cynodon dactylon (NC)	Couch			24/11/1999
Cynodon sp.	Couch			14/02/2018

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Sighting
Cyperus eragrostis	Drain Flat-sedge			18/04/2011
Danthonia sp. (NC)	Wallaby-grass			10/02/1999
Dichanthium sericeum ssp.	Silky Blue-grass			20/08/2010
Dichanthium sericeum ssp. sericeum	Silky Blue-grass			24/08/2010
Disphyma crassifolium ssp. clavellatum	Round-leaf Pigface			14/11/1996
Echinochloa crus-galli	Common Barnyard Grass			18/04/2011
Echium plantagineum	Salvation Jane			30/11/1999
Elytrigia repens	Twitch Grass			3/02/1996
Enchylaena tomentosa var.	Ruby Saltbush			20/08/2010
Enchylaena tomentosa var. tomentosa	Ruby Saltbush			14/02/2018
Enteropogon acicularis	Umbrella Grass			23/11/1999
Eragrostis cilianensis	Stink Grass			18/04/2011
Erodium cicutarium	Cut-leaf Heron's-bill			20/08/2010
Erodium moschatum	Musky Herons-bill			28/09/2010
Eucalyptus camaldulensis ssp. camaldulensis	River Red Gum			14/02/2018
Eucalyptus leucoxylon ssp.	South Australian Blue Gum			14/02/2018
Eucalyptus porosa	Mallee Box			14/02/2018
Eucalyptus sp.				14/02/2018
Eucalyptus torquata	Coral Gum			14/02/2018
Frankenia pauciflora var. gunnii	Southern Sea-heath			14/11/1996
Fraxinus angustifolia ssp. angustifolia	Narrow-leaved Ash			14/02/2018
Gahnia filum	Thatching Grass			14/11/1996
Gazania linearis	Gazania			18/04/2011
Glandularia aristigera	Mayne's Pest			23/11/1999
Gramineae sp.	Grass Family			25/12/1997
Halosarcia sp. (NC)	Samphire			16/02/1999
Heliotropium europaeum	Common Heliotrope			14/02/2018
Hemichroa pentandra	Trailing Hemichroa			23/11/2018
Hordeum glaucum	Blue Barley-grass			17/12/1997
Hordeum marinum	Sea Barley-grass			20/08/2010
Hordeum vulgare	Barley			30/11/1999
Hordeum vulgare ssp. (NC)				10/02/1999
Hornungia procumbens	Oval Purse			14/11/1996
Isolepis marginata	Little Club-rush			14/02/2018
Juncus acutus	Sharp Rush			14/02/2018
Juncus bufonius	Toad Rush			14/11/1996
Juncus radula	Hoary Rush		V	24/09/1999
Lactuca serriola (NC)	Prickly Lettuce			24/11/1999
Lactuca sp.	Lettuce			14/02/2018
Lepidium africanum	Common Peppercress			20/08/2010
Limonium companyonis	Sea-lavender			18/04/2011
Limonium diffusum				3/02/1996
Limonium lobatum	Winged Sea-lavender			20/08/2010

Ì

Made Statistic Contributing Pail Pai	Cracilla Norma		EPBC	NPW	Most Recent
Limonium sinudrium Notch-leaf Sala-Riveroper 3.00/1999 Loilum siglidum Ryegrass 18/04/2011 Loilum sp. Ryegrass 10/02/1999 Lomandra multificer sp. dura Alfrican Boxthom 22/01/2022 Lythrum sp. Loosestifie 20/08/2010 Maireana aphylia Cotton-bush 22/07/02/2022 Lythrum sp. Loosestifie 20/08/2010 Maireana ophylia Cotton-bush 22/06/2021 Maireana opopsilifolia Salt Blucbush 14/07/2018 Marieana opopsilifolia Salt Blucbush 29/11/2018 Marieana opopsilifolia Salt Blucbush Issure-plant 25/12/1997 Marublum vulgare Horehound 15/06/2021 Mariedana opopsilifolia Common Nardoo 27/06/2022 Medicaga polymorpha Burr-medic 28/09/2010 Mesembryanthemum crystallinum Common loceplant 14/11/1966 Nitre-bush 14/00/2018 20/06/2012 Onopordum acanthium Soctch Thistle 14/00/2018 Opuntia sp. INC) Pickky Pear 21/11/1999	Species Name		ACI	ACI	Signung
Lolum ngrum Winnera kysgrass 18/04/201 Lolum sp. Ryegrass 10/02/199 Lomandra multiflora ssp. dura Hard Matrush 23/11/1999 Lythrum foroclistimum African Boxhborn 22/08/2010 Mareana ophylla Cotton-bush 27/06/2022 Mareana ophylla Cotton-bush 27/06/2022 Mareana ophylla Sont-keat Blucbush 14/00/2018 Mareana ophylla Sont-keat Blucbush 29/11/2018 Mareana ophylla Sait Bluebush 29/11/2018 Maroubum vulgare Harchound 15/06/2021 Marsuba ophymorpha Burt-medic 28/09/2010 Medicago polymorpha Burt-medic 28/09/2010 Mesembryanthemum crystallinum Common iceplant 16/02/199 Mesembryanthemum any compare sp. Olive 14/02/2018 Olea europaea sp. Olive 14/02/2018 Olea europaea sp. Olive 14/02/2018 Opuntia sp. Nitre-bush 14/02/2018 Opuntia sp. Prickly Pear 23/11/1999 Parapholis fu		Notch-leaf Sea-lavender			3/02/1996
Loim sp. Hysgrass 10002/1499 Lomandra multiflora ssp. dura Hard Matrush 22/11/2022 Lythrum sp. Loosestrife 22/01/2022 Lythrum sp. Loosestrife 22/06/2022 Maireana aphylla Cotton-bush 22/105/2022 Maireana aphylla Cotton-bush 22/105/2022 Maireana aphylla Cotton-bush 29/11/2018 Maireana populifiolia Salt Bluebush 29/11/2018 Maireana sp. Bluebush/Hissure-plant 25/12/1997 Marislea drummondii Common Nardoo 27/06/2022 Medicaga polymorpha Burt-modic 28/09/2010 Mesembryanthemum crystallinum Common lceplant 14/02/2018 Nitratia bilardierei Nitre-bush 14/02/2018 Olea europaea ssp. Olive 4/06/2021 Onopardum acanthium Scotch Thistie 14/02/2018 Opunfia sp. Pickly Pear 23/11/1999 Opunfia sp. Native Millet 20/08/2011 Paricum Millioni Witch-grass 18/04/2011 Paricum Millioni Scotch Thistie 14/02/2018 Opunfia sp. Pickly Pear 23/11/1999 Panicum Simoni Scotch Thistie 16/02/1999 Phanorea sp. C	Lolium rigidum	Wimmera Ryegrass			18/04/2011
Lomandra multiflara sp. dura Hard Matrush 23/11/1499 Lydium ferocisimum African Boxhorn 22/2010 Maireana aphylla Cotton-bush 22/07/2022 Mareana brevifolta Short-leaf Bluebush 24/07/2018 Maireana opposififolta Salt Bluebush 24/07/2018 Maireana opposififolta Salt Bluebush 24/07/2018 Maireana opposififolta Salt Bluebush 24/07/2018 Maireana opposififolta Salt Bluebush 24/07/2018 Mareana opposififolta Common Nattoo 27/06/2022 Medicago polymorpha Buri-medic 28/09/2010 Mesembryanthemum crystallinum Common Nattoo 27/06/2021 Medicago polymorpha Buri-medic 28/09/2010 Mesembryanthemum notifforum Slender iceplant 16/02/1999 Mesembryanthemum notifforum Slender iceplant 14/07/2018 Olice europaea sp. Olive 44/06/2021 Onopordum acanthium Scitch Thistle 14/02/2018 Olice europaea sp. europaea Olive 44/06/2021 Onopordum acanthium Scitch Thistle 14/02/2018 Opuntia sp. (NC) Prickly Pear 223/11/1999 Opuntia sp. (NC) Prickly Pear 44/06/2021 Panicum Altimanii Witch-grass 18/04/2011 Panicum Altimanii Witch-grass 18/04/2011 Parapolis incurva Cutly Ryegrass 14/11/196 Parapolis incurva Cutly Ryegrass 14/11/199 Plinks sp. Pline 17/12/199 Plinks sp. Canary Crass 12/11/1999 Plantago najor Creater Plantalin 10/02/1999 Plantago najor Creater Plantalin 30/11/1999 Plantago najor Creater Plantalin 20/02/2019 Plantago najor Creater Plantalin 20/02/2019 Plantago najor Millet 16/02/1999 Plantago najor Creater Plantalin 20/02/2019 Plantago najor Creater Plantalin 20/02/2019 Plantago najor Creater Plantalin 20/02/2019 Plantago najor Creater Plantalin 20/02/2019 Plantago najor Millet 28/09/2010 Plantago najor Creater Plantalin 20/02/2018 Palyagonum aviculare (NC) Wreweed 14/02/2018 Palyagonum aviculare (NC) Wreweed 24/01/1999 Plantago najor Coreater Plantalin 20/02/2019 Plantago najor Co	Lolium sp.	Ryegrass			10/02/1999
Lyckum ferocissimum African Boxthorn 22/01/2022 Lythrum sp. Loosestrile 20/08/2010 Maireana aphylla Colton-bush 21/05/2022 Maireana aphylla Colton-bush 21/05/2022 Maireana sp. Bluebush/lisure-plant 25/17/1921 Marubium vulgare Horehound 15/06/2021 Marubium vulgare Horehound 15/06/2021 Marubium vulgare Horehound 27/05/2022 Medicago polymopha Burr-medic 28/09/2010 Mesembryanthemum crystallinum Common lceplant 16/02/1999 Mesembryanthemum nodiflorum Slender Iceplant 14/02/2018 Olea europace ssp. Olive 14/02/2018 Olea europace ssp. Olive 23/11/1999 Oppordum acenthium Scotch Thistle 14/02/2018 Oppordum acenthium Scotch Thistle 20/08/2010 Panicum decompositum var. decompositum Conthilled 20/08/2010 Panicum hilmanii Witch-grass 18/04/2011 Paragalum vaginatum Sait-water Couch 16/02/1999 </td <td>Lomandra multiflora ssp. dura</td> <td>Hard Mat-rush</td> <td></td> <td></td> <td>23/11/1999</td>	Lomandra multiflora ssp. dura	Hard Mat-rush			23/11/1999
Lythmur sp. Loosestiffe 20/08/2010 Maireana aphylla Cotton-bush 27/05/2022 Maireana brevifolia Short-leaf Bluebush 14/02/2018 Maireana sp. Bluebush/Fisure-plant 25/12/1997 Marubium vulgare Horehound 15/06/2021 Marubium vulgare Horehound 28/07/2022 Medicago polymorpha Bur-medic 28/09/2010 Mesembryanthemum crystallirum Common Nardoo 27/05/2022 Medicago polymorpha Bur-medic 28/09/2010 Mesembryanthemum nodifforum Stocter Itsite 14/10/2018 Oltea Olive 14/02/2018 Olea europaea ssp. Olive 14/02/2018 Opuntia sp. (NC) Prickly Pear 4/06/2021 Paricum decompositum var. decompositum 14/01/1999 Parapholis incurva Curty Ryegrass 18/04/2011 Parapholis incurva Curty Ryegrass 14/01/2097 Phataris sp. Caaray Grass 23/11/1999 Phataris sp. Caaray Grass 23/11/1999 Phataris sp	Lycium ferocissimum	African Boxthorn			22/01/2022
Maireana apehylla Cotton-bush 27/05/2022 Maireana brevifolia Short-leaf Bluebush 14/02/2018 Maireana oppositifolia Salt Bluebush 29/11/2018 Maireana sp. Bluebush/Fissure-plant 25/12/1997 Marublum vulgare Horehound 15/06/2021 Medicago polymorpha Bur-medic 28/09/2010 Mesembryanthemum crystallinum Common Nardoo 27/05/2022 Medicago polymorpha Bur-medic 28/09/2010 Mesembryanthemum noditlorum Slender Leaplant 14/02/2018 Olea europaea sp. Olive 14/02/2018 Olea europaea sp. Olive 4/06/2021 Onopordum acanthium Scotch Thistle 14/02/2018 Opuntia sp. Prickly Pear 20/11/1999 Opuntia sp. Prickly Pear 14/02/2011 Paricum hilmanii Witch-grass 18/04/2011 Paricum hilmanii Witch-grass 18/04/2011 Paricum hilmanii Salt Water Couch 16/02/1999 Pholaris sp. Canary Grass 23/11/1999	Lythrum sp.	Loosestrife			20/08/2010
Maireana brevitolia Shart-leaf Bluebush 14/02/2018 Maireana oppositifolia Salt Bluebush 29/11/2018 Maireana sp. Bluebush/Tssure-plant 25/12/1997 Marubium vulgare Horchound 15/06/2021 Medicang sp. Bluebush/Tssure-plant 28/09/2010 Mesembryanthemum crystallinum Common locaplant 16/02/1999 Mesembryanthemum crystallinum Siender Iceplant 14/11/1996 Nitracia billardierei Nitro-bush 14/02/2018 Olea europaea ssp. Olive 14/02/2018 Olea europaea ssp. Olive 14/02/2018 Opuntia sp., (NC) Prickly Pear 23/11/1999 Opuntia sp., (NC) Prickly Pear 20/08/2011 Panicum decompositum var. decompositum Native Nillet 20/08/2011 Parapholis incurva Cutry Ryegrass 14/11/1999 20/08/2011 Parapholis incurva Cutry Ryegrass 23/11/1999 23/11/1999 Pinus sp. Canary Grass 23/11/1999 23/11/1999 Pinatago inneeoleta var. Ianceolata <td< td=""><td>Maireana aphylla</td><td>Cotton-bush</td><td></td><td></td><td>27/05/2022</td></td<>	Maireana aphylla	Cotton-bush			27/05/2022
Maireana oppositifalia Salt Bluebush 29/11/2018 Maireana sp. Bluebush/Fissure-plant 25/21/997 Marrubium vulgare Horehound 15/06/2021 Marsilea drummondii Common Nardoo 27/05/2022 Medicago polymorpha Burr-medic 28/09/2010 Mesembryanthemum crystallinum Common Iceplant 16/02/1999 Mesembryanthemum nodiflorum Slender Iceplant 14/11/1996 Nitraria bilikrafieriei Nitro-bush 14/02/2018 Olea europaea ssp. Olive 4/06/2021 Onopordum acanthium Soctoch Thistic 14/02/2018 Opuntia sp. (NC) Prickly Pear 4/06/2021 Panicum decompositum var. decompositum 20/08/2010 Panicum hilmanii Witch-grass 18/04/2011 Parapholis Incurva Curly Ryegrass 14/11/1996 Phaloris sp. Canary Grass 23/11/1999 Pinus sp. Pine 11/21/197 Piptatherum milaceum Native Millet 20/08/2010 Parapholis Incurva Curly Ryegrass 23/11/1999 <	Maireana brevifolia	Short-leaf Bluebush			14/02/2018
Maireana sp. Bluebush/fissure-plant 25/12/1997 Marxilea drummondii Common Nardoo 15/06/2021 Marxilea drummondii Common Nardoo 27/05/2022 Medicago polymorpha Burr-medic 28/09/2010 Mesembryanthemum crystallinum Common Iceplant 16/02/1999 Mitesembryanthemum conditiorum Slender Iceplant 14/11/1996 Nitraria billardierei Nitre-bush 14/02/2018 Olea europaea ssp. Olive 4/06/2021 Oppardia sp. Prickly Pear 23/11/1999 Oppuntia sp. (NC) Prickly Pear 23/11/1999 Opuntia sp. Prickly Pear 4/06/2021 Panicum decompositum var. decompositum var. 18/04/2011 Parapholis incuva Curly Ryegrass 14/11/1996 Pagaplum vaginatum Salt-water Couch 16/02/1999 Phalaris sp. Pine 11/12/1997 Piptatherum miliaceum Rice Millet 16/02/1999 Piantago increolata var. 13/01/1999 28/09/2010 Plantago sp. Pine 11/12/1997	Maireana oppositifolia	Salt Bluebush			29/11/2018
Marrubium vulgareHorehound15/06/2021Merrubium vulgareCommon Nardoo27/05/2021Medicago polymorphaBurr-medic28/09/2010Mesembryanthemum crystallinumCommon Iceplant16/02/1999Mesembryanthemum nodiflorumSlender Iceplant14/11/1996Nitraria billardiereiNitre-bush14/02/2018Olea europaea ssp.Olive4/06/2021Olea europaea ssp. europaeaOlive4/06/2021Opuntia sp. (NC)Prickly Pear23/11/1999Opuntia sp.Prickly Pear4/06/2021Panicum decompositum var.Native Millet20/08/2010Pariacum decompositum var.Native Millet20/08/2010Parapholis incurvaCurly Ryegrass14/01/2199Pharapholis incurvaCurly Ryegrass23/11/1999Pinus sp.Pine17/12/1997Piptatherum miliaceumRite Millet16/02/1999Pina de Icecolata var.Ribwort28/09/2010Parapholis incurvaCarler Plantain10/02/1999Pina sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Pinas sp.Pine11/02/2018Plantago Iso Icecolata var.Ribwort28/09/2010Plantago Iso Icocolata var.Ribwort28/09/2010Plantago sp.Plantain30/11/1999Plantago sp.Plantain20/02/1999Plantago sp.Reflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Raphanus raph	Maireana sp.	Bluebush/Fissure-plant			25/12/1997
Marsilea drummondiiCommon Nardoo27/05/2022Medicago polymorphaBurr-medic28/09/2010Mesembryanthemum crystallinumCommon Iceplant11/02/1990Mitradio billardiereiNitre-bush11/11/1966Nitradio billardiereiNitre-bush11/02/2018Olea europaea ssp.Olive11/02/2018Olea europaea ssp. europaeaOlive4/06/2021Onopordum acanthiumScotch Thistle11/02/2018Opuntia sp. (NC)Prickly Pear23/11/1999Opuntia sp. (NC)Prickly Pear4/06/2021Panicum Alecompositum var.Native Millet20/08/2010Panicum IllimaniiWitch-grass118/04/2011Parapholis incurvaCurly Ryegrass114/11/1999Phaspalum vaginatumSalt-water Couch16/02/1999Phantaris sp.Canary Grass23/11/1999Pinus sp.Pine11/02/2018Plantago ingoroGreater Plantain10/02/1999Plantago majorGreater Plantain10/02/1999Plantago mayRibwort28/09/2010Plantago sp.Pilattini30/11/1999Plantago may arxiculare (NC)Wireweed16/02/1999Plantago may case spilensisAnnual Beard-grass20/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapidago majorGreater Plantain10/02/1999Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed18/04/2011Rumex sp.Dock24/01/199 <td>Marrubium vulgare</td> <td>Horehound</td> <td></td> <td></td> <td>15/06/2021</td>	Marrubium vulgare	Horehound			15/06/2021
Medicago polymorpha Bur-medic 28/09/2010 Mesembryanthemum crystallinum Common lceplant 16/02/1999 Mesembryanthemum nodiflorum Slender lceplant 14/11/1996 Nitraria billardierei Nitre-bush 14/02/2018 Olea europaea ssp. Olive 14/02/2018 Olea europaea ssp. europaea Olive 4/06/2021 Onopardum acanthium Scatch Thistle 14/02/2018 Opuntia sp. (NC) Prickly Pear 23/11/1990 Panicum decompositum var. decompositum var. 20/08/2010 Panicum hilmanii Witch-grass 18/04/2011 Parapholis incurva Curk Ryegrass 14/11/1996 Paspalum vaginatum Salt-water Couch 16/02/1999 Pinats sp. Pine 17/12/1997 Pinats sp. Canary Grass 23/11/1999 Plantago lanceolofa var. Iakee Millet 16/02/1999 Plantago lanceolofa var. Ribwort 28/09/2010 Plantago major Greater Plantain 10/02/1999 Plantago major Greater Plantain 30/11/1999	Marsilea drummondii	Common Nardoo			27/05/2022
Mesembryanthemum crystallinumCommon Iceplant16/02/1999Mesembryanthemum nodiflorumSlender Iceplant14/11/1996Nitraria billardiereiNitre-bush14/02/2018Olea europaea ssp.Olive14/02/2018Olea europaea ssp.Olive4/06/2021Onopordum acanthiumScotch Thistle14/02/2018Opuntia sp. (NC)Prickly Pear23/11/1999Opuntia sp. (NC)Prickly Pear4/06/2021Panicum decompositum var.decompositum20/08/2010Panicum differing20/08/201020/08/2010Panicum differingUtre-grass18/04/2011Panicum hillmaniiWitch-grass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1999Phadaris sp.Canary Grass23/11/1999Pinus sp.Pine11/12/1997Piptatherum miliaceumRice Millet16/02/1999Pinus sp.Pine11/12/1997Piptatherum miliaceumRice Millet16/02/1999Pinatago angiorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculare (NC)Wireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed28/09/2010Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumVelvet Wallaby-grass28/09/2010<	Medicago polymorpha	Burr-medic			28/09/2010
Mesembryanthemum nodiflorumSlender Iceplant14/11/1996Nitracia billardiereiNitre-bush14/02/2018Olea europaea ssp.Olive14/02/2018Olea europaea ssp. europaeaOlive4/06/2021Onapordum acanthiumScotch Thistle14/02/2018Opuntia sp. (NC)Prickly Pear23/11/1999Opuntia spp.Prickly Pear4/06/2021Panicum decompositum var.decompositum var.decompositum var.decompositum var.decompositum var.18/04/2011Panicum hillmaniiWitch-grass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1999Phalaris sp.Canary Grass23/11/1999Phalaris sp.Canary Grass23/11/1999Pintago Innceolata var.Ibwort28/09/2010Pintago Innceolata var.Ribwort28/09/2010Plantago sp.Plantain10/02/1999Plantago sp.Plantain30/11/1999Plantago sp.Plantain30/11/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed16/02/1999Plantago sp.Plantain20/02/195Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurlip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass28/09/2010Salisola australisBuckbush21/02/1018Salisola australisBuckbush21/02/2018Salisola aust	Mesembryanthemum crystallinum	Common Iceplant			16/02/1999
Nitraria billardiereiNitre-bush14/02/2018Olea europaea ssp.Olive14/02/2018Olea europaea ssp. europaeaOlive4/06/2021Onopardum acanthiumScatch Thistle14/02/2018Opuntia sp. (NC)Prickly Pear23/11/1999Opuntia sp. (NC)Prickly Pear20/08/2011Panicum decompositum var.decompositum20/08/2010Panicum hilmaniiWitch-grass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1999Paspalum vaginatumSait-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine11/1/2/1997Piptatherum miliaceumRice Millet16/02/1999Pinatago majorGreater Plantain10/02/1999Plantago sp.Pine14/02/2018Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Plantago sp.Plantain30/11/1999Polyconum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed16/02/1999Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumWild Radish28/09/2010Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salsola australisBuckbush21/03/2020Salsola australisBuckbush14/02/2018Salsola australisBuckbush14/02/2018	Mesembryanthemum nodiflorum	Slender Iceplant			14/11/1996
Olea europaea ssp.Olive14/02/2018Olea europaea ssp. europaeaOlive4/06/2021Onopordum acanthiumScotch Thistle14/02/2018Opunita sp. (NC)Prickly Pear23/11/1999Opunita sp. (NC)Prickly Pear4/06/2021Panicum decompositum var.4/06/2021Panicum decompositum var.Native Millet20/08/2010Panicum decompositum var.18/04/2011Parapholis incurvaCurly Ryegrass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1996Paspalum vaginatumSalt-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1997Pinus sp.Pine17/12/1997Pinatogo lanceolata var.Ribwort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Playgonum aviculareWireweed14/02/2018Polygonum aviculareWireweed16/02/1999Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed18/04/2011Rumex sp.Dock24/01/199Ryhdans raphanistrumWild Radish28/09/2010Raphanus raphanistrumVelvet Wallaby-grass22/02/1995Ryhdasperma allosumVelvet Wallaby-grass22/08/2010Saltosa atropurpureaBeaded Samphire27/03/2020Saltosa atropurpureaPincushion11/02/198	Nitraria billardierei	Nitre-bush			14/02/2018
Olea europaea ssp. europaeaOlive4/06/2021Onopordum acanthiumScotch Thistle14/02/2018Opuntia sp. (NC)Prickly Pear23/11/1999Opuntia sp.Prickly Pear4/06/2021Panicum decompositum var.decompositum var.decompositum var.decompositum var.Curly Ryegrass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1996Parapholis incurvaCurly Ryegrass23/11/1999Phalaris sp.Canary Grass23/11/1999Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine17/12/1997Plantargo lanceolata var. lanceolataRice Millet16/02/1999Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed2/02/1995Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumWild Radish28/09/2010Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Salicornia quinquefloraBeaded Samphire27/03/2020Salicornia quinquefloraBeaded Samphire27/03/2020Salicornia quinquefloraBeaded Samphire27/03/2020Salicornia quinquefloraBeaded Samphire27/03/2020Salicornia quinquefloraBeaded Samphire27/	Olea europaea ssp.	Olive			14/02/2018
Onopordum acanthiumScotch Thistle14/02/2018Opuntia sp. (NC)Prickly Pear23/11/1999Opuntia spp.Prickly Pear4/06/2021Panicum decompositum var. decompositumNative Millet20/08/2010Panicum ilimaniiWitch-grass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1996Paspalum vaginatumSalt-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rytidosperma caespitosum (NC)Common Wallaby-grass20/02/010Saltosia australisBuckbush21/03/2020Salsola australisBuckbush21/03/2020Salsola australisBuckbush21/03/2020	Olea europaea ssp. europaea	Olive			4/06/2021
Opuntia sp.Prickly Pear23/11/1999Opuntia sp.Prickly Pear4/06/2021Panicum decompositum var.Native Millet20/08/2010Panicum hillmaniiWitch-grass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1996Paspalum vaginatumSalt-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var.Islowort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed2/02/1999Polygonum aviculare (NC)Wireweed2/02/1999Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumVelvet Wallaby-grass20/08/2010Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Salsola australisBuckbush21/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropupreaPincushion10/02/1999	Onopordum acanthium	Scotch Thistle			14/02/2018
Opuntia spp.Prickly Pear4/06/2021Panicum decompositum var. decompositum decompositum var. decompositum var.Native Millet20/08/2010Panicum hillmaniiWitch-grass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1996Paspalum vaginatumSalt-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago sp.Plantain30/11/1999Plantago sp.Plantain30/11/1999Plantago sp.Plantain30/11/1999Ploygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum sp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma pilosumVelvet Wallaby-grass20/08/2010Salsola australisBuckbush21/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Opuntia sp. (NC)	Prickly Pear			23/11/1999
Panicum decompositum var. decompositumNative Millet20/08/2010Panicum hillmaniiWitch-grass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1996Paspalum vaginatumSalt-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1997Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago sp.Plantain10/02/1999Plantago sp.Plantain30/11/1997Ploygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed20/08/2010Raphanus raphonistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma pilosumVelvet Wallaby-grass20/08/2010Salsola australisBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurgueaPincushion10/02/198	Opuntia spp.	Prickly Pear			4/06/2021
decompositumNative Millet20/08/2010Panicum hillmaniiWitch-grass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1996Paspalum vaginatumSalt-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var.128/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculareWireweed16/02/1999Polygonum aviculareWireweed16/02/1999Polygonum aviculareWireweed16/02/1999Polygonum aviculareWireweed16/02/1999Polygonum aviculareWireweed16/02/1999Polygonum aviculareWireweed16/02/1999Polygonum aviculareWireweed18/04/2011Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Ryfidosperma pilosumVelvet Wallaby-grass28/09/2010Salsola australisBuckbush14/02/2018Sadsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1989	Panicum decompositum var.				
Panicum hillmaniiWitch-grass18/04/2011Parapholis incurvaCurly Ryegrass14/11/1996Paspalum vaginatumSalt-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var.18/04/2011IanceolataRibwort28/09/2010Plantago sp.Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculareWireweed16/02/1999Polygonum aviculareWireweed16/02/1999Polygonum aviculareWireweed16/02/1999Polygonum aviculareWireweed16/02/1999Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed28/09/2010Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Ryfidosperma pilosumVelvet Wallaby-grass20/08/2010Salsola australisBuckbush14/02/2018Sadsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	decompositum	Native Millet			20/08/2010
Parapholis incurvaCurly Ryegrass14/11/1996Paspalum vaginatumSalt-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed28/09/2010Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumWild Radish28/09/2010Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Panicum hillmanii	Witch-grass			18/04/2011
Paspalum vaginatumSalt-water Couch16/02/1999Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum sp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora sp. quinqueflora sp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Parapholis incurva	Curly Ryegrass			14/11/1996
Phalaris sp.Canary Grass23/11/1999Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed28/09/2010Raphanus raphanistrumWild Radish28/09/2010Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Paspalum vaginatum	Salt-water Couch			16/02/1999
Pinus sp.Pine17/12/1997Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polygonum aviculare (NC)Wireweed16/02/1999Polypogon monspeliensisAnnual Beard-grass19/10/2017Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Phalaris sp.	Canary Grass			23/11/1999
Piptatherum miliaceumRice Millet16/02/1999Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polypogon monspeliensisAnnual Beard-grass19/10/2017Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Pinus sp.	Pine			17/12/1997
Plantago lanceolata var. lanceolataRibwort28/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polypogon monspeliensisAnnual Beard-grass19/10/2017Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Piptatherum miliaceum	Rice Millet			16/02/1999
NameNowork20/09/2010Plantago majorGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polypogon monspeliensisAnnual Beard-grass19/10/2017Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Plantago lanceolata var.	Pibwort			28/00/2010
Plantago mulpoGreater Plantain10/02/1999Plantago sp.Plantain30/11/1999Polygonum aviculareWireweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polypogon monspeliensisAnnual Beard-grass19/10/2017Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Plantage major				10/02/1000
Polygonum aviculareWireweed30/11/1999Polygonum aviculare (NC)Wireweed14/02/2018Polypogon monspeliensisAnnual Beard-grass19/10/2017Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Salicornia quinqueflora ssp.Beaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Plantage sp				20/11/1000
Polygonum aviculareWiteweed14/02/2018Polygonum aviculare (NC)Wireweed16/02/1999Polypogon monspeliensisAnnual Beard-grass19/10/2017Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp.Beaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Palvaanum aviaulara	Mirowood			14/02/2019
Polygonum dviculare (NC)Witeweed18/02/1999Polypogon monspeliensisAnnual Beard-grass19/10/2017Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp.Beaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999		Wireweed			14/02/2018
Polypogon monspellensisAnnual Beard-grass19/10/2017Puccinellia distansReflexed Poa2/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp.Beaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999					10/10/2017
Pocchelia distansReliexed Poa27/02/1995Raphanus raphanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp.guinqueflora28/09/2010Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Polypogon monspellensis	Annual Beard-grass			19/10/2017
Rapnanus rapnanistrumWild Radish28/09/2010Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp.guinqueflora27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999					2/02/1995
Rapistrum rugosum ssp. rugosumTurnip Weed18/04/2011Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp.Beaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Raphanus raphanistrum	Wild Radish			28/09/2010
Rumex sp.Dock24/11/1999Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Rapisfrum rugosum ssp. rugosum	lurnip Weed			18/04/2011
Rytidosperma caespitosum (NC)Common Wallaby-grass20/08/2010Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Rumex sp.	Dock			24/11/1999
Rytidosperma pilosumVelvet Wallaby-grass28/09/2010Salicornia quinqueflora ssp. quinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Rytidosperma caespitosum (NC)	Common Wallaby-grass			20/08/2010
solicon in queriora sp.Beaded Samphire27/03/2020guinquefloraBeaded Samphire27/03/2020Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	Rytidosperma pilosum	Velvet Wallaby-grass			28/09/2010
Salsola australisBuckbush14/02/2018Scabiosa atropurpureaPincushion10/02/1999	auinqueflora	Beaded Samphire			27/03/2020
Scabiosa atropurpurea Pincushion 10/02/1999	Salsola australis	Buckbush			14/02/2018
	Scabiosa atropurpurea	Pincushion			10/02/1999

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Sighting
Sclerolaena muricata var.	Five-spine Bindyi			27/05/2022
Sclerostegia sp. (NC)	Samphire			16/02/1999
Secale cereale	Rye			14/02/2018
Senecio glossanthus	Annual Groundsel			21/10/2013
Senecio glossanthus (NC)	Annual Groundsel			14/11/1996
Senecio sp.	Groundsel			10/02/1999
Setaria jubiflora	Warrego Summer-grass			20/08/2010
Sisymbrium orientale	Indian Hedge Mustard			20/08/2010
Sisymbrium sp.	Wild Mustard			24/11/1999
Solanum elaeagnifolium	Silver-leaf Nightshade			11/03/2022
Sonchus oleraceus	Common Sow-thistle			14/11/1996
Sonchus sp.	Sow-thistle			10/02/1999
Sorghum halepense	Johnson Grass			18/04/2011
Spergularia marina	Salt Sand-spurrey			14/11/1996
Spergularia marina (NC)	Salt Sand-spurrey			14/11/1996
Sphenopus divaricatus	Wedge-foot Grass			14/11/1996
Suaeda australis	Austral Seablite			27/03/2020
Suaeda baccifera	Seablite			27/03/2020
Tamarix aphylla	Athel Pine			14/02/2018
Tamarix aphylla (NC)	Athel Pine			25/12/1997
Tecticornia arbuscula	Shrubby Samphire			29/11/2018
Tecticornia flabelliformis	Bead Samphire	VU	\vee	25/12/2001
Tecticornia halocnemoides ssp. halocnemoides	Grey Samphire			14/11/1996
Tecticornia indica ssp. bidens	Brown-head Samphire			14/11/1996
Tecticornia pergranulata ssp.	Black-seed Samphire			14/02/2018
Tecticornia pergranulata ssp. pergranulata	Black-seed Samphire			14/11/1996
Tecticornia syncarpa	Fused Samphire			14/11/1996
Tribulus terrestris	Caltrop			19/04/2022
Trifolium arvense var. arvense	Hare's-foot Clover			26/09/2010
Trifolium sp.	Clover			25/12/1997
Unidentified sp.				17/12/1997
Vicia sativa ssp.	Common Vetch			28/09/2010
Vittadinia cervicularis var. cervicularis	Waisted New Holland Daisy			20/08/2010
Vulpia bromoides	Squirrel-tail Fescue			20/08/2010
Vulpia myuros f. myuros	Rat's-tail Fescue			14/11/1996
Wilsonia humilis	Silky Wilsonia			29/11/2018

Appendix 4. BDBSA fauna records







Native Vegetation Clearance

Battery Anode Material Facility - Renascor Data Report

Clearance under the Native Vegetation Regulations 2017

29/06/2023 Prepared by Ecosphere Ecological Solutions





Table of contents

- 1. Application information
- 2. Purpose of clearance
 - 2.1 Description
 - 2.2 Background
 - 2.3 General location map
 - 2.4 Details of the proposal
 - 2.5 Approvals required or obtained
 - 2.6 Native Vegetation Regulation
 - 2.7 Development Application information (if applicable)
- 3. Method
 - 3.1 Flora assessment
 - 3.2 Fauna assessment
- 4. Assessment outcomes
 - 4.1 Vegetation assessment
 - 4.2 Threatened Species assessment
 - 4.3 Cumulative impacts
 - 4.4 Addressing the Mitigation hierarchy
 - 4.5 Principles of clearance
 - 4.6 Risk Assessment
 - 4.7 NVC Guidelines
- 5. Clearance summary
- 6. Significant environmental benefit
- 7. Appendices
 - 7.1 Fauna Survey (where applicable)
 - 7.2 Bushland, Rangeland or Scattered Tree Vegetation Assessment Scoresheets (to be submitted in Excel format).
 - 7.3 Flora Species List
 - 7.4 SEB Management Plan (where applicable)



Application Details

Applicant:	Renascor Resources Pty Ltd				
Key contact:	Aaron Maddern, Project Mana	Aaron Maddern, Project Manager, 36 North Terrace, Kent Town, SA, 5067.			
	Email:	Email:			
	aaron.maddern@renascor.con	aaron.maddern@renascor.com.au			
	Mobile: 0404 581 630				
Landowner:	SA Water				
Site Address:	91 Robinson Road, Waterloo (Corner, SA, 5110			
Local Government Area:	City of Salisbury	Hundred:	Port Adelaide		
Title ID:	CT5723/299	Parcel ID	F115108AL3		
	CT5881/409		F115108AL4		
	CT6257/133		H105800SE185		
			H105800SE186		
			H105800SE187		
			H105800SE5017		

Summary of proposed clearance

Purpose of clearance	Clearance required for the construction of a Battery Anode Material Facility, stormwater deluge management system and associated pipeline.
Native Vegetation Regulation	Schedule 1 Part 6 Clause 34 – Infrastructure
Description of the vegetation under application	Mixed emergent and degraded samphire and chenopod shrubland as understorey to planted amenity shrubs and trees.
Total proposed clearance - area (ha) and number of trees	A total of 26.72 hectares will be cleared for the project. Of this, 22.22 ha of emergent samphire / chenopod shrubland is proposed to be cleared.
Level of clearance	Level 4
Overlay (Planning and Design Code)	Native Vegetation Overlay



	siting and design of the stormwater channel will aim to minimise clearing of native vegetation and maintain the screen along the eastern boundary, where practicable.
SEB Offset proposal	Payment of \$160. 541.65

2. Purpose of clearance

2.1 Description

Ecosphere Ecological Solutions (Ecosphere) was engaged by JBS&G on behalf of Renascor Resources Pty Ltd (Renascor) to prepare a clearance proposal for a proposed Battery Anode Material (BAM) Facility located at Bolivar, South Australia (The Project, Figure 1).

The specific objectives of the vegetation assessment were to:

- Record vegetation association and condition values of any vegetation subject to provisions of the *Native Vegetation Act 1991* (NV Act).
- Identify of any flora species of Commonwealth or state significance present or likely to occur within the project site either on a temporary or permanent basis.
- Undertake an opportunistic fauna assessment to determine if any native fauna species, or fauna habitat, may be significantly impacted by the proposed BAM facility.
- Identify any areas where significant ecological constraints may occur and provide preliminary spatial data to describe these areas if relevant.
- Calculate the Significant Environmental Benefit (SEB) requirement to offset any vegetation clearance as part of development of the proposed BAM facility.

2.2 Background

Renascor Resources Pty Ltd (Renascor) is a South Australian based exploration and development company, listed on the Australian Securities Exchange (ASX:RNU) with projects located on the Eyre Peninsula, South Australia. Renascor's flagship project is the Siviour Graphite Project located near Arno Bay in South Australia. Sitting over the world's second largest known Graphite Reserve and operating under Mining Lease (ML) 6495, the mine will produce high quality graphite concentrate products via an open cut mining operation. Critical to the Siviour Graphite Project is the need for a BAM Facility.

The proposed BAM Facility (the project) is located in South Australia, approximately 16 km northwest of the Adelaide CBD and located within the City of Salisbury Council area (Figure 1). The BAM Facility will accept graphite concentrate from the Siviour Graphite Mine and process, refine and package the Purified Spherical Graphite (PSG) product, which will then be transported offsite for export.

The project is anticipated to cover an area of approximately 26.72 hectares (ha) and is comprised of the following components:

- micronisation and spheronisation plant
- water treatment plant
- administration and laboratory facilities
- warehousing
- electrical high voltage (HV) switchyard
- water pipelines
- stormwater channel and detention basin
- access roads.

Figure 2 and Figure 3 show further detail of the project components including the proposed water pipeline, stormwater channel and retention basin and infrastructure layout.



2.3 General location map



Figure 1. General location of the proposed Renascor BAM facility at Bolivar.



Figure 2. Project boundary and infrastructure layout of BAM facility and pipeline.



Figure 3. Project boundary and infrastructure layout of BAM facility with detailed stormwater footprint.



2.4 Details of the proposal

The project is anticipated to cover an area of approximately 26.72 hectares (ha) and is comprised of the following components:

- micronisation and spheronisation plant
- water treatment plant
- administration and laboratory facilities
- warehousing
- electrical high voltage (HV) switchyard
- water pipelines
- stormwater channel and detention basin
- access roads.

2.5 Approvals required or obtained.

A summary of key legislation relating to flora and fauna consideration and their relevance to the proposed project is provided in Table 1 below.

Table 1. Summary of relevant commonwealth and state legislation.

Legislation	Summary	Relevance
Commonwealth	·	
Environment Protection and Biodiversity Conservation Act 1999	 To protect 'matters of national environmental significance' (MNES): World Heritage properties National Heritage properties wetlands of international importance (Ramsar wetlands) listed threatened species and ecological communities. migratory species Commonwealth marine areas the Great Barrier Reef Marine Park nuclear actions (including uranium mining). a water resource, in relation to coal seam gas development and large coal mining development 	Where an activity may trigger requirements of the EPBC Act, this legislation must be considered. Any action that has, will have, or is likely to have a significant impact on a matter of national environmental significance requires referral and approval. Significant penalties apply. To determine whether an action is likely to have a significant impact on a matter of national environmental significance, refer to the Significant Impact Guidelines (Commonwealth of Australia 2009) at: <u>http://www.environment.gov.au/epbc/publications/ pubs/nes-guidelines.pdf</u> .
South Australia	I	I
National Parks and Wildlife Act 1972	Allows for the protection of habitat and wildlife through the establishment of parks and reserves (both on land and in State waters); provides for the protection of native flora and fauna; identifies flora and fauna species considered to be of conservation significance (under Schedules 7, 8, and 9 of the Act); and provides for the use of approved wildlife through a system of permits allowing certain actions, i.e. keeping and selling (s.58), harvesting (s.60G), farming (s.60C), hunting (s.68A), releasing (s.55) and undertaking scientific	A person must not "take" a native plant, protected animal or the eggs of a protected animal without approval (s.48A). Significant penalties apply. To take a native plant means to remove the plant or part of the plant, from the place in which it is growing; or to damage the plant. To take a protected animal means to remove, hunt, catch, restrain, kill or injure an animal, or attempt to do so. A person may take non-prescribed plant species from private land with the consent of the owner; however, these species may also be covered under the <i>Native Vegetation Act 1991</i> .

Legislation	Summary	Relevance
	research (s.53) on/of native fauna species, and for the taking of plants (s.49).	There are several non-complying activities in parks and reserves that result in penalty (parts 4-6).
Native Vegetation Act 1991	 To preserve, enhance and manage the State's native vegetation; provide a regulatory framework to control clearance of vegetation; and provide incentives and assistance to landowners to encourage them to preserve and enhance native vegetation. The Act protects all native vegetation that naturally occurs, i.e., vegetation which has not been planted. This includes all naturally occurring local native plants, from small ground covers and native grasses to mallee scrub and tall trees. It does not cover planted trees. Approval is required for the clearance of native vegetation. Clearance is defined as: the killing or destruction of native vegetation the removal of native vegetation. the severing of branches, limbs, stems or trunks of native vegetation. any other substantial damage to native vegetation including activities such as the draining for the reclamation of wetlands or flooding of land, grazing land where stock have been excluded for more than ten years. 	Persons wanting to clear native vegetation must apply for a permit from the Native Vegetation Council (NVC) (ss.7,14), unless exempt under the regulations. The NVC will consider the impacts of the proposed clearance and may grant consent, refuse consent or grant consent subject to certain conditions (s.29). A net environment benefit is generally conditional on an approval being granted. Significant penalties apply if a person clears native vegetation without the permission of the NVC (s.26). The NVC can also take civil enforcement proceedings in the District Court for an order that the native vegetation be re-instated (s.31). The Act also provides the opportunity for landholders to enter into voluntary "Heritage Agreement(s)" to ensure vegetation on private land is protected for perpetuity (s.23). As the project will be assessed via an EIS under the <i>Planning, Development and Infrastructure Act 2016</i> , it is understood that Regulations 12 and 13 of the NV Regulations will apply. Under these Regulations and Schedule 1, Part 4 (clause 27) of the NV Regulations, vegetation clearance for major developments that are approved under an EIS (that was referred to the NVC for comment) is permitted, provided that it is undertaken in accordance with the development consent and an approved management plan (or a payment into the Native Vegetation Fund) which results in a significant environmental benefit.

2.6 Native Vegetation Regulation

Schedule 1 Part 6 Clause 34 – Infrastructure, to allow clearance of vegetation incidental to the construction or expansion of a building or infrastructure (and associated services) where the Minister has declared that the clearance is in the public interest.

2.7 Development Application information (if applicable)

Multiple zones apply to the project site including:

- Infrastructure
- Open Space
- Rural Horticulture
- Resource Extraction

Overlays that apply to the project area include:

- Aircraft Noise Exposure (ANEF 20)
- Airport Building Heights (Regulated) (All structures over 45 metres)
- Building Near Airfields



- Coastal Areas
- Defence Aviation Area (All structures over 45 metres)
- Defence Aviation Area (All structures over 90 metres)
- Gas and Liquid Petroleum Pipelines
- Gas and Liquid Petroleum Pipelines (Facilities)
- Hazards (Flooding)
- Hazards (Flooding General)
- Limited Land Division
- Major Urban Transport Routes
- Native Vegetation
- Non-stop Corridor
- Prescribed Watercourses
- Prescribed Wells Area
- Regulated and Significant Tree
- Traffic Generating Development
- Water Resources



3. Method

3.1 Desktop Assessment

3.1.1 Protected Matters Search Tool (PMST) – EPBC Act

A PMST report was generated on 23rd November 2022 with an updated report generated on the 29th of May 2023 to identify MNES under the EPBC Act, relevant to the project site (DCCEEW, 2022). The PMST is maintained by the Department of Climate Change, Energy, the Environment and Water (DCCEEW) and was used to identify flora and fauna species or ecological communities of national environmental significance that may occur or likely to have suitable habitat within 5km of the project site.

3.1.2 Biological Database of South Australia (BDBSA)

Threatened species listed under the EPBC Act and NPW Act were assessed using the Naturemaps Supertable, obtained through the general query tool on Naturemaps. The dataset was obtained on 16th June 2022 and was used to identify threatened species that have been recorded within 5km of the project site (DEW 2022). Search criteria also included records since 1st January 1995 with a spatial reliability of <1km.

3.1.3 Assessment of the likelihood of occurrence

The likelihood of each threatened flora and fauna species potential of occurring within the project site was assessed. A likelihood of occurrence rating (Highly Likely / Known, Likely, Possible and Unlikely) was assigned to each threatened species identified in the desktop PMST and BDBSA search using the parameters as outlined below in Table 2.

Likelihood	Criteria
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is largely intact and falls within the known Project 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 species habitat which is largely intact.
Possible	Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area does not provide species habitat which is largely intact. Recorded within 20 -40 years, survey effort is considered adequate, habitat is present and intact, and species of similar habitat needs have been recorded in the area.
Unlikely	 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 within the previous 40 years despite suitable habitat being known to occur in the area. No records despite adequate survey effort.

Table 2. (Criteria for the	likelihood of occur	rence of species	within the project site.
------------	------------------	---------------------	------------------	--------------------------



3.1.4 Desktop study limitations

The content of the desktop study was derived from existing datasets and references from a range of sources. Flora and fauna records were sourced from the Protected Matters Database via the PMST and the BDBSA via Naturemaps. The BDBSA only includes verified flora and fauna records submitted to Department for Environment and Wildlife (DEW) or partner organisations. It is recognised that drawing conclusions can be unreliable within areas that have been underrepresented in terms of biological studies. It is possible, therefore, that significant species occur within the project site that were not reflected by database records.

3.2 Field survey

The original field survey was conducted on 29th June 2022 and a follow up assessment for a refined project area undertaken on the 11th of May 2023 by NVC accredited ecologists Andrew Sinel and Rob Kelman. The field survey included a vegetation survey and passive fauna assessment.

3.2.1 Vegetation survey

The vegetation survey for areas of native vegetation was undertaken in accordance with the NVC endorsed Bushland Assessment Method (BAM).

Vegetation within the individual associations was surveyed for national, state and regionally significant flora species that occurred within the area. A ramble survey method was adopted (i.e., randomly walking through areas of vegetation, attempting to cover different topography and habitats) to ensure best coverage of the individual associations.

- The following information is recorded for any threatened flora observed:
- Location and extent of any populations (hand-held GPS); and
- Vegetation association and additional habitat observations where relevant.

3.2.2 Fauna

A focus of the on-ground fauna assessment was on avian species due to ability to passively identify and record species. For more inconspicuous fauna species, opportunistic observations were recorded, and fauna likelihood based largely on the presence and quality of habitat. The likelihood of specific species occurring within the project site included:

- Reviewing previous field survey results and database records
- Assessing the habitat value of the vegetation during the field survey to determine the fauna species likely to occur within the project site.
- Presence of any areas of significant fauna value such as fallen timber, areas for shelter such as caves or overhangs or permanent or casual water/wetlands.



4. Assessment Outcomes

4.1 Vegetation Assessment

General description of the vegetation, the site and matters of significance.

Field assessments were undertaken within the project site on 29th June 2022 (BAM facility) and 11th May 2023 (Pipeline). The vegetation was comprised of planted indigenous amenity shrub and tree species over an exotic understory with low density emergent native indigenous shrubland vegetation. Plantings of amenity species were comprised of locally indigenous species however were planted in rows and likely to be as a functional stand for water take up or filtration rather than as a habitat area. Sheep were grazing this area as a pasture at the time of the assessment.

Details of the vegetation associates/scattered trees proposed to be impacted.

Ten vegetation associations were recorded within the project site and are summarised below in Table 3. and shown in Figure 5 to Figure 9. These were in poor condition and providing low habitat value being present as emergent naturally regenerating species which are recognised as highly disturbance resistant and grow naturally in areas where high disturbance occurs such as around water points and roadsides.

Assoc #	Description	UBS	Area (ha)
1	<i>Myoporum insulare</i> (Boobialla) amenity plantings over exotic grassland and emergent chenopod shrubs.	3.12	0.64
2	Mixed Amenity plantings over emergent chenopod shrubs	6.23	3.41
3	Sparsely planted <i>Eucalyptus largiflorens</i> (Black Box), <i>E. odorata</i> (Peppermint Box) Woodland +/- planted <i>Eucalyptus spathulata</i> (Swamp Mallet) over planted amenity species and emergent <i>Nitraria billardierei</i> (Nitre Bush) and <i>Maireana brevifolia</i> (Lobe Fruit Bluebush) shrubland	22.23	3.13
4	<i>Tecticornia pergranulata</i> (Black See Samphire) emergent under planted <i>Melaleuca</i> <i>halmaturorum</i> (Swamp Paperbark) and <i>Atriplex rhagodioides</i> (Silver Saltbush)	29.6	0.75
5	Planted <i>Melaleuca halmaturorum</i> (Swamp Paperbark) over planted <i>Atriplex rhagodioides</i> (Silver Saltbush) and emergent chenopod shrubs	15.15	3.68
6	Mixed amenity shrubs over exotic grassland and emergent chenopod shrubs	7.79	9.65
7	Fallow land used for industrial or storage areas.	N/S*	4.49
8	Nitraria billardierei (Nitre Bush) Low Open Shrubland.	17.66	0.21
9	<i>Myoporum insulare</i> (boobialla) emergent shrubs over <i>Threlkeldia diffusa</i> (Coast Bonefruit) and <i>Maireana brevifolia</i> (Short leaved Bluebush)	4.23	0.65
10	Austrostipa spp. (Spear Grass), Chloris truncata (Windmill Grass) Open Grassland.	7.75	0.10
		Total	26.72

Table 3. Vegetation association summary.

*N/S denotes not scored as native vegetation or bushland.

Vegetation Associati	on 1	<i>Myoporum insulare</i> (Boobialla) amenity plantings over exotic grassland and emergent chenopod shrubs.					
General description		habitat value for bird species due to dense growth. Has low biodiversity score due to contribution made primarily from planted species with low level indigenous regeneration in this site. Understory largely absent due to domination by density of shrub growth.					
Threatened species or community		Not conserv following co • Me • Ne	ation significant as a v onservation significant lithreptus gularis (Blac ophema elegans elega	regetation community species: k-chinned Honeyeater <i>ns</i> (Elegant Parrot)	but is likely to provide)	e habitat for the	
Landscape context score	1.22	1	Vegetation Condition Score	2.32	Conservation significance score	1.10	
Unit biodiversity Score	3.12		Area (ha)	0.64	Total biodiversity Score	1.99	



		1					
Vegetation association 3 Sparsely planted <i>Eucalyptus largiflorens</i> (Black Box), <i>E. odorata</i> (Peppermint Box) Woodland					ox) Woodland +/-		
		planted Eu	calyptus spathulata (S	wamp Mallet) over pla	nted amenity species	and emergent	
		Nitraria bi	llardierei (Nitre Bush) a	and Maireana brevifolio	a (Lobe Fruit Bluebush) shrubland	
General description		Melaleuca lanceolata (Moonah) an inner row of Eucalyptus spathulata (Swamp Mallet) and then the middle row Eucalyptus largiflorens / E. odorata. Emergent Maireana brevifolia was present as the dominant understory with declared weed species prevalent.					
Threatened species or Not			Not conservation significant as a vegetation community and could be best described as a highly				
community		disturbance resistant emergent chenopod shrubland of very low ecological value. The following					
community		threatened species with records locally may use this area on a temporary or irregular basis:					
		Bubulcus ibis coromandus (Eastern Cattle Egret)					
		Cereopsis novaehollandiae novaehollandiae (Cape Barren Goose)					
		Melithreptus gularis (Black-chinned Honeyeater)					
			oturnix vnsilonhora au	stralis (Brown Ouail)			
		• H	lieraaetus morphnoide.	s (Little Eagle)			
Landscape context score	1.22		Vegetation Condition Score	16.56	Conservation significance score	1.10	
Unit biodiversity Score	22.23		Area (ha)	2.50	Total biodiversity Score	55.57	



General description		Area adjacent semi-intact samphire community and infrequently inundated by rainfall during the winter months. Good cover of samphire and lower weed invasion in this section due to annual wetting drowning many species not tolerant of wet and saline conditions.					
Threatened species or		This community is not conservation significant at regional, state or Federal level.					
community		• B • C • M • N • C • H • A V	 Bubulcus ibis coromandus (Eastern Cattle Egret) Cereopsis novaehollandiae novaehollandiae (Cape Barren Goose) Melithreptus gularis (Black-chinned Honeyeater) Neophema elegans elegans (Elegant Parrot) Coturnix ypsilophora australis (Brown Quail) Hieraaetus morphnoides (Little Eagle) Acanthiza iredalei rosinae (Samphire Thornbill or Slender-billed Thornbill Gulf St Vincent) 				
Landscape context score	1.22		Vegetation Condition Score	22.06	Conservation significance score	1.10	
Unit biodiversity Score	29.60		Area (ha)	0.75	Total biodiversity Score	22.20	







Vegetation association	on 8	Nitraria billardierei (Nitre	e Bush) Low Open Shrul	bland.		
General description		Semi degraded chenopod shrubland where natural ground level has been altered by the presence of the drain bank. The resultant regrowth in this area id a mix of exotic and indigenous species not resembling a natural stratum and in very poor condition with high levels of exotic grass, herbaceous and woody species.				
Threatened species of	or community	This site is not conservat support habitat for threa <i>Neophema elegans elega</i> The adjacent samphire s be impacted by this proj	ion significant at regior tened species. It may p ins (Elegant Parrot). hrubland has high ecolo ect.	nal, state or Federal lev otentially provide tran ogical and conservatio	rel. Unlikely to sient habitat for n value but will not	
Landscape context score	1.20	Vegetation Condition Score	11.74	Conservation significance score	1.10	
Unit biodiversity Score	15.50	Area (ha)	1.52	Total biodiversity Score	23.55	



Vegetation association 10			Austrostipa spp. (Spear Grass), Chloris truncata (Windmill Grass) Open Grassland.				
General description		Small disjunct patch of native grassland surrounded by other areas of very poor condition. Approximately 50% native cover, this area is not contiguous with other intact patches and is therefore likely to not change in condition or spread to other areas.					
Threatened species or community		This sma pate	site is not conservatic Il extent and quality o ches.	on significant at region f the grassland. Low le	al, state or Federal lev vels of connectivity to	rel due to the very any other intact	
Landscape context score	1.20		Vegetation Condition Score	5.78	Conservation significance score	1.10	
Unit biodiversity Score	7.62		Area (ha)	0.10	Total biodiversity Score	0.76	

Site map showing areas of proposed impact



Figure 4. Vegetation associations recorded within the BAM facility and pipeline sites.



Figure 5. Vegetation associations and amenity scattered trees recorded within the BAM facility site.



Figure 6. Vegetation associations recorded along the eastern extent of the pipeline site.



Figure 7. Vegetation associations recorded along the north-eastern extent of the pipeline site.



Figure 8. Vegetation associations and amenity scattered tree recorded along the north-western extent of the pipeline site.



Figure 9. Vegetation associations recorded along the western extent of the pipeline site.


4.2 Threatened Species Assessment

4.2.1 Matters of National Significance (MNES)

A total of 48 listed threatened species and 63 migratory species were identified by the EPBC Act PMST report as potentially occurring or having suitable habitat potentially occurring within 5 km of the project site (Table 4) (DECCEW 2023). The relevant MNES protected under the EPBC Act are discussed in detail below. Marine only species were not assessed as part of this desktop work due to a lack of connectivity of the project site to marine environments within the scope of the project option layouts.

Table 4. EPBC Act PMST report results summary (5km buffer).

Search area (5 km buffer)	Matters of national environmental significance under the EPBC Act	Identified within the search area
	World heritage properties	None
	National heritage properties	None
Vighia	Wetlands of international importance	None
	Great Barrier Reef marine park	None
	Commonwealth marine area	None
	Threatened ecological communities	2
Saft Crystallization	Listed Threatened species	48
Romo	Migratory species	63
	Commonwealth land	22
Euron E	Commonwealth heritage places	None
	Listed marine species	97
	Whales and other cetaceans	8
Salisbury	Critical habitats	None
	Commonwealth reserves terrestrial	None
er Hartor Gardens	Commonwealth reserves marine	None
	State and Territory reserves	5
	Regional forest agreements	None
Mawson Lakes	Nationally important wetlands	2
Largs North	Key Ecological Features	None
Pooraka	Biologically Important Areas	None
	Key ecological features (marine)	None

4.2.2 Threatened Ecological Communities

Two Threatened Ecological Communities (TEC's) were identified in the PMST as potentially occurring within 5 km of the project site. A summary of these communities and comment regarding their likelihood of occurrence in the project site are provided in Table 5 below.



Table 5. The threatened ecological communities identified by the PMST and their likelihood of presence within the project site.

Threatened Ecological Community	EPBC Status	Likelihood of Occurrence in the Project Site
Subtropical and Temperate Coastal Saltmarsh	Vulnerable	The field survey recorded no areas with connectivity to supra tidal conditions. The presence of infrastructure and evaporation ponds associated with the WWTP ensure no flooding from tidal surges can occur within the project site. Tidal influence is a key criterion and therefore rules out the possibility any samphire shrublands in the area can fulfill conditions for the TEC.
Peppermint Box (<i>Eucalyptus odorata</i>) Grassy Woodland of South Australia	Critically Endangered	No indigenous intact Peppermint Box Woodlands recorded in project site. There were areas of <i>Eucalyptus odorata</i> planted within the project site as a screen along the boundary. A lack of understory species richness and intact perennial grass stands meant that any areas of <i>E. odorata</i> woodland could not be considered part of the threatened ecological community.

4.2.3 Nationally Threatened Flora

Five flora species listed as threatened under the EPBC Act were identified in the PMST report as potentially occurring or having suitable habitat within the project site (Table 6 and Figure 10). One flora species of national conservation significance had historical records within 5km of the project site, *Tecticornia flabelliformis* (Bead Glasswort, VU: AUS). Bead Glasswort typically occupies a specific niche at the edge of the supra tidal zone where winter inundation from rainfall and storm surges creates a temporary wet zone. This species defoliates during winter and regains leaf cover during summer when surface water is largely not present. The locations of this population occur approximately 2 km west of the project site at St Kilda. No individuals of this species were recorded within the project site nor were they considered likely to occur based on the type and quality of habitat present.

4.2.4 State Threatened Flora

One flora species of state conservation significance had historical records from the BDBSA. *Juncus radula* was considered unlikely due to the lack of permanent water within the project site.

A list of all flora species with records within 5km of the project site is provided in Appendix 2.

Table 6. Threatened flora species potentially or known to occur within the project site identified from the PMST (DCCEEW 2023) and Naturemaps (DEW 2022).

Scientific name	Common name	Conservation ne status So		Source	BDBSA last	Distribution and preferred habitat	Likelihood of
		Aus.	SA		record (year)		Habitat Use
Caladenia tensa	Green-comb Spider- orchid	EN	R	1	None	This species is considered to be widespread in SA from the west coast, throughout Eyre Peninsula and adjacent pastoral zone, the Flinders Ranges, rare in the Mt Lofty Ranges and more common in the Murray and upper south-east. The Green-comb Spider-orchid grows on red-brown sandy loams on rises in open woodland dominated by <i>Eucalyptus leucoxylon</i> (SA Blue gum) and <i>Callitris gracilis</i> (Native Pine).	Unlikely
Juncus radula	Hoary Rush		V	2	24/09/1999	Recorded in depressions and along seasonal drainage lines in a range of vegetation communities. Known to hybridize with <i>J. subsecundus</i> .	Unlikely
Prasophyllum pallidum	Pale Leek-orchid	VU	E	1	None	Grows in woodland on slopes and gullies. Limited to intact stratums not subject to disturbance.	Unlikely
Senecio macrocarpus	Large Fruit Fireweed	VU	V	1	None	Occurs in a variety of habitats, including grasslands, sedgelands, shrublands and woodlands, generally on sparsely vegetated sites on sandy loam to heavy clay soils, often in depressions that are waterlogged in winter.	Unlikely
Swainsona pyrophila	Yellow Swainson-pea	VU	R	1	None	Occurs in mallee vegetation communities on a variety of soil types including well-drained sands, sandy loams and heavier clay loams.	Unlikely
Tecticornia flabelliformis	Beaded Glasswort	VU	E	1,2	25/12/2001	Sub tidal and supra tidal zones. Several records within 5km of project site. Not likely to occur outside of known location.	Unlikely

Conservation status: Aus.: Australia (Environment Protection and Biodiversity Conservation Act 1999). SA: South Australia (National Parks and Wildlife Act 1972). Conservation codes: EN/E: Endangered. VU/V: Vulnerable, R: Rare.



Figure 10. BDBSA records for conservation significant flora observations within 5km of project site.



4.2.5 Nationally Threatened Fauna

A total of 43 fauna species listed as threatened under the EPBC Act were identified by the PMST as having suitable habitat potentially occurring within 5 km of the project site (Table 7 and Figure 11). This included three mammals, four reptiles, two fish and a shark with the remaining 33 being avian species. Ten nationally threatened fauna species had historical records since 1995 and within 5km of the project site from the BDBSA. The desktop assessment resulted in three species considered to possibly occur within the project site, these were:

- St Vincent Gulf Slender-billed Thornbill (*Acanthiza iredalei rosinae*, EPBC: VU, SA: V)
- Grey-headed Flying-fox (Pteropus Poliocephalus, EPBC: VU, SA: R)
- Blue-winged Parrot (Neophema chrysostoma, EPBC: VU, SA: V).

An additional species, the Fairy Tern (*Sternula nereis nereis* EPBC: VU, SA: E) was considered to possible fly over the site periodically but not utilise the habitat within the area.

The St Vincent Gulf **Slender-billed Thornbill** subspecies (*Acanthiza iredalei rosinae*) is known to inhabit samphire shrublands. There was a lack of low compact shrubs within the project site and coupled with the grazing of the area and a planted modified overstorey dominated by *Melaleuca halmaturorum* (Coast Tea-tree), resulted in an unlikely likelihood of this species occupying the project site. Further, a targeted survey did not identify the species within the project site. Based on the degraded quality of the vegetation within the project footprint and land use for sheep grazing, the potential for this species to utilise the habitat is very unlikely.

Grey-headed Flying-fox (*Pteropus Poliocephalus*) are known to roost in the Adelaide Botanic Park and forage over a wide area, with individuals capable of travelling 40 km between their roost and feeding sites in a night (Eby and Law, 2008), which places the project site well within their range. Grey-headed Flying Foxes consume fleshy fruits and blossoms, have been observed feeding on the fruits of the Moreton Bay Fig (*Ficus macrophylla*) and the blossoms of eucalypts (*Eucalyptus* spp. and *Corymbia* sp.). Although the species may fly through the project site, the field survey did not identify any habitat critical to the species within the project site.

Blue-winged Parrot (*Neophema chrysostoma*) are known to inhabit coastal, sub-coastal and inland areas. 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 is also known to be found in altered environments such as airfields, golf-courses and paddocks. Habitat within the project site is not deemed critical for the species given the project site is a previously degraded and marginally rehabilitated area that is subject to grazing by sheep and incurs ongoing disturbance occurs from heavy vehicles and machinery associated with the WWTP. No records occur within 5km of the project site. However, suitable habitat for the species is present within the wider area and this transient species is considered to possibly move through the project site to access areas of suitable habitat.

4.2.6 State threatened fauna.

A total of 32 state threatened fauna species have historical records within 5 km of the project site (Table 7). Three species were considered as possibly or likely to occur within the project site, these were:

- Elegant Parrot (*Neophema elegans*)
- Little Egret (Egretta garzetta nigripes)
- Brown Quail (Coturnix ypsilophora australis)

None of these species were considered likely to be impacted by the extent of the project as the **Elegant Parrot** and **Little Egret** are typically transient in nature and do not occupy habitats on a permanent basis (Table 7) and the **Brown Quail** requires dense undergrowth which is not present within the project site. A list of all fauna species with historical records within 5 km of the project site is provided in Appendix 4.

4.2.7 Commonwealth listed migratory species.

Sixty-three migratory species were highlighted as part of the search (Table 7) and most of these species were associated with the Adelaide International Bird Sanctuary National Park - Winaityinaityi Pangkara. The park is located at the southern end of the East Asian-Australasian Flyway (EAAF) which is used by more than 5 million birds every year. 27,000 of these birds stop and rest in the Adelaide International Bird Sanctuary (DEW 2022). Most of these species are unlikely to utilise the project site other than as a brief flyover as a result of the surrounding land use and high levels of disturbance from machinery and heavy vehicles.



4.2.8 Nationally listed marine species

Ninety-seven listed marine species listed under the EPBC Act were identified in the PMST as potentially occurring or having suitable habitat potentially occurring within 5 km of the project site. Thirty-two of these were marine mammals fish and reptiles and were not considered as part of this assessment being entirely terrestrial in nature. The remaining 65 avian species were likely to fly over the area or utilise saltmarsh areas associated with the gulf mangrove systems. The project site was considered unsuitable for migratory bird species due to a lack of foraging and coastal saltmarsh habitat.

Table 7. Threatened and migratory fauna species potentially or known to occur within the project site identified from the PMST (DCCEEW 2023) and Naturemaps (DEW 2022).

Scientific name Common name		Conser	vation tus	Source	Last record	Distribution and habitat preferences	Likelihood of Habitat
	Aus.	SA		(year)		Use	
BIRDS							
Acanthiza iredalei rosinae	Slender-billed Thornbill	VU	V	1, 2	06/11/2020	Open Chenopod shrublands and samphire shrublands. Historical record well north of project site associated with intact samphire shrublands however the project site itself is a previously degraded and marginally rehabilitated area that is subject to grazing by sheep. The samphire shrubland stands have only very low cover and height and are mixed with planted coastal Tea-tree. The habitat within the project site is overall not suitable for this species and coupled with the existing land use and ongoing disturbance from heavy vehicles and machinery associated with the WWTP it is considered unlikely that the project site supports any suitable habitat for this species.	Unlikely
Aphelocephala leucopsis	Southern Whiteface	VU		1	None	Open woodlands and shrublands where there is an understored of grasses or shrubs, or both. Favours habitat with low tree densities and herbaceous understory litter cover.	Unlikely
Actitis hypoleucos	Common Sandpiper	Mi (W)	R	1, 2	13/12/2014	Coastal tidal salt marshes	Unlikely
Anhinga novaehollandiae	Australasian Darter		R	2	02/12/2012	Freshwater Wetlands	Unlikely
Apus pacificus	Fork-tailed Swift	Mi (M), Ma		1	None	Migratory and aerial species will roost in large tress	Unlikely
Ardea intermedia plumifera	Plumed Egret		R	2	19/01/2012	Wetlands and open grazing country	Unlikely
Ardenna carneipes	Flesh-footed Shearwater	Mi.		1	None	Marine species, comes to islands to nest.	Unlikely
Ardenna grisea	Sooty Shearwater	Mi.		1	None	Marine species, comes to islands to nest.	Unlikely
Arenaria interpres	Ruddy Turnstone	MI (W)	R	1,2	26/02/2006	Coastal shorebird often found around high tide mark amongst wrack on beach	Unlikely
Biziura lobata menziesii	Musk Duck		R	2	13/12/2014	Freshwater wetland species	Unlikely
Botaurus poiciloptilus	Australasian Bittern	EN	E	1,2	25/08/2007	Freshwater wetland species, inhabits swamps and wetlands, largely nocturnal	Unlikely
Bubulcus ibis coromandus	Eastern Cattle Egret		R	2	08/08/2006	Wetlands and open paddocks	Unlikely

Scientific name	Common name	Conserv	vation us	Source	Last record	Distribution and habitat preferences	Likelihood of Habitat
		Aus.	SA		(year)		Use
Calidris acuminata	Sharp-tailed Sandpiper	Mi (W)		1	None	Wading shorebird	Unlikely
Calidris alba	Sanderling	Mi (W)		1	None	Wading shorebird	Unlikely
Calidris canutus	Red Knot	EN, Mi (W)	E	1, 2	08/02/1998	Wading shorebird	Unlikely
Calidris ferruginea	Curlew Sandpiper	CE, Mi (W)		1,2	02/12/2012	Wading shorebird	Unlikely
Calidris melanotus	Pectoral Sandpiper	Mi (W)	R	1, 2	13/10/2015	Wading shorebird	Unlikely
Calidris pugnax	Ruff		R	2	13/01/2011	Wading shorebird	Unlikely
Calidris ruficollis	Red-necked Stint	Mi (W)		1	None	Wading shorebird	Unlikely
Calidris subminuta	Long-toed Stint	MI (W)	R	1,2	17/01/2006	Wading shorebird	Unlikely
Calidris tenuirostris	Great Knot	CE, Mi (W)	R	1	None	Wading shorebird	Unlikely
Cereopsis novaehollandiae	Cape Barren Goose		R	2	20/03/2004	Cape Barren Goose prefers offshore islands with scrub or pasture, ocean beaches, headlands, margins of lakes, swamps, farm pastures. Cape Barren geese live mostly on small, windswept and generally uninhabited offshore islands	Unlikely
Charadrius bicinctus	Double-banded Plover	Mi (W)		1	None	Wading shorebird	Unlikely
Charadrius leschenaultii	Greater Sand Plover	VU, Mi (W)	R	1	None	Wading shorebird	Unlikely
Charadrius mongolus	Lesser Sand Plover	EN, Mi (W)	R	1	None	Wading shorebird	Unlikely
Charadrius veredus	Oriental Plover	Mi (W)		1	None	Wading shorebird	Unlikely
Cladorhynchus leucocephalus	Banded Stilt		V	2	20/12/2015	Wading shorebird	Unlikely
Coturnix ypsilophora australis	Brown Quail		V	2	13/12/2014	Open flats and grassy plains	Possible
Diomedea antipodensis	Antipodean Albatross	VU, Mi		1	None	Pelagic marine species	Unlikely
Diomedea epomophora	Southern Royal Albatross	VU, Mi	V	1	None	Pelagic marine species	Unlikely
Diomedea exulans	Wandering Albatross	VU, Mi	V	1	None	Pelagic marine species	Unlikely
Diomedea sanfordi	Northern Royal Albatross	EN, Mi		1	None	Pelagic marine species	Unlikely

Scientific name	Common name	Conserv stat	vation us	Source	Last record	Distribution and habitat preferences	Likelihood of Habitat
		Aus.	SA		(year)		Use
Egretta garzetta nigripes	Little Egret		R	2	14/10/2020	Wading bird, nearby record within samphire shrublands.	Possible
Falco hypoleucos	Grey Falcon	VU	R	1	None	Distributed sparsely over Australia's arid and semi-arid zones.	Unlikely
Falco subniger	Black Falcon		R	2	14/08/2007	sparsely spread in the inland and across northern, eastern, southern and central Australia. The Black Falcon is found along tree-lined watercourses and in isolated woodlands, mainly in arid and semi-arid areas.	Unlikely
Gallinago hardwickii	Latham's Snipe	Mi (W)	R	1,2	23/09/2006	Wading bird, likely in salt fields areas but no samphire shrubland	Unlikely
Gallinago megala	Swinhoe's Snipe	Mi (W)		1	None	Wading bird	Unlikely
Gallinago stenura	Pin-tailed Snipe	Mi (W)		1	None	Wading bird	Unlikely
Grantiella picta	Painted Honeyeater	VU	V	1	None	Wading bird	Unlikely
Haematopus fuliginosus fuliginosus	Sooty Oystercatcher		R	2	26/11/2014	Coastal shorebird, likely to occur along coastal fringe and around nearby Torrens Island. Unlikely within project site.	Unlikely
Haematopus longirostris	Pied Oystercatcher		R	2	26/11/2014	Coastal shorebird, likely to occur along coastal fringe and around Torrens Island	Unlikely
Hieraaetus morphnoides	Little Eagle		V	2	19/06/2005	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.	Unlikely
Hirundapus caudacutus	White-throated Needletail	VU, Mi	V	1	None	Largely aerial species, may roost locally in large trees	Unlikely
Limicola falcinellus	Broad-billed Sandpiper	Mi (W)		1	None	Wading species, likely in salt pan areas	Unlikely
Limosa lapponica baueri	Bar Tailed Godwit	VU, Mi (W)	R	1, 2	28/03/2010	Wading species, likely in salt pan areas	Unlikely
Limosa limosa	Black-tailed Godwit	Mi (W)	R	1,2	02/04/2011	Wading species, likely in salt pan areas	Unlikely
Macronectes giganteus	Southern Giant Petrel	EN, Mi	V	1	None	Pelagic marine species	Unlikely
Macronectes halli	Northern Giant Petrel	VU, Mi		1	None	Pelagic marine species	Unlikely
Melanodryas cucullata cucullata	South-eastern Hooded Robin	EN	R	1	None	Prefer dry eucalypt and acacia woodlands and shrublands with an open understorey, some grassy areas and a complex ground layer. Sometimes occur in tall, dense heaths with scattered open areas.	Unlikely

Scientific name	Common name	Conserv	vation :us	Source	Last record	Distribution and habitat preferences	Likelihood of Habitat
		Aus.	SA		(year)		Use
Melithreptus gularis gularis	Black-chinned Honeyeater		V	2	11/09/2007	Occupies mostly upper levels of drier open forests or woodlands dominated by box bark Eucalypts,	Unlikely
Motacilla cinerea	Grey Wagtail	Mi (T),		1	None	Vagrant only	Unlikely
Motacilla flava	Yellow Wagtail	Mi (T),		1	None	Vagrant only	Unlikely
Myiagra cyanoleuca	Satin Flycatcher	Mi (T)		1	None	Recorded in woodlands	Unlikely
Neophema chrysogaster	Orange-bellied Parrot	CE	E	1	None	Formerly widespread along coastal margins and samphire marshes now only recorded along the southern Victorian coastline mostly around the Bellarine Peninsula and breeding areas at Melaleuca Tasmania. Remnants important in the event that population recovers.	Unlikely
Neophema chrysostoma	Blue-winged Parrot	VU	V	1	None	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. Can also be seen in altered environments such as airfields, golf-courses and paddocks.	Possible
Neophema elegans elegans	Elegant Parrot		R	2	13/01/2011	Occupies woodlands, mallee and open shrublands	Likely
Numenius madagascariensis	Eastern Curlew	CE, Mi (W)	E	1,2	02/12/2012	Coastal Shorebird	Unlikely
Numenius minutus	Little Whimbrel	Mi (W)		1	None	Coastal Shorebird	Unlikely
Numenius phaeopus	Whimbrel	Mi (W)	R	1,2	26/02/2006	Coastal Shorebird records in proximity to project site on samphire shrubland community.	Unlikely
Oxyura australis	Blue-billed Duck		R	2	02/12/2012	Wetlands	Unlikely
Pachyptila turtur subantarctica	Fairy Prion	VU		1	None	Pelagic marine species	Unlikely
Pandion haliaetus	Osprey	Mi (W),	E	1	None	Ospreys 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.	Unlikely
Pedionomus torquatus	Plains-wanderer	CE	E	1	None	Open plains in arid and semi-arid areas	Unlikely
Pezoporus occidentalis	Night Parrot	EN	E	1	None	Extinct in area	Unlikely

Page **40** of **57**

Scientific name	Common name	Conserv stat	vation us	Source	Last record	Distribution and habitat preferences	Likelihood of Habitat
		Aus.	SA		(year)		Use
Phalaropus lobatus	Red-necked Phalarope	Mi (W)		1	None	Migratory wetland species	Unlikely
Philomachus pugnax	Ruff (Reeve)	Mi (W)		1	None	Migratory wetland species	Unlikely
Phoebetria fusca	Sooty Albatross	VU, Mi	E	1	None	Pelagic marine species	Unlikely
Plegadis falcinellus	Glossy Ibis		R	2	01/12/2004	The Glossy Ibis requires shallow water and mudflats, so is found in well-vegetated wetlands, floodplains, mangroves and rice fields	Unlikely
Pluvialis fulva	Pacific Golden Plover	Mi (W)	R	1,2	25/01/2007	Migratory wetlands species likely in adjacent salt pans and saline wetlands	Unlikely
Pluvialis squatarola	Grey Plover	Mi (W)		1	None	Migratory wetlands species likely in adjacent salt pans and saline wetlands	Unlikely
Podiceps cristatus cristatus	Great Crested Grebe		R	2	13/12/2014	Wetlands from rivers and lakes to estuaries and sheltered bays, but favours large, deep, open bodies of fresh water	Unlikely
Rostratula australis	Australian Painted Snipe	EN, Ma	E	1, 2	22/11/2004	Migratory wetlands species likely in adjacent salt pans and saline wetlands	Unlikely
Spatula rhynchotis	Australasian Shoveler		R	2	09/04/2016	Wetland's species	Unlikely
Stagonopleura guttata	Diamond Firetail	VU	V	2	02/12/2012	Open grassy woodland, heath and farmland or grassland with scattered trees.	Unlikely
Sternula albifrons	Little Tern	Mi		1, 2	24/11/2005	The Little Tern is mainly coastal, being found on beaches, sheltered inlets, estuaries, lakes, sewage farms, lagoons, river mouths and deltas	Possible, as fly over
Sternula nereis nereis	Australian Fairy Tern	VU	E	1,2	02/12/2012	Found on coastal beaches, inshore and offshore islands, sheltered inlets, sewage farms, harbours, estuaries and lagoons. It favours both fresh and saline wetlands and near- coastal terrestrial wetlands, including lakes and salt-ponds.	Possible, as fly over
Stictonetta naevosa	Freckled Duck		V	2	09/09/2017	Freshwater wetlands	Unlikely
Thalassarche carteri	Indian Yellow-nosed Albatross	VU, Mi		1	None	Pelagic marine species	Unlikely
Thalassarche cauta	Shy Albatross	EN, Mi	V	1	None	Pelagic marine species	Unlikely
Thalassarche impavida	Campbell Albatross,	VU, Mi		1	None	Pelagic marine species	Unlikely
Thalassarche melanophris	Black-browed Albatross	VU, MI	ssp.	1	None	Pelagic marine species	Unlikely

Scientific name	Common name	Conser	vation tus	Source	Last record	Distribution and habitat preferences	Likelihood of Habitat
		Aus.	SA		(year)	i de la companya de l	Use
Thalassarche steadi	White-capped Albatross	VU, Mi	V	1	None	Pelagic marine species	Unlikely
Thinornis cucullatus cucullatus	Hooded Plover	VU	V	1	None	Occurs mainly on sandy ocean beaches, just on the tide line. Total population in SA is approx. 540 birds.	Unlikely
Tringa brevipes	Grey-tailed Tattler	Mi (W)	R	1, 2	20/03/2004	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely
Tringa glareola	Wood Sandpiper	Mi (W)	R	1,2	18/03/2006	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely
Tringa nebularia	Common Greenshank	Mi (W)		1	None	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely
Tringa stagnatilis	Marsh Sandpiper	Mi (W)		1	None	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely
Xenus cinereus	Terek Sandpiper	Mi (W)	R	1,2	04/04/2012	Migratory wetlands species, likely in salt pans and tidal salt marsh	Unlikely
REPTILES							
Caretta caretta	Loggerhead Turtle	EN, Mi (Ma)	E	1	None	Marine Species	Unlikely
Chelonia mydas	Green Turtle	VU, Mi (Ma)	V	1,2	22/12/2008	Marine Species	Unlikely
Dermochelys coriacea	Leatherback Turtle	EN, MI (Ma)	V	1	None	Marine Species	Unlikely
Tiliqua adelaidensis	Pygmy Blue-tongue Lizard	EN	E	1	None	Remnant native grassland or grassy woodland with a sparse overstorey of trees.	Unlikely
MAMMALS			•	•	1		
Balaenoptera edeni	Bryde's Whale	Mi (M)		1	None	Marine Species	Impossible
Caperea marginata	Pygmy Right Whale	Mi (M)		1	None	Marine Species	Impossible
Eubalaena australis	Southern Right Whale	EN	V	1	None	Marine Species	Impossible
Lagenorhynchus obscurus	Dusky Dolphin	Mi (M)		1	None	Marine Species	Impossible
Megaptera novaeangliae	Humpback Whale	VU, Mi (Ma)	V	1	None	Marine Species	Impossible

Scientific name Common name		Conservation status		Source	Last record	Distribution and habitat preferences	Likelihood of Habitat
		Aus.	SA		(year)		Use
Neophoca cinerea	Australian Sea-lion,	VU	V	1	None	About 80 per cent of the world's Australian Sea-lion population occurs in SA. These animals travel large distances to find food but return to the same places to rest on land.	Unlikely
Pteropus poliocephalus	Grey-headed Flying-fox	VU	R	1,2	25/02/2020	The distribution of the Grey-headed Flying Fox has contracted in the north of Australia, and expanded in the south, with the roosting colony at Botanic Park first recorded in 2010. Grey- headed Flying Foxes forage over a wide area, with individuals capable of travelling 40 km between their roost and feeding sites in a night feeding on flowers fruits and nectar.	Possible
SHARKS					·		
Carcharodon carcharias	Great White Shark	VU, Mi (Ma)		1	None	Marine Species	Impossible
Lamna nasus	Mackerel Shark	Mi (MA)		1	None	Marine Species	Impossible
FISH							
Thunnus maccoyii	Southern Bluefin Tuna	CD		1	None	Marine Species	Impossible
Seriolella brama	Blue Warehou	CD		1	None	Marine Species	Impossible

Conservation status: Aus.: Australia (Environment Protection and Biodiversity Conservation Act 1999). SA: South Australia (National Parks and Wildlife Act 1972). Conservation codes: CD: Conservation Dependent. CE: Critically Endangered. EN/E: Endangered. VU/V: Vulnerable. R: Rare. Mi: Migratory, Ma: Marine, T: Terrestrial, W: Wetland species.



Figure 11. National and state conservation significant fauna observations within 5km of project site.

Over lapping data cluster origin

Threatened fauna (BDBSA records, number of records per point not represented)

- Australasian Bittern (Botaurus poiciloptilus)
 AUS : EN, SA : E
- Australasian Darter (Anhinga novaehollandiae novaehollandiae) SA : R
- ▲ Australasian Shoveler (Spatula rhynchotis) SA : R
- Australian Painted-snipe (Rostratula australis) AUS : EN, SA : E
- Banded Stilt (Cladorhynchus leucocephalus) SA : V
- ▲ Black Falcon (Falco subniger) SA : R
- Black-chinned Honeyeater (Melithreptus gularis)
 SA : R
- O Black-tailed Godwit (Limosa limosa melanuroides) SA : R
- Blue-billed Duck (Oxyura australis) SA : R
- Brown Quail (Coturnix ypsilophora australis) SA : V
- Cape Barren Goose (Cereopsis novaehollandiae novaehollandiae) SA : R
- Common Sandpiper (Actitis hypoleucos) SA : R
- Curlew Sandpiper (Calidris ferruginea) AUS : CR, SA :
 E
- ★ Eastern Cattle Egret (Bubulcus ibis coromandus) SA : R
- ★ Elegant Parrot (Neophema elegans elegans) SA : R
- ★ Fairy Tern (Sternula nereis nereis) AUS : VU, SA : E
- Far Eastern Curlew (Numenius madagascariensis) AUS : CR, SA : E

Freckled Duck (Stictonetta naevosa) SA : V

Figure 12. Threatened fauna species legend.

- 🛠 Glossy Ibis (Plegadis falcinellus) SA : R
- Great Crested Grebe (Podiceps cristatus australis) SA : R
- ★ Green Sea Turtle (Chelonia mydas) AUS : VU, SA : V
- Grey-headed Flying-fox (Pteropus poliocephalus) AUS : VU, SA : R
- Grey-tailed Tattler (Tringa brevipes) SA : R
- Latham's Snipe (Gallinago hardwickii) SA : R
- Little Eagle (Hieraaetus morphnoides) SA : V
- Little Egret (Egretta garzetta nigripes) SA : R
- Little Tern (Sternula albifrons sinensis) SA : E
- Long-toed Stint (Calidris subminuta) SA : R
- ▼ Musk Duck (Biziura lobata menziesi) SA : R
- ▼ Pacific Golden Plover (Pluvialis fulva) SA : R
- ▼ Pectoral Sandpiper (Calidris melanotos) SA : R
- ▼ Pied Oystercatcher (Haematopus longirostris) SA : R
- ▼ Plumed Egret (Ardea intermedia plumifera) SA : R
- ▼ Red Knot (ssp. rogersi) (Calidris canutus rogersi) SA : E
- ▼ Ruddy Turnstone (Arenaria interpres interpres) SA : R
- Ruff (Calidris pugnax) SA : R
- Samphire Thornbill or Slender-billed Thornbill Gulf St Vincent) (Acanthiza iredalei rosinae) AUS : VU, SA : V
- Sooty Oystercatcher (Haematopus fuliginosus fuliginosus) SA : R
- Terek Sandpiper (Xenus cinereus) SA : R
- Whimbrel (Numenius phaeopus variegatus) SA : R
- 🗜 🛛 Wood Sandpiper (Tringa glareola) SA : R



When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must consider the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.

Under the current proposal the entirety of the project site is included for clearance accounting for cumulative impacts associated with the operation of an industrial plant. Offsite impacts such as dust etc would only drift onto other areas used for industrial purposes and the WWTP. No cumulative impacts area expected from this proposal.

4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

a) Avoidance – outline measures taken to avoid clearance of native vegetation.

The project has been designed to minimise clearance of native vegetation where practicable. The stormwater channel runs along the eastern boundary and with its current design, would require some vegetation clearance. However, the stormwater channel design is maturing with ongoing collaboration with stakeholders, including SA Water and Council. Collaboration with the City of Playford Council includes discussions with regard to how stormwater design along Robinson Road can fit within the Councils long term planning for broader stormwater management. Final siting and design of the stormwater channel will aim to minimise clearing of native vegetation and maintain the screen along the eastern boundary, where practicable.

b) Minimization – if clearance cannot be avoided, outline measures taken to minimize the extent, duration and intensity of impacts of the clearance on biodiversity to the fullest possible extent (whether the impact is direct, indirect or cumulative).

The surrounding land use means that adjoining vegetation is largely disturbed and that disturbance to surrounding areas is not likely to place added pressure on areas of vegetation.

c) Rehabilitation or restoration – outline measures taken to rehabilitate ecosystems that have been degraded, and to restore ecosystems that have been degraded, or destroyed by the impact of clearance that cannot be avoided or further minimized, such as allowing for the re-establishment of the vegetation.

Any vegetation outside of the project footprints will be retained and managed for weeds and enhanced in the absence of grazing pressure from sheep.

d) Offset – any adverse impact on native vegetation that cannot be avoided or further minimized should be offset by the achievement of a significant environmental benefit that outweighs that impact.

The NVC will only consider an offset once avoidance, minimization and restoration have been documented and fulfilled. The <u>SEB Policy</u> explains the biodiversity offsetting principles that must be met.



4.5 Principles of Clearance (Schedule 1, *Native Vegetation Act* 1991)

The Native Vegetation Council will consider Principles 1(b), 1(c) and 1(d) when assigning a level of Risk under Regulation 16 of the Native Vegetation Regulations. The Native Vegetation Council will consider all the principles of clearance of the Act as relevant, when considering an application referred under the *Planning, Development and Infrastructure Act 2016.*

Principle of	Considerations
clearance	
Principle 1a - it	Relevant information
comprises a	Very low species richness with only highly disturbance resistant species emergent as understorey to amenity
high level of	shrub and tree plantings.
diversity of	Association 4 (native species diversity score: 16) has a higher coverage of samphire and lower weed invasion
plant species	due to annual wetting drowning many species not tolerant of wet and saline conditions.
	Assessment against the principles
	Association 4 is at variance with this principle
	Moderating factors that may be considered by the NVC.
	Only a small patch (0.75ha) of habitat is present which is surrounded by highly disturbed land use.
Principle 1b -	Relevant information
significance as	A total of 42 fauna species had historical BDBSA records within and surrounding the project site. No species
a habitat for	of conservation significance were recorded during field assessments within the project footprint over two
wildlife	survey periods.
	Three species of national conservation significance were considered to possibly occur within the project site.
	Grev-headed Flying-fox (Pteropus Poliocephalus)
	• Blue-winged Parrot (<i>Neophema chrysostoma</i>)
	• Fairy Tern (Sternula nereis nereis) (Elyover only)
	A further three species of state conservation significance were considered to possibly occur within the
	project site.
	Elegant Parrot (Neophema elegans)
	• Little Egret (<i>Egretta garzetta nigripes</i>)
	Brown Quail (Coturnix ypsilophora australis)
	Threatened Fauna Score – The threatened fauna score for all associations was 0.1.
	Unit biodiversity Scores ranged from 32.07 down to 3.12.
	Assessment against the principles
	Seriously at Variance
	Vegetation associations 4, 5, 6, 8, 9, 10 were seriously at variance with this principle.
	Moderating factors that may be considered by the NVC
	While the area may provide habitat for some threatened fauna species it is likely to be as a transient period
	while the area may provide habitat for some threatened fadia species it is likely to be as a transient period
	surrounding the area and that species moving through the area are likely to preferentially use over
	degraded zones such as the project site despite it being grazed as a farming alletment and little sare shown
	for its ongoing maintenance as a vegetation stratum. There is another large vegetated area to the porth of
	the project site and provided this is retained in the longer term, development of the project site is not likely
	to lead to a long-term decline in threatened species nonulations
Principle 1c	Palavant information
plants of a	No threatened flora recorded or likely to over utilise this area while being used as a farming alletment
	The threatened not a recorded of likely to ever utilise this area while being used as a farming allothemt.
rare,	

vulnerable or	Assessment against the principles
endangered	Not At Variance
species	
•	
	Moderating factors that may be considered by the NVC
	Moderating factors that may be considered by the NVC
Principle 1d -	Relevant information
the vegetation	No threatened ecological communities were recorded within the project site. The area has been subject to
comprises the	long term degradation and the only remnant communities within the local area are camphire and
whole or	Manaroves associated with the coastal fringe
whole of	
	There is a set of Commentation of the Manufacture of the second
community	Inreatened Community Score – 0, No threatened communities present.
that is Rare,	Assessment against the principles
Vulnerable or	Not at variance
endangered:	
	Moderating factors that may be considered by the NVC
Duin ciula 1a it	
Principle Te - it	Relevant information
is significant as	Remnancy in the St Vincent IBRA Subregion is 8%. Remnancy in the Mailala Environmental Association is 3%
a remnant of	and, in the Parham, Environmental Association is 44%.
vegetation in	
an area which	Total Biodiversity Score – Total biodiversity score 232.99
has been	Assessment against the principles
extensively	The clearance of vegetation within the Project is considered Seriously at Variance
cleared.	
	Moderating factors that may be considered by the NVC.
	This site has historically been mostly cleared and used for farming. The regeneration of disturbance
	resistant species is not unusual for areas such as this where heavy saline soils will grow little else other than
	annual grasses during winter.
Principle 1f - it	Relevant information
is growing in,	Prior to this area being highly modified through evaporation and salt pans, the project site was likely to be
or in	right at the edge of the supra tidal Zone. A 'sort of' wetland remains in the southern section of the project
association	site however this is from rainfall collecting and having nowhere to naturally drain.
with, a wetland	Assessment against the principles
environment.	Seriously at Variance
	Vegetation association 4 is theoretically a wetland and is evidenced by the persistence of Tecticornia
	shrubland that is the only species that can persist longer term in the area dependent on how wet each year
	is. The wetland composition is likely to flux from year-to-year dependent on the water depth and length of
	time that water remains in the wetland.
	Moderating factors that may be considered by the NVC.
	The wetland provides little to no habitat value as with the grazing that occurs in the site the bare ground is
	mud and is likely to provide little foraging value for wetland species.
Principle 1a - it	Relevant information
contributes	The boundary screen provides good amenity value however the useful lifespan of many of these trees is
significantly to	nearing completion with many trees either falling over or shedding limbs
the amenity of	
the area in	
which it is	Moderating factors that may be considered by the NVC.
arowing or is	The primary amenity value is provided by planted trees rather than the native vegetation which does not
situated	present as an attractive community.



4.6 Risk Assessment

Determine the level of risk associated with the application.

Total	No. of trees	n/a
clearance	Area (ha)	22.22
	Total biodiversity Score	253.18
Seriously at va 1(b), 1(c) or 1	ariance with principle (d)	1(b)
Risk assessment outcome		Level 4

4.7 NVC Guidelines

Provide any other information that demonstrates that the clearance complies with any relevant NVC guidelines related to the activity.



5. Clearance summary

Clearance Area(s) Summary Table

Block	Site	Species Diversity Score	Threatened Ecological Community Score	Threatened Plant Score	Threatened Fauna Score	UBS	Area (Ha)	Total Biodiversity Score	Loss Factor	Loadings	Reductions	SEB Points Required	SEB Payment	Admin Fee
1	1	6	1	0	0.1	3.12	0.64	2.00	1			2.10	\$1,200.17	\$66.01
1	2	6	1	0	0.1	6.23	3.41	21.24	1			22.31	\$12,768.77	\$702.28
1	3	8	1	0	0.1	22.23	3.13	69.58	1			73.06	\$41,820.61	\$2,300.13
1	4	16	1	0	0.1	29.6	0.75	22.20	1			23.31	\$13,343.19	\$733.88
1	5	10	1	0	0.1	15.15	3.68	55.75	1			58.54	\$33,509.43	\$1,843.02
1	6	6	1	0	0.1	7.79	9.65	75.17	1			78.93	\$45,182.61	\$2,485.04
1	8	10	1	0	0.1	17.66	0.21	3.71	1			3.89	\$2,229.03	\$122.60
1	9	10	1	0	0.1	4.23	0.65	2.75	1			2.89	\$1,652.57	\$90.89
1	10	6	1	0	0.1	7.75	0.1	0.78	1			0.81	\$465.81	\$25.62
						Total	22.22	253.1796				265.84	\$152,172.18	\$8,369.47

Totals Summary Table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	253.18	265.84	\$152,172.18	\$8,369.47	\$160,541.65

Economies of Scale Factor	0.5
Rainfall (mm)	428



6. Significant Environmental Benefit

A Significant Environmental Benefit (SEB) is required for approval to clear under Division 5 of the *Native Vegetation Regulations 2017*. The NVC must be satisfied that as a result of the loss of vegetation from the clearance that an SEB will result in a positive impact on the environment that is over and above the negative impact of the clearance.

ACHIEVING AN SEB

Indicate how the SEB will be achieved by ticking the appropriate box and providing the associated information:

Establish a new SEB Area on land owned by the proponent.

Use SEB Credit that the proponent has established. Provide the SEB Credit Ref. No.

Apply to have SEB Credit assigned from another person or body. The <u>application form</u> needs to be submitted with this Data Report.

Apply to have an SEB to be delivered by a Third Party. The <u>application form</u> needs to be submitted with this Data Report.

Pay into the Native Vegetation Fund.

PAYMENT SEB

If a proponent proposes to achieve the SEB by paying into the Native Vegetation Fund, summary information must be provided on the amount required to be paid and the manner of payment:

Payment of \$151,172.18 into the Native Vegetation Fund plus an administration fee of \$8,369.47 totalling \$160,541.65.



7. Appendices

Appendix 1. Bushland, Rangeland or Scattered Tree Vegetation Assessment Scoresheets associated with the proposed clearance and SEB Area (to be submitted in Excel format)

Appended.

Appendix 2. Flora Species List

		EPBC	NPW	Most Recent
Species Name	Common Name	Act	Act	Sighting
Acacia acinacea	Wreath Wattle			26/09/2010
Acacia cyclops	Western Coastal Wattle			14/02/2018
Acacia ligulata	Umbrella Bush			24/11/1999
Acacia sp.	Wattle			25/12/1997
Acacia victoriae ssp.	Elegant Wattle			20/08/2010
Aeonium arboreum	Tree Aeonium			18/04/2011
Aizoon pubescens	Coastal Galenia			14/02/2018
Aizoon sp.	Galenia			30/11/1999
Anredera cordifolia	Madeira Vine			11/04/2022
Arctotheca calendula	Cape Weed			28/09/2010
Arundo donax	Giant Reed			24/11/1999
Asphodelus fistulosus	Onion Weed			16/02/1999
Atriplex paludosa ssp.	Marsh Saltbush			20/08/2010
Atriplex paludosa ssp. cordata	Marsh Saltbush			24/11/1999
Atriplex paludosa ssp. paludosa	Marsh Saltbush			20/08/2010
Atriplex prostrata	Creeping Saltbush			14/02/2018
Atriplex semibaccata	Berry Saltbush			14/02/2018
Atriplex suberecta	Lagoon Saltbush			20/08/2010
Austrostipa nitida	Balcarra Spear-grass			26/09/2010
Austrostipa nodosa	Tall Spear-grass			20/08/2010
Austrostipa puberula	Fine-hairy Spear-grass			14/11/1996
Austrostipa scabra ssp.	Rough Spear-grass			28/09/2010
Austrostipa sp.	Spear-grass			23/11/1999
Avena barbata	Bearded Oat			30/11/1999
Avena sp.	Oat			14/02/2018
Avicennia marina ssp. marina	Grey Mangrove			27/11/2018
Brassica sp.				16/02/1999
Brassica tournefortii	Wild Turnip			20/08/2010
Bromus diandrus	Great Brome			10/11/2013
Bromus sp.	Brome			16/02/1999
Casuarinaceae sp.	Sheoak Family			16/02/1999
Cenchrus ciliaris	Buffel Grass			20/03/2015
Cenchrus clandestinus	Kikuyu			24/11/1999
Chenopodium album	Fat Hen			18/04/2011
Chenopodium sp.	Goosefoot			24/11/1999

		EPBC	NPW	Most Recent
Species Name	Common Name	Act	Act	Sighting
Chloris truncata	Windmill Grass			13/08/2010
Compositae sp.	Daisy Family	-		25/12/1997
Convolvulus erubescens complex				20/08/2010
Conyza canadensis var. canadensis	Canadian Fleabane			20/08/2010
Critesion sp. (NC)	Barley-grass	_		17/12/1997
Cynara cardunculus ssp. flavescens	Artichoke Thistle			25/06/2021
Cynodon dactylon (NC)	Couch			24/11/1999
Cynodon sp.	Couch			14/02/2018
Cyperus eragrostis	Drain Flat-sedge			18/04/2011
Danthonia sp. (NC)	Wallaby-grass			10/02/1999
Dichanthium sericeum ssp.	Silky Blue-grass			20/08/2010
Dichanthium sericeum ssp. sericeum	Silky Blue-grass			24/08/2010
Disphyma crassifolium ssp. clavellatum	Round-leaf Pigface			14/11/1996
Echinochloa crus-galli	Common Barnyard Grass			18/04/2011
Echium plantagineum	Salvation Jane			30/11/1999
Elytrigia repens	Twitch Grass			3/02/1996
Enchylaena tomentosa var.	Ruby Saltbush			20/08/2010
Enchylaena tomentosa var. tomentosa	Ruby Saltbush			14/02/2018
Enteropogon acicularis	Umbrella Grass			23/11/1999
Eragrostis cilianensis	Stink Grass			18/04/2011
Erodium cicutarium	Cut-leaf Heron's-bill			20/08/2010
Erodium moschatum	Musky Herons-bill			28/09/2010
Eucalyptus camaldulensis ssp.				
	River Red Gum			14/02/2018
Eucalyptus leucoxylon ssp.	South Australian Blue Gum			14/02/2018
Eucalyptus porosa	Mallee Box			14/02/2018
Eucalyptus sp.				14/02/2018
Eucalyptus torquata	Coral Gum			14/02/2018
Frankenia pauciflora var. gunnii	Southern Sea-heath			14/11/1996
Fraxinus angustifolia ssp. angustifolia	Narrow-leaved Ash	_		14/02/2018
Gahnia filum	Thatching Grass			14/11/1996
Gazania linearis	Gazania			18/04/2011
Glandularia aristigera	Mayne's Pest			23/11/1999
Gramineae sp.	Grass Family			25/12/1997
Halosarcia sp. (NC)	Samphire			16/02/1999
Heliotropium europaeum	Common Heliotrope			14/02/2018
Hemichroa pentandra	Trailing Hemichroa			23/11/2018
Hordeum glaucum	Blue Barley-grass			17/12/1997
Hordeum marinum	Sea Barley-grass			20/08/2010
Hordeum vulgare	Barley			30/11/1999
Hordeum vulgare ssp. (NC)				10/02/1999
Hornungia procumbens	Oval Purse			14/11/1996
Isolepis marginata	Little Club-rush			14/02/2018
Juncus acutus	Sharp Rush			14/02/2018

		EPBC	NPW	Most Recent
Species Name	Common Name	Act	Act	Sighting
Juncus bufonius	Toad Rush			14/11/1996
Juncus radula	Hoary Rush		V	24/09/1999
Lactuca serriola (NC)	Prickly Lettuce			24/11/1999
Lactuca sp.	Lettuce			14/02/2018
Lepidium africanum	Common Peppercress			20/08/2010
Limonium companyonis	Sea-lavender			18/04/2011
Limonium diffusum				3/02/1996
Limonium lobatum	Winged Sea-lavender			20/08/2010
Limonium sinuatum	Notch-leaf Sea-lavender			3/02/1996
Lolium rigidum	Wimmera Ryegrass			18/04/2011
Lolium sp.	Ryegrass			10/02/1999
Lomandra multiflora ssp. dura	Hard Mat-rush			23/11/1999
Lycium ferocissimum	African Boxthorn			22/01/2022
Lythrum sp.	Loosestrife			20/08/2010
Maireana aphylla	Cotton-bush			27/05/2022
Maireana brevifolia	Short-leaf Bluebush			14/02/2018
Maireana oppositifolia	Salt Bluebush			29/11/2018
Maireana sp.	Bluebush/Fissure-plant			25/12/1997
Marrubium vulgare	Horehound			15/06/2021
Marsilea drummondii	Common Nardoo			27/05/2022
Medicago polymorpha	Burr-medic			28/09/2010
Mesembryanthemum crystallinum	Common Iceplant			16/02/1999
Mesembryanthemum nodiflorum	Slender Iceplant			14/11/1996
Nitraria billardierei	Nitre-bush			14/02/2018
Olea europaea ssp.	Olive			14/02/2018
Olea europaea ssp. europaea	Olive			4/06/2021
Onopordum acanthium	Scotch Thistle			14/02/2018
Opuntia sp. (NC)	Prickly Pear			23/11/1999
Opuntia spp.	Prickly Pear			4/06/2021
Panicum decompositum var. decompositum	Native Millet			20/08/2010
Panicum hillmanii	Witch-grass			18/04/2011
Parapholis incurva	Curly Ryegrass			14/11/1996
Paspalum vaainatum	Salt-water Couch			16/02/1999
Phalaris sp.	Canary Grass			23/11/1999
Pinus sp.	Pine			17/12/1997
Piptatherum miliaceum	Rice Millet			16/02/1999
Plantago lanceolata var. lanceolata	Ribwort			28/09/2010
Plantago major	Greater Plantain			10/02/1999
Plantago sp.	Plantain			30/11/1999
Polyaonum aviculare	Wireweed			14/02/2018
Polyaonum aviculare (NC)	Wireweed			16/02/1999
Polypogon monspeliensis	Annual Beard-grass			19/10/2017
Puccinellia distans	Reflexed Poa			2/02/1995

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Sighting
Raphanus raphanistrum	Wild Radish	7.00	,	28/09/2010
Rapistrum rugosum ssp. rugosum	Turnin Weed			18/04/2011
Rumex so	Dock			24/11/1999
Rytidosperma caespitosum (NC)	Common Wallaby-grass			20/08/2010
Rytidosperma pilosum	Velvet Wallaby-grass			28/09/2010
Salicornia quinqueflora ssp.				20/07/2010
quinqueflora	Beaded Samphire			27/03/2020
Salsola australis	Buckbush			14/02/2018
Scabiosa atropurpurea	Pincushion			10/02/1999
Sclerolaena muricata var.	Five-spine Bindyi			27/05/2022
Sclerostegia sp. (NC)	Samphire			16/02/1999
Secale cereale	Rye			14/02/2018
Senecio glossanthus	Annual Groundsel			21/10/2013
Senecio glossanthus (NC)	Annual Groundsel			14/11/1996
Senecio sp.	Groundsel			10/02/1999
Setaria jubiflora	Warrego Summer-grass			20/08/2010
Sisymbrium orientale	Indian Hedge Mustard			20/08/2010
Sisymbrium sp.	Wild Mustard			24/11/1999
Solanum elaeagnifolium	Silver-leaf Nightshade			11/03/2022
Sonchus oleraceus	Common Sow-thistle			14/11/1996
Sonchus sp.	Sow-thistle			10/02/1999
Sorghum halepense	Johnson Grass			18/04/2011
Spergularia marina	Salt Sand-spurrey			14/11/1996
Spergularia marina (NC)	Salt Sand-spurrey			14/11/1996
Sphenopus divaricatus	Wedge-foot Grass			14/11/1996
Suaeda australis	Austral Seablite			27/03/2020
Suaeda baccifera	Seablite			27/03/2020
Tamarix aphylla	Athel Pine			14/02/2018
Tamarix aphylla (NC)	Athel Pine			25/12/1997
Tecticornia arbuscula	Shrubby Samphire			29/11/2018
Tecticornia flabelliformis	Bead Samphire	VU	V	25/12/2001
Tecticornia halocnemoides ssp. halocnemoides	Grev Samphire			14/11/1996
Tecticornia indica ssp. bidens	Brown-bead Samphire			14/11/1996
Tecticornia peraranulata ssp.	Black-seed Samphire			14/02/2018
Tecticornia pergranulata ssp.				11/02/2010
pergranulata	Black-seed Samphire			14/11/1996
Tecticornia syncarpa	Fused Samphire			14/11/1996
Tribulus terrestris	Caltrop			19/04/2022
Trifolium arvense var. arvense	Hare's-foot Clover			26/09/2010
Trifolium sp.	Clover			25/12/1997
Unidentified sp.				17/12/1997
Vicia sativa ssp.	Common Vetch			28/09/2010
Vittadinia cervicularis var. cervicularis	Waisted New Holland Daisy			20/08/2010
Vulpia bromoides	Squirrel-tail Fescue			20/08/2010

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Sighting
Vulpia myuros f. myuros	Rat's-tail Fescue			14/11/1996
Wilsonia humilis	Silky Wilsonia			29/11/2018

Appendix 3. Fauna Species List (where applicable)

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Siahtina
Acanthiza iredalei	Slender-billed Thornbill	ssp	ssp	25/01/2007
Acanthiza iredalei rosinae	Samphire Thornbill or Slender-billed Thornbill Gulf St Vincent)	VU	V	6/11/2020
Actitis hypoleucos	Common Sandpiper		R	13/12/2014
Anhinga novaehollandiae novaehollandiae	Australasian Darter		R	2/12/2012
Ardea intermedia plumifera	Plumed Egret		R	19/01/2012
Arenaria interpres interpres	Ruddy Turnstone		R	26/02/2006
Biziura lobata menziesi	Musk Duck		R	13/12/2014
Botaurus poiciloptilus	Australasian Bittern	EN	E	25/08/2007
Bubulcus ibis coromandus	Eastern Cattle Egret		R	8/08/2006
Calidris canutus rogersi	Red Knot (ssp. rogersi)	sp	E	8/02/1998
Calidris ferruginea	Curlew Sandpiper	CR	E	2/12/2012
Calidris melanotos	Pectoral Sandpiper		R	13/10/2015
Calidris pugnax	Ruff		R	13/01/2011
Calidris subminuta	Long-toed Stint		R	17/01/2006
Cereopsis novaehollandiae novaehollandiae	Cape Barren Goose		R	20/03/2004
Chelonia mydas	Green Sea Turtle	VU	V	22/12/2008
Cladorhynchus leucocephalus	Banded Stilt		V	12/10/2015
Coturnix ypsilophora australis	Brown Quail		V	13/12/2014
Egretta garzetta nigripes	Little Egret		R	14/10/2020
Falco subniger	Black Falcon		R	1/08/2007
Gallinago hardwickii	Latham's Snipe		R	23/09/2006
Haematopus fuliginosus fuliginosus	Sooty Oystercatcher		R	26/11/2014
Haematopus longirostris	Pied Oystercatcher		R	26/11/2014
Hieraaetus morphnoides	Little Eagle		V	19/06/2005
Limosa lapponica	Bar-tailed Godwit	ssp	ssp	28/03/2010
Limosa limosa melanuroides	Black-tailed Godwit		R	2/04/2011
Melithreptus gularis	Black-chinned Honeyeater		ssp	11/09/2007
Neophema elegans elegans	Elegant Parrot		R	19/11/2021
Numenius madagascariensis	Far Eastern Curlew	CR	E	2/12/2012
Numenius phaeopus variegatus	Whimbrel		R	26/02/2006
Oxyura australis	Blue-billed Duck		R	2/12/2012
Plegadis falcinellus	Glossy Ibis		R	1/12/2004
Pluvialis fulva	Pacific Golden Plover		R	25/01/2007
Podiceps cristatus australis	Great Crested Grebe		R	13/12/2014
Pteropus poliocephalus	Grey-headed Flying-fox	VU	R	25/02/2020
Rostratula australis	Australian Painted-snipe	EN	E	22/11/2004



Species Name	Common Name	EPBC	NPW	Most Recent
		Act	Act	Sighting
Spatula rhynchotis	Australasian Shoveler		R	9/04/2016
Sternula albifrons sinensis	Little Tern		E	24/11/2005
Sternula nereis nereis	Fairy Tern	VU	E	2/12/2012
Stictonetta naevosa	Freckled Duck		V	9/09/2017
Tringa brevipes	Grey-tailed Tattler		R	20/03/2004
Tringa glareola	Wood Sandpiper		R	18/03/2006
Xenus cinereus	Terek Sandpiper		R	4/04/2012

Bushland Asses	sment Scoresheets		(Version - 22 Oct 2	021)
Block	Renascor PSG Facility	ASSESSOR(S)	Ecosphere Ecologica	I Solutions
Size of Block (Ha)	26.720			
andscapes Region	Green Adelaide	DATE OF ASSESSMENT	29/06/2022	
BCM Region	Southern Mount Lofty Ranges			
BRA Association	Mallala			
BRA Subregion	St Vincent			
BRA Subregion				
C) Lainean	0 100 200 300 400 500 m 22 06 222			
Landscape C	ontext Scores	% native veg. remaining in I	BRA Assoc.	3
		% native veg. remaining in IE	BRA subregion	8
		0 - 10% = 0.05 pts; >10-20% =	= 0.04 pts; >20-30% = 0	0.03 pts;
		>30-60% = 0.02 pts; > 60 = 0	pts Score	0.1
		Score received for both IBRA asso	oc. and subregion then sun	nmed
ercent Vegetation Cov	er (5km radius) (%) 22			
0-5% = 0 pts; >5-10% =	= 0.02 pts; >10-25% = 0.04 pts;	% native veg. protected IBR/	A Assoc.	2
>25-50% = 0.06 pts; >5	0-75% = 0.03 pt; >75-100% = 0 pts	0-10% = 0.03 pts; >10-20% =	0.02 pts; >20-40% = 0	.01 pt;
	Score 0.04	>40% = 0	Score	0.03
Block Shape Cleared pe	rimeter:Area (km/km2)	Wetland or Riparian Habitat	present	
Cleared Perimeter (m) =	2056	Riparian zone present (Yes/No	o) = 0.02 pt	No
Cleared Perimeter to are	ea ratio 7.69	Swamp/wetland present (Yes/I	No) = 0.03 pts	Yes
<6 = 0.03 pts; 6 to <12 =	0.02 pts; 12 to <18 = 0.01 pt	(Swamp/wetland may be +/- rip	parian zone)	
	Score 0.02		Score	0.03
lote; Blocks will score a	minimum Landscape Context Score of 1	LANDSCAPE CONTEXT S	SCORE (max 1.25)	1.22

Plant Species Recorded (Native and Introduced)		Listed Species		Natives only			
•				Not in		Annual Herbs	Introduced
Species	Common Name	EPBC	SA	quadrat	Regen	Spring survey	Species
Aizoon pubescens	Coastal Galenia						*
Enchylaena tomentosa var.	Ruby Saltbush						
Maireana brevifolia	Short-leaf Bluebush						
Maireana aphylla	Cotton-bush						
Avena barbata	Bearded Oat						*
Atriplex subcrecta	Lagoon Salthush						
l voium ferocissimum	African Roythorn						*
Arctotheca calendula							*
	Cape Weed						*
Macambrianthamum anistallinum	Common loonlant						*
							*
							*
Lollum perenne	Perennial Ryegrass						*
		 					
		I					
		ſ					
		1					
		1					
		1					
		1					
		1	-				
		1	-				
		I					

Threatened or Introduced Animal Species Recorded or Observed		Threatened				
(Native and Introduced)	Common Nome	Specie	S	Deet Deeard	Observed	Introduced
Species Melithreptus gularis	Common Name	EPBC	5A	Past Record	Observed	Species
Moonhoma clogans	Black-chinned Honeyeater		R			
Reconic foloinolluo			R			
Pluvialia fulva	Glossy Ibis		к D			
Padiaana ariatetua	Pacific Golden Plover		R			
Podiceps cristatus	Great Crested Grebe	241	R			
Pieropus ponocephalus			R F			
Rostilacita australis	Australian Painted-Shipe	EN				
Spatula myncholis	Australasian Snoveler		R V			
Stagonopieura guitata						
Stemula apprioris		241				
Stietenette pervee	Fairy Tern	VU	E			
			V			
Tringa dievipes			R			
Aconthiza iradalai rasinaa	Slonder billed Therabill (Culf)		ĸ			
		VU	V			
Actilits hypoleucos	Common Sandpiper		R			
			R			
			R			
Arenaria Interpres			R			
Biziura lobata menziesi	Musk Duck		R			
Botaurus poiciloptilus	Australasian Bittern	EN	E			
Bubulcus ibis coromandus	Eastern Cattle Egret		R -			-
Calidris canutus rogersi	Red Knot	sp	E -			-
	Curlew Sandpiper	CR	E			-
	Pectoral Sandpiper		R			-
Calidris pugnax	Ruff		R			-
	Long-toed Stint		R			-
Cereopsis novaehollandiae novaeholland	Cape Barren Goose		R			-
Chelonia mydas	Green Sea Turtle	VU	V			
Cladornynchus leucocephaius	Banded Stilt		V			
Coturnix ypsilopnora australis	Brown Quail		_			
Egretta garzetta			R			
Faico subniger	Black Falcon		R			
			R			
	Sooty Oystercatcher		R			
Haematopus longirostris	(Australian) Pied Oystercatch		R			
Hieraaetus morprinoides			V			
	l					

Vegetation Condition Scores

SITE:	RENPSG01
BCM COMMUNITY	SMLR Co 8.3 – Coastal Swamp Paperbark Low Open Forests & Tall Shrublands of Saline Swamps
VEGETATION ASSOCIATION DESCRIPTION	Myoporum insulare Tall Shrubland
SIZE OF SITE (Ha)	0.64

Benchmarked attributes (Scores determined by comparing to a Benchmark	Native Plant Life Forms	Cover rating			
		Trees > 15m			
Number of Native Species (Minus herbaceous annuals	4	Trees 5 - 15 m			
Native Plant Species Diversity Score (max 30) from benchn	nark score			Trees < 5m	
weighted by a factor of 2			6.0	Mallee > 5m	
				Mallee < 5m	
Number of regenerating native species			0	Shrubs > 2m	
Regeneration Score (max 12) from benchmark community	weighted by a	factor of 1.5		Shrubs 0.5 - 2m	
0				Shrubs < 0.5	1
				Forbs	1
Weed species	Cover	Weed Threat	CxI	Mat Plants	
(Top 5 Cover x Invasiveness)	(max 6)	Rating (max 5)		Grasses > 0.2m	
Galenia pubescens var. pubescens	3	2	6	Grasses < 0.2m	
Avena spp.	3	2	6	Sedges > 1m	
Arctotheca calendula	3	2	6	Sedges < 1m	
Mesembryanthemum crystallinum	2	2	4	Hummock grasses	
Lycium ferocissimum	1	3	3	Vines, scramblers	
	Cover x	Threat	25	Mistletoe	
Weed Score (max 15) from benchmark community 3					
Grass-tree					
Total					
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2					

Non-Benchmarked Attributes Is the community naturally treeless? (Scores determined from direct field observations) Tree attributes not scored for treeless Native:exotic Understorey biomass Score (max 5) 0 emergent trees Is the community naturally treeless?

Vegetation Condition Score calculation				
Positive Vegetation Attributes Score = Native speci Fallen timber/debris + Hollow-bearing trees	es diversity +	• Regeneration + Native Plar	it Life Forms	
- If the community Score is Not Benchmarked (SNB)	for regenera	ation this score is multiplied	1.24	
- If the community is naturally treeless this score is multiplied	d by 1.29			10.32
Negative Vegetation Attributes Score = (15 - Weeds) +	- ((10 - (Biom	ass score x 2))exp2/2)		62.00
VEGETATION CONDITION SCORE (Positive veg attr	ibutes x ((80	 Negative vegetation attribution 	tes) / 80))	2.32
	Low	Medium	High	
Native Plant Species Diversity				
Weed Score				
Native Plant Life Forms				
Regeneration				
Native:exotic Understorey Biomass				
Mature Trees				
Tree Canopy Cover				
Tree Hollows				
Fallen timber				
Vegetation Condition Score				

Conservation Significance Score	
Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	
Nationally (EPBC Act) Vulnerable community (0.35 pts)	
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	
Note; all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score	1
Number of Threatened Flora Species recorded for the site (within the site)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
Threatened Flora Score	0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species observed or locally recorded (1 pt each)	23
State Vulnerable species observed or locally recorded (2.5 pt each)	4
State Endangered species observed or locally recorded (5 pt each)	1
Nationally Vulnerable species observed or locally recorded (10 pts each)	4
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	3
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	138
Threatened Fauna Score	0.1
CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site		Vegetation Condition x Landscape Contex	d x
	Score	Conservation Significance =	
LANDSCAPE CONTEXT SCORE	1.22	UNIT BIODIVERSITY SCORE	3.12
VEGETATION CONDITION SCORE	2.32	Total Biodiversity Score	
CONSERVATION SIGNIFICANCE SCORE	1.10	(Biodiversity Score x hectares)	1.99

Photo Point and Vegetation Survey Location		Direction of the P	noto
		South	
		GPS Reference	
		Datur	n GDA94
A STA		Zone (52, 53 or 54) 54
		Easting (6 digits	5)
	Electron and	Northing (7 digits	;)
		Description	
		Complete domination	on by planted
		species. Very little c	over provided
		by chenopod shrub	s.
	Contraction of the second		
The second s			
What is the purpose of Assessment?	earance	SEB Area Other	
Assessment for Clearance		Approximate hectares required	0.26
Loss Factor	1.0	Economies of Scale Factor	0.5
Loadings for clearance of protected areas		Mean Annual rainfall for the site (mm)	425
Reductions for rehabilitation of impact site		Payment into the fund (GST Exclusive)	\$1,190.27
SEB Points required	2.09	Administration fee (GST Inclusive)	\$65.46

Block Remeascor PSG Facility Size of Block (Ha) 26 / 720 Landscape Region Southern Mount Lofty Ranges IBRA Association Mallai IBRA Subregion St Vincent Map of the Block (Including the Sites) Comparison Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Site (Including the Sites) Image of the Site (Including the Sites) Image of the Site (Including the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site) </th <th>Bushland Asses</th> <th>sment Scoresheets</th> <th></th> <th></th> <th>(Version - 22 Oct 2</th> <th>2021)</th>	Bushland Asses	sment Scoresheets			(Version - 22 Oct 2	2021)
Size of Block (Ha) 28.720 Landscapes Region Green Adelaide SOUM Region Southern Mount Lofty Ranges IBRA Association Malaia IBRA Subregion St Vincent Map of the Block (Including the Sites) Image: Southern Mount Lofty Ranges IBRA Subregion St Vincent Map of the Block (Including the Sites) Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges	Block	Renascor PSG Facility		ASSESSOR(S)	Ecosphere Ecologic	al Solutions
Landscapes Region Green Adelaide BCM Region Southern Mount Lofty Ranges IBRA Association Malia IBRA Subregion St Vincent Association Malia IBRA Subregion St Vincent Image: Status and the stat	Size of Block (Ha)	26.720				
BCM Region Southern Mount Lofty Ranges IBRA Association Mallaia IBRA Subregion St Vincent Map of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sit	Landscapes Region	Green Adelaide		DATE OF ASSESSMENT	29/06/2022	
IBRA Suborgion Maliaia IBRA Suborgion St Vincent Map of the Block (Including the Sites) Image: Strate and Strate Strate and Strate Strate and Strate Strate and Strate and Strate and Strate and Strate and Strate Strate and Strate and Strate and Strate and Strate and Strate and Strate Strate and Stra	BCM Region	Southern Mount Lofty Rar	nges			
BERA Subregion St Vincent Map of the Block (Including the Sites) Image: Strate Strat	IBRA Association	Mallala				
Algo of the Block (including the Sites)	IBRA Subregion	St Vincent				
Image: Construct Scores % native veg. remaining in IBRA Assoc. 3 % native veg. remaining in IBRA Assoc. 0.04 Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts 2 % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0.pts 2056 Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score	IBRA Subregion Map of the Block	St Vincent (Including the Sites)				
Landscape Context Scores % native veg. remaining in IBRA Assoc. 3 % native veg. remaining in IBRA subregion 8 0 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; >60 = 0 pts Score 0.5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score 0.04 % native veg. protected IBRA Assoc. 2 0.10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score 0.04 % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 Score 0.03 Score Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter (m) = 2056 Score 0.02 Score 0.02 Score 0.02 No Swamp/wetland present (Yes/No) = 0.03 pts Yes (Swamp/wetland may be +/- riparian zone) Score 0.03 Keise will scor		0 100 200 300 400 500 m	Coordinate elemento y Cuindatto / eleñanto Cuindatto / eleñanto 22 de	2022		
% native veg. remaining in IBRA subregion80 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; >60 = 0 ptsScore0.1Score received for both IBRA assoc. and subregion then summedScore0.1Score received for both IBRA assoc. and subregion then summedScore0.1Score 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score20-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >20-40% = 0.01 pt; >40% = 0Block Shape Cleared perimeter: Area (km/km2) Cleared Perimeter to area ratio2056 7.69NoScore0.03Cleared Perimeter to area ratio7.69Score0.02NoScore0.02Score0.03YesNote; Blocks will score a minimum Landscape Context Score of 1LANDSCAPE CONTEXT SCORE (max 1.25)1.22	Landscape C	ontext Scores		% native veg. remaining in IE	BRA Assoc.	3
Percent Vegetation Cover (5km radius) (%)22 $0-5\% = 0 \text{ pts}; >5-10\% = 0.02 \text{ pts}; >10-25\% = 0.04 \text{ pts};>25-50\% = 0.06 \text{ pts}; >50-75\% = 0.03 \text{ pt}; >75-100\% = 0 \text{ pts}$ 22 $0-5\% = 0 \text{ pts}; >5-10\% = 0.02 \text{ pts}; >10-25\% = 0.04 \text{ pts};>25-50\% = 0.06 \text{ pts}; >50-75\% = 0.03 \text{ pt}; >75-100\% = 0 \text{ pts}$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2Block Shape Cleared perimeter:Area (km/km2)Wetland or Riparian Habitat present Riparian zone present (Yes/No) = 0.02 \text{ pt}; Swamp/wetland present (Yes/No) = 0.03 \text{ pts}; YesCleared Perimeter to area ratio7.69<6 = 0.03 \text{ pts}; 6 to <12 = 0.02 \text{ pts}; 12 to <18 = 0.01 \text{ pt} ScoreScore0.02Note; Blocks will score a minimum Landscape Context Score of 1LANDSCAPE CONTEXT SCORE (max 1.25)1.22				% native veg. remaining in IE	3RA subregion	8
$Score 0.02 pts; > 60 = 0 pts Score 0.1$ Score received for both IBRA assoc. and subregion then summed $\frac{Percent Vegetation Cover (5km radius) (\%) 22}{0-5\% = 0.02 pts; >5-10\% = 0.02 pts; >10-25\% = 0.04 pts; >25-50\% = 0.06 pts; >50-75\% = 0.03 pt; >75-100\% = 0 pts Score 0.04 Score 0.03 pts; >10-20\% = 0.02 pts; >20-40\% = 0.01 pt; >40\% = 0 Score 0.03 Block Shape Cleared perimeter: Area (km/km2) Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 Score 0.02 Score 0.02 Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22$				0 - 10% = 0.05 pts; >10-20% =	0.04 pts; >20-30% = 0).03 pts;
Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts > Score 0.04 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)				>30-60% = 0.02 pts; > 60 = 0 p	ots Score	0.1
Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; % native veg. protected IBRA Assoc. 2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 Score 0.03 Block Shape Cleared perimeter:Area (km/km2) Cleared Perimeter (m) = 2056 Riparian zone present (Yes/No) = 0.02 pt No <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22				Score received for both IBRA asso	c. and subregion then sum	imed
0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; 2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; Score 0.04 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)	Percent Vegetation Cov	er (5km radius) (%)	22			_
>25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts $O = 0 ts$ $O = 0 t$	0-5% = 0 pts; >5-10% =	0.02 pts; >10-25% = 0.04 pts	;	% native veg. protected IBR/	A ASSOC.	2 01 pt:
Score 0.04 P40 / 0 = 0 Score 0.03 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Riparian zone present (Yes/No) = 0.02 pt No Cleared Perimeter (m) = 2056 7.69 Swamp/wetland present (Yes/No) = 0.03 pts Yes <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22	>25-50% = 0.06 pts; >50	0-75% = 0.03 pt; >75-100% =	0 pts	0-10% = 0.05 pts, >10-20% =	0.02 μls, 20-40% – 0	.01 pl,
Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Swamp/wetland present (Yes/No) = 0.03 pts Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)		Score	0.04		Score	0.03
Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 < 6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt	Block Shape Cleared per	imeter: Area (km/km2)		Wetland or Ringrian Habitat	nresent	
Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)	Cleared Perimeter (m) =		2056	Riparian zone present (Yes/No) = 0.02 pt	No
<6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt	Cleared Perimeter to an	ea ratio	7.69	Swamp/wetland present (Yes/N	lo) = 0.03 pts	Yes
Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22	<6 = 0.03 pts; 6 to <12 =	0.02 pts; 12 to <18 = 0.01 pt		(Swamp/wetland may be +/- rip	arian zone)	
Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22		Score	0.02		Score	0.03
	Note; Blocks will score a	minimum Landscape Context .	Score of 1	LANDSCAPE CONTEXT S	CORE (max 1.25)	1.22

Plant Species Recorded (Native and Introduced)		Listed Species		Natives only			
Species	Common Name	ЕРВС	SA	Not in quadrat	Reaen	Annual Herbs Spring survey	Introduced Species
Aizoon pubescens	Coastal Galenia		-	-			*
Enchvlaena tomentosa var.	Ruby Saltbush						
Maireana brevifolia	Short-leaf Bluebush						
Maireana aphvlla	Cotton-bush						
Avena harhata	Rearded Oct						*
Atrinley subcrecta	Lagoon Solthuch						
	African Baytharn						*
Malva pan <i>i</i> flora							*
Marzez setifolia							*
Macambrianthamum anistallinum	Perennial Ryegrass						^
							*
Arctotheca calendula	Soursop Cone Wood						*
Arciolineca calendula							
							<u> </u>
	<u> </u>	1					

Threatened or Introduced Animal Species Recorded or Observed		Threatened				
(Native and Introduced)	Common Nome	Specie	S	Deet Deeard	Observed	Introduced
Species Melithreptus gularis	Common Name	EPBC	5A	Past Record	Observed	Species
Moonhoma clogans	Black-chinned Honeyeater		R			
Reconic foloinolluo			R			
Pluvialia fulva	Glossy Ibis		к D			
Padiaana ariatetua	Pacific Golden Plover		R			
Podiceps cristatus	Great Crested Grebe	241	R			
Pieropus ponocephalus			R F			
Rostilacita australis	Australian Painted-Shipe	EN				
Spatula myncholis	Australasian Snoveler		R V			
Stagonopieura guitata						
Stemula apprioris		241				
Stietenette pervee	Fairy Tern	VU	E			
			V			
Tringa dievipes			R			
Aconthiza iradalai rasinaa	Slonder billed Therabill (Culf)		ĸ			-
		VU	V			
Actilits hypoleucos	Common Sandpiper		R			
			R			
			R			
Arenaria Interpres			R			
Biziura lobata menziesi	Musk Duck		R			
Botaurus poiciloptilus	Australasian Bittern	EN	E			
Bubulcus ibis coromandus	Eastern Cattle Egret		R -			-
Calidris canutus rogersi	Red Knot	sp	E -			-
	Curlew Sandpiper	CR	E			-
	Pectoral Sandpiper		R			-
Calidris pugnax	Ruff		R			-
	Long-toed Stint		R			-
Cereopsis novaehollandiae novaeholland	Cape Barren Goose		R			-
Chelonia mydas	Green Sea Turtle	VU	V			
Cladornynchus leucocephaius	Banded Stilt		V			
Coturnix ypsilopnora australis	Brown Quail		_			
Egretta garzetta			R			
Faico subniger	Black Falcon		R			
			R			
	Sooty Oystercatcher		R			
Haematopus longirostris	(Australian) Pied Oystercatch		R			
Hieraaetus morprinoides			V			
	l					

Vegetation Condition Scores

SITE:	RENPSG02
BCM COMMUNITY	SMLR Co 8.3 – Coastal Swamp Paperbark Low Open Forests & Tall Shrublands of Saline Swamps
VEGETATION ASSOCIATION DESCRIPTION	Mixed amenity plantings over emergent Maireana aphylla
SIZE OF SITE (Ha)	3.41

Benchmarked attributes (Scores determined by comparing to a Benchmark	Native Plant Life Forms	Cover rating			
	Trees > 15m				
Number of Native Species (Minus herbaceous annuals	4	Trees 5 - 15 m			
Native Plant Species Diversity Score (max 30) from benchma	Trees < 5m				
weighted by a factor of 2			6.0	Mallee > 5m	
	Mallee < 5m				
Number of regenerating native species	Shrubs > 2m				
Regeneration Score (max 12) from benchmark community w	Shrubs 0.5 - 2m				
				Shrubs < 0.5	1
	Forbs	1			
Weed species	Cover	Weed Threat	CxI	Mat Plants	
(Top 5 Cover x Invasiveness)	(max 6)	Rating (max 5)		Grasses > 0.2m	
Galenia pubescens var. pubescens	3	2	6	Grasses < 0.2m	
Avena spp.	3	2	6	Sedges > 1m	
Arctotheca calendula	3	2	6	Sedges < 1m	
Moraea setifolia	1	2	2	Hummock grasses	
Lycium ferocissimum	1	3	3	Vines, scramblers	
Cover x Threat 2				Mistletoe	
Weed Score (max 15) from benchmark community 3			Ferns		
				Grass-tree	
				Total	2
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2					

Non-Benchmarked Attributes Is the community naturally treeless? (Scores determined from direct field observations) Tree attributes not scored for treeless Native:exotic Understorey biomass Score (max 5) 1 emergent trees Image: Communities with only

Vegetation Condition Score calculation								
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees								
- If the community Score is Not Benchmarked (SNB) for regeneration this score is multiplied 1.24								
- If the community is naturally treeless this score is multiplied by 1.29								
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - (Biomass score x 2))exp2/2)								
VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80))								
	Low	Medium	High					
Native Plant Species Diversity								
Weed Score								
Native Plant Life Forms								
Regeneration								
Native:exotic Understorey Biomass								
Mature Trees								
Tree Canopy Cover								
Tree Hollows								
Fallen timber								
Vegetation Condition Score								
Conservation Significance Score								
---	--------							
Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No							
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)								
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)								
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)								
Nationally (EPBC Act) Vulnerable community (0.35 pts)								
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)								
Note; all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score	1							
Number of Threatened Flora Species recorded for the site (within the site)	Number							
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.								
State Rare species recorded (1 pt each)	0							
State Vulnerable species recorded (2.5 pt each)	0							
State Endangered recorded (5 pts each)	0							
Nationally Vulnerable species recorded (10 pts each)	0							
Nationally Endangered or Critically endangered species recorded (20 pts each)	0							
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0							
Threatened Flora Score	0							
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number							
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.								
State Rare species observed or locally recorded (1 pt each)	23							
State Vulnerable species observed or locally recorded (2.5 pt each)	4							
State Endangered species observed or locally recorded (5 pt each)	1							
Nationally Vulnerable species observed or locally recorded (10 pts each)	4							
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	3							
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	138							
Threatened Fauna Score	0.1							
CONSERVATION SIGNIFICANCE SCORE	1.1							

Total Scores for the Site		Vegetation Condition x Landscape Context x
	Score	Conservation Significance =
LANDSCAPE CONTEXT SCORE	1.22	UNIT BIODIVERSITY SCORE 6.23
VEGETATION CONDITION SCORE	4.64	Total Biodiversity Score
CONSERVATION SIGNIFICANCE SCORE	1.10	(Biodiversity Score x hectares) 21.25

Photo Point and Vegetation Survey Location		Direction of the Ph	oto
	2.72	South	
		GPS Reference	
	and the second	Datum	GDA94
	da	Zone (52, 53 or 54)	54
		Easting (6 digits)	
		Northing (7 digits)	
		Description	
and the second states and the second states and the	a substant	Mixed amneity planti	ngs including
		Euc porosa, E. odor	ata, E.
		largiflorens,E. camal	dulensis,
		Acacia salicina, A. p	aradoxa, A.
	Carlos and	ligulata, Melaleuca la	nceolata, M.
Y De Xelander () A The		halmaturorum, Santa	alum
		lanceolatum, Atriple>	rhagodioides,
What is the purpose of Assessment?	arance	SEB Area Other	_
Assessment for Clearance		Approximate hectares required	2.79
Loss Factor	1.0	Economies of Scale Factor	0.5
Loadings for clearance of protected areas		Mean Annual rainfall for the site (mm)	425
Reductions for rehabilitation of impact site		Payment into the fund (GST Exclusive)	\$12,683.84
SEB Points required	22.31	Administration fee (GST Inclusive)	\$697.61

Block Remeascor PSG Facility Size of Block (Ha) 26 / 720 Landscape Region Southern Mount Lofty Ranges IBRA Association Mallai IBRA Subregion St Vincent Map of the Block (Including the Sites) Comparison Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Site (Including the Sites) Image of the Site (Including the Sites) Image of the Site (Including the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site) </th <th>Bushland Asses</th> <th>sment Scoresheets</th> <th></th> <th></th> <th>(Version - 22 Oct 2</th> <th>2021)</th>	Bushland Asses	sment Scoresheets			(Version - 22 Oct 2	2021)
Size of Block (Ha) 28.720 Landscapes Region Green Adelaide SOUM Region Southern Mount Lofty Ranges IBRA Association Malaia IBRA Subregion St Vincent Map of the Block (Including the Sites) Image: Southern Mount Lofty Ranges IBRA Subregion St Vincent Map of the Block (Including the Sites) Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges	Block	Renascor PSG Facility		ASSESSOR(S)	Ecosphere Ecologic	al Solutions
Landscapes Region Green Adelaide BCM Region Southern Mount Lofty Ranges IBRA Association Malia IBRA Subregion St Vincent Association Malia IBRA Subregion St Vincent Image: Status and the stat	Size of Block (Ha)	26.720				
BCM Region Southern Mount Lofty Ranges IBRA Association Mallaia IBRA Subregion St Vincent Map of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sit	Landscapes Region	Green Adelaide		DATE OF ASSESSMENT	29/06/2022	
IBRA Suborgion Maliaia IBRA Suborgion St Vincent Map of the Block (Including the Sites) Image: Strate and Strate Strate and Strate Strate and Strate Strate and Strate and Strate and Strate and Strate and Strate Strate and Strate and Strate and Strate and Strate and Strate and Strate Strate and Stra	BCM Region	Southern Mount Lofty Rar	nges			
BERA Subregion St Vincent Map of the Block (Including the Sites) Image: Strate Strat	IBRA Association	Mallala				
Algo of the Block (including the Sites)	IBRA Subregion	St Vincent				
Image: Construct Scores % native veg. remaining in IBRA Assoc. 3 % native veg. remaining in IBRA Assoc. 0.04 Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts 2 % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0.pts 2056 Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score	IBRA Subregion Map of the Block	St Vincent (Including the Sites)				
Landscape Context Scores % native veg. remaining in IBRA Assoc. 3 % native veg. remaining in IBRA subregion 8 0 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; >60 = 0 pts Score 0.5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score 0.04 % native veg. protected IBRA Assoc. 2 0.10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score 0.04 % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 Score 0.03 Score Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter (m) = 2056 Score 0.02 Score 0.02 Score 0.02 Score 0.02 No Swamp/wetland present (Yes/No) = 0.03 pts (Swamp/wetland may be +/- riparian zone) Yes (Swamp/wetland may be +/- ripar		0 100 200 300 400 500 m	Coordinate elemento y Cuindatto / eleñanto Cuindatto / eleñanto 22 de	2022		
% native veg. remaining in IBRA subregion80 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; >60 = 0 ptsScore0.1Score received for both IBRA assoc. and subregion then summedScore0.1Score received for both IBRA assoc. and subregion then summedScore0.1Score 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score20-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >20-40% = 0.01 pt; >40% = 0Block Shape Cleared perimeter: Area (km/km2) Cleared Perimeter to area ratio2056 7.69NoScore0.03Cleared Perimeter to area ratio7.69Score0.02NoScore0.02Score0.03YesNote; Blocks will score a minimum Landscape Context Score of 1LANDSCAPE CONTEXT SCORE (max 1.25)1.22	Landscape C	ontext Scores		% native veg. remaining in IE	BRA Assoc.	3
Percent Vegetation Cover (5km radius) (%)22 $0-5\% = 0 \text{ pts}; >5-10\% = 0.02 \text{ pts}; >10-25\% = 0.04 \text{ pts};>25-50\% = 0.06 \text{ pts}; >50-75\% = 0.03 \text{ pt}; >75-100\% = 0 \text{ pts}$ 22 $0-5\% = 0 \text{ pts}; >5-10\% = 0.02 \text{ pts}; >10-25\% = 0.04 \text{ pts};>25-50\% = 0.06 \text{ pts}; >50-75\% = 0.03 \text{ pt}; >75-100\% = 0 \text{ pts}$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ NoScore7.69Swamp/wetland present (Yes/No) = 0.02 \text{ pt}; Swamp/wetland present (Yes/No) = 0.03 \text{ pts}; Yes $40\% = 0$ Score0.03Note; Blocks will score a minimum Landscape Context Score of 1LANDSCAPE CONTEXT SCORE (max 1.25)1.22				% native veg. remaining in IE	3RA subregion	8
$Score 0.02 pts; > 60 = 0 pts Score 0.1$ Score received for both IBRA assoc. and subregion then summed $\frac{Percent Vegetation Cover (5km radius) (\%) 22}{0-5\% = 0.02 pts; >5-10\% = 0.02 pts; >10-25\% = 0.04 pts; >25-50\% = 0.06 pts; >50-75\% = 0.03 pt; >75-100\% = 0 pts Score 0.04 Score 0.03 pts; >10-20\% = 0.02 pts; >20-40\% = 0.01 pt; >40\% = 0 Score 0.03 Block Shape Cleared perimeter: Area (km/km2) Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 Score 0.02 Score 0.02 Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22$				0 - 10% = 0.05 pts; >10-20% =	0.04 pts; >20-30% = 0).03 pts;
Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts > Score 0.04 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)				>30-60% = 0.02 pts; > 60 = 0 p	ots Score	0.1
Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; % native veg. protected IBRA Assoc. 2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 Score 0.03 Block Shape Cleared perimeter:Area (km/km2) Cleared Perimeter (m) = 2056 Riparian zone present (Yes/No) = 0.02 pt No <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22				Score received for both IBRA asso	c. and subregion then sum	imed
0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; 2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; Score 0.04 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)	Percent Vegetation Cov	er (5km radius) (%)	22			_
>25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts $O = 0 ts$ $O = 0 t$	0-5% = 0 pts; >5-10% =	0.02 pts; >10-25% = 0.04 pts	;	% native veg. protected IBR/	A ASSOC.	2 01 pt:
Score 0.04 P40 / 0 = 0 Score 0.03 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Riparian zone present (Yes/No) = 0.02 pt No Cleared Perimeter (m) = 2056 7.69 Swamp/wetland present (Yes/No) = 0.03 pts Yes <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22	>25-50% = 0.06 pts; >50	0-75% = 0.03 pt; >75-100% =	0 pts	0-10% = 0.05 pts, >10-20% =	$0.02 \mu\text{s}, \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$.01 pl,
Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Swamp/wetland present (Yes/No) = 0.03 pts Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)		Score	0.04		Score	0.03
Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 < 6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt	Block Shape Cleared per	imeter: Area (km/km2)		Wetland or Ringrian Habitat	nresent	
Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)	Cleared Perimeter (m) =		2056	Riparian zone present (Yes/No) = 0.02 pt	No
<6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt	Cleared Perimeter to an	ea ratio	7.69	Swamp/wetland present (Yes/N	lo) = 0.03 pts	Yes
Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22	<6 = 0.03 pts; 6 to <12 =	0.02 pts; 12 to <18 = 0.01 pt		(Swamp/wetland may be +/- rip	arian zone)	
Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22		Score	0.02		Score	0.03
	Note; Blocks will score a	minimum Landscape Context .	Score of 1	LANDSCAPE CONTEXT S	CORE (max 1.25)	1.22

Plant Species Recorded (Native and Introduced)		Listed	d Spec	cies	Na	atives only	
Snecies	Common Name	EPBC	SA	Not in quadrat	Regen	Annual Herbs	Introduced
Aizoon pubescens	Coastal Galenia			quadrat	Regen	oping our oy	*
Enchylaena tomentosa var	Ruby Saltbush						
Maireana brevifolia	Short-leaf Bluebush				Ves		
Maireana anbyla	Cotton-bush				Ves		
Avena barbata	Bearded Oat				103		*
Atrinley subcrecta	Lagoon Salthuch						
Solanum elaeagnifolium	Silver-leaf Nightshade						*
Tecticornia pergranulata ssp	Black-seed Samphire				Yes		
l voium ferocissimum	African Boxthorn				103		*
Oxalis pes-caprae	Soursob						*
Nitraria billardierei	Nitre-bush						
			<u> </u>				
		1					
		1					
		1					
	L	I	i				

Threatened or Introduced Animal Species Recorded or Observed		Threatened				
(Native and Introduced)	Common Nome	Specie	S	Deet Deeard	Observed	Introduced
Species Melithreptus gularis	Common Name	EPBC	5A	Past Record	Observed	Species
Moonhoma clogans	Black-chinned Honeyeater		R			
Reconic foloinolluo			R			
Pluvialia fulva	Glossy Ibis		к D			
Padiaana ariatetua	Pacific Golden Plover		R			
Podiceps cristatus	Great Crested Grebe	241	R			
Pieropus ponocephalus			R F			
Rostilacita australis	Australian Painted-Shipe	EN				
Spatula myncholis	Australasian Snoveler		R V			
Stagonopieura guitata						
Stemula apprioris		241				
Stietenette pervee	Fairy Tern	VU	E			
			V			
Tringa dievipes			R			
Aconthiza iradalai rasinaa	Slonder billed Therabill (Culf)		ĸ			
		VU	V			
Actilits hypoleucos	Common Sandpiper		R			
			R			
Ardea Intermedia			R			
Arenaria Interpres			R			
Biziura lobata menziesi	Musk Duck		R			
Botaurus poiciloptilus	Australasian Bittern	EN	E			
Bubulcus ibis coromandus	Eastern Cattle Egret		R -			-
Calidris canutus rogersi	Red Knot	sp	E -			-
	Curlew Sandpiper	CR	E			-
Calidris melanotos	Pectoral Sandpiper		R			-
Calidris pugnax	Ruff		R			-
	Long-toed Stint		R			-
Cereopsis novaehollandiae novaeholland	Cape Barren Goose		R			-
Chelonia mydas	Green Sea Turtle	VU	V			
Cladornynchus leucocephaius	Banded Stilt		V			
Coturnix ypsilopnora australis	Brown Quail		_			
Egretta garzetta			R			
Faico subniger	Black Falcon		R			
			R			
	Sooty Oystercatcher		R			
Haematopus longirostris	(Australian) Pied Oystercatch		R			
Hieraaetus morprinoides			V			
	l					

SITE:	RENPSG03
BCM COMMUNITY	SMLR 3.2 Box Bark Gum and Small Tree Woodlands with an Open Shrub and Grassy Understorey
VEGETATION ASSOCIATION DESCRIPTION	Eucalyotus largiflorens, E. odorata +/- Mixed amenity plantings over emerg
SIZE OF SITE (Ha)	3.13

Benchmarked attributes Native Plant						
(Scores determined by comparing to a Benchmark community)						
			.	Trees > 15m		
Number of Native Species (Minus herbaceous annuals	for spring S	Surveys)	6	Trees 5 - 15 m		
Native Plant Species Diversity Score (max 30) from benchmark score Trees < 5m						
weighted by a factor of 2			8.0	Mallee > 5m		
				Mallee < 5m		
Number of regenerating native species 3 Shrubs > 2m						
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5 Shrubs 0.5 - 2m						
	Shrubs < 0.5	2				
Forbs						
Weed species	Cover	Weed Threat	CxI	Mat Plants		
(Top 5 Cover x Invasiveness)	(max 6)	Rating (max 5)		Grasses > 0.2m		
Galenia pubescens var. pubescens	3	2	6	Grasses < 0.2m		
Avena spp.	3	2	6	Sedges > 1m		
Oxalis pes-caprae	3	4	12	Sedges < 1m		
Solanum elaeagnifolium	1	2	2	Hummock grasses		
Lycium ferocissimum	1	3	3	Vines, scramblers		
	Cover x	Threat	29	Mistletoe		
Weed Score (max 15) from benchmark community 6						
Grass-tree						
Total						
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2						

Non-Benchmarked Attributes		Is the community naturally treeless?	
(Scores determined from direct field observations)		Fallen Timber/Debris (max 5)	1
Native:exotic Understorey biomass Score (max 5)	2	Hollow-bearing trees Score (max 5)	0
		 Mature Tree Score (max 8)	2
		Tree Canopy Cover Score (max 5)	2

Vegetation Condition Score calculation				
Positive Vegetation Attributes Score = Native speci	es diversity + F	Regeneration + Native Plan	it Life Forms	
Fallen timber/debris + Hollow-bearing trees				
- If the community Score is Not Benchmarked (SNB)	for regeneration	on this score is multiplied	1.24	
- If the community is naturally treeless this score is multiplied	d by 1.29			25.00
Negative Vegetation Attributes Score = (15 - Weeds) +	· ((10 - Biomas	s score - Tree Canopy Co	ver Score)exp2/2)	27.00
VEGETATION CONDITION SCORE (Positive veg attr	ibutes x ((80 - I	Negative vegetation attribu	tes) / 80))	16.56
	Low	Medium	High	
Native Plant Species Diversity				
Weed Score				
Native Plant Life Forms				
Regeneration				
Native:exotic Understorey Biomass				
Mature Trees				
Tree Canopy Cover				
Tree Hollows				
Fallen timber				
Vegetation Condition Score				

Conservation Significance Score	
Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	
Nationally (EPBC Act) Vulnerable community (0.35 pts)	
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	
Note; all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score	1
Number of Threatened Flora Species recorded for the site (within the site)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
Threatened Flora Score	0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species observed or locally recorded (1 pt each)	23
State Vulnerable species observed or locally recorded (2.5 pt each)	4
State Endangered species observed or locally recorded (5 pt each)	1
Nationally Vulnerable species observed or locally recorded (10 pts each)	4
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	3
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	138
Threatened Fauna Score	0.1
CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site		Vegetation Condition x Landscape Context x
	Score	Conservation Significance =
LANDSCAPE CONTEXT SCORE	1.22	UNIT BIODIVERSITY SCORE 22.23
VEGETATION CONDITION SCORE	16.56	Total Biodiversity Score
CONSERVATION SIGNIFICANCE SCORE	1.10	(Biodiversity Score x hectares) 69.57

Photo Point and Vegetation Survey Location		Direction of the Pho	oto
		South	
		GPS Reference	
		Datum	GDA94
The start wat the		Zone (52, 53 or 54)	54
A REAL PROPERTY AND A REAL		Easting (6 digits)	
	lan.	Northing (7 digits)	
	12.1	Description	
man and the second s		Mixed amenity plantin	gs including
		Euc porosa, E. odora	ta, E.
	N. W.	largiflorens,E. camald	ulensis,
		Acacia salicina, A. vic	toriaea, A.
		paradoxa, A. ligulata,	Melaleuca
		lanceolata, Allocasuar	rina verticillata,
		Nitraria billardierei, My	oporum/
What is the purpose of Assessment?	arance	SEB Area Other	·
Assessment for Clearance		Approximate hectares required	9.13
Loss Factor	1.0	Economies of Scale Factor	0.5
Loadings for clearance of protected areas		Mean Annual rainfall for the site (mm)	425
Reductions for rehabilitation of impact site		Payment into the fund (GST Exclusive)	\$41,521.64
SEB Points required	73.05	Administration fee (GST Inclusive)	\$2,283.69

Block Remeascor PSG Facility Size of Block (Ha) 26 / 720 Landscape Region Southern Mount Lofty Ranges IBRA Association Mallai IBRA Subregion St Vincent Map of the Block (Including the Sites) Comparison Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Site (Including the Sites) Image of the Site (Including the Sites) Image of the Site (Including the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site) </th <th>Bushland Asses</th> <th>sment Scoresheets</th> <th></th> <th></th> <th>(Version - 22 Oct 2</th> <th>2021)</th>	Bushland Asses	sment Scoresheets			(Version - 22 Oct 2	2021)
Size of Block (Ha) 28.720 Landscapes Region Green Adelaide SOUM Region Southern Mount Lofty Ranges IBRA Association Malaia IBRA Subregion St Vincent Map of the Block (Including the Sites) Image: Southern Mount Lofty Ranges IBRA Subregion St Vincent Map of the Block (Including the Sites) Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges	Block	Renascor PSG Facility		ASSESSOR(S)	Ecosphere Ecologic	al Solutions
Landscapes Region Green Adelaide BCM Region Southern Mount Lofty Ranges IBRA Association Malia IBRA Subregion St Vincent Association Malia IBRA Subregion St Vincent Image: Status and the stat	Size of Block (Ha)	26.720				
BCM Region Southern Mount Lofty Ranges IBRA Association Mallaia IBRA Subregion St Vincent Map of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sit	Landscapes Region	Green Adelaide		DATE OF ASSESSMENT	29/06/2022	
IBRA Suborgion Maliaia IBRA Suborgion St Vincent Map of the Block (Including the Sites) Image: Strate and Strate Strate and Strate Strate and Strate Strate and Strate and Strate and Strate and Strate and Strate Strate and Strate and Strate and Strate and Strate and Strate and Strate Strate and Stra	BCM Region	Southern Mount Lofty Rar	nges			
BERA Subregion St Vincent Map of the Block (Including the Sites) Image: Strate Strat	IBRA Association	Mallala				
Algo of the Block (including the Sites)	IBRA Subregion	St Vincent				
Image: Construct Scores % native veg. remaining in IBRA Assoc. 3 % native veg. remaining in IBRA Assoc. 0.04 Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts 2 % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0.pts 2056 Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score	IBRA Subregion Map of the Block	St Vincent (Including the Sites)				
Landscape Context Scores % native veg. remaining in IBRA Assoc. 3 % native veg. remaining in IBRA subregion 8 0 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; >60 = 0 pts Score 0.5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score 0.04 % native veg. protected IBRA Assoc. 2 0.10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score 0.04 % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 Score 0.03 Score Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter (m) = 2056 Score 0.02 Score 0.02 Score 0.02 Score 0.02 No Swamp/wetland present (Yes/No) = 0.03 pts (Swamp/wetland may be +/- riparian zone) Yes (Swamp/wetland may be +/- ripar		0 100 200 300 400 500 m	Coordinate elemento y Cuindatto / eleñanto Cuindatto / eleñanto 22 de	2022		
% native veg. remaining in IBRA subregion80 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; >60 = 0 ptsScore0.1Score received for both IBRA assoc. and subregion then summedScore0.1Score received for both IBRA assoc. and subregion then summedScore0.1Score 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score20-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >20-40% = 0.01 pt; >40% = 0Block Shape Cleared perimeter: Area (km/km2) Cleared Perimeter to area ratio2056 7.69NoScore0.03Cleared Perimeter to area ratio7.69Score0.02NoScore0.02Score0.03YesNote; Blocks will score a minimum Landscape Context Score of 1LANDSCAPE CONTEXT SCORE (max 1.25)1.22	Landscape C	ontext Scores		% native veg. remaining in IE	BRA Assoc.	3
Percent Vegetation Cover (5km radius) (%)22 $0-5\% = 0 \text{ pts}; >5-10\% = 0.02 \text{ pts}; >10-25\% = 0.04 \text{ pts};>25-50\% = 0.06 \text{ pts}; >50-75\% = 0.03 \text{ pt}; >75-100\% = 0 \text{ pts}$ 22 $0-5\% = 0 \text{ pts}; >5-10\% = 0.02 \text{ pts}; >10-25\% = 0.04 \text{ pts};>25-50\% = 0.06 \text{ pts}; >50-75\% = 0.03 \text{ pt}; >75-100\% = 0 \text{ pts}$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ NoScore0.02NoScore0.02NoSwamp/wetland present (Yes/No) = 0.03 \text{ pts}; Yes(Swamp/wetland may be +/- riparian zone)YesScore0.02Note; Blocks will score a minimum Landscape Context Score of 1LANDSCAPE CONTEXT SCORE (max 1.25)				% native veg. remaining in IE	3RA subregion	8
$Score 0.02 pts; > 60 = 0 pts Score 0.1$ Score received for both IBRA assoc. and subregion then summed $\frac{Percent Vegetation Cover (5km radius) (\%) 22}{0-5\% = 0.02 pts; >5-10\% = 0.02 pts; >10-25\% = 0.04 pts; >25-50\% = 0.06 pts; >50-75\% = 0.03 pt; >75-100\% = 0 pts Score 0.04 Score 0.03 pts; >10-20\% = 0.02 pts; >20-40\% = 0.01 pt; >40\% = 0 Score 0.03 Block Shape Cleared perimeter: Area (km/km2) Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 Score 0.02 Score 0.02 Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22$				0 - 10% = 0.05 pts; >10-20% =	0.04 pts; >20-30% = 0).03 pts;
Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts > Score 0.04 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)				>30-60% = 0.02 pts; > 60 = 0 p	ots Score	0.1
Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; % native veg. protected IBRA Assoc. 2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 Score 0.03 Block Shape Cleared perimeter:Area (km/km2) Cleared Perimeter (m) = 2056 Riparian zone present (Yes/No) = 0.02 pt No <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22				Score received for both IBRA asso	c. and subregion then sum	imed
0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; 2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; Score 0.04 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)	Percent Vegetation Cov	er (5km radius) (%)	22			_
>25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts $O = 0 ts$ $O = 0 t$	0-5% = 0 pts; >5-10% =	0.02 pts; >10-25% = 0.04 pts	;	% native veg. protected IBR/	A ASSOC.	2 01 pt:
Score 0.04 P40 / 0 = 0 Score 0.03 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Riparian zone present (Yes/No) = 0.02 pt No Cleared Perimeter (m) = 2056 7.69 Swamp/wetland present (Yes/No) = 0.03 pts Yes <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22	>25-50% = 0.06 pts; >50	0-75% = 0.03 pt; >75-100% =	0 pts	0-10% = 0.05 pts, >10-20% =	0.02 μls, 20-40% – 0	.01 pl,
Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Swamp/wetland present (Yes/No) = 0.03 pts Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)		Score	0.04		Score	0.03
Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 < 6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt	Block Shape Cleared per	imeter: Area (km/km2)		Wetland or Ringrian Habitat	nresent	
Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)	Cleared Perimeter (m) =		2056	Riparian zone present (Yes/No) = 0.02 pt	No
<6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt	Cleared Perimeter to an	ea ratio	7.69	Swamp/wetland present (Yes/N	lo) = 0.03 pts	Yes
Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22	<6 = 0.03 pts; 6 to <12 =	0.02 pts; 12 to <18 = 0.01 pt		(Swamp/wetland may be +/- rip	arian zone)	
Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22		Score	0.02		Score	0.03
	Note; Blocks will score a	minimum Landscape Context .	Score of 1	LANDSCAPE CONTEXT S	CORE (max 1.25)	1.22

Plant Species Recorded (Native and Intro	roduced)		Listed Species		Natives only		
				Not in	_	Annual Herbs	Introduced
Species	Common Name	EPBC	SA	quadrat	Regen	Spring survey	Species
Aizoon pubescens	Coastal Galenia						*
Enchylaena tomentosa var.	Ruby Saltbush						
Tecticornia pergranulata ssp.	Black-seed Samphire						
Maireana aphylla	Cotton-bush						
Crassula sp.	Crassula/Stonecrop						
Rhagodia candolleana ssp	Sea-berry Salthush						
Atriplex suberecta	Lagoon Soltbuch						
Amplex Subcreeta							
		Ī					
		1					
		1					
		<u> </u>					
		İ	1				
		<u> </u>					
		<u> </u>					
		L					
		<u> </u>					

Threatened or Introduced Animal Species	d or Introduced Animal Species Recorded or Observed		Threatened			
(Native and Introduced)	Common Nome	Specie	S	Deet Deeard	Observed	Introduced
Species Melithreptus gularis	Common Name	EPBC	5A	Past Record	Observed	Species
Moonhoma clogans	Black-chinned Honeyeater		R			
Reconic foloinolluo			R			
Pluvialia fulva	Glossy Ibis		к D			
Padiaana ariatetua	Pacific Golden Plover		R			
Podiceps cristatus	Great Crested Grebe	241	R			
Pieropus ponocephalus			R F			
Rostilacita australis	Australian Painted-Shipe	EN				
Spatula myncholis	Australasian Snoveler		R V			
Stagonopieura guitata						
Stemula apprioris		241				
Stietenette pervee	Fairy Tern	VU	E			
			V			
Tringa dievipes			R			
Aconthiza iradalai rasinaa	Slonder billed Therabill (Culf)		ĸ			
		VU	V			
Actilits hypoleucos	Common Sandpiper		R			
			R			
			R			
Arenaria Interpres			R			
Biziura lobata menziesi	Musk Duck		R			
Botaurus poiciloptilus	Australasian Bittern	EN	E			
Bubulcus ibis coromandus	Eastern Cattle Egret		R -			-
Calidris canutus rogersi	Red Knot	sp	E -			-
	Curlew Sandpiper	CR	E			-
	Pectoral Sandpiper		R			-
Calidris pugnax	Ruff		R			-
	Long-toed Stint		R			-
Cereopsis novaehollandiae novaeholland	Cape Barren Goose		R			-
Chelonia mydas	Green Sea Turtle	VU	V			
Cladornynchus leucocephaius	Banded Stilt		V			
Coturnix ypsilopnora australis	Brown Quail		_			
Egretta garzetta			R			
Faico subniger	Black Falcon		R			
			R			
	Sooty Oystercatcher		R			
Haematopus longirostris	(Australian) Pied Oystercatch	4	R			
Hieraaetus morprinoides			V			
	l					

SITE:	RENPSG05
BCM COMMUNITY	SMLR Co 8.3 – Coastal Swamp Paperbark Low Open Forests & Tall Shrublands of Saline Swamps
VEGETATION ASSOCIATION DESCRIPTION	Tecticornia spp. Low Open Shrubland
SIZE OF SITE (Ha)	3.68

Benchmarked attributes (Scores determined by comparing to a Benchmark	Native Plant Life Forms	Cover rating			
				Trees > 15m	
Number of Native Species (Minus herbaceous annuals	6	Trees 5 - 15 m			
Native Plant Species Diversity Score (max 30) from benchma		Trees < 5m			
weighted by a factor of 2	10.0	Mallee > 5m			
			•	Mallee < 5m	
Number of regenerating native species			0	Shrubs > 2m	
Regeneration Score (max 12) from benchmark community w	eighted by a	factor of 1.5		Shrubs 0.5 - 2m	
			0	Shrubs < 0.5	3
				Forbs	1
Weed species	Cover	Weed Threat	CxI	Mat Plants	
(Top 5 Cover x Invasiveness)	(max 6)	Rating (max 5)		Grasses > 0.2m	
Galenia pubescens var. pubescens	3	2	6	Grasses < 0.2m	
Arctotheca calendula	2	2	4	Sedges > 1m	
Oxalis pes-caprae	2	4	8	Sedges < 1m	
Mesembryanthemum crystallinum	2	2	4	Hummock grasses	
Lycium ferocissimum	1	3	3	Vines, scramblers	
	Cover x	Threat	25	Mistletoe	
Weed Score (max 15) from benchmark community	Ferns				
				Grass-tree	
				Total	4
Native Plant Life Forms (max 20) from benchmark score we	ighted by a f	actor of 2		· · ·	4.0

Non-Benchmarked Attributes			Is the community naturally treeless?	7
(Scores determined from direct field observations)			Tree attributes not scored for treeless	
Native:exotic Understorey biomass Score (max 5)	2		communities or communities with only	
		-	emergent trees	

Vegetation Condition Score calculation				
Positive Vegetation Attributes Score = Native speci	ies diversity + Rege	eneration + Native Pla	nt Life Forms	
Fallen timber/debris + Hollow-bearing trees				
- If the community Score is Not Benchmarked (SNB)	for regeneration t	nis score is multiplied	1.24	
- If the community is naturally treeless this score is multiplied	d by 1.29			18.06
Negative Vegetation Attributes Score = (15 - Weeds) +	- ((10 - (Biomass s	core x 2))exp2/2)		30.00
VEGETATION CONDITION SCORE (Positive veg attr	ibutes x ((80 - Neg	ative vegetation attrib	utes) / 80))	11.29
	Low	Medium	High	
Native Plant Species Diversity				
Weed Score				
Native Plant Life Forms				
Regeneration				
Native:exotic Understorey Biomass				
Vegetation Condition Score				

Conservation Significance Score	
Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	
Nationally (EPBC Act) Vulnerable community (0.35 pts)	
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	
Note; all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score	1
Number of Threatened Flora Species recorded for the site (within the site)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
Threatened Flora Score	0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species observed or locally recorded (1 pt each)	23
State Vulnerable species observed or locally recorded (2.5 pt each)	4
State Endangered species observed or locally recorded (5 pt each)	1
Nationally Vulnerable species observed or locally recorded (10 pts each)	4
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	3
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	138
Threatened Fauna Score	0.1
CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site		Vegetation Condition x Landscape Context x
	Score	Conservation Significance =
LANDSCAPE CONTEXT SCORE	1.22	UNIT BIODIVERSITY SCORE 15.15
VEGETATION CONDITION SCORE	11.29	Total Biodiversity Score
CONSERVATION SIGNIFICANCE SCORE	1.10	(Biodiversity Score x hectares) 55.74

Photo Point and Vegetation Survey Location		Direction of the P	hoto
	-	South	
		GPS Reference	
and the second sec	ar	Datu	m GDA94
The second	Sector Bar	Zone (52, 53 or 5	4) 54
SET CATANAN STRAN	1.1	Easting (6 digit	s)
	1 19/3	Northing (7 digit	s)
		Description	
	2018	Mixed amenity plan	tings of Atrplex
		rahgodioides and I	lelaleuca
And the second s	NAME AND A	halmaturorum over	emergent
the second s		indigenous vegetat	ion.
121 A			
Contraction of the second second			
What is the purpose of Assessment?	irance	SEB Area Other	
Assessment for Clearance		Approximate hectares required	7.32
Loss Factor	1.0	Economies of Scale Factor	0.5
Loadings for clearance of protected areas		Mean Annual rainfall for the site (mm)	425
Reductions for rehabilitation of impact site		Payment into the fund (GST Exclusive)	\$33,269.77
SEB Points required	58.53	Administration fee (GST Inclusive)	\$1,829.84

D 11 1 4					
Bushland Asses	sment Scoresheets			(Version - 22 Oct	2021)
Block	Renascor PSG Facility		ASSESSOR(S)	Ecosphere Ecologic	al Solutions
Size of Block (Ha)	26.720			_	
Landscapes Region	Green Adelaide		DATE OF ASSESSMENT	29/06/2022	
BCM Region	Southern Mount Lofty Rar	nges			
IBRA Association	Mallala	-			
IBRA Subregion	St Vincent				
Man of the Block	(Including the Sites)				
Dom WIDE PIPELINE ROUTE		ender states and the			
l andecano C	ontaxt Scores		% native veg. remaining in	IBRA Assoc.	3
Lanuscape C			% native veg. remaining in	IBRA subregion	8
			0 - 10% = 0.05 pts; >10-20%	= 0.04 pts; >20-30% =	0.03 pts;
			>30-60% = 0.02 pts; > 60 = 0	pts Score	0.1
			Score received for both IBRA as	soc. and subregion then su	mmed
Percent Vegetation Cov	er (5km radius) (%)	22			
0-5% = 0 pts; >5-10% =	= 0.02 pts; >10-25% = 0.04 pts	5;	% native veg. protected IBF	RA Assoc.	2
>25-50% = 0.06 pts: >5	0-75% = 0.03 pt; >75-100% =	0 pts	0-10% = 0.03 pts; >10-20%	= 0.02 pts; >20-40% = 0	0.01 pt;
	Score	0.04	>40% = 0	Score	0.03
Block Shape Cleared per	rimeter:Area (km/km2)		Wetland or Riparian Habita	t present	
Cleared Perimeter (m) =	(2056	Riparian zone present (Yes/N	lo) = 0.02 pt	No
Cleared Perimeter to are	ea ratio	7.69	Swamp/wetland present (Yes	s/No) = 0.03 pts	Yes
<6 = 0.03 pts: 6 to <12 =	0.02 pts: 12 to <18 = 0.01 pt		(Swamp/wetland may be +/-	riparian zone)	
	Score	0.02		Score	0.03
Note: Blocks will score a	minimum Landscape Context	Score of 1	LANDSCAPE CONTEXT	SCORE (max 1 25)	1 22
	annandan Lanuscape Context		LANDOGAPE CONTEXT	000NE (Max 1.20)	1.44

ant Species Recorded (Native and Introduced)		Listeo	d Spec	cies	Na	tives only	
				Not in	_	Annual Herbs	Introduced
Species	Common Name	EPBC	SA	quadrat	Regen	Spring survey	Species
Maireana aphylla	Cotton-bush						
Enchylaena tomentosa var.	Ruby Saltbush						
Maireana brevifolia	Short-leaf Bluebush						
Atriplex suberecta	Lagoon Saltbush						
		ļ					
		 					
		 					
		ļ	ļ				
		<u> </u>					

Threatened or Introduced Animal Species Recorded or Observed			ened			
(Native and Introduced)	Common Nome	Specie	S	Deet Deeevel	Oh e em se d	Introduced
Melithrentus gularis		CPBC	D	Past Record	Observed	opecies
	Black-chinned Honeyeater		R			
Neopherna elegans	Elegant Parrot		R			
Plegadis falcinellus			R			
Stagonopleura guttata	Diamond Firetail		V			
Acanthiza iredalei rosinae	Slender-billed Thornbill (Gulf	VU	V			
Bubulcus ibis coromandus	Eastern Cattle Egret		R			
Cereopsis novaehollandiae novaeholland	Cape Barren Goose		R			
Coturnix ypsilophora australis	Brown Quail					
Falco subniger	Black Falcon		R			
Hieraaetus morphnoides	Little Eagle		V			
			İ			
		1				
		1				
	<u> </u>					

SITE:	RENPSG06
BCM COMMUNITY	SMLR Co 8.3 – Coastal Swamp Paperbark Low Open Forests & Tall Shrublands of Saline Swamps
VEGETATION ASSOCIATION DESCRIPTION	Maireana aphylla Low Open Shrubland +/- planted M. halmaturorum
SIZE OF SITE (Ha)	9.52

Benchmarked attributes (Scores determined by comparing to a Benchmark	Native Plant Life Forms	Cover rating			
		- /		Trees > 15m	
Number of Native Species (Minus herbaceous annuals	for spring S	Surveys)	4	Trees 5 - 15 m	
Native Plant Species Diversity Score (max 30) from benchma	ark score			Trees < 5m	
weighted by a factor of 2			6.0	Mallee > 5m	
			••	Mallee < 5m	
Number of regenerating native species			0	Shrubs > 2m	
Regeneration Score (max 12) from benchmark community w	eighted by a	factor of 1.5		Shrubs 0.5 - 2m	
			0	Shrubs < 0.5	3
				Forbs	1
Weed species	Cover	Weed Threat	CxI	Mat Plants	
(Top 5 Cover x Invasiveness)	(max 6)	Rating (max 5)		Grasses > 0.2m	
Galenia pubescens var. pubescens	3	2	6	Grasses < 0.2m	
Arctotheca calendula	2	2	4	Sedges > 1m	
Oxalis pes-caprae	2	4	8	Sedges < 1m	
Avena spp.	2	2	4	Hummock grasses	
Lycium ferocissimum	1	3	3	Vines, scramblers	
Cover x Threat 25 Mistletoe					
Weed Score (max 15) from benchmark community			3	Ferns	
Grass-tree					
Total					4
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2					

Non-Benchmarked Attributes Is the community naturally treeless? Image: Community of the community of the communities of the communities of the communities of the communities of the communities with only of the communities of the communities with only of the communities of the communities of the communities with only of the communities of the communities of the communities with only of the communities of the communities with only of the communities of the commun

Vegetation Condition Score calculation	Vegetation Condition Score calculation				
Positive Vegetation Attributes Score = Native speci Fallen timber/debris + Hollow-bearing trees	es diversity +	+ Regeneration + Native Plar	nt Life Forms		
- If the community Score is Not Benchmarked (SNB)	for regenera	ation this score is multiplied	1.24		
- If the community is naturally treeless this score is multiplied	d by 1.29			12.90	
Negative Vegetation Attributes Score = (15 - Weeds) +	· ((10 - (Biom	nass score x 2))exp2/2)		44.00	
VEGETATION CONDITION SCORE (Positive veg attr	ibutes x ((80	- Negative vegetation attribut	ites) / 80))	5.81	
	Low	Medium	High		
Native Plant Species Diversity					
Weed Score					
Native Plant Life Forms					
Regeneration					
Native:exotic Understorey Biomass					
Vegetation Condition Score					

Conservation Significance Score	
Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	
Nationally (EPBC Act) Vulnerable community (0.35 pts)	
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	
Note; all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score	1
Number of Threatened Flora Species recorded for the site (within the site)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
Threatened Flora Score	0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species observed or locally recorded (1 pt each)	6
State Vulnerable species observed or locally recorded (2.5 pt each)	2
State Endangered species observed or locally recorded (5 pt each)	0
Nationally Vulnerable species observed or locally recorded (10 pts each)	1
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	0
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	21
Threatened Fauna Score	0.1
CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site		Vegetation Condition x Landscape Context x
	Score	Conservation Significance =
LANDSCAPE CONTEXT SCORE	1.22	UNIT BIODIVERSITY SCORE 7.79
VEGETATION CONDITION SCORE	5.81	Total Biodiversity Score
CONSERVATION SIGNIFICANCE SCORE	1.10	(Biodiversity Score x hectares) 74.16

Photo Point and Vegetation Survey Location		Direction of the Pho	oto
	-	South	
	Ar.	GPS Reference	
	and a	Datum	GDA94
		Zone (52, 53 or 54)	54
And the second s		Easting (6 digits)	
		Northing (7 digits)	
and the second second second second second second second second second second second second second second second		Description	
- Aller and a state of the second state of the		Open shrubland over	extic grass
Later and the second	A CONTRACTOR	and herbaceous spec	cies with
	a de la d	sparsely scattered pla	anted
and the second second second second second second second second second second second second second second second		oversotrey of Melaleu	ICA
and the second sec		naimaturorum. Very p	boor. Sneep
		grazing planted speci	les intensively.
	1		
What is the purpose of Assessment?	arance	SEB Area Other	
Assessment for Clearance		Approximate hectares required	9.73
Loss Factor	1.0	Economies of Scale Factor	0.5
Loadings for clearance of protected areas		Mean Annual rainfall for the site (mm)	425
Reductions for rehabilitation of impact site		Payment into the fund (GST Exclusive)	\$44,263.26
SEB Points required	77.87	Administration fee (GST Inclusive)	\$2.434.48

Block Remeascor PSG Facility Size of Block (Ha) 26 / 720 Landscape Region Southern Mount Lofty Ranges IBRA Association Mallai IBRA Subregion St Vincent Map of the Block (Including the Sites) Comparison Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Site (Including the Sites) Image of the Site (Including the Sites) Image of the Site (Including the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site (Including the Site) Image of the Site) </th <th>Bushland Asses</th> <th>sment Scoresheets</th> <th></th> <th></th> <th>(Version - 22 Oct 2</th> <th>2021)</th>	Bushland Asses	sment Scoresheets			(Version - 22 Oct 2	2021)
Size of Block (Ha) 28.720 Landscapes Region Green Adelaide SOUM Region Southern Mount Lofty Ranges IBRA Association Malaia IBRA Subregion St Vincent Map of the Block (Including the Sites) Image: Southern Mount Lofty Ranges IBRA Subregion St Vincent Map of the Block (Including the Sites) Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges Image: Southern Mount Lofty Ranges	Block	Renascor PSG Facility		ASSESSOR(S)	Ecosphere Ecologic	al Solutions
Landscapes Region Green Adelaide BCM Region Southern Mount Lofty Ranges IBRA Association Malia IBRA Subregion St Vincent Association Malia IBRA Subregion St Vincent Image: Status and the stat	Size of Block (Ha)	26.720				
BCM Region Southern Mount Lofty Ranges IBRA Association Mallaia IBRA Subregion St Vincent Map of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sites) Image of the Block (Including the Sites) Image of the Sit	Landscapes Region	Green Adelaide		DATE OF ASSESSMENT	29/06/2022	
IBRA Suborgion Maliaia IBRA Suborgion St Vincent Map of the Block (Including the Sites) Image: Strate and Strate Strate and Strate Strate and Strate Strate and Strate and Strate and Strate and Strate and Strate Strate and Strate and Strate and Strate and Strate and Strate and Strate Strate and Stra	BCM Region	Southern Mount Lofty Rar	nges			
BERA Subregion St Vincent Map of the Block (Including the Sites) Image: Strate Strat	IBRA Association	Mallala				
Algo of the Block (including the Sites)	IBRA Subregion	St Vincent				
Image: Construct Scores % native veg. remaining in IBRA Assoc. 3 % native veg. remaining in IBRA Assoc. 0.04 Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts 2 % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0.pts 2056 Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score	IBRA Subregion Map of the Block	St Vincent (Including the Sites)				
Landscape Context Scores % native veg. remaining in IBRA Assoc. 3 % native veg. remaining in IBRA subregion 8 0 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; >60 = 0 pts Score 0.5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score 0.04 % native veg. protected IBRA Assoc. 2 0.10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score 0.04 % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 Score 0.03 Score Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter (m) = 2056 Score 0.02 Score 0.02 Score 0.02 Score 0.02 No Swamp/wetland present (Yes/No) = 0.03 pts (Swamp/wetland may be +/- riparian zone) Yes (Swamp/wetland may be +/- ripar		0 100 200 300 400 500 m	Coordinate elemento y Cuindatto / eleñanto Cuindatto / eleñanto 22 de	2022		
% native veg. remaining in IBRA subregion80 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; >60 = 0 ptsScore0.1Score received for both IBRA assoc. and subregion then summedScore0.1Score received for both IBRA assoc. and subregion then summedScore0.1Score 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts Score20-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >20-40% = 0.01 pt; >40% = 0Block Shape Cleared perimeter: Area (km/km2) Cleared Perimeter to area ratio2056 7.69NoScore0.03Cleared Perimeter to area ratio7.69Score0.02NoScore0.02Score0.03YesNote; Blocks will score a minimum Landscape Context Score of 1LANDSCAPE CONTEXT SCORE (max 1.25)1.22	Landscape C	ontext Scores		% native veg. remaining in IE	BRA Assoc.	3
Percent Vegetation Cover (5km radius) (%)22 $0-5\% = 0 \text{ pts}; >5-10\% = 0.02 \text{ pts}; >10-25\% = 0.04 \text{ pts};>25-50\% = 0.06 \text{ pts}; >50-75\% = 0.03 \text{ pt}; >75-100\% = 0 \text{ pts}$ 22 $0-5\% = 0 \text{ pts}; >5-10\% = 0.02 \text{ pts}; >10-25\% = 0.04 \text{ pts};>25-50\% = 0.06 \text{ pts}; >50-75\% = 0.03 \text{ pt}; >75-100\% = 0 \text{ pts}$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ 2 $0-10\% = 0.03 \text{ pts}; >10-20\% = 0.02 \text{ pts}; >20-40\% = 0.01 \text{ pt};>40\% = 0$ NoScore0.02NoScore0.02NoSwamp/wetland present (Yes/No) = 0.03 \text{ pts}; Yes(Swamp/wetland may be +/- riparian zone)YesScore0.02Note; Blocks will score a minimum Landscape Context Score of 1LANDSCAPE CONTEXT SCORE (max 1.25)				% native veg. remaining in IE	3RA subregion	8
$Score 0.02 pts; > 60 = 0 pts Score 0.1$ Score received for both IBRA assoc. and subregion then summed $\frac{Percent Vegetation Cover (5km radius) (\%) 22}{0-5\% = 0.02 pts; >5-10\% = 0.02 pts; >10-25\% = 0.04 pts; >25-50\% = 0.06 pts; >50-75\% = 0.03 pt; >75-100\% = 0 pts Score 0.04 Score 0.03 pts; >10-20\% = 0.02 pts; >20-40\% = 0.01 pt; >40\% = 0 Score 0.03 Block Shape Cleared perimeter: Area (km/km2) Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 Score 0.02 Score 0.02 Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22$				0 - 10% = 0.05 pts; >10-20% =	0.04 pts; >20-30% = 0).03 pts;
Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts > Score 0.04 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)				>30-60% = 0.02 pts; > 60 = 0 p	ots Score	0.1
Percent Vegetation Cover (5km radius) (%) 22 0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; % native veg. protected IBRA Assoc. 2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts % native veg. protected IBRA Assoc. 2 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 Score 0.03 Block Shape Cleared perimeter:Area (km/km2) Cleared Perimeter (m) = 2056 Riparian zone present (Yes/No) = 0.02 pt No <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22				Score received for both IBRA asso	c. and subregion then sum	imed
0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; 2 >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts 0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; Score 0.04 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)	Percent Vegetation Cov	er (5km radius) (%)	22			_
>25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts $O = 0 ts$ $O = 0 t$	0-5% = 0 pts; >5-10% =	0.02 pts; >10-25% = 0.04 pts	;	% native veg. protected IBR/	A ASSOC.	2 01 pt:
Score 0.04 P40 / 0 = 0 Score 0.03 Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Riparian zone present (Yes/No) = 0.02 pt No Cleared Perimeter (m) = 2056 7.69 Swamp/wetland present (Yes/No) = 0.03 pts Yes <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22	>25-50% = 0.06 pts; >50	0-75% = 0.03 pt; >75-100% =	0 pts	0-10% = 0.05 pts, >10-20% =	0.02 μls, 20-40% – 0	.01 pl,
Block Shape Cleared perimeter:Area (km/km2) Wetland or Riparian Habitat present Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Swamp/wetland present (Yes/No) = 0.03 pts Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)		Score	0.04		Score	0.03
Cleared Perimeter (m) = 2056 Cleared Perimeter to area ratio 7.69 < 6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt	Block Shape Cleared per	imeter: Area (km/km2)		Wetland or Ringrian Habitat	nresent	
Cleared Perimeter to area ratio 7.69 <6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt Score Score 0.02 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25)	Cleared Perimeter (m) =		2056	Riparian zone present (Yes/No) = 0.02 pt	No
<6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt	Cleared Perimeter to an	ea ratio	7.69	Swamp/wetland present (Yes/N	lo) = 0.03 pts	Yes
Score 0.02 Score 0.03 Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22	<6 = 0.03 pts; 6 to <12 =	0.02 pts; 12 to <18 = 0.01 pt		(Swamp/wetland may be +/- rip	arian zone)	
Note; Blocks will score a minimum Landscape Context Score of 1 LANDSCAPE CONTEXT SCORE (max 1.25) 1.22		Score	0.02		Score	0.03
	Note; Blocks will score a	minimum Landscape Context .	Score of 1	LANDSCAPE CONTEXT S	CORE (max 1.25)	1.22

Plant Species Recorded (Native and Introduced)		Listed Species			Na			
				Not in		Annual Herbs	Introduced	
Species	Common Name	EPBC	SA	quadrat	Regen	Spring survey	Species	
Aizoon pubescens	Coastal Galenia						*	
Enchylaena tomentosa var.	Ruby Saltbush							
Tecticornia pergranulata ssp.	Black-seed Samphire							
Maireana aphylla	Cotton-bush							
Crassula sp.	Crassula/Stonecrop					Yes		
Disphyma crassifolium ssp. clavellatum	Round-leaf Pigface					100		
Atriplex suberecta	Lagoon Salthush							
- p								
		}	-					
			<u> </u>					
		Ì	-					
		Ì	-					
		Ì						
		ľ						
		ľ						

Threatened or Introduced Animal Species Recorded or Observed		Threatened				
(Native and Introduced)	Common Nome	Specie	S	Deet Deeard	Observed	Introduced
Species Melithreptus gularis	Common Name	EPBC	5A	Past Record	Observed	Species
Moonhoma clogans	Black-chinned Honeyeater		R			
Reconic foloinolluo			R			
Pluvialia fulva	Glossy Ibis		к D			
Padiaana ariatetua	Pacific Golden Plover		R			
Podiceps cristatus	Great Crested Grebe	241	R			
Pieropus ponocephalus			R F			
Rostilacita australis	Australian Painted-Shipe	EN				
Spatula myncholis	Australasian Snoveler		R V			
Stagonopieura guitata						
Stemula apprioris		241				
Stietenette pervee	Fairy Tern	VU	E			
			V			
Tringa dievipes			R			
Aconthiza iradalai rasinaa	Slonder billed Therabill (Culf)		ĸ			
		VU	V			
Actilits hypoleucos	Common Sandpiper		R			
			R			
			R			
Arenaria Interpres			R			
Biziura lobata menziesi	Musk Duck		R			
Botaurus poiciloptilus	Australasian Bittern	EN	E			
Bubulcus ibis coromandus	Eastern Cattle Egret		R -			-
Calidris canutus rogersi	Red Knot	sp	E -			-
	Curlew Sandpiper	CR	E			-
	Pectoral Sandpiper		R			-
Calidris pugnax	Ruff		R			-
	Long-toed Stint		R			-
Cereopsis novaehollandiae novaeholland	Cape Barren Goose		R			-
Chelonia mydas	Green Sea Turtle	VU	V			
Cladornynchus leucocephaius	Banded Stilt		V			
Coturnix ypsilopnora australis	Brown Quail		_			
Egretta garzetta			R			
Faico subniger	Black Falcon		R			
			R			
	Sooty Oystercatcher		R			
Haematopus longirostris	(Australian) Pied Oystercatch		R			
Hieraaetus morprinoides			V			
	l					

SITE:	RENPSG04
BCM COMMUNITY	SMLR Co 8.2 – Coastal Samphire / Saltbush, Bluebush Shrublands with Infrequent Inundation/Lower Salinity
VEGETATION ASSOCIATION DESCRIPTION	Tecticornia spp. Low Open Shrubland
SIZE OF SITE (Ha)	0.75

Benchmarked attributes (Scores determined by comparing to a Benchmark of	Native Plant Life Forms	Cover rating			
	Trees > 15m				
Number of Native Species (Minus herbaceous annuals	Trees 5 - 15 m				
Native Plant Species Diversity Score (max 30) from benchma	Trees < 5m				
weighted by a factor of 2	Mallee > 5m				
	Mallee < 5m				
Number of regenerating native species			0	Shrubs > 2m	
Regeneration Score (max 12) from benchmark community w	eighted by a	factor of 1.5		Shrubs 0.5 - 2m	2
			0	Shrubs < 0.5	1
			<u> </u>	Forbs	1
Weed species	Cover	Weed Threat	CxI	Mat Plants	1
(Top 5 Cover x Invasiveness)	(max 6)	Rating (max 5)		Grasses > 0.2m	
Galenia pubescens var. pubescens	3	2	6	Grasses < 0.2m	
Arctotheca calendula	2	2	4	Sedges > 1m	
Oxalis pes-caprae	2	4	8	Sedges < 1m	
Mesembryanthemum crystallinum	2	2	4	Hummock grasses	
Lycium ferocissimum	1	3	3	Vines, scramblers	
	Cover x	Threat	25	Mistletoe	
Weed Score (max 15) from benchmark community			0	Ferns	
				Grass-tree	
				Total	5
Native Plant Life Forms (max 20) from benchmark score we	ighted by a fa	actor of 2			8.0

Non-Benchmarked Attributes Is the community naturally treeless? Image: Community of the community of the community of the communities of the communities of the communities of the communities with only of the communities of the communities with only of the communities of the communities with only of the communities of the communities with only of the communities of the communities with only of the communities of the communities with only of the communities of the communities with only of the communities of the communities with only of the communities of the communities with only of the communities of the communities of the communities of the communities of the communities with only of the communities of

Vegetation Condition Score calculation				
Positive Vegetation Attributes Score = Native speci	es diversity + R	Regeneration + Native Plant	Life Forms	
Fallen timber/debris + Hollow-bearing trees				
- If the community Score is Not Benchmarked (SNB)	for regeneration	on this score is multiplied 1	.24	
- If the community is naturally treeless this score is multiplied	d by 1.29			30.96
Negative Vegetation Attributes Score = (15 - Weeds) +	- ((10 - (Biomas	ss score x 2))exp2/2)		23.00
VEGETATION CONDITION SCORE (Positive veg attri	ibutes x ((80 - I	Negative vegetation attribut	es) / 80))	22.06
	Low	Medium	High	
Native Plant Species Diversity				
Weed Score				
Native Plant Life Forms				
Regeneration				
Native:exotic Understorey Biomass				
Vegetation Condition Score				

Conservation Significance Score	
Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	
Nationally (EPBC Act) Vulnerable community (0.35 pts)	
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	
Note; all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score	1
Number of Threatened Flora Species recorded for the site (within the site)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
Threatened Flora Score	0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species observed or locally recorded (1 pt each)	23
State Vulnerable species observed or locally recorded (2.5 pt each)	4
State Endangered species observed or locally recorded (5 pt each)	1
Nationally Vulnerable species observed or locally recorded (10 pts each)	4
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	3
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	138
Threatened Fauna Score	0.1
CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site		Vegetation Condition x Landscape Context x
	Score	Conservation Significance =
LANDSCAPE CONTEXT SCORE	1.22	UNIT BIODIVERSITY SCORE 29.60
VEGETATION CONDITION SCORE	22.06	Total Biodiversity Score
CONSERVATION SIGNIFICANCE SCORE	1.10	(Biodiversity Score x hectares) 22.20

Photo Point and Vegetation Survey Location		Direction	of the Photo
		South	
and the second sec		GPS Refe	erence
	1 Martin		Datum GDA94
En Constant And And And And And And And And And And		Zone (52	<mark>, 53 or 54)</mark> 54
		Eastin	g (6 digits)
My Realized and the second	the second	Northin	g (7 digits)
The state of the state of the		Description	on
		Mixed ame	enity plantings of Atrplex
	Salar -	rahgodioic	les and Melaleuca
	and the second second second second second second second second second second second second second second second	halmaturo	rum over emergent
	-	Indigenous	s vegetation.
What is the purpose of Assessment?	irance	SEB Area Other	
Assessment for Clearance		Approximate hectares required	2.91
Loss Factor	1.0	Economies of Scale Factor	0.5
Loadings for clearance of protected areas		Mean Annual rainfall for the site ((mm) 425
Reductions for rehabilitation of impact site		Payment into the fund (GST Excl	usive) \$13,251.08
SEB Points required	23.31	Administration fee (GST Inclusive	e) \$728.81

Bushland Asses	sment Scoresheets		(Version 22 Oct	2021)
Dusmanu Asses	sment beoresitets			2021)
Block	Renascor - Pipeline	ASSESSOR(S)	Ecosphere Ecologic	al Solutions
Size of Block (Ha)	26.720			
Landscapes Region	Green Adelaide	DATE OF ASSESSMENT	11.05.2023	
BCM Region	Southern Mount Lofty Ranges			
IBRA Association	Mallala			
IBRA Subregion	St Vincent			
Dependent of the short of tables of the short of tables				
Landscapa C	antaxt Scaras	% native veg. remaining in I	BRA Assoc.	3
Lanuscape C	Unlext Scores	% native veg. remaining in II	3RA subregion	8
		0 - 10% = 0.05 pts; >10-20% =	= 0.04 pts; >20-30% = (0.03 pts;
		>30-60% = 0.02 pts; > 60 = 0	ots Score	0.1
		Score received for both IBRA asso	c. and subregion then sum	nmed
Percent Vegetation Cov	er (5km radius) (%) 13			
0-5% = 0 pts; >5-10% =	0.02 pts; >10-25% = 0.04 pts;	% native veg. protected IBR	A Assoc.	2
>25-50% = 0.06 pts: >5	0-75% = 0.03 pt; >75-100% = 0 pts	0-10% = 0.03 pts; >10-20% =	0.02 pts; >20-40% = 0	.01 pt;
	Score 0.04	>40% = 0	Score	0.03
Block Shape Cleared per	imeter:Area (km/km2)	Wetland or Riparian Habitat	present	
Cleared Perimeter (m) =	2056	Riparian zone present (Yes/No) = 0.02 pt	No
Cleared Perimeter to an	ea ratio 7.69	Swamp/wetland present (Yes/N	lo) = 0.03 pts	Yes
<6 = 0.03 pts: 6 to <12 =	0.02 pts; 12 to <18 = 0.01 pt	(Swamp/wetland may be +/- rip	arian zone)	
	Score 0.02		Score	0.03
			COPE (may 4.25)	1 00
Note; BIOCKS WIII SCORE a	minimum Landscape Context Score of 1	LANDSCAPE CONTEXTS	CORE (max 1.25)	1.22

Plant Species Recorded (Native and Intro	and Introduced)		Listed Species		Natives only			
Species	Common Name	EPBC	SA	Not in quadrat	Regen	Annual Herbs Spring survey	Introduced Species	
Melaleuca halmaturorum	Swamp Paper-bark							
Myoporum insulare	Common Boobialla							
Maireana brevifolia	Short-leaf Bluebush							
Nitraria billardierei	Nitre-bush							
Aizoon pubescens	Coastal Galenia						*	
Lycium ferocissimum	African Boxthorn						*	
Paspalum sp.							*	
Cenchrus clandestinus	Kikuvu						*	
Rumex sp.	Dock							
Olea europaea ssp.	Olive						*	
Vulpia sp.	Fescue						*	
Parapholis incurva	Curly Ryegrass						*	
Sonchus oleraceus	Common Sow-thistle						*	
Livistona australis	#N/A	#N/A	#N/A				#N/A	
Thinopyrum elongatum	Tall Wheat-grass						*	
Oxalis pes-caprae	Soursob						*	
Plantago coronopus ssp.	Bucks-horn Plantain	1					*	
Threlkeldia diffusa	Coast Bonefruit	1						
	<u> </u>	1						

Threatened or Introduced Animal Species	imal Species Recorded or Observed		ened			
(Native and Introduced)	Common Nome	Specie	S	Deet Deeard	Observed	Introduced
Species Melithreptus gularis	Common Name	EPBC	5A	Past Record	Observed	Species
Moonhoma clogans	Black-chinned Honeyeater		R			
Reconic foloinolluo			R			
Pluvialia fulva	Glossy Ibis		к D			
Padiaana ariatetua	Pacific Golden Plover		R			
Podiceps cristatus	Great Crested Grebe	241	R			
Pieropus ponocephalus			R F			
Rostilacita australis	Australian Painted-Shipe	EN				
Spatula myncholis	Australasian Snoveler		R V			
Stagonopieura guitata						
Stemula apprioris		241				
Stietenette pervee	Fairy Tern	VU	E			
			V			
Tringa dievipes			R			
Aconthiza iradalai rasinaa	Slonder billed Therabill (Culf)		ĸ			-
		VU	V			
Actilits hypoleucos	Common Sandpiper		R			
			R			
			R			
Arenaria Interpres			R			
Biziura lobata menziesi	Musk Duck		R			
Botaurus poiciloptilus	Australasian Bittern	EN	E			
Bubulcus ibis coromandus	Eastern Cattle Egret		R -			-
Calidris canutus rogersi	Red Knot	sp	E -			-
	Curlew Sandpiper	CR	E			-
	Pectoral Sandpiper		R			-
Calidris pugnax	Ruff		R			-
	Long-toed Stint		R			-
Cereopsis novaehollandiae novaeholland	Cape Barren Goose		R			-
Chelonia mydas	Green Sea Turtle	VU	V			
Cladornynchus leucocephaius	Banded Stilt		V			
Coturnix ypsilopnora australis	Brown Quail		_			
Egretta garzetta			R			
Faico subniger	Black Falcon		R			
			R			
	Sooty Oystercatcher		R			
Haematopus longirostris	(Australian) Pied Oystercatch		R			
Hieraaetus morprinoides			V			
	l					

Γ

SITE:	Renascor - Association 9
BCM COMMUNITY	SMLR 3.2 Box Bark Gum and Small Tree Woodlands with an Open Shrub and Grassy Understorey
VEGETATION ASSOCIATION DESCRIPTION	Myoporum insulare over exotic herbaceous species and Threlkeldia diffu
SIZE OF SITE (Ha)	0.65

Benchmarked attributes		Native Plant	Cover		
(Scores determined by comparing to a Benchmark of	communit	y)		Life Forms	rating
				Trees > 15m	
Number of Native Species (Minus herbaceous annuals f	Trees 5 - 15 m				
Native Plant Species Diversity Score (max 30) from benchma	Trees < 5m				
weighted by a factor of 2			10.0	Mallee > 5m	
	Mallee < 5m				
Number of regenerating native species			0	Shrubs > 2m	
Regeneration Score (max 12) from benchmark community we	ighted by a	factor of 1.5		Shrubs 0.5 - 2m	2
0				Shrubs < 0.5	2
				Forbs	
Weed species	Cover	Weed Threat	CxI	Mat Plants	
(Top 5 Cover x Invasiveness)	(max 6)	Rating (max 5)		Grasses > 0.2m	
Oxalis pes-caprae	3	4	12	Grasses < 0.2m	
Paspalum dilatatum	2	3	6	Sedges > 1m	
Thinopyrum elongatum	2	3	6	Sedges < 1m	
Parapholis incurva	2	1	2	Hummock grasses	
Sonchus sp.	2	1	2	Vines, scramblers	
	Cover x	Threat	28	Mistletoe	
Weed Score (max 15) from benchmark community			6	Ferns	
				Grass-tree	
				Total	4
Native Plant Life Forms (max 20) from benchmark score weig	ghted by a fa	actor of 2			2.0

Non-Benchmarked Attributes			Is the community naturally treeless?	
(Scores determined from direct field observations)			Fallen Timber/Debris (max 5)	0
Native:exotic Understorey biomass Score (max 5)	0		Hollow-bearing trees Score (max 5)	0
		-	Mature Tree Score (max 8)	0
			Tree Canopy Cover Score (max 5)	0

Vegetation Condition Score calculation				
Positive Vegetation Attributes Score = Native speci	es diversity + F	Regeneration + Native Plan	it Life Forms	
Fallen timber/debris + Hollow-bearing trees				
- If the community Score is Not Benchmarked (SNB)	for regenerati	ion this score is multiplied	1.24	
- If the community is naturally treeless this score is multiplied	d by 1.29			12.00
Negative Vegetation Attributes Score = (15 - Weeds) +	· ((10 - Biomas	ss score - Tree Canopy Co	ver Score)exp2/2)	59.00
VEGETATION CONDITION SCORE (Positive veg attri	ibutes x ((80 -	Negative vegetation attribu	tes) / 80))	3. <u>15</u>
	Low	Medium	High	
Native Plant Species Diversity				
Weed Score				
Native Plant Life Forms				
Regeneration				
Native:exotic Understorey Biomass				
Mature Trees				
Tree Canopy Cover				
Tree Hollows				
Fallen timber				
Vegetation Condition Score				

Conservation Significance Score	
Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	
Nationally (EPBC Act) Vulnerable community (0.35 pts)	
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	
Note; all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score	1
Number of Threatened Flora Species recorded for the site (within the site)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
Threatened Flora Score	0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species observed or locally recorded (1 pt each)	23
State Vulnerable species observed or locally recorded (2.5 pt each)	4
State Endangered species observed or locally recorded (5 pt each)	1
Nationally Vulnerable species observed or locally recorded (10 pts each)	4
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	3
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	138
Threatened Fauna Score	0.1
CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site		Vegetation Condition x Landscape Context x
	Score	Conservation Significance =
LANDSCAPE CONTEXT SCORE	1.22	UNIT BIODIVERSITY SCORE 4.23
VEGETATION CONDITION SCORE	3.15	Total Biodiversity Score
CONSERVATION SIGNIFICANCE SCORE	1.10	(Biodiversity Score x hectares) 2.75

Photo Point and Vegetation Survey Location		Direction of the Pho	oto	
100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100		South-west		
10K		GPS Reference		
		Datum	GDA94	
		Zone (52, 53 or 54)	54	
	PE	Easting (6 digits)	276848	
	1.15	Northing (7 digits)	6154316	
	0	Description		
And a state of the	2 6	Previously cleared are	ea with	
emergent shrubs between fenceline				
		and planted trees (pla	inted trees	
		located 6-8metres fro	m fence).	
	A-16304			
What is the purpose of Assessment?	irance	SEB Area Other		
Assessment for Clearance		Approximate hectares required	0.36	
Loss Factor	1.0	Economies of Scale Factor	0.5	
Loadings for clearance of protected areas		Mean Annual rainfall for the site (mm)	425	
Reductions for rehabilitation of impact site		Payment into the fund (GST Exclusive)	\$1,639.94	
SEB Points required	2.89	Administration fee (GST Inclusive)	\$90.20	

Bushland Asses	sment Scoresheets		(Version - 22 Oct	2021)
Diask	Democrate Dinalina		Ecosphere Ecologic	al Solutions
DIUCK		A33E33UK(3)		
Landscapes Pegion	Green Adelaide	DATE OF ASSESSMENT	11 05 2023	
BCM Region	Southern Mount Lofty Ranges	DATE OF ACCECOMENT	11.00.2020	
IBRA Association	Mallala			
IBRA Subregion	St Vincent			
		1		
Map or the block				
Landeana C	antaxt Saaraa	% native veg. remaining in I	BRA Assoc.	3
Lanuscape C	Unitext Scores	% native veg. remaining in II	BRA subregion	8
		0 - 10% = 0.05 pts; >10-20% =	= 0.04 pts; >20-30% = (0.03 pts;
		>30-60% = 0.02 pts; > 60 = 0	pts Score	0.1
		Score received for both IBRA asso	c. and subregion then sur	nmed
Percent Vegetation Cov	er (5km radius) (%) 13			
0-5% = 0 pts; >5-10% =	0.02 pts; >10-25% = 0.04 pts;	% native veg. protected IBR	A Assoc.	2
>25-50% = 0.06 pts; >5	0-75% = 0.03 pt; >75-100% = <u>0 pts</u>	0-10% = 0.03 pts; >10-20% =	0.02 pts; >20-40% = 0	.01 pt;
	Score 0.04	>40% = 0	Score	0.03
Block Shape Cleared per	imeter:Area (km/km2)	Wetland or Riparian Habitat	present	
Cleared Perimeter (m) =	2056	Riparian zone present (Yes/No	o) = 0.02 pt	No
Cleared Perimeter to are	ea ratio 7.69	Swamp/wetland present (Yes/N	vo) = 0.03 pts	Yes
<6 = 0.03 pts; 6 to <12 =	0.02 pts; 12 to <18 = 0.01 pt	(Swamp/wetland may be +/- rip	parian zone)	
	Score 0.02		Score	0.03
Note; Blocks will score a	minimum Landscape Context Score of 1	LANDSCAPE CONTEXT	SCORE (max 1.25)	1.22

Plant Species Recorded (Native and Introduced)		Listed Species		Natives only			
Species	Common Name	EPBC	SA	Not in quadrat	Regen	Annual Herbs Spring survey	Introduced Species
Nitraria billardierei	Nitre-bush		-	-			
Enchvlaena tomentosa var.	Ruby Saltbush						
Tecticornia arbuscula	Shrubby Samphire						
Maireana brevifolia	Short-leaf Bluebush						
Atriplex paludosa ssp.	Marsh Salthush						
Atriplex semibaccata	Berry Salthush						
Mvoporum insulare	Common Boobialla						
Lolium perenne	Perennial Ryegrass						*
Convza bonariensis	Flax-leaf Fleabane						*
Sonchus oleraceus	Common Sow-thistle						*
Solanum elaeagnifolium	Silver-leaf Nightshade						*
Aizoon pubescens	Coastal Galenia						*
Oxalis pes-caprae	Soursob						*
Diplotaxis tenuifolia	Lincoln Weed						*
Lvcium ferocissimum	African Boxthorn						*
Solanum nigrum	Black Nightshade						*
Acacia saligna	Golden Wreath Wattle						*
Heliotropium sp.	Heliotrope						
Lactuca serriola f.	Prickly Lettuce						*
		1					
		Ĩ					
		Ĩ					

Threatened or Introduced Animal Species Recorded or Observed		Threatened				
(Native and Introduced)	Common Nome	Specie	S	Deet Deeard	Observed	Introduced
Species Melithreptus gularis	Common Name	EPBC	5A	Past Record	Observed	Species
Moonhoma clogans	Black-chinned Honeyeater		R			
Reconic foloinolluo			R			
Pluvialia fulva	Glossy Ibis		к D			
Padiaana ariatetua	Pacific Golden Plover		R			
Podiceps cristatus	Great Crested Grebe	241	R			
Pieropus ponocephalus			R F			
Rostilacita australis	Australian Painted-Shipe	EN				
Spatula myncholis	Australasian Snoveler		R V			
Stagonopieura guitata						
Stemula apprioris		241				
Stietenette pervee	Fairy Tern	VU	E			
			V			
Tringa dievipes			R			
Aconthiza iradalai rasinaa	Slonder billed Therabill (Culf)		ĸ			
		VU	V			
Actilits hypoleucos	Common Sandpiper		R			
			R			
			R			
Arenaria Interpres			R			
Biziura lobata menziesi	Musk Duck		R			
Botaurus poiciloptilus	Australasian Bittern	EN	E			
Bubulcus ibis coromandus	Eastern Cattle Egret		R -			-
Calidris canutus rogersi	Red Knot	sp	E -			-
	Curlew Sandpiper	CR	E			-
	Pectoral Sandpiper		R			-
Calidris pugnax	Ruff		R			-
	Long-toed Stint		R			-
Cereopsis novaehollandiae novaeholland	Cape Barren Goose		R			-
Chelonia mydas	Green Sea Turtle	VU	V			
Cladornynchus leucocephaius	Banded Stilt		V			
Coturnix ypsilopnora australis	Brown Quail		_			
Egretta garzetta			R			
Faico subniger	Black Falcon		R			
			R			
	Sooty Oystercatcher		R			
Haematopus longirostris	(Australian) Pied Oystercatch		R			
Hieraaetus morprinoides			V			
	l					

SITE:	Renascor - Association 8
BCM COMMUNITY	SMLR Co 7.2 Coastal Shrublands & Tall Shrublands
VEGETATION ASSOCIATION DESCRIPTION	Nitraria billardierei low open shrubland.
SIZE OF SITE (Ha)	0.21

Benchmarked attributes		Native Plant	Cover				
(below a below miner by comparing to a benominant	Trees > 15m	Tating					
Number of Native Species (Minus herbaceous annuals for spring Surveys) 8 Trees 5 - 15 m							
Native Plant Species Diversity Score (max 30) from benchmark score							
weighted by a factor of 2			10.0	Mallee > 5m			
			••	Mallee < 5m			
Number of regenerating native species			0	Shrubs > 2m			
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5 Shrubs 0.5 - 2m							
	Shrubs < 0.5	3					
				Forbs			
Weed species	Cover	Weed Threat	CxI	Mat Plants			
(Top 5 Cover x Invasiveness)	(max 6)	Rating (max 5)		Grasses > 0.2m			
Galenia pubescens var. pubescens	3	2	6	Grasses < 0.2m			
Avena spp.	3	2	6	Sedges > 1m			
Vulpia spp.	3	2	6	Sedges < 1m			
Solanum elaeagnifolium	2	2	4	Hummock grasses			
Lycium ferocissimum	2	3	6	Vines, scramblers			
	Cover x	Threat	28	Mistletoe			
Weed Score (max 15) from benchmark community			4	Ferns			
				Grass-tree			
Total							
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2							

Non-Benchmarked Attributes			Is the community naturally treeless?	7
(Scores determined from direct field observations)			Tree attributes not scored for treeless	0
Native:exotic Understorey biomass Score (max 5)	2	1	communities or communities with only	0
			emergent trees	0
				0

Vegetation Condition Score calculation							
Positive Vegetation Attributes Score = Native speci	ies diversity + Reg	eneration + Native Pla	nt Life Forms				
Fallen timber/debris + Hollow-bearing trees							
- If the community Score is Not Benchmarked (SNB)	for regeneration t	his score is multiplied	1.24				
- If the community is naturally treeless this score is multiplied by 1.29							
Negative Vegetation Attributes Score = (15 - Weeds) +	+ ((10 - (Biomass s	core x 2))exp2/2)		29.00			
VEGETATION CONDITION SCORE (Positive veg attr	ibutes x ((80 - Neg	ative vegetation attribu	ıtes) / 80))	13 <u>.16</u>			
	Low	Medium	High				
Native Plant Species Diversity							
Weed Score							
Native Plant Life Forms							
Regeneration							
Native:exotic Understorey Biomass							
Vegetation Condition Score							

Conservation Significance Score	
Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	
Nationally (EPBC Act) Vulnerable community (0.35 pts)	
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	
Note; all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score	1
Number of Threatened Flora Species recorded for the site (within the site)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
Threatened Flora Score	0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species observed or locally recorded (1 pt each)	23
State Vulnerable species observed or locally recorded (2.5 pt each)	4
State Endangered species observed or locally recorded (5 pt each)	1
Nationally Vulnerable species observed or locally recorded (10 pts each)	4
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	3
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	138
Threatened Fauna Score	0.1
CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site		Vegetation Condition x Landscape Context x
	Score	Conservation Significance =
LANDSCAPE CONTEXT SCORE	1.22	UNIT BIODIVERSITY SCORE 17.66
VEGETATION CONDITION SCORE	13.16	Total Biodiversity Score
CONSERVATION SIGNIFICANCE SCORE	1.10	(Biodiversity Score x hectares) 3.71

Photo Point and Vegetation Survey Location		Direction of the Pho	oto
		North-west	
		GPS Reference	
		Datum	GDA94
		Zone (52, 53 or 54)	54
		Easting (6 digits)	276345
		Northing (7 digits)	6152354
and the second s		Description	
		Previously disturbed I	ow shrubland
A COMPANY AND A		alongside concrete di	rainage
		channel with a mainta	ained
The Property of the Property o	The second second	clearance buffer for a	ccess.
A REPAIR OF A REPAIR OF A REPAIR			
TO THE ALL AND THE SHARE			
What is the purpose of Assessment?	arance	SEB Area Other	
Assessment for Clearance		Approximate hectares required	0.49
Loss Factor	1.0	Economies of Scale Factor	0.5
Loadings for clearance of protected areas		Mean Annual rainfall for the site (mm)	425
Reductions for rehabilitation of impact site		Payment into the fund (GST Exclusive)	\$2,213.16
SEB Points required	3.89	Administration fee (GST Inclusive)	\$121.72

Bushland Asses	sment Scoresheets		(Version - 22 Oct	2021)
Diesk	Democran Dineline		Ecosphere Ecologic	al Solutions
DIUCK		A33E33UR(3)		
Jize of Block (Hd)	Creen Adelaide	DATE OF ASSESSMENT	11 05 2023	
BCM Region	Southern Mount Lofty Ranges	DATE OF ADDECOMENT	11.00.2020	
IBRA Association	Mallala			
IBRA Subregion	St Vincent			
Pipeline Rour of of of of of of of of of of				
Landscape C	ontext Scores	% native veg. remaining in II	BRA Assoc.	3
		% native veg. remaining in II	BRA subregion	8
		0 - 10% = 0.05 pts; >10-20% =	= 0.04 pts; >20-30% = 0).03 pts;
		>30-60% = 0.02 pts; > 60 = 0	pts Score	0.1
		Score received for both IBRA asso	c. and subregion then sum	nmed
Percent Vegetation Cov	er (5km radius) (%) 13			
0-5% = 0 pts; >5-10% =	0.02 pts; >10-25% = 0.04 pts;	% native veg. protected IBR	A Assoc.	2
>25-50% = 0.06 pts; >5	0-75% = 0.03 pt; >75-100% = 0 pts	0.10% = 0.03 pts; > 10.20% =	0.02 pts; > 20-40% = 0	.01 pt;
	Score 0.04	>40% = 0	Score	0.03
Block Shape Cleared per	Imeter:Area (Km/Km2)	Riparian Zone present (Vec/No	present) = 0.02 pt	Nia
Cleared Perimeter (m) =	2056	Swamp/wetland present (Yes/No	h(0) = 0.03 pt	NO
Cleared Perimeter to an	0.02 ptp: 12 to <12 = 0.01 pt	(Swamp/wetland may be +/- rin	arian zone)	Yes
$\sim -0.03 \text{ pts}; \text{ to } 12 =$	0.02 pis, 12 i0 < 18 = 0.01 pi		Scoro	0.03
			Score	0.03
Note; Blocks will score a	minimum Landscape Context Score of 1	LANDSCAPE CONTEXT S	SCORE (max 1.25)	1.22

Plant Species Recorded (Native and Introduced)		Listed Species		Natives only				
				Not in	Annual Herbs		Introduced	
Species	Common Name	EPBC	SA	quadrat	Regen	Spring survey	Species	
Chloris truncata	Windmill Grass							
Maireana brevifolia	Short-leaf Bluebush				Yes			
Austrostipa sp.	Spear-grass							
Threlkeldia diffusa	Coast Bonefruit							
Avena barbata	Bearded Oat						*	
Convza honariansis	Elex loof Electore						*	
	Common Southistle						*	
Solicitus oleraceus								
Vulpia sp.	Fescue						*	
Aizoon pubescens	Coastal Galenia						*	
		ľ						
		İ	1					
		<u> </u>						
							<u> </u>	
		 						
		<u> </u>						
		ļ						

reatened or Introduced Animal Species Recorded or Observed		Threatened				
(Native and Introduced)	Common Nome	Specie	S	Deet Deeard	Observed	Introduced
Species Melithreptus gularis	Common Name	EPBC	5A	Past Record	Observed	Species
Moonhoma clogans	Black-chinned Honeyeater		R			
Reconica foloinolluo			R			
Pluvialia fulva	Glossy Ibis		к D			
Podicons cristotus	Pacific Golden Plover		R D			
Podiceps cristatus	Great Crested Grebe	241	R			
Pieropus ponocephalus			R F			
Rostilacita australis	Australian Painted-Shipe	EN				
Spatula myncholis	Australasian Shoveler		ĸ			
Stargonopieura guitata			V F			
Stemula apprioris		241				
Stietenette pervee	Fairy Tern	VU	E			
			V			
Tringa dievipes			R			
Aconthiza iradalai racinaa	Wood Sandpiper		ĸ			
		VU	V			
Actilits hypoleucos	Common Sandpiper		R			
			R			
			R			
Arenaria Interpres			R			
Biziura lobata menziesi			R			
Botaurus poiciloptilus	Australasian Bittern	EN	E			
Bubulcus ibis coromandus	Eastern Cattle Egret		R -			
Calidris canutus rogersi	Red Knot	sp	E -			
	Curlew Sandpiper	CR	E			
	Pectoral Sandpiper		R			
Calidris pugnax	Ruff		R			
	Long-toed Stint		R			
Cereopsis novaehollandiae novaeholland	Cape Barren Goose		R			
Chelonia mydas	Green Sea Turtle	VU	V			
Cladornynchus leucocephaius	Banded Stilt		V			
Coturnix ypsilopnora australis	Brown Quail		_			
Egretta garzetta			R			
Faico subniger	Black Falcon		R			
	Latham's Shipe		R			
	Sooty Oystercatcher		R			
Haematopus iongirostris	(Australian) Pied Oystercatch	4	R			
Hieraaetus morphnoides	Little Eagle		V			

SITE:	Renascor - Association 10
BCM COMMUNITY	SMLR 3.2 Box Bark Gum and Small Tree Woodlands with an Open Shrub and Grassy Understorey
VEGETATION ASSOCIATION DESCRIPTION	Open grassland
SIZE OF SITE (Ha)	0.1

Benchmarked attributes (Scores determined by comparing to a Bench	Native Plant Life Forms	Cover rating			
				Trees > 15m	
Number of Native Species (Minus herbaceous an	nuals for spring S	Surveys)	4	Trees 5 - 15 m	
Native Plant Species Diversity Score (max 30) from be	enchmark score			Trees < 5m	
weighted by a factor of 2			6.0	Mallee > 5m	
				Mallee < 5m	
Number of regenerating native species			1	Shrubs > 2m	
Regeneration Score (max 12) from benchmark commu	inity weighted by a	factor of 1.5		Shrubs 0.5 - 2m	
			3	Shrubs < 0.5	
			<u> </u>	Forbs	
Weed species	Cover	Weed Threat	CxI	Mat Plants	
(Top 5 Cover x Invasiveness)	(max 6)	Rating (max 5)		Grasses > 0.2m	
Avena spp.	3	2	6	Grasses < 0.2m	3
Conyza sp.	3	2	6	Sedges > 1m	
Sonchus oleraceus	2	1	2	Sedges < 1m	
Vulpia spp.	3	2	6	Hummock grasses	
			0	Vines, scramblers	
	Cover x	Threat	20	Mistletoe	
Weed Score (max 15) from benchmark community			9	Ferns	
				Grass-tree	
				Total	3
Native Plant Life Forms (max 20) from benchmark sc	ore weighted by a f	actor of 2			2.0

Non-Benchmarked Attributes		Is the community naturally treeless?	
(Scores determined from direct field observations)		Fallen Timber/Debris (max 5)	0
Native:exotic Understorey biomass Score (max 5)	2	Hollow-bearing trees Score (max 5)	0
		Mature Tree Score (max 8)	0
		Tree Canopy Cover Score (max 5)	0

Vegetation Condition Score calculation				
Positive Vegetation Attributes Score = Native speci	es diversity +	Regeneration + Native Plan	nt Life Forms	
Fallen timber/debris + Hollow-bearing trees				
- If the community Score is Not Benchmarked (SNB)	for regenera	tion this score is multiplied	1.24	
- If the community is naturally treeless this score is multiplied	d by 1.29			11.00
Negative Vegetation Attributes Score = (15 - Weeds) +	- ((10 - Bioma	ass score - Tree Canopy Co	ver Score)exp2/2)	38.00
VEGETATION CONDITION SCORE (Positive veg attr	ibutes x ((80	 Negative vegetation attribution 	utes) / 80))	5.78
	Low	Medium	High	
Native Plant Species Diversity				
Weed Score				
Native Plant Life Forms				
Regeneration				
Native:exotic Understorey Biomass				
Mature Trees				
Tree Canopy Cover				
Tree Hollows				
Fallen timber				
Vegetation Condition Score				

Conservation Significance Score	
Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	
State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	
State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	
Nationally (EPBC Act) Vulnerable community (0.35 pts)	
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	
Note; all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score	1
Number of Threatened Flora Species recorded for the site (within the site)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
Threatened Flora Score	0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species observed or locally recorded (1 pt each)	23
State Vulnerable species observed or locally recorded (2.5 pt each)	4
State Endangered species observed or locally recorded (5 pt each)	1
Nationally Vulnerable species observed or locally recorded (10 pts each)	4
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	3
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts	138
Threatened Fauna Score	0.1
CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site		Vegetation Condition x Landscape Context x
	Score	Conservation Significance =
LANDSCAPE CONTEXT SCORE	1.22	UNIT BIODIVERSITY SCORE 7.75
VEGETATION CONDITION SCORE	5.78	Total Biodiversity Score
CONSERVATION SIGNIFICANCE SCORE	1.10	(Biodiversity Score x hectares) 0.78

Photo Point and Vegetation Survey Location		Direction of the Ph	oto
		North-east	
		GPS Reference	
		Datum	GDA94
		Zone (52, 53 or 54	54
		Easting (6 digits	276145
* 111		Northing (7 digits	6154094
		Description	
A starting with an	184	Open mixed native/r	on-native
		grassland.	
and the second s	and the second		
The Long and the second			
and the second sec	and the second s		
	E.M. P		
What is the purpose of Assessment?	arance	SEB Area Other	
Assessment for Olegran			ı ————————————————————————————————————
Assessment for Clearance		Approximate hectares required	0.10
Loss Factor	1.0	Economies of Scale Factor	0.5
Loadings for clearance of protected areas		Mean Annual rainfall for the site (mm)	425
Reductions for rehabilitation of impact site		Payment into the fund (GST Exclusive)	\$462.55
SEB Points required	0.81	Administration fee (GST Inclusive)	\$25.44
Clearance summary Table - Agricultural region

Bushland assessment														
Block	Site	Native species diversity	Threatened Ecological community	Threatened	Threatened	IIRS	Area (ha)	Total Biodiversity	oss factor	oadings	teductions	SEB Points	SEB novment	Admin Eee
1	1	6	1	0	0.1	3.12	0.64	2.00	1	_		2.10	\$1.200.17	\$66.01
1	2	6	1	0	0.1	6.23	3.41	21.24	1			22.31	\$12,768.77	\$702.28
1	3	8	1	0	0.1	22.23	3.13	69.58	1			73.06	\$41,820.61	\$2,300.13
1	4	16	1	0	0.1	29.6	0.75	22.20	1			23.31	\$13,343.19	\$733.88
1	5	10	1	0	0.1	15.15	3.68	55.75	1			58.54	\$33,509.43	\$1,843.02
1	6	6	1	0	0.1	7.79	9.65	75.17	1			78.93	\$45,182.61	\$2,485.04
1	8	10	1	0	0.1	17.66	0.21	3.71	1			3.89	\$2,229.03	\$122.60
1	9	10	1	0	0.1	4.23	0.65	2.75	1			2.89	\$1,652.57	\$90.89
⊥ Insert ad	10 ditional row	s into the to	⊥ able as required	0	0.1	7.75 Total	22 22	253 1796	1			265.84	\$403.81 \$152 172 18	\$2 369 47
Centrared Tree according to the second secon														J0,303.47
Scatte	ered Tre	e asses	sment						1					
Tree or	Number	Fauna Habitat	Threatened	Biodiversity		SEB Points								
ID	of trees	score	flora score	score	Loss factor	required	SEB Payment	Admin Fee						
									1					
Total	0		1	0		0.00	\$0.00	\$0.00	1					
Insert ad	ditional row	s into the to	able as required			•			•					
IBRA Association percent vegetation remnancy (%)						3	1							
IBRA Subregion percent vegetation remnancy (%)						8								
Is the vegetation associated with a Wetland						Yes								
Economies of Scale Factor						0.5								
Rainfall (mm)						428								
		Total Bio	diversity	Total SEB po	Total SEB points									
		score		required		SEB Payment		Admin Fee		Tota	l Pay	/ment		
Applica	tion		253.18		265.84		\$152 172 18	\$8.36	9 47			\$160 541 65		
			200120		200101		<i>v</i> 102)172110	<i>\$</i> 0,00	5			¢100)0 11100		
		[1											
Risk level 🖊														
Level	2, 3 or 4	4												
			1											
Seriously at			Vegetation				Vege	tatior	۱					
Principle			variance	Assocation	Trees		At variance	Asso	catior	1	Trees			
a - Plant species diversity							Yes	14						
				11, 12, 13,			100	14						
b - Wildlife habitat			Yes	14, 15, 16,										
c. Para plant species														
c - kare plant species														
d - Rare plant communities														
e - Remnancy			Yes	All										
f - Wetland			Voc	Associated										
, weathing				103	· cactation	1	J	L						