Native Vegetation Clearance Data Report

Gawler Ranges Rd – Targeted Re-sheeting Works

Department for Infrastructure and Transport

83 Pirie Street, Adelaide, South Australia 5000

Prepared by:

SLR Consulting Australia Pty Ltd

SLR Project No.: 655.010559.00009

12 March 2026

Revision: 2.0

Revision Record

Revision	Date	Comment	Prepared By	Checked By	Authorised By
1.0	19 December 2025	Final 1	Monique Bury & Georgia Wilson	Louise Jaunay (Accredited Consultant)	Louise Jaunay (Accredited Consultant)
2.0	12 March 2026	Addition of Pit 1287	Monique Bury & Georgia Wilson	Louise Jaunay (Accredited Consultant)	Louise Jaunay (Accredited Consultant)

Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Department for Infrastructure and Transport (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

Table of Contents

Tables

Figures

Photos

Appendices

Appendix D EPBC Act PMST Report

Appendix E Threatened Species Likelihood of Occurrence Assessment

Appendix F Photo Log

Applicant Information

Table A: Application Details

Applicant:	Department for Infrastructure and Transport (DIT)		
Key contact:	Name:		
	Contact details:	Pirie Street, Adelaide 5000 GPO Box 1533, Adelaide SA 5001	
Landowner:	Name:	• Road Reserve, Department for Energy and Mining (DEM) and Crown Lease • Lake Everard Station • Nature Foundation • Kokatha Station	
	Contact details:	As above	
Site address:	Multiple locations in relation to Road No. 22003		
Local Government Area:	Pastoral Unincorporated Area	Hundred:	-
Title ID:	Multiple land parcels adjacent to road reserve	Parcel ID:	F251769 A42 F261594 A13 F251007 A50 F261593 A10 H834500 B1147

Table B: Summary of Proposed Clearance

Purpose of clearance	Clearance of vegetation is required for the re-sheeting of three sections of Gawler Ranges Road, as well as for the extension and maintenance of existing ancillary sites, including borrow pits, campsites, bores and Turkey Nests.
Native Vegetation Regulation	Part 6, Regulation 12 (32) – Works on behalf of the Commissioner of Highways and *Part 1, Regulation 8 (2)* – Maintenance of Infrastructure
Description of the vegetation under application	1.359 hectares (ha) of VA1; Samphire low shrubland 5.192 ha of VA2; Eucalyptus open Woodland over *Dodonaea viscosa* Shrubland 2.431 ha of VA 3*; Maireana sedifolia* low shrubland 1.836 ha of VA 4a (Gawler Volcanics); Tall open shrubland with *Acacia spp. +/- Alectryon sp.* Over chenopod low shrubland 0.147 ha of VA 4b (Yellabinna); Tall open shrubland with *Acacia spp. +/- Alectryon sp.* Over chenopod low shrubland 1.538 ha of VA 5; *Tall Acacia spp.* Shrubland 3.772 ha of VA 6; *Eucalyptus spp.* Woodland over *Triodia irritans* 0.111 ha of VA 7a (Gawler Volcanics); *Casuarina pauper* woodland 1.084 ha of VA 7b (Yellabinna); *Casuarina pauper* woodland

	0.463 ha of VA 8; *Eucalyptus oleosa ssp*. open woodland in drainage line 3.33 ha of VA 9a (Gawler Volcanics); *Atriplex spp*. Low chenopod Shrubland 0.316 ha of VA 9b (Yellabinna); *Atriplex spp*. Low chenopod Shrubland 0.478 ha of VA 10; *Melaleuca uncinata +/- Exocarpus aphylla* high shrubland over *Dodonaea viscosa, Triodia irritans* 13.432 ha of VA 11; Very Open low chenopod Shrubland 1.824 ha of VA 12; *Acacia spp*. tall very open shrubland in drainage lines over *Eremophila spp.* 1.888 ha of VA 13*; Acacia spp*. shrubland over *Triodia irritans* hummock grassland.
Total proposed clearance area	38.992 ha
Level of clearance	Level 4
Overlay (Planning and Design Code)	Remote Areas - Hazards (Bushfire - Outback), Hazards (Flooding - Evidence Required), Key Outback and Rural Routes, Native Vegetation, State Significant Native Vegetation, Water Resources, Heritage Adjacency, State Heritage Place 24, State Significant Native Vegetation, Hazards (Bushfire - General)
Map of proposed clearance area	Provided in Figure 1.
Mitigation hierarchy	The planned road upgrades are located in areas that have been exposed to a moderate level of previous vegetation clearance associated with road construction and maintenance activities. Grid extensions will not require any additional clearance outside of the road formation, and pit extensions will avoid active wombat warrens to avoid impact to habitat. Remaining clearance is required as grading of the existing road corridor has proven to be no longer effective, and the safety of road users is a priority. Native vegetation clearance will only be required for minimal widths along the length of the Project Area, as outlined in **Section 4.1 Vegetation Assessment**. The design of the final road formation has been made to ensure the extent of impacts of clearance has been minimised to the lowest possible extent to achieve a safe carriage way. Existing campsites, turkey nest dams and bores will be used. Only a small number of borrow pits have been chosen to be extended to reduce the clearance of higher-quality native vegetation. Pit 1288 has been avoided due to the presence of wombat burrows. It is expected that native vegetation will naturally regenerate all disturbed areas, consistent with observations of past clearance.
Significant Environmental Benefit (SEB) Offset proposal	Payment of $233,566.29, as well as an administration fee of $12,176.45, to be paid into the Native Vegetation Fund (NVF), with the potential for opportunities to provide on-ground SEB Offsets via an NVC Accredited Third Party Provider to be investigated.

1.0 Purpose of Clearance

1.1 Description

SLR has been engaged by DIT to undertake native vegetation assessments for clearance along Gawler Ranges Road for targeted re-sheeting works, including the maintenance of the associated ancillary sites for use during the works. The project is based in the Gawler Ranges, South Australia, with work sites scattered between Wirrulla and Kingoonya. This area is managed by the South Australian Arid Lands (SAAL) Landscape Board.

1.2 Background

Gawler Ranges Road is an unsealed track connecting the South Australian townships of Wirrulla and Kingoonya. It is approximately 289 kilometres (km) in length and is the core route through the western extent of the Gawler Ranges. The proposed works are to occur from MM 36 and MM 177.2, hereafter known as the Project Area.

Gawler Ranges Road has been reclassified from a minor unsealed road to a secondary road. As such, the road now requires upgrades to the existing unsealed pavement, formation and a wider carriageway. The current road is heavily corrugated in areas, with damaged sections causing road safety issues. Local landholders have raised concerns about road safety associated with grid widths being too narrow in some locations. Their concerns are supported by evidence of narrower grids along the roadway being hit by vehicles towing caravans and campers.

The surrounding land use is predominantly livestock and reserves, with large areas of pastoral grazing. The remnant vegetation across the Project Area is a mix of Acacia shrubland, chenopod shrubland, Casuarina woodland and Eucalyptus mallee woodland with some patches of hummock grassland.

The southern portion of the Project Area falls within the Hiltaba Nature Reserve. The Reserve covers 78,000 ha of conservation area, focusing on threat abatement, conservation and protection of fauna and flora. There are currently 40 state-threatened species and nine federally threatened species within the Reserve, managed by the Nature Foundation.

1.2.1 Interim Biogeographical Regionalisation of Australia (IBRA)

A search of the Government of South Australia Enviro Data application *NatureMaps* (*NatureMaps*) confirmed the Project Area is located within the Gawler and the Great Victoria Desert IBRA Regions and the Gawler Volcanics and Yellabinna IBRA Subregions. The Gawler IBRA Region is described as a depositional plain landform with plains broken by hills and ridges; some dune tracts; saline flats; clay pans; seasonal swamps and lakes, with lakes fringed on the eastern margins by lunettes. The Great Victoria Desert IBRA Region is characterised by extensive dunefields with duricrusted rises and shallow depressions.

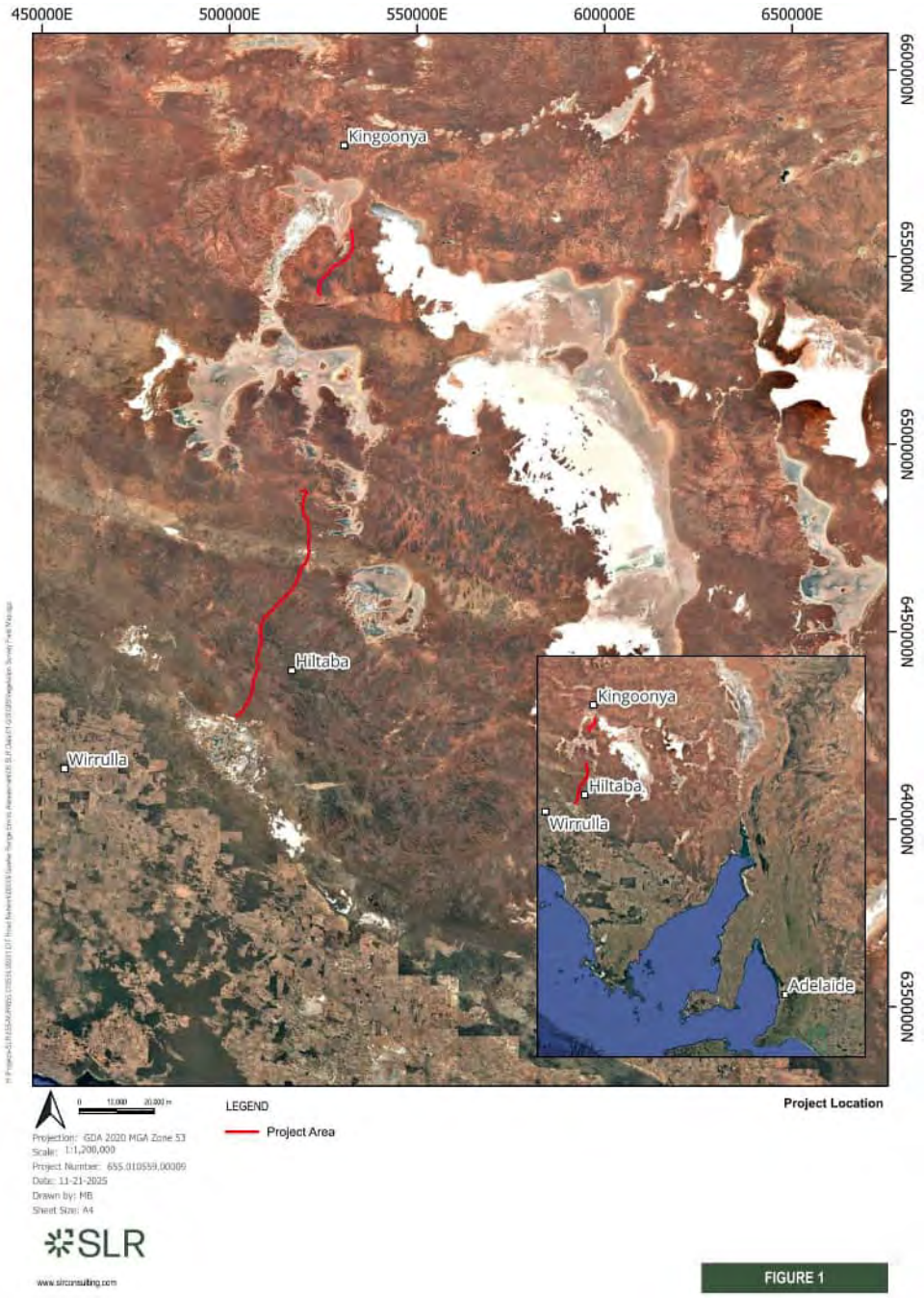
1.2.2 Climate

The nearest open weather station is located at Tarcoola Aero (Bureau of Meteorology (BoM) – Site Number 016098), approximately 74 km west of Kingoonya. The climate is described as semi-arid, with the majority of rainfall occurring from November to December. The mean daily maximum temperatures range from 36.6 degrees Celsius in January to 18.9 degrees Celsius in June. The mean minimum temperatures range from 19.7 degrees Celsius in January to 4.6 degrees Celsius in July. A review of *NatureMaps* climate data references a mean annual rainfall of between 179 millimetres (mm) and 248 mm across the Project Area, with rainfall increasing in the southern extent.

1.3 General Location Map

The Project is located approximately 780 km from Adelaide, South Australia, with work sites scattered between Wirrulla and Kingoonya along Gawler Ranges Road. Refer to Figure 1 for a visual representation of the Project location.

Figure 1: Project Location



1.4 Details of the Proposal

The proposed road upgrades will improve the safety and utilisation of Gawler Ranges Road and will support residential and tourist travel between remote townships. The scope of work discussed in this assessment will include:

- Targeted re-sheeting at three priority areas of Gawler Ranges Road
- Extension of some existing borrow pits
- Replacement of existing grids with double-width grids
- Use of existing campsites
- Maintenance of bores and Turkey Nest Dams.

The current road formation across the Project Area consists, on average, of a seven metre (m) wide carriageway plus an average 1.5 m wide drain on both sides of the carriageway. The proposed upgrades are to allow for clearance of 10 m either side of the centreline, in accordance with the typical cross-section for primary and secondary roads. The Construction Activity Zone (CAZ) for the proposed works comprises the area required to carry out the above scope of works. Native vegetation clearance will be required where the CAZ extends beyond the existing Maintenance Activity Zone (MAZ).

Ancillary site locations (bores, pits, campsites and dams) within the Project Area are separated into 21 separate work areas within the three priority areas and two additional assets (pits), which DIT may decide to utilise based on this assessment, as listed in Table C. Refer to Appendix A for a visual representation of the priority areas and associated ancillary sites. Vegetation clearance is only required along the re-sheeting sections as well as at six borrow pits, which are planned to be extended. All grid replacements associated with the project are to be undertaken within the road formation and will not result in any additional clearance. Campsites, bores, dams and pits not to be extended may undergo maintenance clearance but will not require approval for native vegetation clearance as they are already existing disturbed areas.

Table C: Work Areas Summary

Work Areas	MM	Proposed Scope
Priority 1		
Re-sheeting	36.025-46.06	Formation width 9m + drainage in accordance with the typical cross-section for primary and secondary roads. Clearance required 10 m either side of the existing centre line.
Pit 1345	36.02	Existing Pit. To be extended.
Campsite 150	40.55	Existing site to be utilised during construction, no clearance required.
Pit 1347	42.68	Existing Pit. To be extended.
Grid 778	41.29	Replace with a double-width grid. No clearance required.
Grid 779	44.06	Replace with a double-width grid. No clearance required.
Grid 780	45.28	Replace with a double-width grid. No clearance required.
Grid 781	46.03	Replace with a double-width grid. No clearance required.
Campsite 152	59.05	Existing site to be utilised during construction, no clearance required.
Pit 1348	59.05	Existing. Material to be extracted within the existing pit, no extension required.

Work Areas	MM	Proposed Scope
Bore	27.285	Existing bore to be utilised during construction, no clearance required.
Turkey Nest (RHS 800m in)	27.285	Existing dam to be utilised during construction, no clearance required.
Priority 2		
Re-sheeting	170.9-177.18	Formation width 9m + drainage in accordance with the typical cross-section for primary and secondary roads. Clearance required 10 m either side of the existing centre line.
Pit 1287	169.623	Existing Pit. To be extended.
Pit 1286	166.85	Existing. Material to be extracted within the existing pit, no extension required.
Campsite 128	166.85	Existing site to be utilised during construction, no clearance required.
Pit 1288	178.09	Existing. Material to be extracted within the existing pit, no extension required.
Pit (no number)	196.986	Existing Pit. To be extended.
Campsite 129	195.14	Existing site to be utilised during construction, no clearance required.
Grid 715	169.8	Replace with a double-width grid. No clearance required.
Bore & Turkey Nest	165.749	Existing site to be utilised during construction, no clearance required.
Pit MF1762879	159.03	Existing. Material to be extracted within the existing pit, no extension required.
Priority 3		
Re-sheeting	133.5-146.404	Formation width 9m + drainage in accordance with the typical cross-section for primary and secondary roads. Clearance required 10 m either side of the existing centre line.
Pit 1282	128.7	Existing. Material stockpiled to be used during construction.
Pit 1283	133.27	Existing. Material to be extracted within the existing pit, no extension required.
Pit 1284	137.62	Existing. Material to be extracted within the existing pit, no extension required.
Pit 1285	148.58	Existing. Material to be extracted within the existing pit, no extension required.
Grid 708	132.43	Replace with a double-width grid. No clearance required.
Grid 709	134.5	Replace with a double-width grid. No clearance required.
Grid 710	146.38	Replace with a double-width grid. No clearance required.
Bore & Turkey Nest	126.043	Existing site to be utilised during construction, no clearance required.
Campsite 127	133.27	Existing site to be utilised during construction, no clearance required.
Additional Assets		

Work Areas	MM	Proposed Scope
Pit 1291	193.91	Existing Pit. To be extended.
Pit 1292	194.4	Existing Pit. To be extended.

1.5 Approvals Required or Obtained

A review of *NatureMaps* has indicated that there have been no previous native vegetation clearance applications within the Project Area.

Other legislation that may apply to the proposed works includes:

- *Environment Protection and Biodiversity Conservation Act 1999* (*EPBC Act*).

The *EPBC Act* provides protection for Matters of National Environmental Significance (MNES). Any action that has, will have or is likely to have a significant impact on MNES requires referral under the *EPBC Act*. Conservation significant flora and fauna species, and ecological communities listed under the *EPBC Act* are known from and/or could potentially occur within the Project Area.

- *National Parks and Wildlife Act 1972 (SA)* (*NP&W Act*).

Native plants and animals in South Australia are protected under the *NP&W Act*. It is an offence to take a native plant or protected animal without approval. Conservation-significant flora and fauna species listed on Schedules 7, 8, or 9 of the *NP&W Act* could potentially occur within the Project Area.

- Landscape South Australia Act 2019 (Landscape Act).

Under the Landscape Act, landholders have a legal responsibility to manage declared pest plants and animals and prevent land and water degradation. The SAAL Landscape Board has the statutory role of enforcing this within the Project Area. Approval may be required for the movement of Declared Plants associated with the project.

- *Aboriginal Heritage Act 1988* (AH Act).

Approval is required if damage to Aboriginal Heritage Sites (reported/registered or undocumented) is required. Ministerial authorisation under section 23 of the AH Act may be required.

A detailed Environment and Heritage Impact Assessment according to DIT's internal guidelines has been produced for the Project. Relevant environmental and heritage aspects have been assessed as part of this process, with recommended mitigations and necessary approvals documented.

1.6 Native Vegetation Regulation

The works are to be undertaken within the provisions of clearance of native vegetation provided under the *Native Vegetation Regulations 2017*, Part 6, Regulation 12 (32) – Works on Behalf of Commissioner of Highways. This applies to all associated infrastructure works that are new impacts.

1.7 Development Application Information (if applicable)

Approval under the *Planning, Development and Infrastructure Act 2016* is not required.

2.0 Method

2.1 Flora assessment

A desktop assessment using the *EPBC Act* Protected Matters Search Tool (PMST) was undertaken for the presence of threatened flora species and Threatened Ecological Communities (TEC) within a 50 km radius of the Project Area. *NatureMaps* (2025) was searched for historical records of *NP&W Act* listed threatened flora species occurring within 50 km of the Project Area in the previous 20 years.

The search radius was separated into two sections that centred around the northern and southern extents of the Project Area, and they were grouped due to their proximity to each other. Priority 1 Area is within the northern desktop search area, as it was located further from Priority 2 and 3 Areas, which were closer in distance in the southern desktop search area. Both searches were undertaken on 17th November 2025.

Following a review of the background information and literature, a vegetation assessment was undertaken from the 23rd to the 28th of November 2025 by SLR. The assessment utilised the Native Vegetation Council's Rangelands Assessment Methodology. The assessment also included a general survey of the Project Area, including assessment of exotic species, identification of habitat for species or remnant and regrowth native vegetation. Representative photographs of the vegetation are provided within Section 4.1. A Likelihood of Occurrence Assessment for the species identified by the NatureMaps (2025) desktop search and the *EPBC Act* species listed as 'known' and 'likely' to occur has been completed based upon the proximity of recent records, the species' known habitat requirements, and available habitat recorded onsite through field inspections. This was used to determine species presence within the Project Area.

Representative photographs of the vegetation associations within the Project Area are provided within Section 4.1.

2.2 Fauna assessment

A desktop survey was undertaken for *EPBC Act* MNES using the PMST on the 17th of November 2025, along with a review of *NatureMaps* for historical records of threatened fauna species within 50 km of the Project Area.

The search radius was separated into two sections that centred around the northern and southern extents of the Project Area, and they were grouped due to their proximity to each other. Priority 1 Area is within the northern desktop search area, as it was located further from Priority 2 and 3 Areas, which were closer in distance in the southern desktop search area.

Following a review of the background information and literature, an assessment of the Project Area was undertaken from the 23rd to the 28th of November 2025 by SLR. During the field assessment, vegetation was surveyed to determine habitat potential for all fauna species, in particular, the threatened species identified in the desktop assessment. Opportunistic records of fauna species were also captured.

A likelihood of occurrence assessment was completed for the species identified by *NatureMaps* and the species listed in the *EPBC Act* PMST report as likely or known to occur based upon the proximity of recent records, the species' known habitat requirements, and available habitat recorded onsite through field inspections. This was used to determine species presence within the Project Area.

3.0 Assessment Outcomes

3.1 Vegetation Assessment

The vegetation assessment identified several landforms containing predominantly high-quality remnant vegetation, with the evidence of grazing pressure increasing towards the northern extent of the Project Area. Priority 1 Area occurs in an area of lower flora species diversity, caused by naturally occurring differences in landforms, as well as higher grazing pressure from the current pastoral management practices. This area largely consisted of flat and undulating plains, with drainage lines containing a higher diversity of flora.

Priority 2 and Priority 3 Areas occur in predominantly remnant vegetation, with varying associations of woodland and shrublands, which contain a high flora species diversity. These areas contained very few introduced flora species and had low to moderate impacts from grazing. The majority of the proposed works will occur on the side of the existing road where weed presence was higher, and signs of historical degradation from road maintenance were present. The landforms consisted of flat and undulating plains, rocky outcrops, drainage lines and salt lakes.

The Priority 2 area occurs in the Hiltaba Nature Reserve, where significant conservation efforts by Nature Foundation are active. Most vegetation within the construction footprint is of lower understorey species and younger overstorey species, with minimal mature overstorey species to be impacted. However, a few mature taller shrubs, particularly in waterways, have been identified as falling within the impact area.

The current road formation was calculated in the field using a measuring wheel. The clearance amounts were then based on the requirement for a 20 m final road formation. Refer to Table D for the details.

Table D: MAZ and Clearance Amounts

Priority Area Re-sheeting	Road total (m)	Drain (each) (m)	Total MAZ (m)	Clearance Each Side (m)
1	5.3	1.2	7.7	6.1
2	7.3	1	9.3	5.4
3	7.7	1.5	10.7	4.7

Vegetation associations were assessed and separated into their respective IBRA subregions within which they fall. IBRA subregions across the Project Area include Gawler Volcanics and Yellabinna. Inspection of the Project Area confirmed the presence of native vegetation with the following vegetation associations (VA) identified:

- VA 1; Samphire low shrubland
- VA2; Eucalyptus open Woodland over *Dodonaea viscosa* Shrubland
- VA 3; *Maireana sedifolia* low shrubland
- VA 4a (Gawler Volcanics); Tall open shrubland with *Acacia spp. +/- Alectryon sp.* Over chenopod low shrubland
- VA 4b (Yellabinna); Tall open shrubland with *Acacia spp. +/- Alectryon sp.* Over chenopod low shrubland
- VA 5; Tall *Acacia spp*. Shrubland
- VA 6; *Eucalyptus spp*. Woodland over *Triodia irritans*
- VA 7a (Gawler Volcanics); *Casuarina pauper* woodland

- VA 7b (Yellabinna); *Casuarina pauper* woodland
- VA 8; *Eucalyptus oleosa ssp.* open woodland in drainage line
- VA 9a (Gawler Volcanics); *Atriplex spp.* Low chenopod Shrubland
- VA 9b (Yellabinna); *Atriplex spp.* Low chenopod Shrubland
- VA 10; *Melaleuca uncinata* +/- *Exocarpus aphylla* high shrubland over *Dodonaea viscosa*, *Triodia irritans*
- VA 11; Very Open low chenopod Shrubland
- VA 12; *Acacia* spp. tall very open shrubland in drainage lines over *Eremophila* spp.
- VA 13; *Acacia spp.* shrubland over *Triodia irritans* hummock grassland.

Full assessment of the vegetation attributes and condition scores is provided within Appendix B. A list of flora and fauna species recorded onsite is provided within Appendix C. Vegetation associations were classified at a broad level, and based upon landform as well as dominant species, as was appropriate for the context of the landscape and the assessment methodology. Refer to Table E for a description of each vegetation association and Table F for vegetation impacts associated with specific work areas.

Table E: Vegetation Associations Summary

Vegetation Association	VA 1; Samphire low shrubland
	
	Photo 1 Representative Photo of VA 1, looking West
General description	The assessed vegetation is consistent with typical flora species associated with salt lakes in the region, with some evidence of grazing and minor weed invasion, specifically closer to the road reserve. The vegetation largely consisted of low samphire shrubs on a stony plain with minor cracking clay features. The dominant native flora species include: • *Tecticornia ssp.*

<table>
<tr><td></td><td colspan="5">

- *Frankenia serpyllifolia*
- *Atriplex vesicaria.*

Refer to Appendix B for the detailed assessment and the detailed flora species list.
</td></tr>
<tr><td>Threatened species or community</td><td colspan="5">No threatened flora or fauna species listed under the EPBC Act or the NP&W Act were recorded within VA 1 during the field assessment. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.</td></tr>
<tr><td>Landscape context score</td><td>1.18</td><td>Vegetation Condition Score</td><td>37.06</td><td>Conservation significance score</td><td>1.08</td></tr>
<tr><td>Unit biodiversity Score</td><td>47.23</td><td>Area (ha)</td><td>1.359</td><td>Total biodiversity Score</td><td>64.19</td></tr>
<tr><td>Vegetation Association</td><td colspan="5">VA2; Eucalyptus open Woodland over Dodonaea viscosa Shrubland</td></tr>
<tr><td colspan="6"> 
Photo 2 Representative Photo of VA2. Looking West</td></tr>
<tr><td>General description</td><td colspan="5">Remnant Eucalypt woodland with a moderate diversity of annual species and a healthy midstory of high shrubs. Little evidence of grazing pressure and very low to nil weed invasion. Some disturbance from the road reserve is evident. There is an active wombat warren located within the road reserve of the re-sheeting works. Refer to Appendix F for images of warrens. Vegetation occurs on a stony, undulating plain with cracking clay. High diversity of perennial species that are predominantly intact. The dominant native flora species include:

- *Eucalyptus brachycalyx*
- *Dodonaea viscosa ssp. angustissima*
- *Eremophila glabra ssp. glabra*
- *Atriplex stipitata*

Refer to Appendix B for the detailed assessment and the detailed flora species list.</td></tr>
</table>

Threatened species or community	*Acanthiza iredalei iredalei* (Slender-billed Thornbill (western)), listed under the *NP&W Act* as Rare, was identified in VA2. Two threatened fauna species were observed utilising woodland during the vegetation assessment, *Aphelocephala leucopsis leucopsis* (Southern Whiteface), listed as Vulnerable under the *EPBC Act*, and *Corcorax melanorhamphos whiteae* (White-winged Chough (Gawler Ranges, EP, southern FR, MLR)), listed as Rare under the *NP&W Act*. These species are also likely to occur within this vegetation association. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.				
Landscape context score	1.18	**Vegetation Condition Score**	55.39	**Conservation significance score**	1.10
Unit biodiversity Score	71.90	**Area (ha)**	5.192	**Total biodiversity Score**	373.30
Vegetation Association	VA 3; *Maireana sedifolia* low shrubland				

Photo 3 Representative photo of VA 3, looking West

General description	Relatively intact *Maireana sedifolia* low shrubland, with some evidence of grazing and low presence of introduced species. Vegetation occurs on a level plain with cracking clay and stony patches, with some dust settlement impacts from the road reserve. The dominant native flora species include: • *Maireana sedifolia* • *Atriplex vesicaria* • *Atriplex stipitata.*

	Refer to Appendix B for the detailed assessment and the detailed flora species list.				
Threatened species or community	No threatened flora species or ecological communities as listed under the *EPBC Act* or the *NP&W Act* were recorded within VA 3 during the field assessment. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.				
Landscape context score	1.12	**Vegetation Condition Score**	42.88	**Conservation significance score**	1.10
Unit biodiversity Score	52.83	**Area (ha)**	2.431	**Total biodiversity Score**	128.43
Vegetation Association	VA 4; Tall open shrubland with *Acacia spp. +/- Alectryon sp.* Over chenopod low shrubland				

Photo 4 Representative photo of VA 4, looking South

General description	Vegetation occurs on an undulating plain with a dominant stony surface and cracking clay. Very sparse to nil introduced species present; however, the disturbed roadside has caused *Solanum elaeagnifolium* (Silver-leaf Nightshade), a declared weed species, to be present. VA 4 contains potential marsupial burrows. Some evidence of grazing. The dominant native flora species include: • *Acacia tarculensis* • *Alectryon oleifolius ssp. canescens* • *Senna cardiosperma ssp. gawlerensis* • *Ptilotus obovatus* • *Acacia aneura var.* • *Acacia tetragonophylla.*

	Refer to Appendix B for the detailed assessment and the detailed flora species list.				
Threatened species or community	No threatened flora species listed under the *EPBC Act* or the *NP&W Act* were recorded within VA 4 during the field assessment. However, suitable habitat for threatened fauna may exist. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.				
VA 4a (Gawler Volcanics IBRA Subregion)					
Landscape context score	1.20	**Vegetation Condition Score**	51.94	**Conservation significance score**	1.10
Unit biodiversity Score	68.56	**Area (ha)**	1.836	**Total biodiversity Score**	125.88
VA 4b (Yellabinna IBRA Subregion)					
Landscape context score	1.20	**Vegetation Condition Score**	51.94	**Conservation significance score**	1.10
Unit biodiversity Score	68.56	**Area (ha)**	0.147	**Total biodiversity Score**	10.08
Vegetation Association	VA 5; Tall *Acacia spp*. Shrubland				

Photo 5 Representative Photo of VA 5, looking North

General description	Remnant tall *Acacia ssp*. shrubland with a high diversity of annual and perennial flora species, occurring on an undulating plain with a stony surface with cracking clay. Some evidence of grazing on perennial species, although annual species relatively intact. Very sparse to nil introduced species present, and no declared weeds. The dominant native flora species include:

<table>
<tr><td></td><td colspan="5">

- *Acacia papyrocarpa*
- *Acacia ligulata*
- *Acacia aneura var.*
- *Acacia ramulosa var.*
- *Maireana sedifolia*
- *Senna cardiosperma ssp. gawlerensis.*

Refer to Appendix B for the detailed assessment and the detailed flora species list.
</td></tr>
<tr><td>Threatened species or community</td><td colspan="5">Two threatened fauna species were observed utilising woodland and dense, tall shrubland during the vegetation assessment: the Southern Whiteface, listed as Vulnerable under the EPBC Act, and the White-winged Chough (Gawler Ranges, EP, southern FR, MLR), listed as Rare under the NP&W Act. These species may therefore occur within this vegetation association. Refer to Section 4.2 and Appendix E for a discussion of other threatened fauna habitat potential.</td></tr>
<tr><td>Landscape context score</td><td>1.18</td><td>Vegetation Condition Score</td><td>63.19</td><td>Conservation significance score</td><td>1.10</td></tr>
<tr><td>Unit biodiversity Score</td><td>82.02</td><td>Area (ha)</td><td>1.538</td><td>Total biodiversity Score</td><td>126.15</td></tr>
<tr><td>Vegetation Association</td><td colspan="5">VA 6; Eucalyptus spp. Woodland over Triodia irritans</td></tr>
<tr><td colspan="6"> 
Photo 6 Representative photo of VA 6, looking East</td></tr>
<tr><td>General description</td><td colspan="5">Eucalyptus ssp. woodland over Spinifex in moderate condition. Displaying some signs of grazing and disturbance history. Vegetation occurs on an undulating plain with a hummock surface and cracking clay. Very sparse to nil introduced</td></tr>
</table>

	flora species present. High fauna activity noted, specifically birds. VA 6 may also provide habitat for burrowing marsupials. High diversity of perennial species and moderate diversity of annual flora species. The dominant native flora species include: • *Eucalyptus yumbarrana* • *Triodia irritans* • *Dodonaea viscosa ssp. angustissima.* Refer to Appendix B for the detailed assessment and the detailed flora species list.				
Threatened species or community	Two threatened fauna species were observed utilising woodland during the vegetation assessment: the Southern Whiteface, listed as Vulnerable under the *EPBC Act*, and the White-winged Chough (Gawler Ranges, EP, southern FR, MLR), listed as Rare under the *NP&W Act*. These species may therefore occur within this vegetation association. Refer to Section 4.2 and Appendix E for a discussion of other threatened fauna habitat potential.				
Landscape context score	1.18	**Vegetation Condition Score**	57.32	**Conservation significance score**	1.10
Unit biodiversity Score	74.40	**Area (ha)**	3.772	**Total biodiversity Score**	280.64
Vegetation Association	VA 7; *Casuarina pauper* woodland				

Photo 7 Representative photo of VA 7, looking Southwest

General description	*Casuarina pauper* woodland with low to medium shrubs in the understory, occurring on an undulating plain with a hummock surface and cracking clay. Very sparse to nil introduced species present, and no declared weeds. Some evidence of grazing, and natural sparseness of the overstory, with some sections of VA 7 forming dense woodland to forest. High biodiversity of

	perennial and annual flora species, with several highly palatable species that are intact. Dominant native flora species include: • *Casuarina pauper* • *Acacia ligulata* • *Senna cardiosperma ssp. gawlerensis.* Refer to Appendix B for the detailed assessment and the detailed flora species list.				
Threatened species or community	Two threatened fauna species were observed utilising woodland during the vegetation assessment: the Southern Whiteface, listed as Vulnerable under the *EPBC Act*, and the White-winged Chough (Gawler Ranges, EP, southern FR, MLR), listed as Rare under the *NP&W Act*. These species may therefore occur within this vegetation association. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.				
VA 7a (Gawler Volcanics IBRA Section)					
Landscape context score	1.20	**Vegetation Condition Score**	59.53	**Conservation significance score**	1.08
Unit biodiversity Score	77.15	**Area (ha)**	0.111	**Total biodiversity Score**	8.56
VA 7b (Yellabinna IBRA Subregion)					
Landscape context score	1.18	**Vegetation Condition Score**	59.53	**Conservation significance score**	1.08
Unit biodiversity Score	75.87	**Area (ha)**	1.084	**Total biodiversity Score**	82.24
Vegetation Association	VA 8; *Eucalyptus oleosa ssp.* open woodland in drainage line				

Photo 8 Representative photo of VA 8, looking South

General description	*Eucalyptus oleosa ssp.* open woodland associated with a drainage line/washout. The washout area is associated with a higher weed invasion, and declared weed species are present. Minor erosion of banks is evident, with a high proportion of loose, sandy topsoil. The woodland area contains better quality vegetation with perennial and annual native flora species that are more intact. The dominant native flora species include: • *Eucalyptus oleosa ssp.* • *Atriplex stipitata* • *Enchylaena tomentosa var.* • *Alectryon oleifolius ssp. canescens.* Refer to Appendix B for the detailed assessment and the detailed flora species list.				
Threatened species or community	Two threatened fauna species were observed utilising woodland during the vegetation assessment: the Southern Whiteface, listed as Vulnerable under the *EPBC Act*, and the White-winged Chough (Gawler Ranges, EP, southern FR, MLR), listed as Rare under the *NP&W Act*. These species may therefore occur within this vegetation association. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.				
Landscape context score	1.20	**Vegetation Condition Score**	48.85	**Conservation significance score**	1.10
Unit biodiversity Score	64.48	**Area (ha)**	0.463	**Total biodiversity Score**	29.85
Vegetation Association	VA 9; *Atriplex spp.* Low chenopod Shrubland				

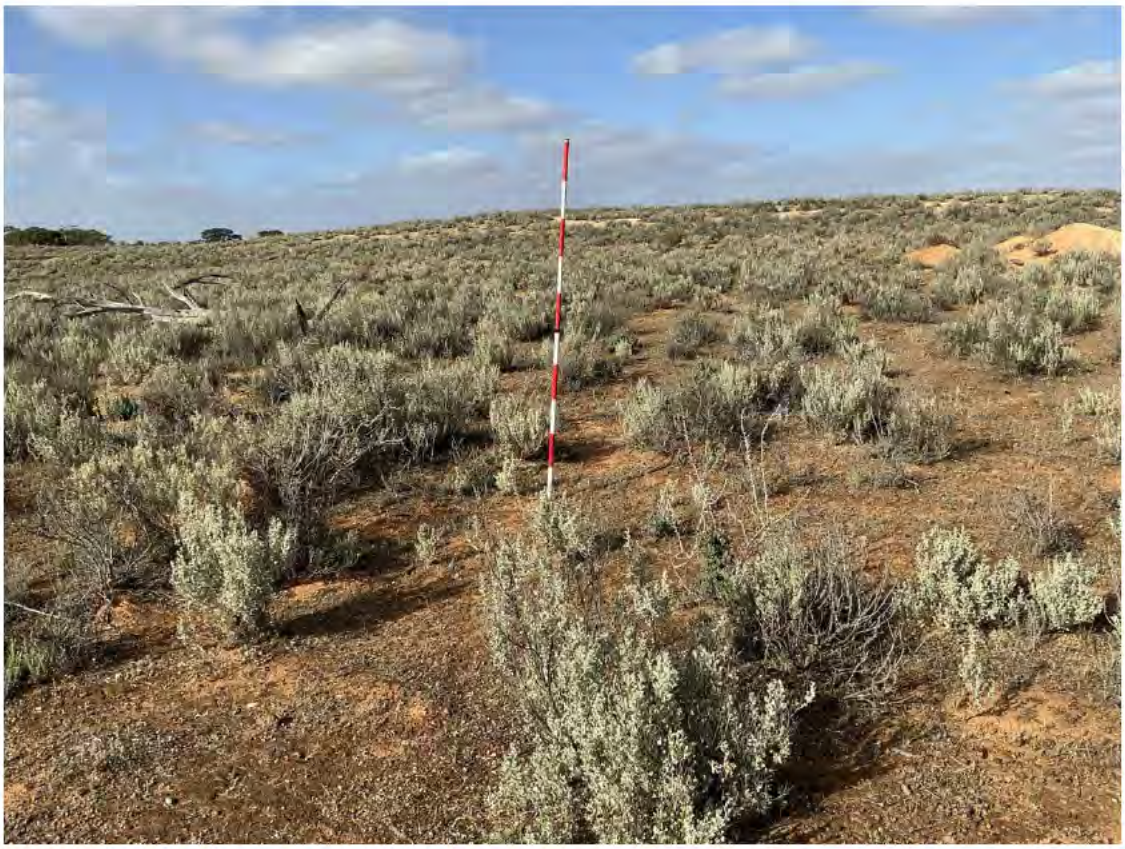


Photo 9 Representative photo of VA 9, looking East

General description	*Atriplex ssp.* low chenopod shrubland with minor effects from grazing. Perennial species show no signs of grazing; however, little regeneration of perennial species indicates some grazing pressure. Vegetation occurs on an undulating plain with a stony surface and cracking clay. Moderate invasion of introduced species, but no declared weeds. Good diversity of native annual flora species. The dominant native flora species include: • *Atriplex vesicaria* • *Maireana georgei.* Refer to Appendix B for the detailed assessment and the detailed flora species list.
Threatened species or community	No threatened flora species listed under the *EPBC Act* or the *NP&W Act* were recorded within VA 9 during the field assessment. However, suitable habitat for threatened fauna may exist. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.

VA 9a (Gawler Volcanics IBRA Subregion)					
Landscape context score	1.20	**Vegetation Condition Score**	43.30	**Conservation significance score**	1.08
Unit biodiversity Score	56.12	**Area (ha)**	3.33	**Total biodiversity Score**	229.53
VA 9b (Yellabinna IBRA Subregion)					

Landscape context score	1.18	**Vegetation Condition Score**	43.30	**Conservation significance score**	1.08
Unit biodiversity Score	55.18	**Area (ha)**	0.316	**Total biodiversity Score**	17.44
Vegetation Association	VA 10; *Melaleuca uncinata* +/- *Exocarpus aphylla* high shrubland over *Dodonaea viscosa*, *Triodia irritans*				

Photo 10 Representative photo of VA 10, looking West

General description	*Melaleuca uncinata* and *Exocarpus aphylla* high shrubland over *Dodonaea viscosa* and a thick ground cover of *Triodia irritans*. Vegetation occurs on a rocky outcrop with hummock grasses and cracking clay. Disturbance from the road reserve is encroaching on the vegetation. Good diversity of native annual and perennial species, with some evidence of grazing. Very sparse to nil introduced species present. The dominant native flora species include: • *Melaleuca uncinata* • *Exocarpos aphyllus* • *Dodonaea viscosa ssp. angustissima* • *Triodia irritans.* Refer to Appendix B for the detailed assessment and the detailed flora species list.
Threatened species or community	VA 10 contains known rocky outcrop habitat and potential scats of *Petrogale xanthopus xanthopus* (Yellow-footed Rock-wallaby), listed as Vulnerable under the *EPBC Act* and the *NP&W Act*. However, this species is unlikely to inhabit the roadside to be impacted. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.

Landscape context score	1.20	**Vegetation Condition Score**	55.71	**Conservation significance score**	1.10
Unit biodiversity Score	73.54	**Area (ha)**	0.478	**Total biodiversity Score**	35.15
Vegetation Association	VA 11; Very Open low chenopod Shrubland				

Photo 11 Representative photo of VA 11, looking East

General description	Very open low chenopod shrubland, subject to high grazing pressure. Good diversity of perennial species; however, most of these palatable species are being actively grazed. Annual species are present, however, at a lower diversity. There is a moderate invasion of introduced species that are common to the region and typical in disturbed areas. VA 12 is situated on an undulating plain, with a dominant stony surface and minor cracking clay patches and is located within active farming land. Potential marsupial burrows are present. The dominant native flora species include: • *Maireana pyramidata* • *Maireana astrotricha* • *Atriplex holocarpa*. Refer to Appendix B for the detailed assessment and the detailed flora species list.
Threatened species or community	No threatened flora or fauna species listed under the *EPBC Act* or the *NP&W Act* were recorded within VA 11 during the field assessment. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.

Landscape context score	1.13	**Vegetation Condition Score**	38.63	**Conservation significance score**	1.10
Unit biodiversity Score	48.02	**Area (ha)**	13.432	**Total biodiversity Score**	645.00
Vegetation Association	VA 12; *Acacia* spp. tall very open shrubland in drainage lines over *Eremophila* spp.				

Photo 12 Representative photo of VA 12, looking South

General description	*Acacia* spp. tall, very open shrubland over *Eremophila* spp. associated with drainage lines. VA 12 supports rocky features that provide microhabitat for annual flora species and reptiles, as well as sandy substrate and cracking clay within the drainage line. This vegetation was supporting high fauna activity, specifically bird species. High perennial and annual species diversity, with some impacts from grazing. Moderate invasion of introduced species and declared weed species are present. The dominant native flora species include: • *Eremophila rotundifolia* • *Eremophila duttonii* • *Acacia tetragonophylla* • *Triodia irritans.* Refer to Appendix B for the detailed assessment and the detailed flora species list.
Threatened species or community	No threatened flora or fauna species listed under the *EPBC Act* or the *NP&W Act* were recorded within VA 12 during the field assessment. However, suitable habitat for threatened fauna may exist. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.

Landscape context score	1.13	**Vegetation Condition Score**	43.71	**Conservation significance score**	1.10
Unit biodiversity Score	54.33	**Area (ha)**	1.824	**Total biodiversity Score**	99.10
Vegetation Association	VA 13; *Acacia spp.* shrubland over *Triodia irritans* hummock grassland				

Photo 13 Representative photo of VA 13, looking North

General description	Similar to VA 12, but with a denser layer of Spinifex grass and less *Eremophila spp.*. VA 13 supports rocky features that provide microhabitat for annual flora species and reptiles, as well as sandy substrate and cracking clay within the drainage line. This vegetation was supporting high fauna activity, specifically bird species. High perennial and annual species diversity, with some impacts from grazing. Moderate invasion of introduced species and declared weed species are present. The dominant native flora species include: • *Acacia kempeana* • *Triodia irritans* • *Acacia tarculensis* • *Acacia aneura var.* Refer to Appendix B for the detailed assessment and the detailed flora species list.
Threatened species or community	No threatened flora or fauna species listed under the *EPBC Act* or the *NP&W Act* were recorded within VA 14 during the field assessment. However, suitable habitat for threatened fauna may exist. Refer to Section 4.2 and Appendix E for discussion of threatened fauna habitat potential.

Landscape context score	1.13	**Vegetation Condition Score**	51.00	**Conservation significance score**	1.10
Unit biodiversity Score	63.39	**Area (ha)**	1.888	**Total biodiversity Score**	119.68

Table F: Description of Vegetation Impacts

Works	MM	VA	Biodiversity Score	Clearance Area (ha)	SEB Points required	Payment (ex. GST)	Admin fee (incl. GST)
Priority 1							
Re-sheeting	36.025-46.06	VA11	472.52	9.84	519.77	$39,430.29	$2,168.67
		VA12	99.10	1.824	109.01	$8,269.61	$454.83
		VA13	119.68	1.888	131.65	$9,987.10	$549.29
Pit 1345	36.02	VA11	107.37	2.236	118.11	$8,959.95	$492.80
Pit 1347	42.68	VA11	65.12	1.356	71.63	$5,433.93	$298.87
Priority 2							
Re-sheeting	170.9-177.18	VA3	85.79	1.766	94.37	$8,854.56	$487.00
		VA4a (Gawler Volcanics)	53.20	0.776	58.52	$5,490.82	$302.00
		VA8	0.463	0.463	32.84	$3,277.99	$180.29
		VA9a (Gawler Volcanics)	187.05	3.333	205.76	$20,538.38	$1,129.61
		VA10	35.15	0.478	38.67	$3,998.89	$219.94
Pit (no number)	196.986	VA9b (Yellabinna)	55.18	0.316	19.18	$1,868.54	$102.77
Pit 1287	169.623	VA4a (Gawler Volcanics)	43.74	0.638	48.11	$4,514.07	$248.27
Priority 3							
Re-sheeting	133.5-146.404	VA1	64.19	1.359	70.61	$6,061.36	$333.37
		VA2	315.86	4.393	347.45	$29,826.06	$1,640.43
		VA3	38.23	0.787	42.05	$3,945.47	$217.00

Works	MM	VA	Biodiversity Score	Clearance Area (ha)	SEB Points required	Payment (ex. GST)	Admin fee (incl. GST)
		VA4a (Gawler Volcanics)	28.93	0.422	31.82	$2,985.61	$164.21
		VA4b (Yellabinna)	10.08	0.147	11.09	$1,040.55	$57.23
		VA5	126.15	1.538	138.77	$12,023.21	$661.28
		VA6	280.64	3.772	308.70	$26,622.91	$1,464.26
		VA7a (Gawler Volcanics)	8.56	0.111	9.42	$808.64	$44.48
		VA7b (Yellabinna)	82.24	1.084	90.46	$7,765.33	$427.09
Additional Assets							
Pit 1291	193.91	VA2	88.29	1.228	97.12	$8,337.05	$458.54
Pit 1292	194.4	VA2	17.90	0.249	19.69	$1,690.24	$92.96

3.2 Threatened Species Assessment

3.2.1 Threatened Flora

The *EPBC Act* PMST was used to identify threatened flora species and TEC that could occur within 50 km of the Project Area. This was performed on both the Northern (Priority 1 Area) and Southern sections (Priority 2 and 3 Areas) of the Project Area. In total, the PMST searches identified six threatened flora species that could occur within 50 km of the Project Area. Of these, three species were identified as 'known' to occur:

- *Caladenia tensa* (Greencomb Spider-orchid), *EPBC Act* Endangered;
- *Limosella granitica* (Granite Mudwort), *EPBC Act* Vulnerable; and
- *Pterostylis xerophila* (Desert Greenhood), *EPBC Act* Vulnerable.

Additionally, three species were identified as 'likely' to occur:

- *Frankenia plicata,* (Braided Sea-heath) *EPBC Act* Endangered;
- *Hibbertia crispula* (Ooldea Guinea-flower), *EPBC Act* Vulnerable; and
- *Swainsona pyrophila* (Yellow Swainson-pea), *EPBC Act* Vulnerable.

Refer to Appendix D for the full results of the *EPBC Act* PMST report. As per the PMST Caveat, the presence category is based upon species distributions that have been discerned through a variety of methods. "Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled using point locations and environmental data layers" (PMST). As such, the presence category of 'known to occur' does not guarantee the species presence within the Project Area.

The *EPBC Act* PMST did not identify any TEC as potentially occurring within 50 km of the Project Area.

NatureMaps was used to identify previous records of threatened flora species occurring in the previous 20 years within 50 km of the Project Area. The desktop search identified a further 25 threatened flora species.

A Likelihood of Occurrence Assessment for the species identified by the *NatureMaps* desktop search, as well as the species listed as 'Known' or 'Likely' in the PMST, has been completed based upon proximity of records to the Project Area, species known habitat requirements and available habitat recorded onsite through field inspections. Refer to Appendix E for the full assessment results, and below, which summarises the results by Priority Areas based on northern and southern desktop results.

3.2.1.1 Priority Area 1

One threatened flora species was considered 'likely' to occur:

- *Santalum spicatum* (Sandalwood) *NP&W Act* Vulnerable;

Species grows naturally among rocks and woodland in arid areas of southern Western Australia and northern South Australia. As such, it may occur within shrubland found within drainage lines in Priority Area 1.

3.2.1.2 Priority Areas 2 and 3

Four threatened flora species were considered 'likely' to occur:

- *Santalum spicatum* (Sandalwood) *NP&W Act* Vulnerable;

Species grows naturally among rocks and woodland in arid areas of southern Western Australia and northern South Australia. As such, it may occur within shrubland or woodland found across Project Areas 2 and 3.

- *Melaleuca armillaris ssp. akineta* (Needle-leaf Honey-myrtle) *NP&W Act* Rare;

This species can be found in ridges and granite outcrops and is often associated with coastal heath communities. As such, it may occur within rocky outcrop sections of shrubland and woodland found within Priority Area 2.

- *Senecio gawlerensis* (Gawler Ranges Groundsel) *NP&W Act* Rare;

Species grows on rocky outcrops towards the summit of hills and upper slopes. As such, it may occur within rocky outcrop sections of vegetation found within Priority Area 2 and 3.

- *Stenanthemum arens NP&W Act* Rare.

Grows on the base of rocky hillsides and foot slopes, as such, it may occur within rocky slopes and hill sections with vegetation found within Priority Area 2 and 3.

Three additional threatened flora species were also considered ‘possible’ to occur:

- *Acacia iteaphylla (*Flinders Ranges Wattle) *NP&W Act* Rare;
- *Acacia toondulya* (Toondulya Wattle) *NP&W Act* Rare; and
- *Embadium stagnense* (Arcoona Slipper-plant) *NP&W Act* Rare.

The vegetation within the Project Area could contain threatened flora species; however, the proposed works are unlikely to have a significant impact on any flora populations, based on the narrow, linear nature of the works and the location (already disturbed nature of the works areas and therefore low-quality habitat). The inspection did not find any listed flora species within the Project Area. Refer to Appendix C for a list of flora species observed. Refer to Appendix E for the full assessment results

3.2.2 Threatened Fauna

The *EPBC Act* PMST was used to identify threatened fauna species that could occur within 50 km of the Project Area. The PMST identified sixteen threatened fauna species that could occur within 50 km of the Project Area. This was performed on both the Northern (Priority 1 Area) and Southern section (Priority 2 and 3 Areas) of the Project Area. In total, seven species were identified as ‘known’ to occur:

- *Amytornis merrotsyi pedleri* (Gawler Ranges Short-tailed Grasswren) *EPBC Act* Critically Endangered;
- *Aphelocephala leucopsis* (Southern Whiteface) *EPBC Act* Vulnerable;
- *Calidris acuminata (*Sharp-tailed Sandpiper) *EPBC Act* Vulnerable;
- *Leipoa ocellata* (Malleefowl) *EPBC Act* Vulnerable;
- *Neophema chrysostoma* (Blue-winged Parrot) *EPBC Act* Vulnerable;
- *Petrogale xanthopus xanthopus* (Yellow-footed Rock-wallaby) *EPBC Act* Vulnerable;
- *Sminthopsis psammophila* (Sandhill Dunnart) *EPBC Act* Endangered;

Additionally, two species were identified as ‘likely’ to occur:

- *Amytornis modestus* (Thick-billed Grasswren) *EPBC Act* Vulnerable; and

- *Calidris ferruginea* (Curlew Sandpiper) *EPBC Act* Critically Endangered.

Refer to Appendix D for the full results of the *EPBC Act* PMST report.

NatureMaps was used to identify previous records of threatened fauna species occurring in the previous 20 years within 50 km of the Project Area. The desktop search identified an additional 20 threatened fauna records to those listed within the PMST Report.

A Likelihood of Occurrence Assessment for the species identified by the *NatureMaps* desktop search, as well as the species listed as 'Known' or 'Likely' in the PMST, has been completed based upon proximity of records to the Project Area, species' known habitat requirements and available habitat recorded onsite through field inspections. Refer to Appendix E for the full assessment results, and below, which summarises the results by Priority Areas.

3.2.2.1 Priority Area 1

One species is known to occur within Priority Area 1:

- *Aphelocephala leucopsis* (Southern Whiteface) *EPBC Act* Vulnerable;

Southern whitefaces live in a wide range of open woodlands and shrublands where there is an understorey of grasses or shrubs, or both. These areas are usually in habitats dominated by acacias or eucalypts on ranges, foothills and lowlands, and plains. Species may occur across woodlands, shrubland and moderate to densely clumped chenopod shrubland. Species was observed within the shrubland within Priority Area 1.

One Species was considered highly likely to occur:

- *Acanthiza iredalei iredalei* (Slender-billed Thornbill (western) *NP&W Act* Rare;

The species' preferred habitat is shrublands, sometimes near mangroves, salt lakes, or salt flats. They usually choose chenopod shrublands dominated by Samphire (*Sarcocornia spp*.), Bluebush (*Maireana spp*.) or Saltbush (*Atriplex spp*.). Species is highly likely to occur within chenopod shrubland across the Project Area.

Two species were considered likely to occur:

- *Hieraaetus morphnoides* (Little Eagle) *NP&W Act* Rare;

The Little Eagle is found in open forest, woodlands and croplands. This species occupies habitats rich in prey within open eucalypt forest, woodland or open woodland. They are sometimes found in Sheoak or acacia woodlands. Species may inhabit Priority Area 1 within taller shrubland in drainage lines.

3.2.2.2 Priority Areas 2 and 3

Three threatened fauna species were observed within Priority Areas 2 and 3, as follows:

- *Acanthiza iredalei iredalei* (Slender-billed Thornbill (western) *NP&W Act* Rare;

The species' preferred habitat is shrublands, sometimes near mangroves, salt lakes, or salt flats. They usually choose chenopod shrublands dominated by Samphire (*Sarcocornia spp*.), Bluebush (*Maireana spp*.) or Saltbush (*Atriplex spp*.). Species was observed within chenopod shrubland in Priority Area 3.

- *Aphelocephala leucopsis* (Southern Whiteface) *EPBC Act* Vulnerable;

Southern whitefaces live in a wide range of open woodlands and shrublands where there is an understorey of grasses or shrubs, or both. These areas are usually in habitats dominated by acacias or eucalypts on ranges, foothills and lowlands, and plains. Species occurs across

woodlands, shrubland and moderate to densely clumped chenopod shrubland. The Southern Whiteface was observed within woodland and shrubland within Priority Area 3.

- *Corcorax melanorhamphos* (White-winged Chough) *NP&W Act* Rare.

Inhabits woodlands and taller mallee, where it feeds on the ground amongst the leaf litter. This species tends to prefer wetter areas with leaf litter for feeding and available mud for nest building. This species will inhabit dry woodlands near permanent water sources. The White-winged Chough is present in mallee and woodlands across the Project Area, specifically within Priority Areas 2 and 3, which is where it was observed during the field survey.

Two species were considered as highly likely to occur:

- *Amytornis merrotsyi pedleri* (Gawler Ranges Short-tailed Grasswren) *EPBC Act* and *NP&W Act* Endangered;

This species relies on rocky (granitic) hilltops, ridges and hillsides with spinifex (*Triodia sp.*) tussock grassland and scattered spiny shrubs, particularly Acacia and Grevillea. They are known to occur in the Hiltaba nature reserve run by Nature Foundation. Species may inhabit tussock grassland located within Priority Areas 2 and 3.

- *Pachycephala inornata* (Gilbert's Whistler) *NP&W Act* Rare.

Gilbert's Whistlers inhabit semi-arid regions. They are usually found in tall mallee with sparse shrubby understorey, prickly acacia thickets, casuarina woodlands, and occasionally in taller eucalypt forests. Species may inhabit mallee and woodland located within Priority Areas 2 and 3.

Three species are considered to ‘likely’ occur:

- *Ardeotis australis* (Australian Bustard) *NP&W Act* Vulnerable;

The Australian Bustard lives on dry plains, grasslands, spinifex plains, low shrublands and open woodlands. They favour tussock and hummock grasslands. Occasionally, they are seen in modified habitat areas such as farmlands, golf courses and near dams. Species may inhabit tussock vegetation communities located within Priority Areas 2 and 3.

- *Hieraaetus morphnoides* (Little Eagle) *NP&W Act* Rare;

The Little Eagle is found in open forest, woodlands and croplands. This species occupies habitats rich in prey within open eucalypt forest, woodland or open woodland. They are sometimes found in Sheoak or acacia woodlands. Species may inhabit Priority Areas 2 and 3, within taller shrubland and woodland vegetation.

- *Myiagra inquieta* (Restless Flycatcher) *NP&W Act* Rare;

The Restless Flycatcher frequents open forests and woodlands and is often seen in farmland. This species inhabits River Red Gum. This species also occurs in open mallee (*E. oleosa, E. gracilis*), low woodland to low open forest. This species may occur within woodland within Priority Areas 2 and 3.

A further 11 species were considered ‘possible’ to occur:

- *Amytornis modestus* (Thick-billed Grasswren) *EPBC Act* Vulnerable;
- *Calidris acuminata* (Sharp-tailed Sandpiper) *EPBC Act* Vulnerable;
- *Cinclosoma castanotum (*Chestnut-backed Quail-thrush) *NP&W Act* Rare;
- *Climacteris affinis* (White-browed Treecreeper) *NP&W Act* Rare;

- *Hylacola cauta cauta* (Shy Heathwren) *NP&W Act* Rare;
- *Leipoa ocellata* (Malleefowl) *EPBC Act* Vulnerable and *NP&W Act* Vulnerable;
- *Lichenostomus cratitius occidentalis* (Purple-gaped Honeyeater) *NP&W Act* Rare;
- *Neophema elegans elegans* (Elegant Parrot) *NP&W Act* Rare;
- *Petrogale xanthopus xanthopus* (Yellow-footed Rock-wallaby) *EPBC Act* Vulnerable and *NP&W Act* Vulnerable;
- *Pseudomys australis* (Plains Mouse) *EPBC Act* Vulnerable and *NP&W Act* Rare.
- *Sminthopsis psammophila* (Sandhill Dunnart) *EPBC Act* Endangered and *NP&W Act* Vulnerable;

The majority of these species are birds that inhabit woodland and shrubland, which were present across most of the Project Area and well represented within the broader region. Given the narrow and linear nature of the proposed works, along with the disturbance history of the roadside, bird species will have opportunities to flee to better quality vegetation in the area. Threatened species that are present are likely utilising the roadside vegetation for opportunistic foraging and perching opportunities, and it is unlikely to offer critical habitat for any species. Refer to Appendix E for details on threatened species habitat utilisation within the Project Area.

3.2.3 Burrows

During the field survey, several active wombat burrows were observed within a pre-existing pit within the southern portion of the Project Area in the Hiltaba Nature Reserve. The burrows were located within and immediately adjacent to the proposed pit extension of Pit 1288 in Priority Area 2. These burrows are utilised by the Southern Hairy-Nosed Wombat; as such, they will be avoided, and extension of Pit 1288 will not occur (as per DIT consultation). Buffers of 10 m have been placed on each observed active wombat burrow to aid with potential future pit extension placement. Wombat burrows were also found across the Project Area, with locations provided in Appendix A, and photos provided in Appendix F. As such, all burrows should be avoided, with construction of the direct area unable to occur until the burrow is assessed as unoccupied.

Additionally, several small mammal burrows were observed within certain locations of the Project Area. Whilst these could be utilised by pest rodents, there is potential for threatened species such as the *EPBC Act* threatened Plains Mouse to inhabit the burrows. Burrows identified during the vegetation survey have been mapped; however, more burrows likely exist within the Project Area. It is suggested that the proposed works avoid any small mammal burrows where possible (refer to Table G for the locations). If this is unachievable, further investigation may be required to satisfy potential *EPBC Act* referral obligations as part of the project. A full trapping effort fauna survey would determine the species inhabiting the burrows. Alternatively, if clearance cannot avoid any burrows, a fauna catcher should be on-site during all vegetation clearance activities to assess burrows before and during clearance. Refer to Appendix A, Appendix F and Table G for details of the burrows identified.

Table G: Burrow Locations

Burrow Type	Easting	Northing	Work Area	Photo Log Reference
Mouse/marsupial	520831	6469451	Bore MM 27.285	Photo 5
Mouse/marsupial	520097	6480820	Near Pit 1345	-
Mouse/marsupial	508641	6448029	In Pit 1348	Photo 9
Mouse/marsupial	520464	6480299	Priority 3 re-sheeting	Photo 6
Mouse/marsupial	533028	6532409	Priority 2 re-sheeting	Photo 7
Mouse/marsupial	529100	6548066	Priority 3 re-sheeting	Photo 8
Mouse/marsupial	532599	6556170	Priority 3 re-sheeting	-
Wombat warren	520862	6469525	Priority 3 re-sheeting	Photo 10
Wombat warren	507739	6441442	Pit 1288	Photos 11-13
Wombat warren	519417	6487735	Bore MM 126.043	-
Wombat warren	529144	6548081	Near Pit 1345	Photo 14
Wombat warren	529098	6548065	Near Pit 1345	-

3.2.4 Additional Fauna Recommendations

Further, it is recommended that clearance occurs outside of the typical breeding season (spring) to minimise potential disturbance to species which may be utilising the vegetation (such as hollows and burrows) across the Project Area.

As part of the Project Area falls within the Hiltaba Nature Reserve, it is important to note that it is of significant conservation value, particularly for threatened species. As such, all efforts to minimise impacts to native vegetation and fauna habitat need to be implemented as much as reasonably possible.

3.3 Cumulative Impact

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.

The planned works are located on or bordering the existing road boundary, where there is a history of maintenance and construction activities. Areas previously disturbed through construction have regenerated well with native vegetation, and it is likely that disturbed areas within the current project will be similar.

Future clearance of vegetation surrounding the application areas is possible, as ongoing maintenance of Gawler Ranges Road is likely to be required, most likely from grading. However, this is likely to be contained within already disturbed areas and given the landscape context and prevalence of native vegetation surrounding the road, these are not likely to contribute to a significant accumulation of clearance effect.

Given the nature of the proposed work, there may be minor further effects on surrounding native vegetation from aspects such as dust and sediment deposition, weed invasion and rubbish due to the movement of vehicles and machinery within the application areas. Introduction of weed species may result in the degradation of the surrounding remnant

vegetation; however, during construction, strict hygiene practices must be adhered to ensure weed species are not spread or introduced as per DIT's construction and maintenance procedures.

3.4 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 minimise, 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 planned road upgrades are located in areas that have been exposed to moderate levels of previous vegetation clearance associated with road construction and maintenance activities. Vegetation clearance has been avoided where grid extensions are required, as the size and dimensions of the new grids will be accommodated within the existing MAZ. Borrow pit extensions have been modified to avoid impacts to active wombat warrens and associated habitat. Remaining clearance is required as grading of the existing road corridor has proven to be no longer effective, and the safety of road users is a priority.

b) Minimisation – if clearance cannot be avoided, outline measures taken to minimise 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).

Native vegetation clearance will only be required for minimal widths along the length of the Project Area, as outlined in **Section 4.1 Vegetation Assessment**. The design of the final road formation has been made to ensure the extent of impacts of clearance has been minimised to the lowest possible extent to achieve a safe carriage way.

The minimum number of borrow pits to supply the necessary material has been chosen to be extended to reduce the clearance of native vegetation. No new Borrow Pits or campsites will be established. Likewise, existing water supplies are being utilised to minimise the amount of new vegetation clearance. Pit 1288, originally proposed for extension, has removed from the pit extension scope due to the presence of active wombat warrens.

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 minimised, such as allowing for the re-establishment of the vegetation.

It is expected that native vegetation will naturally regenerate all disturbed areas outside the newly established MAZ, consistent with observations of past clearance. Disturbed native vegetation will be left on-site for ground-inhabiting fauna.

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

At the time of application, DIT will be meeting the SEB Offset requirement via payment to the NV Fund, the amount required for the SEB, as calculated in **Section 5.0**. However, in accordance with the DIT Vegetation Impact Assessment Guideline and based on the package of works requiring an offset obligation greater than 150 SEB Points, opportunities to provide on-ground SEB Offsets via an NVC Accredited Third Party Provider are likely to be investigated.

3.5 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.

Table H: The Principles of Clearance – Relevant Information

Principle of clearance	Relevant information	Assessment against the principles	Moderating factors that may be considered by the NVC
Principle 1(b) – significance as a habitat for wildlife	The vegetation under application contains habitat components, such as ground-level complexities that provide habitat for fauna species, particularly small birds and mammals. The vegetation is connected with surrounding vegetation that provides similar structure and is not in isolation. Unit Biodiversity Scores/Threatened Fauna Scores: VA1 – 47.23 / 0.08 VA2 – 71.90 / 0.1 VA3 – 48.58 / 0.1 VA4a (Gawler Volcanics) – 68.56 / 0.1 VA4b (Yellabinna) – 68.56 / 0.1 VA5 – 82.02 / 0.1 VA6 – 74.40 / 0.1 VA7a (Gawler Volcanics) – 77.15 / 0.1 VA7b (Yellabinna) – 75.87 – 0.1 VA8 – 64.48 / 0.1 VA9a (Gawler Ranges) – 56.12 / 0.08 VA9b (Yellabinna) – 55.18 / 0.08 VA10 – 73.54 / 0.1 VA11 – 48.02 / 0.1 VA12 – 54.33 / 0.1 VA13 – 63.39 / 0.1	Seriously at Variance Yes, All VAs At Variance – No	Given the shape, size, and landscape context of the vegetation under application, it is unlikely that clearance will lead to a long-term decrease in the size of any fauna populations. Likewise, clearance will not significantly reduce the area of occupancy of any fauna species. The application area is located on either side of an existing road, therefore clearance will not fragment any existing fauna population into two or more populations. The application area consists of vegetation associations that are regionally well represented. Given the degradation of the roadside vegetation from historical disturbance, the vegetation under application would provide limited habitat for threatened fauna species. Habitat within the application area is likely to provide opportunistic foraging and perching opportunities for bird species, which can flee to safety during vegetation clearance. Clearance of the application area will not result in an increase in invasive species that are harmful to a threatened species, as construction will adhere to DIT protocols relating to weed management.
Principle 1(c) – plants of a rare, vulnerable or	No threatened flora species were observed within the application areas during the field assessment.	Seriously at Variance No At Variance –	Not Applicable.

Principle of clearance	Relevant information	Assessment against the principles	Moderating factors that may be considered by the NVC
endangered species	Threatened Flora Score(s) 0 – All Vegetation Associations	No	
Principle 1(d) – the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered:	No threatened plant communities were identified within either the desktop assessment or during the Site inspections. Threatened Community Score 1 – All Vegetation Associations	Seriously at Variance No At Variance – No	Not Applicable.

Principles of Clearance (h-m) will be considered by comments provided by the local Landscape Board or the relevant Minister.

3.6 Risk Assessment

Table I: Risk Assessment

Total clearance	No. of trees	N/A
	Area (ha)	38.992
	Total Biodiversity Score	2473.89
Seriously at variance with principle 1(b), 1(c) or 1 (d)		(b)
Risk assessment outcome		Level 4

4.0 Clearance Summary

Table J: Priority Area 1

Block	Site (VA)	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
A	11	1	0	0.1	48.02	13.432	645.00	1	-	-	709.50	$53,823.40	$2,960.29
A	12	1	0	0.1	54.33	1.824	99.10	1	-	-	109	$8,269.61	$454.83
A	13	1	0	0.1	63.39	1.888	119.68	1	-	-	131.65	$9,987.10	$549.29
					Total	**17.14**	**863.78**				**950.15**	**$72,080.11**	**$3,964.41**

Table K: Priority Area 2

Block	Site (VA)	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
A	3	1	0	0.1	48.58	1.766	85.79	1	-	-	94.37	$8,854.56	$487.00
A	4a	1	0	0.1	68.56	1.414	96.94	1	-	-	106.63	$10,004.89	$550.27
A	8	1	0	0.1	64.48	0.463	29.85	1	-	-	32.84	$3,277.99	$180.29
A	9a	1	0	0.08	56.12	4.09	229.53	1	-	-	252.48	$25,201.83	$1,386.10
A	9b	1	0	0.08	55.18	0.316	17.44	1	-	-	19.18	$1,868.54	$102.77
A	10	1	0	0.1	73.54	0.478	35.15	1	-	-	38.64	$3,998.89	$219.94
					Total	**8.527**	**494.7**				**544.14**	**$53,206.70**	**$2,926.37**

Table L: Priority Area 3

Block	Site (VA)	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
A	1	1	0	0.08	47.23	1.359	64.19	1	-	-	70.61	$6,061.36	$333.37
A	2	1	0	0.1	71.9	6	267.11	1	-	-	293.82	$25,222.31	$1,387.23
A	3	1	0	0.1	48.58	0.665	35.13	1	-	-	38.64	$3,625.52	$199.40
A	4a	1	0	0.1	68.56	0.422	28.93	1	-	-	31.82	$2,985.61	$164.21

Block	Site (VA)	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
A	4b	1	0	0.1	68.56	0.147	10.08	1	-	-	11.09	$960.85	$52.85
A	5	1	0	0.1	82.02	1.538	126.15	1	-	-	138.77	$12,023.21	$661.28
A	6	1	0	0.1	74.4	3.772	280.64	1	-	-	308.7	$26,622.91	$1,464.26
A	7a	1	0	0.1	77.15	0.111	8.56	1	-	-	9.42	$808.64	$44.48
A	7b	1	0	0.1	75.87	1.084	82.24	1	-	-	90.46	$7,765.33	$427.09
					Total	**15.09**	**903.03**				**993.33**	**$86,075.74**	**$4,734.17**

Table M: Additional Assets

Block	Site (VA)	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
A	2	1	0	0.1	71.90	1.477	106.20	1	-	-	116.82	$10,028.15	$551.55
					Total	**1.477**	**106.20**				**116.82**	**$10,028.15**	**$551.55**

Table N: Totals Summary Table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	**2473.89**	**2604.43**	**$233,566.29**	**$12,176.45**	**$245,742.74**

Table O: Economies of Scale

Economies of Scale Factor	0.11
Rainfall (mm)	216

5.0 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. Provide information below.

☐ 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 application form needs to be submitted with this Data Report.

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

☒ Pay into the Native Vegetation Fund. Provide details below

Payment SEB

Payment of $233,566.29, as well as an administration fee of $12,176.45, to be paid into the NVF, with the potential for opportunities to provide on-ground SEB Offsets via an NVC Accredited Third Party Provider to be investigated.

6.0 Closure

Thank you for retaining SLR to provide this service. We wish you well and look forward to working with you again. Should you have questions or require additional information, please do not hesitate to contact the below.

Sincerely,

SLR Consulting Australia Pty Ltd

Monique Bury, B Sc
Project Consultant – Ecology & Biodiversity

Georgia Wilson, B Sc
Senior Project Consultant – Ecology & Biodiversity

Appendix A Figures

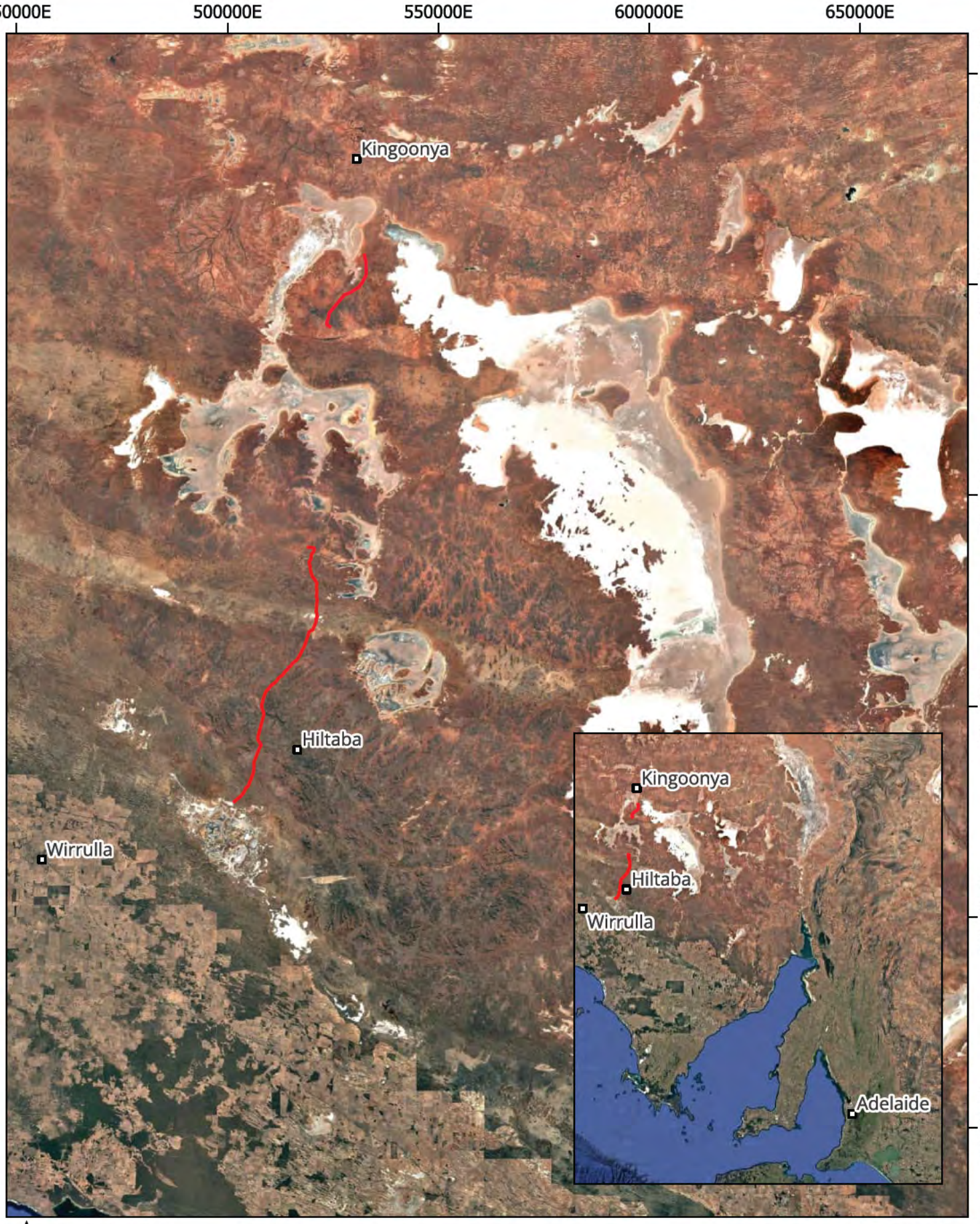
Native Vegetation Clearance Data Report

Gawler Ranges Rd – Targeted Re-sheeting Works

Department for Infrastructure and Transport

SLR Project No.: 655.010559.00009

12 March 2026



H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Survey Field Map.qgz

0 10,000 20,000 m

LEGEND

Project Area

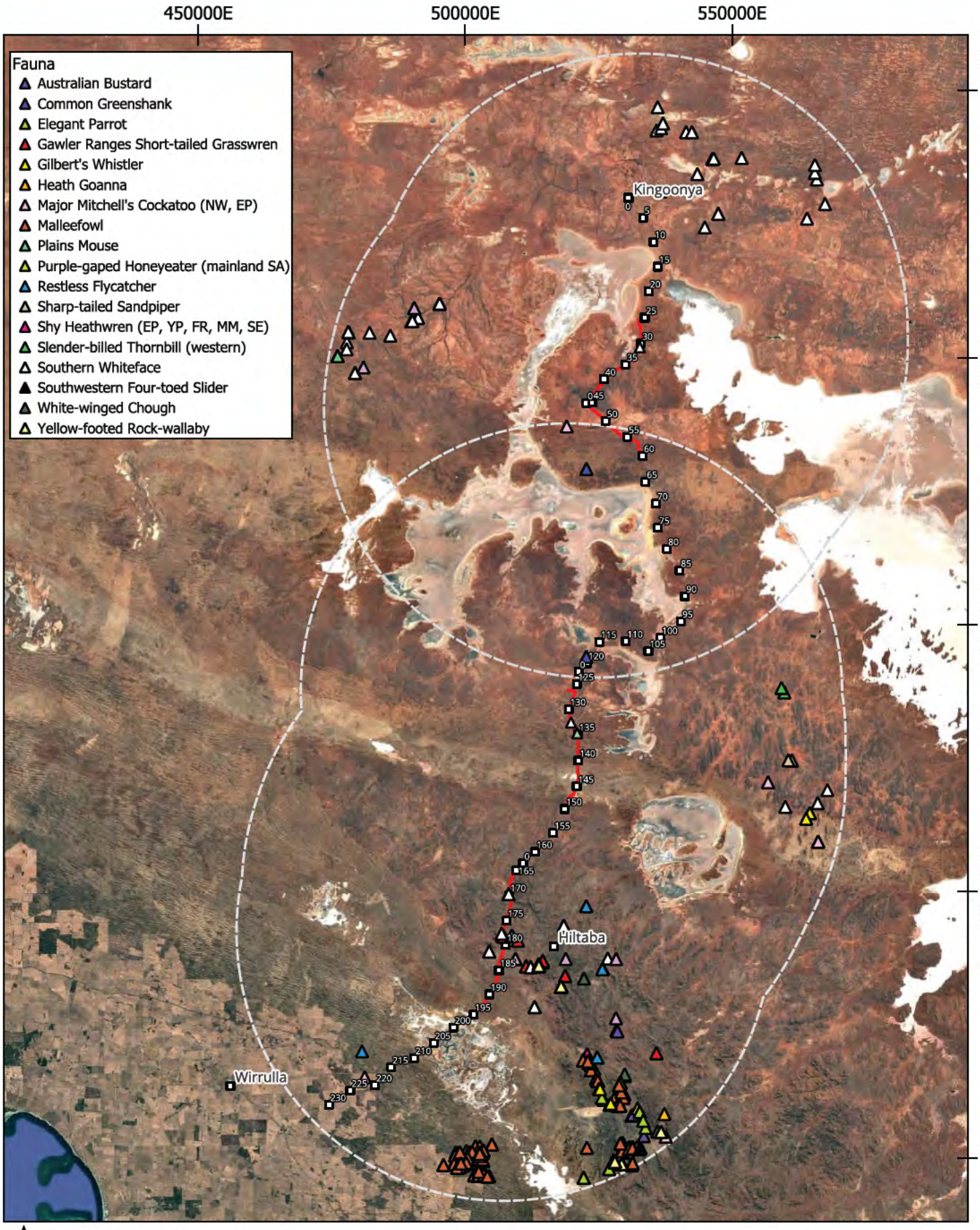
Project Location

Projection: GDA 2020 MGA Zone 53
Scale: 1:1,200,000
Project Number: 655.010559.00009
Date: 11-21-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 1



H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Threatened Species Map.qgz

0 10,000 20,000 m

Projection: GDA 2020 MGA Zone 54
Scale: 1:950,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

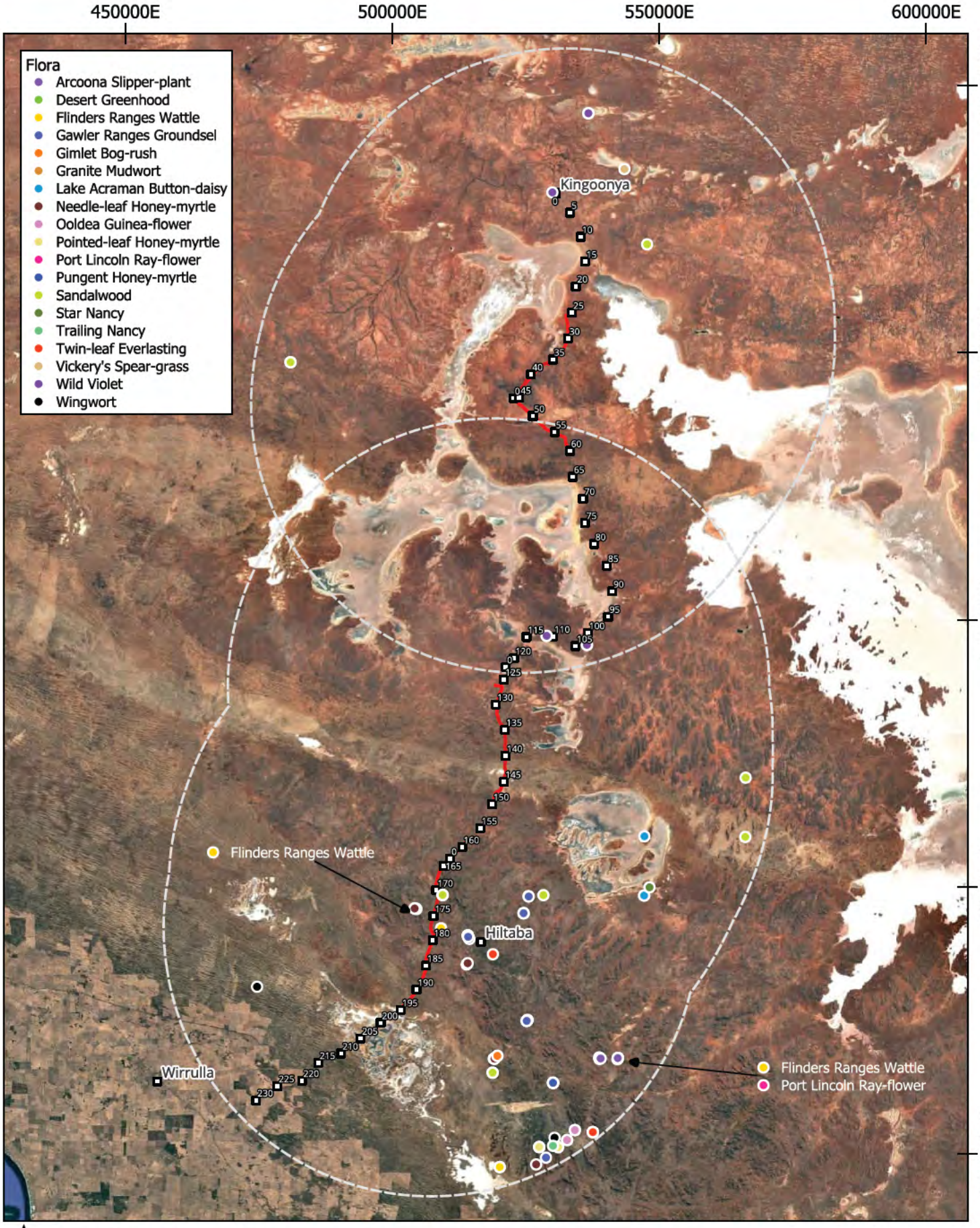
LEGEND
- Maintenance Markers
- Project Area (North) 50km Buffer
- Project Area (South) 50km Buffer
- Priority Areas

Threatened Fauna Map

SLR

www.slrconsulting.com

FIGURE 2



H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Threatened Species Map.qgz

0 10,000 20,000 m

Projection: GDA 2020 MGA Zone 53
Scale: 1:950,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

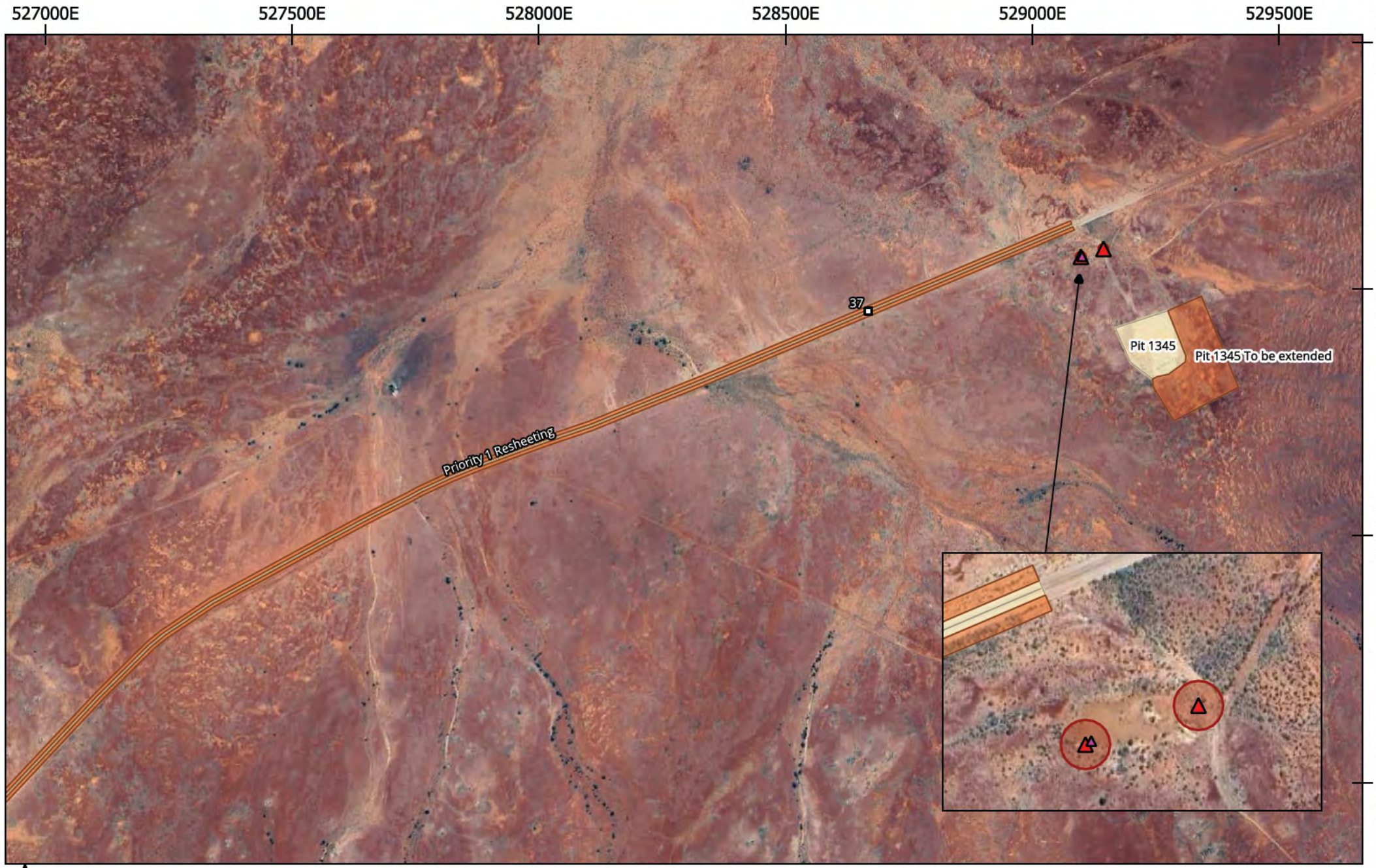
LEGEND
- Maintenance Markers
- Project Area (North) 50km Buffer
- Project Area (South) 50km Buffer
- Priority Areas

Threatened Flora Map

SLR

www.slrconsulting.com

FIGURE 3



H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

LEGEND

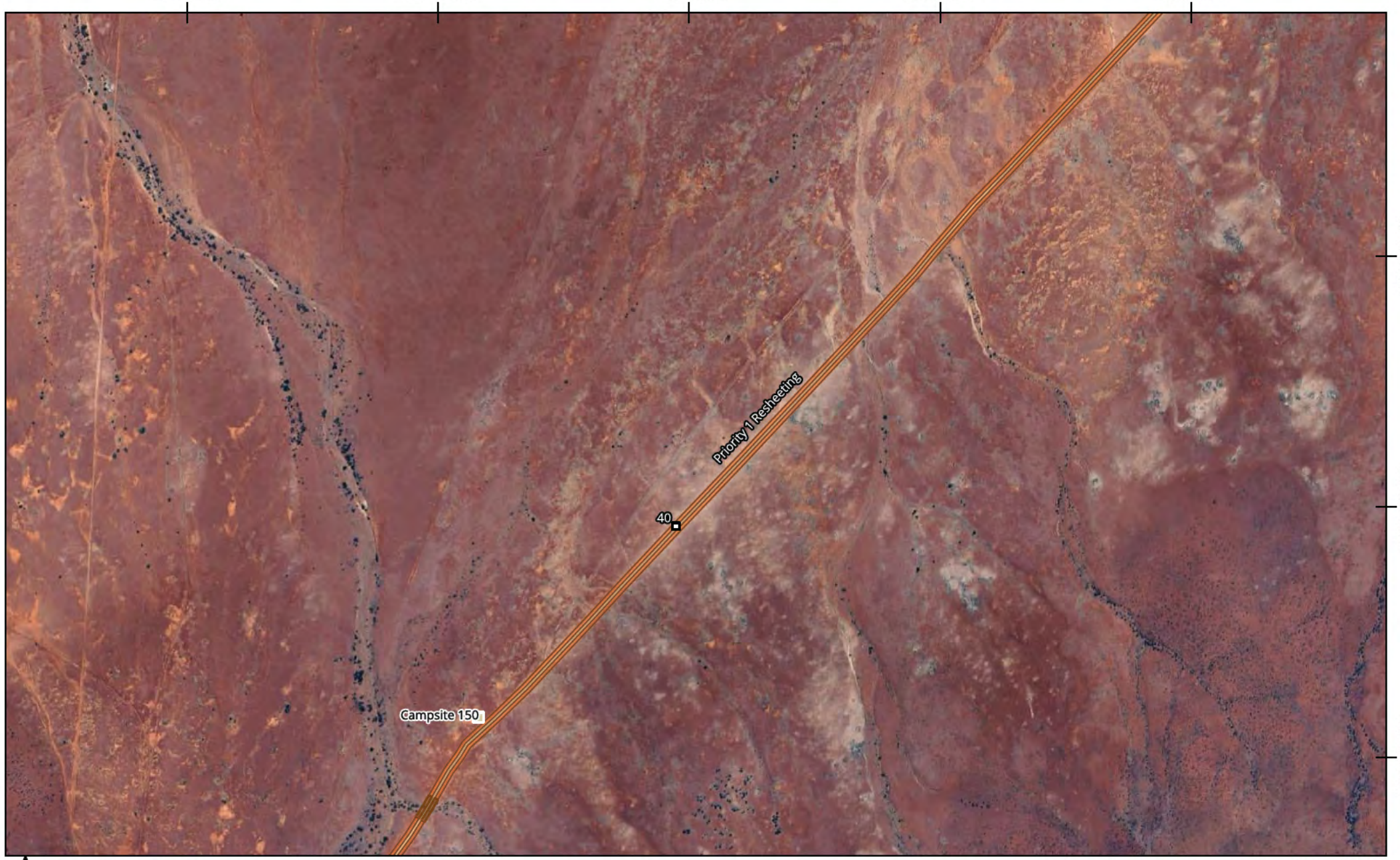
- Maintenance Markers
- Wombat Warrens
- Marsupial Burrow
- Wombat Warren Buffers
- MAZ
- Vegetation Associations
  - VA11

Vegetation Clearance Map - MM36-MM39

SLR

www.slrconsulting.com

FIGURE 4



H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

SLR

www.slrconsulting.com

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

LEGEND

- Maintenance Markers
- Campsite 150
- MAZ

Vegetation Associations

- VA12
- VA11

Vegetation Clearance Map - MM39-MM42

FIGURE 5

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

LEGEND

Maintenance Markers

MAZ

Vegetation Associations

VA12

VA13

VA11

Vegetation Clearance Map - MM42-43

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 6

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

LEGEND

Maintenance Markers

MAZ

Vegetation Associations

VA12

VA13

VA11

Vegetation Clearance Map - MM43-46

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 7

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

LEGEND

- Maintenance Markers
- MAZ

Vegetation Associations

- VA12
- VA11

Vegetation Clearance Map - MM45-47

SLR

www.slrconsulting.com

FIGURE 8

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

LEGEND

- MAZ
- Maintenance Markers
- Marsupial Burrow
- Slender-billed Thornbill
- Southern Whiteface

Vegetation Associations

- VA3
- VA2
- VA4
- VA5
- VA7

Vegetation Clearance Map - MM133-135

FIGURE 9

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\000009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

LEGEND

MAZ

Maintenance Markers

Vegetation Associations

VA2

VA5

VA7

VA6

Vegetation Clearance Map - MM135-137

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 10

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

LEGEND

MAZ

Maintenance Markers

Vegetation Associations

VA2

VA6

Vegetation Clearance Map - MM137-139

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 11

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

LEGEND

MAZ

Maintenance Markers

Vegetation Associations

VA5

VA6

Vegetation Clearance Map - MM139-142

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 12

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

LEGEND

MAZ

Maintenance Markers

Vegetation Associations

VA2

VA5

VA1

Vegetation Clearance Map - MM142-144

SLR

www.slrconsulting.com

FIGURE 13

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\000009 Gawler Range Envire Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

LEGEND

- MAZ
- Maintenance Markers
- Wombat Warrens
- Wombat Warren Buffers
- Marsupial Burrow

Vegetation Associations

- VA2
- VA1

Vegetation Clearance Map - MM144-146

SLR

www.slrconsulting.com

FIGURE 14

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\000009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

LEGEND

- MAZ
- Maintenance Markers
- Marsupial Burrow

Vegetation Associations

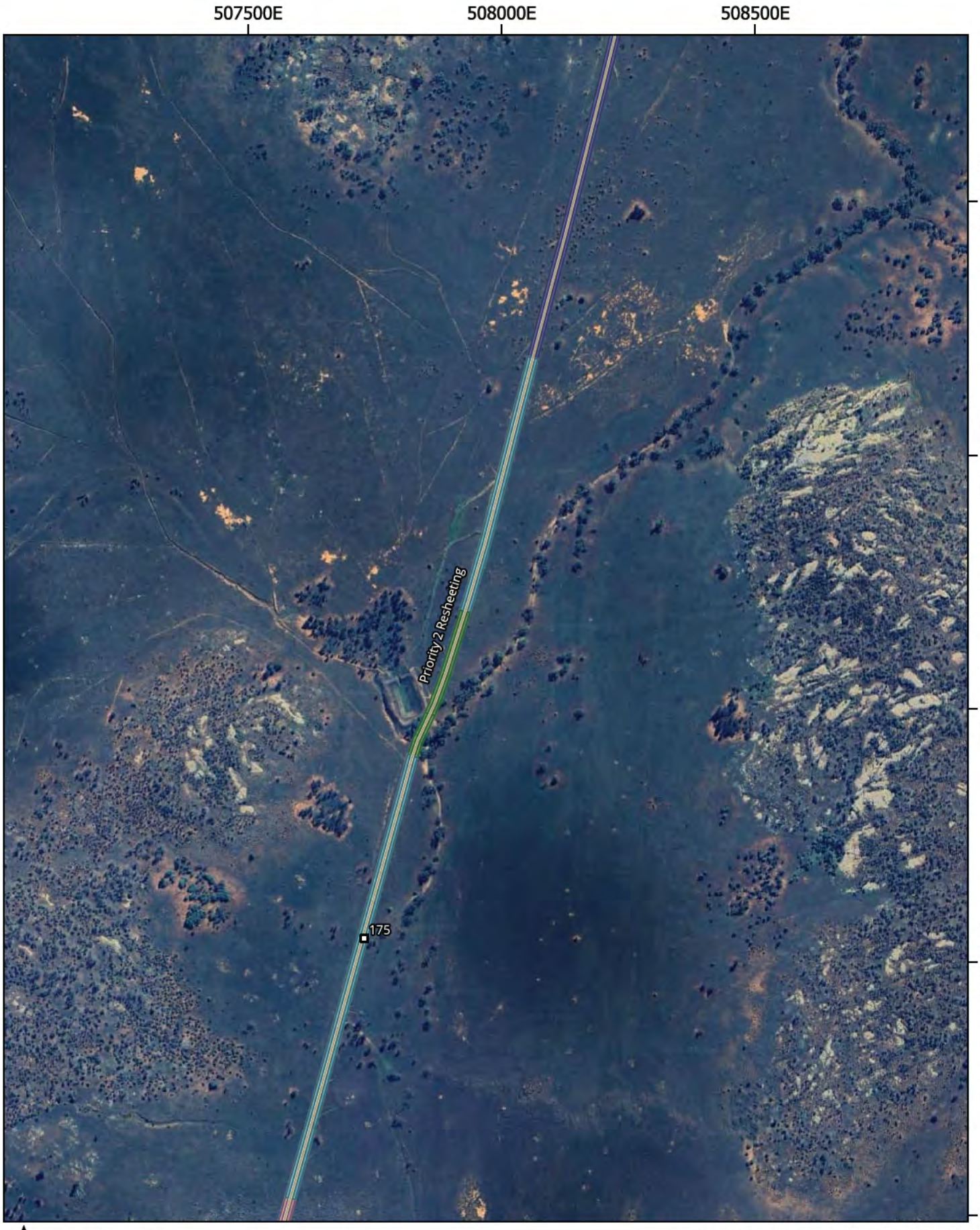
- VA4
- VA8
- VA9
- VA10

Vegetation Clearance Map - MM170-173

SLR

www.slrconsulting.com

FIGURE 15



H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

LEGEND

MAZ

Maintenance Markers

Vegetation Associations

VA3

VA4

VA8

VA9

Vegetation Clearance Map - MM173-176

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 16

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\000009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

LEGEND

MAZ

Maintenance Markers

Vegetation Associations

VA3

VA9

Vegetation Clearance Map - MM176-177

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 17

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\000009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 30 60 m

Projection: GDA 2020 MGA Zone 53
Scale: 1:3,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

LEGEND

- Maintenance Markers
- Wombat Warrens
- Wombat Warren Buffers
- MAZ

Vegetation Clearance Map - MM177-178

SLR

www.slrconsulting.com

FIGURE 18

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\000009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 80 160 m

LEGEND

Maintenance Markers

MAZ

Vegetation Associations

VA2

Vegetation Clearance Map - MM193-195

Projection: GDA 2020 MGA Zone 53
Scale: 1:7,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 19

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\00009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 20 40 m

LEGEND

Maintenance Markers

MAZ

Vegetation Associations

VA9

Vegetation Clearance Map - MM196-197

Projection: GDA 2020 MGA Zone 53
Scale: 1:2,000
Project Number: 655.010559.00009
Date: 12-19-2025
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 20

H:\Projects-SLR\655-NUR\655.010559.00001 DIT Road Network\000009 Gawler Range Enviro Assessment\06 SLR Data\01 GIS\GIS\Vegetation Clearance Map.qgz

0 100 200 m

LEGEND

Maintenance Markers

MAZ

Vegetation Associations

VA4

VA8

VA10

Vegetation Clearance Map - MM168-170

Projection: GDA 2020 MGA Zone 53
Scale: 1:10,000
Project Number: 655.010559.00009
Date: 03-03-2026
Drawn by: MB
Sheet Size: A4

SLR

www.slrconsulting.com

FIGURE 21

Appendix B Rangeland Assessment Scoresheets

Native Vegetation Clearance Data Report

Gawler Ranges Rd – Targeted Re-sheeting Works

Department for Infrastructure and Transport

SLR Project No.: 655.010559.00009

12 March 2026

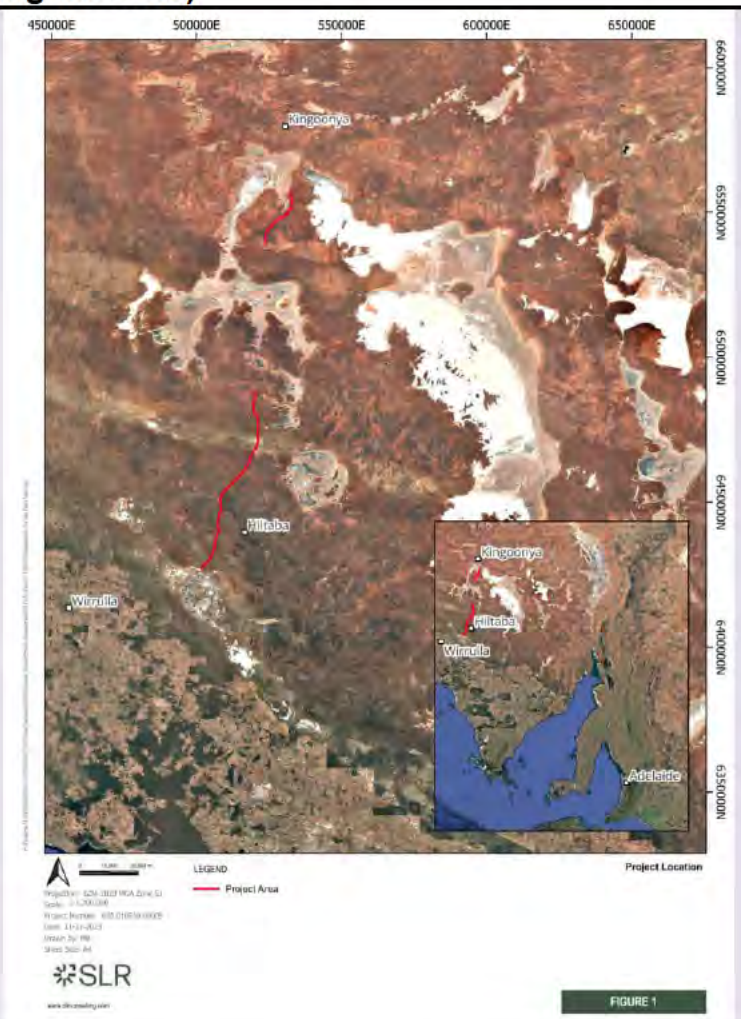
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Yellabinna
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	55
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.01

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.18**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Atriplex vesicaria	Bladder Saltbush	HP	2			Adult	10.06
Frankenia serpyllifolia	Thyme Sea-heath	U	2			Adult	
Tecticornia halocnemoides ssp. tenuis		P	2			Adult	
Tecticornia tenuis	Slender Samphire	P	2			Adult	
Maireana oppositifolia	Salt Bluebush	P	2			Adult	
Dodonaea viscosa ssp. angustissima	Narrow-leaf Hop-bush	U	2			Adult	
Tecticornia pruinosa	Bluish Samphire	P	2			Adult	
Maireana trichoptera	Hairy-fruit Bluebush	P	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	Common Name	EPBC	SA	Past Record	Observed
Calidris acuminata	Sharp-tailed Sandpiper	VU		Yes	

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	Common Name	EPBC	SA	Past Record	Observed

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Bos taurus	Cattle (European Cattle)		Yes	*
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Erodium botrys	Long Heron's-bill		Yes	*
Mesembryanthemum nodiflorum	Slender Iceplant		Yes	*

Vegetation Condition Scores

SITE (name):	VA1	**SIZE OF SITE (Ha)**	1.359
VEGETATION ASSOCIATION DESCRIPTION	Samphire low shrubland		
LANDSCAPE TYPE	Claypans and saltlakes		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☐	☑	0
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☐	☑	0
		Total Score (Max 10 - weighted by 2.5)		**0**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

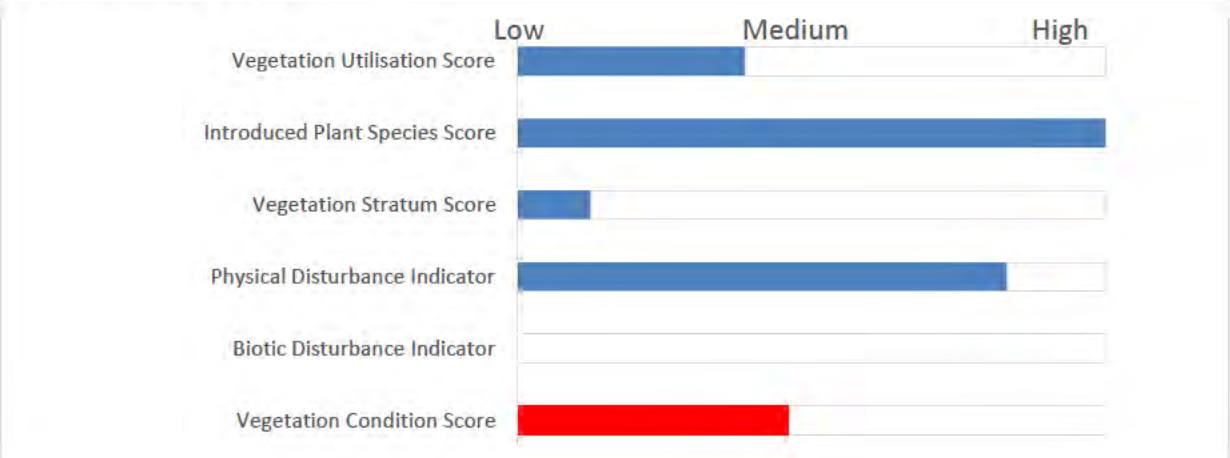
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☐	☐	
Shrubs 1- 3m	☐	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☐	☑	
Total Score (Max 16 - weighted by 4)			**2.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	No	2
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
Total Score (Max 10 - weighted by 2.5)		**10**

Vegetation Utilisation Score	
Total Score (Max 26)	10.06

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**37.06**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	0
State **Vulnerable** species observed or locally recorded (2.5 pt each)	0
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	**10**
Score	0.08

CONSERVATION SIGNIFICANCE SCORE	1.08

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.18**
VEGETATION CONDITION SCORE	**37.06**
CONSERVATION SIGNIFICANCE SCORE	**1.08**

Vegetation Condition x Landscape Context x Conservation Significance =	
UNIT BIODIVERSITY SCORE	47.23
Total Biodiversity Score (Biodiversity Score x hectares)	64.19

Photo Point and Vegetation Survey Location

Direction of the Photo	
West	
GPS Reference	
Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	520521
Northing (7 digits)	6468869
Description	
Low samphire shrubland near salt lake	

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**70.61**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	10.09
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	215
Payment into the Fund (GST exclusive)	$6,061.36
Administration fee (GST inclusive)	$333.37
Total Payment Required	**$6,394.73**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.04	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	8.59	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.47	Standard

Future Negative UBS Score	45.34
Future Positive UBS Score	52.37
UBS Gain Score	7.03
Estimate of SEB Points provided	**9.55**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Disphyma crassifolium ssp. clavella	Round-leaf Pigface				Yes
Podolepis capillaris	Wiry Podolepis				Yes
Portulaca oleracea	Common Purslane				Yes
Malacocera tricornis	Goat-head Soft-horns				Yes
Austrostipa sp.	Spear-grass				Yes
Brachyscome ciliaris var.	Variable Daisy				Yes
Chrysocephalum sp.	Everlasting				Yes
Pimelea trichostachya	Spiked Riceflower				Yes
Sclerolaena diacantha	Grey Bindyi				Yes

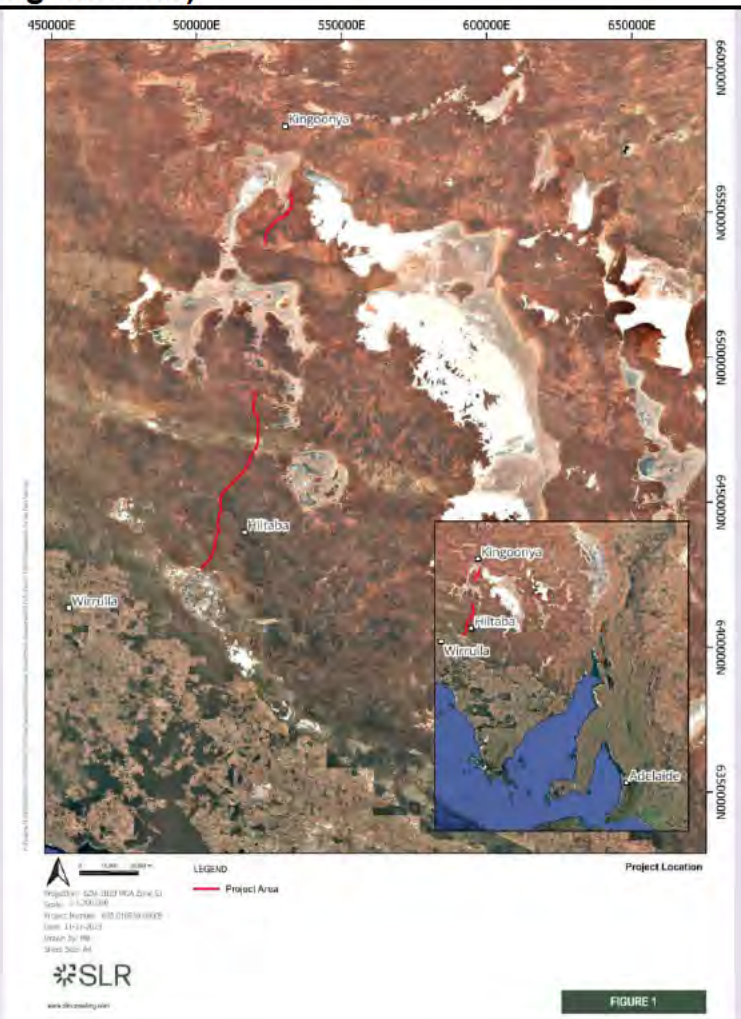
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Yellabinna
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	55
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.01

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.18**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Eucalyptus brachycalyx	Gilja	U	2			Adult	9.39
Eremophila glabra ssp. glabra	Tar Bush	P	2			Adult	
Dodonaea viscosa ssp. angustissima	Narrow-leaf Hop-bush	U	2			Adult	
Enchylaena tomentosa var.	Ruby Saltbush	P	2			Adult	
Atriplex stipitata	Bitter Saltbush	U		2		Adult	
Pittosporum angustifolium	Native Apricot	HP	2			Adult	
Maireana sedifolia	Bluebush	P		2		Adult	
Cymbopogon ambiguus	Lemon-grass	U		2		Adult	
Alectryon oleifolius ssp. canescens	Bullock Bush	HP	2			Adult	
Exocarpos aphyllus	Leafless Cherry	P		2		Adult	
Callitris glaucophylla	White Cypress-pine	U	2			Adult	
Myoporum platycarpum ssp.	False Sandalwood	P	2			Adult	
Acacia papyrocarpa	Western Myall	HP	2			Adult	
Senna artemisioides ssp. X coriacea	Broad-leaf Desert Senna	P	2			Adult	
Santalum lanceolatum	Plumbush	HP	2			Adult	
Abutilon cryptopetalum ssp.	Hill Lantern-bush	P	2			Adult	
Acacia burkittii	Pin-bush Wattle	U	2			Adult	
Eucalyptus socialis ssp.	Beaked Red Mallee	U	2			Adult	
Santalum lanceolatum	Plumbush	HP	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	Yes
Sminthopsis psammophila	Sandhill Dunnart	EN	V	Yes	
Leipoa ocellata	Malleefowl	VU	V	Yes	
Hieraaetus morphnoides	Little Eagle		V	Yes	
Hylacola cauta cauta	Shy Heathwren (EP, YP, FR, MM, upper SE)		R	Yes	
Pachycephala inornata	Gilbert's Whistler		R	Yes	
Neophema elegans elegans	Elegant Parrot		R	Yes	
Myiagra inquieta	Restless Flycatcher		R	Yes	
Lichenostomus cratitius occidentalis	Purple-gaped Honeyeater (mainland SA)		R	Yes	
Hylacola cauta cauta	Shy Heathwren (EP, YP, FR, MM, upper SE)		R	Yes	
Corcorax melanorhamphos whiteae	White-winged Chough (Gawler Ranges, EP, southern		R	Yes	Yes
Acanthiza iredalei iredalei	Slender-billed Thornbill (western)		R	Yes	Yes

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed				Introduced Species
Species	Common Name	Past Record	Observed	
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed				
Species	Common Name	Past Record	Observed	

Vegetation Condition Scores

SITE (name):	VA2	**SIZE OF SITE (Ha)**	5.192
VEGETATION ASSOCIATION DESCRIPTION	Eucalyptus open Woodland over Dodonaea viscosa Shrublan		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☑	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

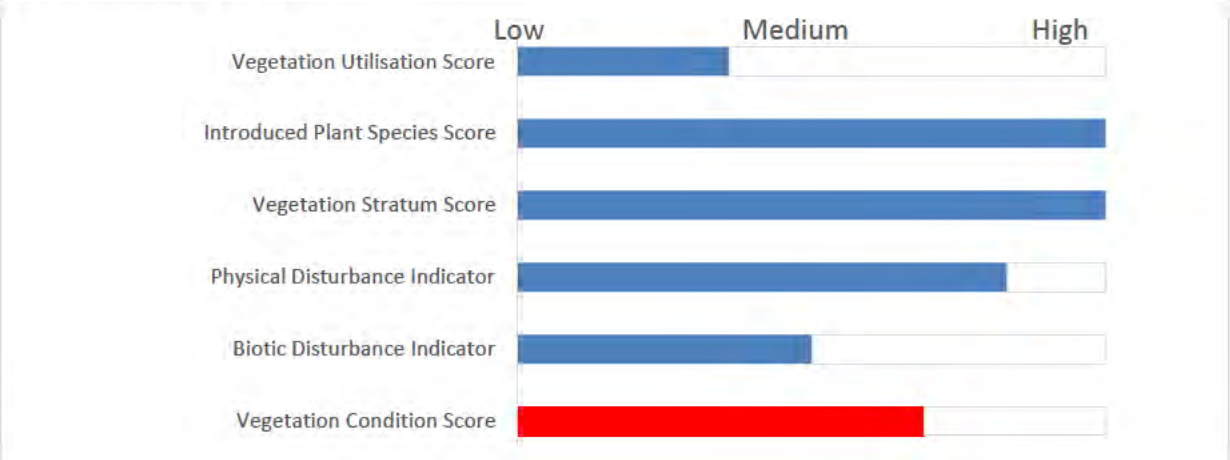
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	No	2
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
Total Score (Max 10 - weighted by 2.5)		**10**

Vegetation Utilisation Score	
Total Score (Max 26)	9.39

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**55.39**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	8
State **Vulnerable** species observed or locally recorded (2.5 pt each)	1
State **Endangered** species observed or locally recorded (5 pt each)	0
Nationally **Vulnerable** species observed or locally recorded (10 pts each)	2
Nationally **Endangered** or **Critically endangered** species observed or locally recorded (20 pts each)	1
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	**50.5**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.18**
VEGETATION CONDITION SCORE	**55.39**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =	
UNIT BIODIVERSITY SCORE	71.90
Total Biodiversity Score (Biodiversity Score x hectares)	373.30

Photo Point and Vegetation Survey Location

Direction of the Photo	
West	
GPS Reference	
Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	520838
Northing (7 digits)	6469499
Description	
Eucalyptus Open Woodland with minor grazing effects	

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**410.63**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	58.66
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	215
Payment into the Fund (GST exclusive)	$35,249.61
Administration fee (GST inclusive)	$1,938.73
Total Payment Required	**$37,188.34**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.03	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	4.92	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.65	Standard

Future Negative UBS Score	69.74
Future Positive UBS Score	76.05
UBS Gain Score	6.31
Estimate of SEB Points provided	**32.76**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Rhodanthe moschata	Musk Daisy				Yes
Brachyscome ciliaris var.	Variable Daisy				Yes
Waitzia acuminata var. acuminata	Orange Immortelle				Yes
Podolepis capillaris	Wiry Podolepis				Yes
Acacia ligulata	Umbrella Bush				Yes
Roepera aurantiaca ssp.	Shrubby Twinleaf				Yes
Solanum coactiliferum	Tomato-bush				Yes
Rhagodia sp.	Saltbush				Yes
Amyema sp.	Mistletoe				Yes
Westringia rigida	Stiff Westringia				Yes
Senecio gregorii	Fleshy Groundsel				Yes

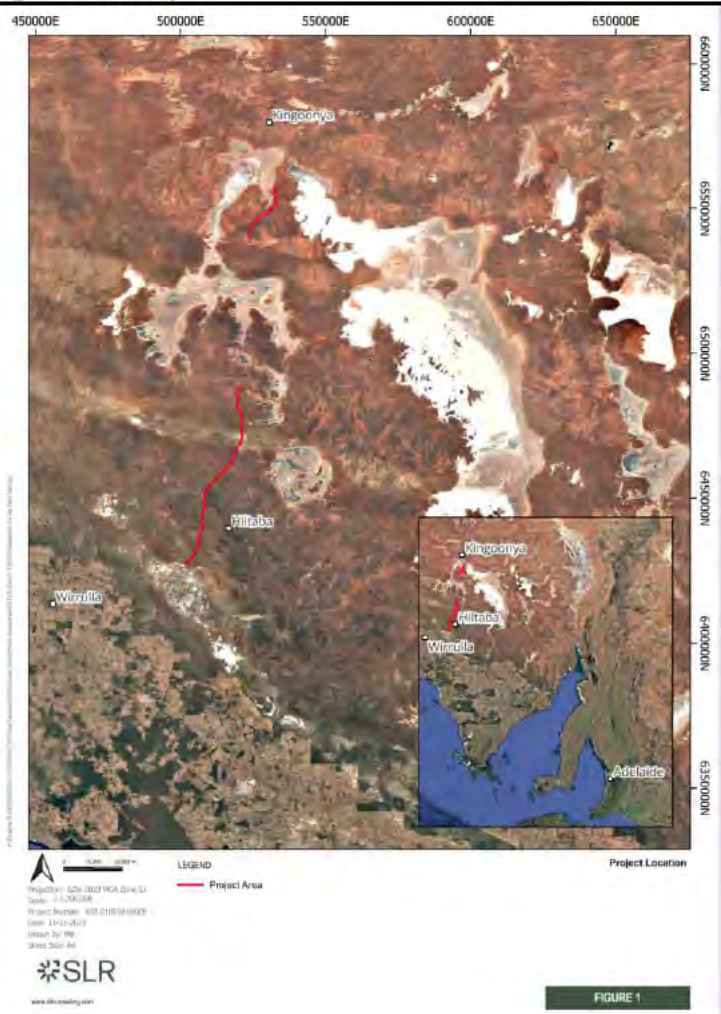
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	
Score	0

LANDSCAPE CONTEXT SCORE (max 1.25)	1.12

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Maireana sedifolia	Bluebush	P		2		Adult	10.88
Atriplex vesicaria	Bladder Saltbush	HP		2		Adult	
Atriplex stipitata	Bitter Saltbush	U		2		Adult	
Ptilotus obovatus	Silver Mulla Mulla	P	2			Mixed	
Enchylaena tomentosa var.	Ruby Saltbush	P		2		Mixed	
Maireana georgei	Satiny Bluebush	P	2			Mixed	
Maireana pyramidata	Black Bluebush	P		1		Adult	
Lycium australe	Australian Boxthorn	U	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	
Amytornis modestus	Thick-billed Grasswren	VU		Yes	
Neophema elegans elegans	Elegant Parrot		R	Yes	
Ardeotis australis	Australian Bustard		V	Yes	

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Carrichtera annua	Ward's Weed		Yes	*
Salvia verbenaca var.	Wild Sage		Yes	*
Medicago sp.	Medic		Yes	*

Vegetation Condition Scores

SITE (name):	VA3	**SIZE OF SITE (Ha)**	2.431
VEGETATION ASSOCIATION DESCRIPTION	Maireana sedifolia low shrubland		
LANDSCAPE TYPE	Plain – level		
SURFACE CHARACTER **Dominant**	Cracking	**Minor**	Stony

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☐	☑	0
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☐	☑	0
		Total Score (Max 10 - weighted by 2.5)		**0**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

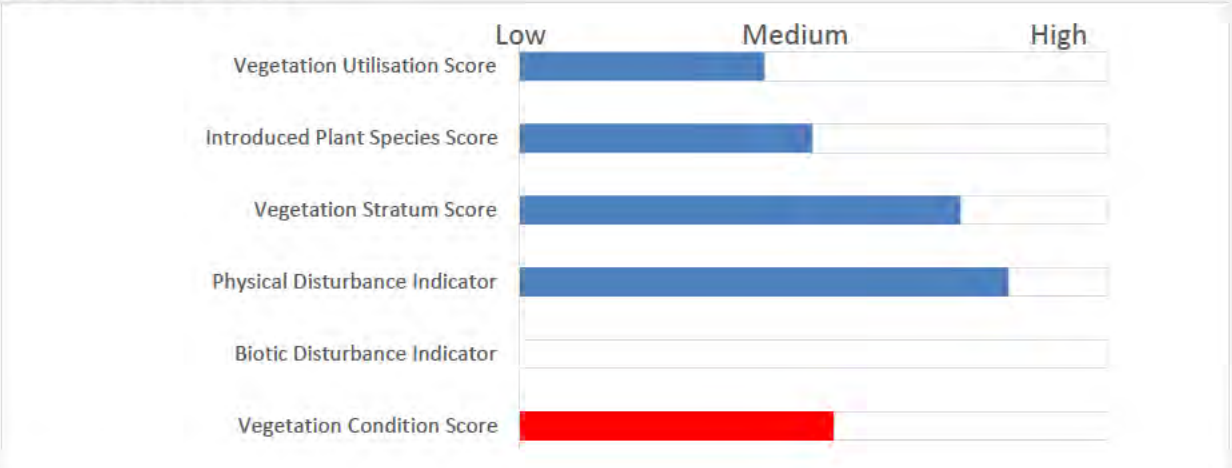
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☐	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**12.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	Yes	0
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
Total Score (Max 10 - weighted by 2.5)		**5**

Vegetation Utilisation Score	
Total Score (Max 26)	10.88

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**42.88**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	1
State **Vulnerable** species observed or locally recorded (2.5 pt each)	1
State **Endangered** species observed or locally recorded (5 pt each)	0
Nationally **Vulnerable** species observed or locally recorded (10 pts each)	2
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	**23.5**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.12**
VEGETATION CONDITION SCORE	**42.88**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	52.83
Total Biodiversity Score (Biodiversity Score x hectares)	128.43

Photo Point and Vegetation Survey Location

Direction of the Photo

West

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	507336
Northing (7 digits)	6443158

Description

Maireana sedifolia low shrubland with scattered Atriplex vesicaria

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**141.27**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	20.18
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	235
Payment into the Fund (GST exclusive)	$13,255.10
Administration fee (GST inclusive)	$729.03
Total Payment Required	**$13,984.13**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground

What is the risk of decline or loss of vegetation in the next 20 years?

Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?	
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?	
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).	
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?	

Likely % Loss	0.04	Standard

Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?

Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?	
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?	
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?	

Are the proposed management actions and their scale of impact already required by duty of care or legislation?

Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .	

Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?

Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?	
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.	

Likely Improvement Due to Management	7.42	Standard

In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?

Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?	

Are there other risk factors which make the outcome uncertain? ***NVB assessment only***

Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?	

Likelihood of Achieving the Outcome	0.53	Standard

Future Negative UBS Score	50.72
Future Positive UBS Score	57.67
UBS Gain Score	6.95
Estimate of SEB Points provided	**16.90**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Austrostipa nitida	Balcarra Spear-grass				Yes
Solanum elaeagnifolium	Silver-leaf Nightshade				Yes
Sida corrugata var.	Corrugated Sida				Yes
Eriochiton sclerolaenoides	Woolly-fruit Bluebush				Yes
Convolvulus remotus	Grassy Bindweed				Yes
Sida ammophila	Sand Sida				Yes
Salsola australis	Buckbush				Yes
Euphorbia drummondii					Yes
Solanum petrophilum	Rock Nightshade				Yes

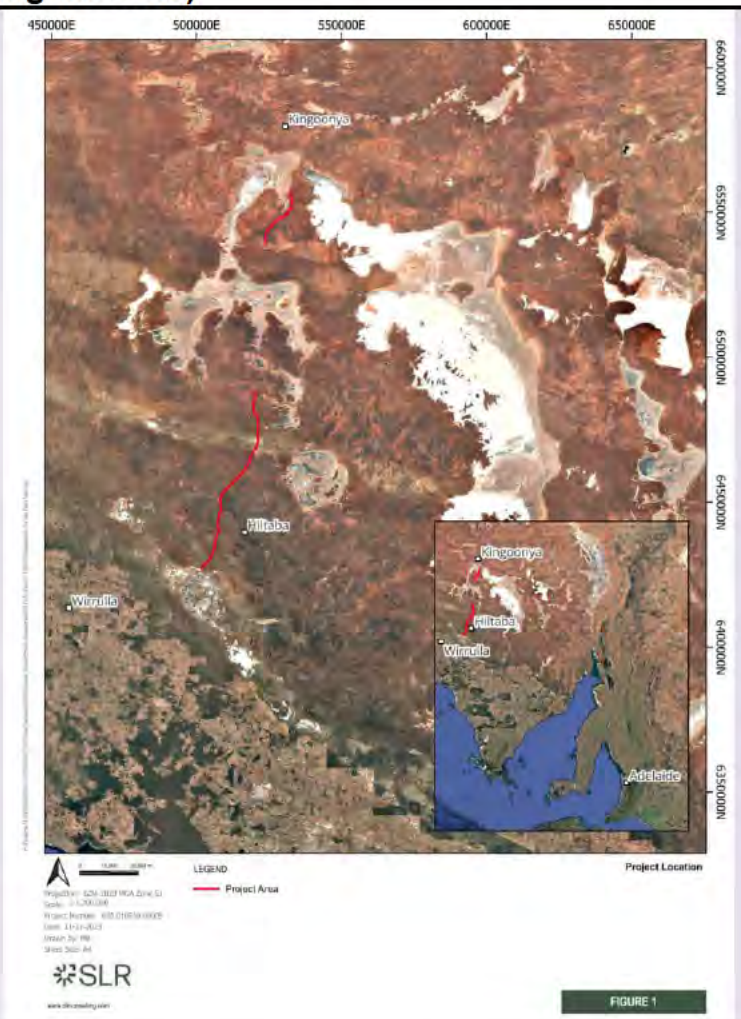
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.2**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Acacia tarculensis	Steel Bush	P	2			Adult	10.94
Alectryon oleifolius ssp. canescens	Bullock Bush	HP	2			Adult	
Senna cardiosperma ssp. gawlerensis	Gawler Ranges Senna	P	2			Adult	
Ptilotus obovatus	Silver Mulla Mulla	P	2			Adult	
Acacia aneura var.	Mulga	HP	2			Adult	
Sida petrophila	Rock Sida	U		2		Adult	
Enchylaena tomentosa var.	Ruby Saltbush	P	2			Adult	
Maireana sedifolia	Bluebush	P	2			Mixed	
Dodonaea viscosa ssp. angustissima	Narrow-leaf Hop-bush	U	2			Mixed	
Maireana sp.	Bluebush/Fissure-plant	P		2		Mixed	
Acacia tetragonophylla	Dead Finish	P	2			Adult	
Einadia nutans ssp.	Climbing Saltbush	P		2		Adult	
Acacia burkittii	Pin-bush Wattle	U	2			Adult	
Eremophila glabra ssp. glabra	Tar Bush	P	2			Adult	
Casuarina pauper	Black Oak	P	2			Adult	
Rhagodia spinescens	Spiny Saltbush	P	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Petrogale xanthopus xanthopus	Yellow-footed Rock-wallaby	VU	V	Yes	
Sminthopsis psammophila	Sandhill Dunnart	EN	V	Yes	
Calidris acuminata	Sharp-tailed Sandpiper	VU		Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	
Leipoa ocellata	Malleefowl	VU	V	Yes	
Pseudomys australis	Plains Mouse	VU	V	Yes	
Threatened Flora Species - Recorded or Observed		**Threatened Species**			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Bos taurus	Cattle (European Cattle)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Sturnus vulgaris vulgaris	Common Starling		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Carrichtera annua	Ward's Weed		Yes	*
Brassica sp.			Yes	*
Salvia verbenaca var.	Wild Sage		Yes	*
Solanum elaeagnifolium	Silver-leaf Nightshade		Yes	*

Vegetation Condition Scores

SITE (name):	VA4	**SIZE OF SITE (Ha)**	1.836
VEGETATION ASSOCIATION DESCRIPTION	Tall open shrubland with Acacia spp +/- Alectryon sp. Over ch		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☑	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

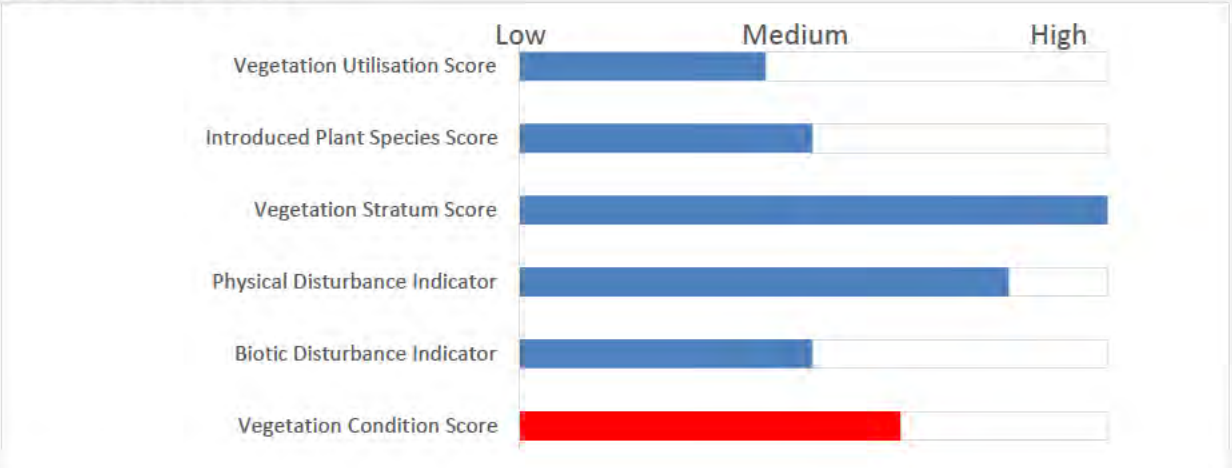
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	Yes	0
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
Total Score (Max 10 - weighted by 2.5)		**5**

Vegetation Utilisation Score	
Total Score (Max 26)	10.94

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**51.94**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	0
State **Vulnerable** species observed or locally recorded (2.5 pt each)	0
State **Endangered** species observed or locally recorded (5 pt each)	0
Nationally **Vulnerable** species observed or locally recorded (10 pts each)	5
Nationally **Endangered** or **Critically endangered** species observed or locally recorded (20 pts each)	1
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	**70**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.20**
VEGETATION CONDITION SCORE	**51.94**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =	
UNIT BIODIVERSITY SCORE	68.56
Total Biodiversity Score (Biodiversity Score x hectares)	125.88

Photo Point and Vegetation Survey Location

Direction of the Photo	
South	
GPS Reference	
Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	520113
Northing (7 digits)	6480822
Description	
Photo of tall open shrubland looking South	

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**138.47**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	19.78
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	235
Payment into the Fund (GST exclusive)	$12,992.38
Administration fee (GST inclusive)	$714.58
Total Payment Required	**$13,706.96**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.03	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	5.61	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.62	Standard

Future Negative UBS Score	66.50
Future Positive UBS Score	73.15
UBS Gain Score	6.65
Estimate of SEB Points provided	**12.21**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Roepera aurantiaca ssp.	Shrubby Twinleaf				Yes
Austrostipa nitida	Balcarra Spear-grass				Yes
Solanum petrophilum	Rock Nightshade				Yes
Austrostipa elegantissima	Feather Spear-grass				Yes
Vittadinia cuneata var.	Fuzzy New Holland Daisy				Yes
Euphorbia drummondii group					Yes
Ptilotus gaudichaudii	Paper Fox-tail				Yes

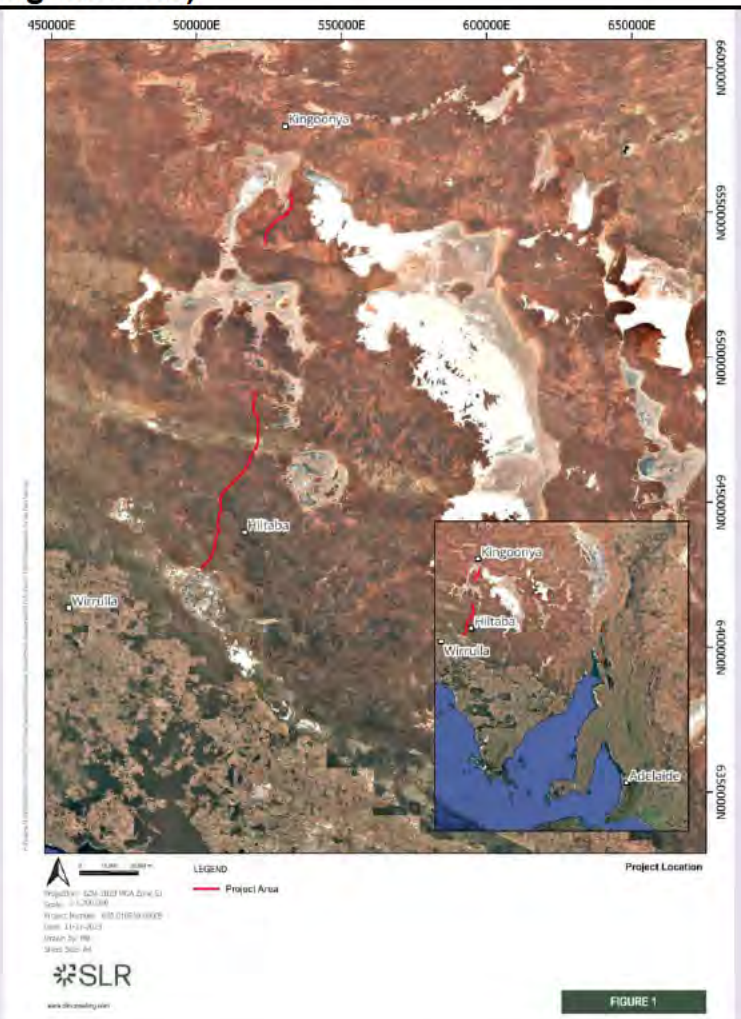
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.2**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Acacia tarculensis	Steel Bush	P	2			Adult	10.94
Alectryon oleifolius ssp. canescens	Bullock Bush	HP	2			Adult	
Senna cardiosperma ssp. gawlerensis	Gawler Ranges Senna	P	2			Adult	
Ptilotus obovatus	Silver Mulla Mulla	P	2			Adult	
Acacia aneura var.	Mulga	HP	2			Adult	
Sida petrophila	Rock Sida	U		2		Adult	
Enchylaena tomentosa var.	Ruby Saltbush	P	2			Adult	
Maireana sedifolia	Bluebush	P	2			Mixed	
Dodonaea viscosa ssp. angustissima	Narrow-leaf Hop-bush	U	2			Mixed	
Maireana sp.	Bluebush/Fissure-plant	P		2		Mixed	
Acacia tetragonophylla	Dead Finish	P	2			Adult	
Einadia nutans ssp.	Climbing Saltbush	P		2		Adult	
Acacia burkittii	Pin-bush Wattle	U	2			Adult	
Eremophila glabra ssp. glabra	Tar Bush	P	2			Adult	
Casuarina pauper	Black Oak	P	2			Adult	
Rhagodia spinescens	Spiny Saltbush	P	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Petrogale xanthopus xanthopus	Yellow-footed Rock-wallaby	VU	V	Yes	
Sminthopsis psammophila	Sandhill Dunnart	EN	V	Yes	
Calidris acuminata	Sharp-tailed Sandpiper	VU		Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	
Leipoa ocellata	Malleefowl	VU	V	Yes	

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Bos taurus	Cattle (European Cattle)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Sturnus vulgaris vulgaris	Common Starling		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Carrichtera annua	Ward's Weed		Yes	*
Brassica sp.			Yes	*
Salvia verbenaca var.	Wild Sage		Yes	*

Vegetation Condition Scores

SITE (name):	VA4	**SIZE OF SITE (Ha)**	0.147
VEGETATION ASSOCIATION DESCRIPTION	Tall open shrubland with Acacia spp +/- Alectryon sp. Over ch		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☑	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

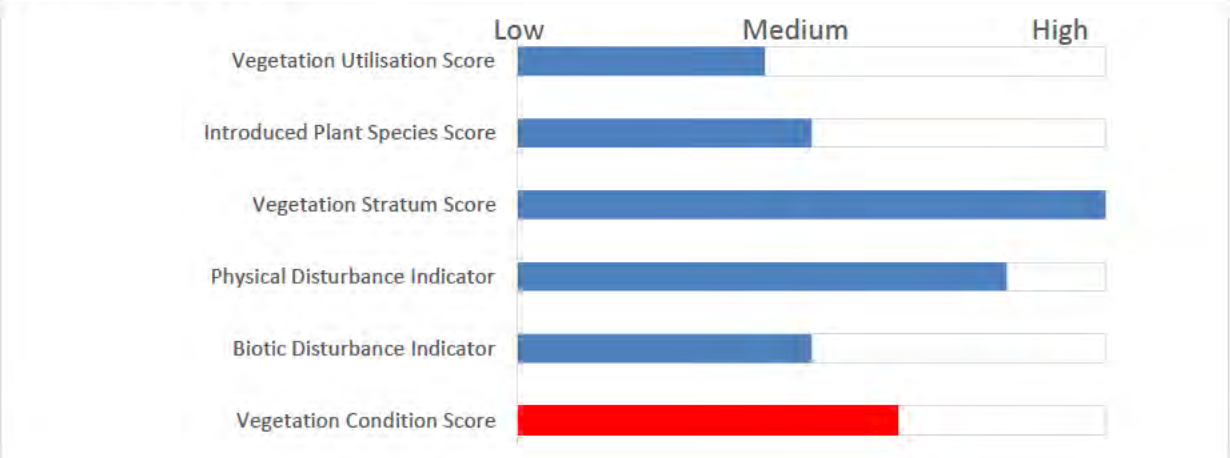
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	Yes	0
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
Total Score (Max 10 - weighted by 2.5)		**5**

Vegetation Utilisation Score	
Total Score (Max 26)	10.94

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**51.94**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	0
State **Vulnerable** species observed or locally recorded (2.5 pt each)	0
State **Endangered** species observed or locally recorded (5 pt each)	0
Nationally **Vulnerable** species observed or locally recorded (10 pts each)	4
Nationally **Endangered** or **Critically endangered** species observed or locally recorded (20 pts each)	1
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	**60**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.20**
VEGETATION CONDITION SCORE	**51.94**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	68.56
Total Biodiversity Score (Biodiversity Score x hectares)	10.08

Photo Point and Vegetation Survey Location

Direction of the Photo

South

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	520113
Northing (7 digits)	6480822

Description

Photo of tall open shrubland looking South

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**11.09**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	1.58
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	217
Payment into the Fund (GST exclusive)	$960.85
Administration fee (GST inclusive)	$52.85
Total Payment Required	**$1,013.70**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.03	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	5.61	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.62	Standard

Future Negative UBS Score	66.50
Future Positive UBS Score	73.15
UBS Gain Score	6.65
Estimate of SEB Points provided	**0.98**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Roepera aurantiaca ssp.	Shrubby Twinleaf				Yes
Austrostipa nitida	Balcarra Spear-grass				Yes
Solanum petrophilum	Rock Nightshade				Yes
Austrostipa elegantissima	Feather Spear-grass				Yes
Vittadinia cuneata var.	Fuzzy New Holland Daisy				Yes
Euphorbia drummondii group					Yes
Ptilotus gaudichaudii	Paper Fox-tail				Yes

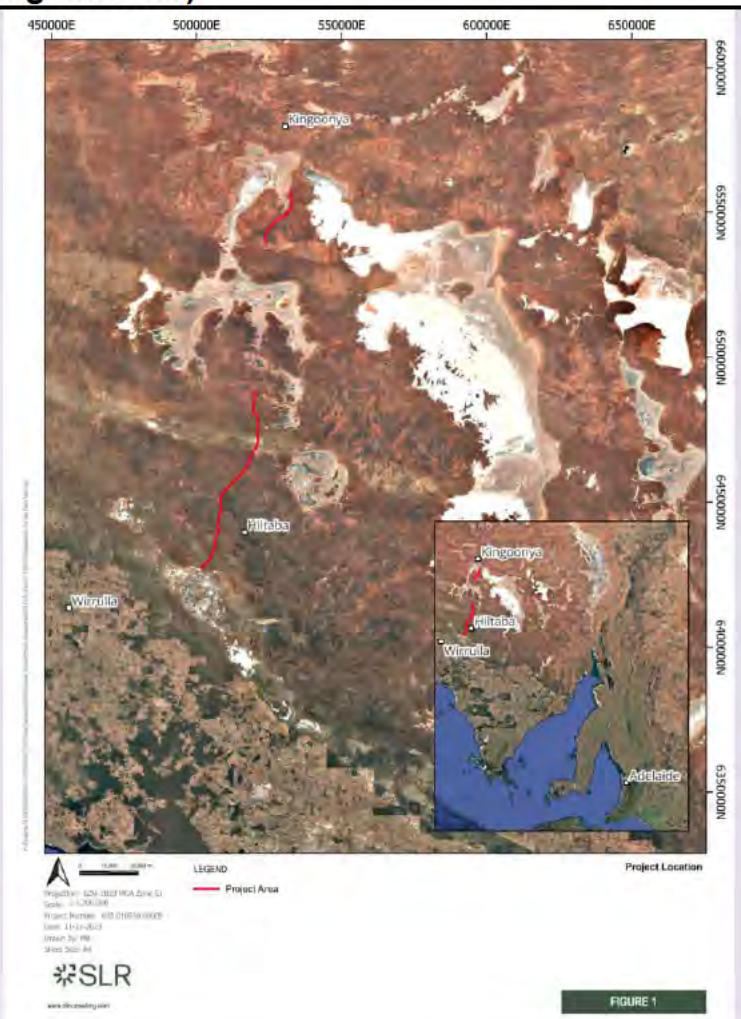
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Yellabinna
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	55
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.01

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.18**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact number (tally)	Modified number (tally)	Over utilised number (tally)		
Acacia papyrocarpa	Western Myall	HP	2			Mixed	12.19
Acacia aneura var.	Mulga	HP	2			Adult	
Acacia ligulata	Umbrella Bush	U	2			Mixed	
Eremophila glabra ssp. glabra	Tar Bush	P	2			Adult	
Maireana sedifolia	Bluebush	P		2		Mixed	
Rhagodia spinescens	Spiny Saltbush	P		2		Mixed	
Senna cardiosperma ssp. gawlerensis	Gawler Ranges Senna	P	2			Mixed	
Atriplex vesicaria	Bladder Saltbush	HP		2		Adult	
Eremophila scoparia	Broom Emubush	U	2			Adult	
Frankenia serpyllifolia	Thyme Sea-heath	U	2			Adult	
Maireana georgei	Satiny Bluebush	P		2		Adult	
Hakea leucoptera ssp. leucoptera	Silver Needlewood	U	2			Young	
Atriplex stipitata	Bitter Saltbush	U	2			Mixed	
Maireana brevifolia	Short-leaf Bluebush	U	2			Adult	
Westringia rigida	Stiff Westringia	P	2			Adult	
Acacia ramulosa var.	Horse Mulga	HP	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	Yes
Ardeotis australis	Australian Bustard		V	Yes	
Neophema elegans elegans	Elegant Parrot		R	Yes	
Climacteris affinis	White-browed Treecreeper		R	Yes	
Pseudomys australis	Plains Mouse	VU	V	Yes	
Hieraaetus morphnoides	Little Eagle		V	Yes	
Acanthiza iredalei iredalei	Slender-billed Thornbill (western)		R	Yes	
Corcorax melanorhamphos	White-winged Chough		R		Yes

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed				Introduced Species
Species	**Common Name**	**Past Record**	**Observed**	
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed				
Species	**Common Name**	**Past Record**	**Observed**	
Carrichtera annua	Ward's Weed		Yes	*

Vegetation Condition Scores

SITE (name):	VA5	**SIZE OF SITE (Ha)**	1.538
VEGETATION ASSOCIATION DESCRIPTION	Tall Acacia spp. Shrubland		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☑	☐	☐	2
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☑	☐	☐	2
		Total Score (Max 10 - weighted by 2.5)		**10**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

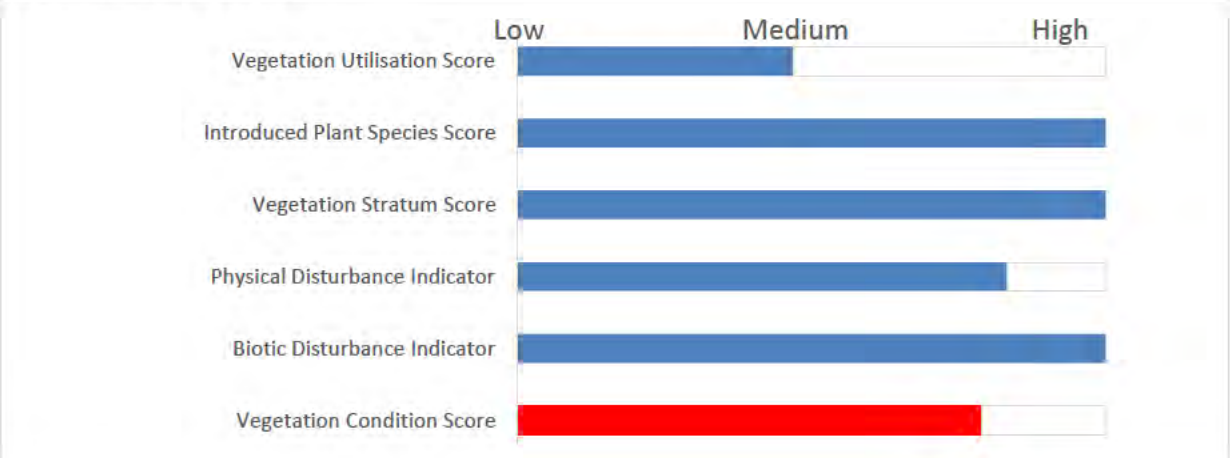
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	No	2
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
Total Score (Max 10 - weighted by 2.5)		**10**

Vegetation Utilisation Score	
Total Score (Max 26)	12.19

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**63.19**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	4
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)	2
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	**29**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.18**
VEGETATION CONDITION SCORE	**63.19**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =	
UNIT BIODIVERSITY SCORE	82.02
Total Biodiversity Score (Biodiversity Score x hectares)	126.15

Photo Point and Vegetation Survey Location

Direction of the Photo	
North	
GPS Reference	
Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	521131
Northing (7 digits)	6479405
Description	
Tall Acacia ssp. Shrubland looking North	

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**138.77**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	19.82
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	217
Payment into the Fund (GST exclusive)	$12,023.21
Administration fee (GST inclusive)	$661.28
Total Payment Required	**$12,684.49**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.02	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	3.36	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.73	Standard

Future Negative UBS Score	80.38
Future Positive UBS Score	85.20
UBS Gain Score	4.82
Estimate of SEB Points provided	**7.41**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Austrostipa nitida	Balcarra Spear-grass				
Eriochiton sclerolaenoides	Woolly-fruit Bluebush				
Sida corrugata var.	Corrugated Sida				
Rytidosperma sp.	Wallaby-grass				
Sclerolaena bicornis var. bicornis	Goat-head Bindyi				
Austrostipa blackii	Crested Spear-grass				
Solanum sturtianum	Sturt's Nightshade				
Goodenia havilandii	Hill Goodenia				
Solanum petrophilum	Rock Nightshade				

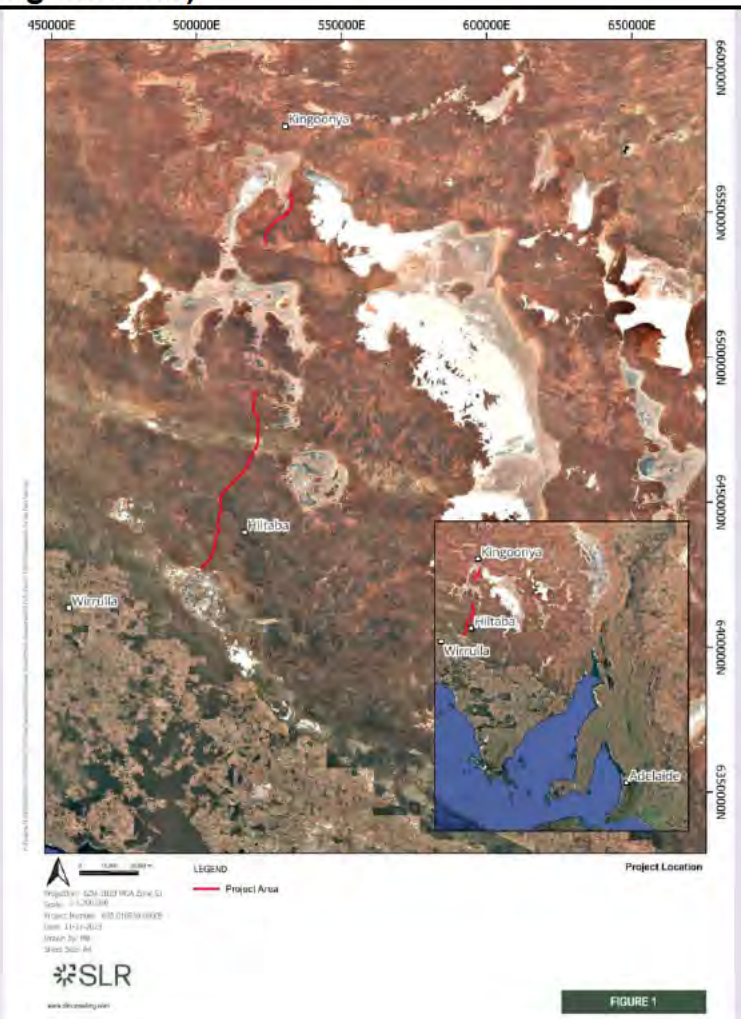
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Yellabinna
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	55
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.01

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.18**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Eucalyptus yumbarrana	Yumbarra Mallee	U	2			Mixed	11.32
Triodia sp.		U	2			Adult	
Westringia rigida	Stiff Westringia	P	2			Adult	
Senna artemisioides ssp. X petiolaris		U	2			Adult	
Acacia ligulata	Umbrella Bush	U	2			Mixed	
Acacia tetragonophylla	Dead Finish	P	2			Adult	
Maireana georgei	Satiny Bluebush	P	2			Mixed	
Melaleuca eleuterostachya	Hummock Honey-myrtle	P	2			Adult	
Acacia nyssophylla	Spine Bush	U	2			Adult	
Dodonaea viscosa ssp. angustissima	Narrow-leaf Hop-bush	U	2			Mixed	
Senna cardiosperma ssp. gawlerensis	Gawler Ranges Senna	P	2			Mixed	
Eucalyptus gracilis	Yorrell	U	2			Mixed	
Eremophila scoparia	Broom Emubush	U	2			Adult	
Callitris glaucophylla	White Cypress-pine	U	2			Adult	
Halgania cyanea	Rough Blue-flower	P	2			Adult	
Eremophila longifolia	Weeping Emubush	HP	2			Adult	
Atriplex nummularia ssp. nummularia	Old-man Saltbush	P	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Acanthiza iredalei iredalei	Slender-billed Thornbill (western)		R	Yes	
Sminthopsis psammophila	Sandhill Dunnart	EN	V	Yes	
Pachycephala inornata	Gilbert's Whistler		R	Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	Yes
Leipoa ocellata	Malleefowl	VU	V	Yes	
Cinclosoma castanotum	Chestnut Quailthrush (Chestnut-backed Quailthrush		R	Yes	
Pseudomys australis	Plains Mouse	VU	V	Yes	
Hieraaetus morphnoides	Little Eagle		V	Yes	
Neophema elegans elegans	Elegant Parrot		R	Yes	
Myiagra inquieta	Restless Flycatcher		R	Yes	
Corcorax melanorhamphos	White-winged Chough		R	Yes	Yes
Ardeotis australis	Australian Bustard		V	Yes	
Amytornis merrotsyi pedleri	Gawler Ranges Short-tailed Grasswren	EN	E	Yes	
Hylacola cauta cauta	Shy Heathwren (EP, YP, FR, MM, upper SE)		R	Yes	
Lichenostomus cratitius occidentalis	Purple-gaped Honeyeater (mainland SA)		R	Yes	

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	

Vegetation Condition Scores

SITE (name):	VA6	**SIZE OF SITE (Ha)**	3.772
VEGETATION ASSOCIATION DESCRIPTION	Eucalyptus spp. Woodland over Triodia irritans		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Hummock	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☑	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

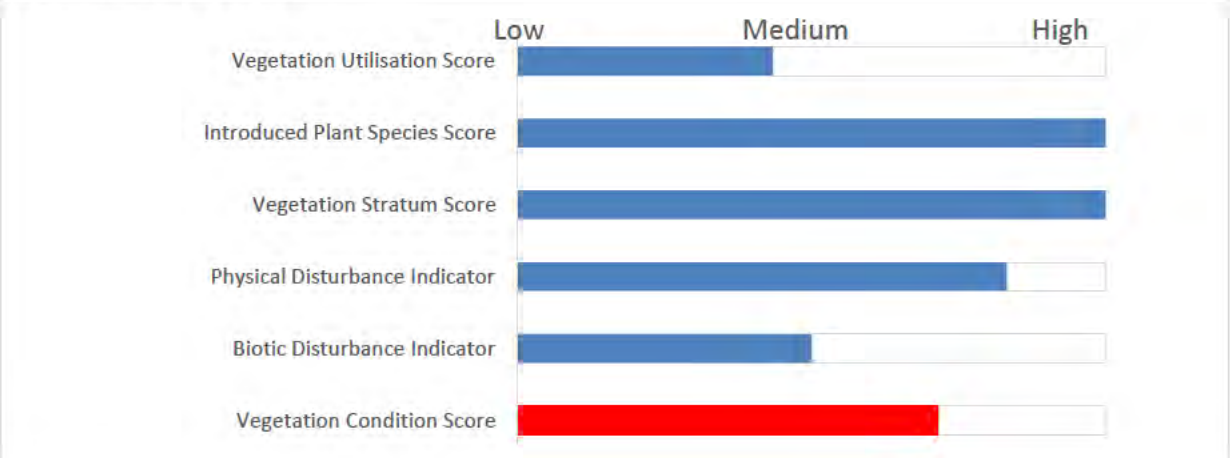
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
	Total Score (Max 16 - weighted by 4)		**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	No	2
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
	Total Score (Max 10 - weighted by 2.5)	**10**

Vegetation Utilisation Score	
Total Score (Max 26)	11.32

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**57.32**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	8
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)	3
Nationally **Endangered** or **Critically endangered** species observed or locally recorded (20 pts each)	2
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	**83**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.18**
VEGETATION CONDITION SCORE	**57.32**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	74.40
Total Biodiversity Score (Biodiversity Score x hectares)	280.64

Photo Point and Vegetation Survey Location

Direction of the Photo

East

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	521116
Northing (7 digits)	6476186

Description

Eucalyptus ssp. Woodland with Triodia irritans understory providing habitat for marsupials.

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**308.70**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	44.10
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	216
Payment into the Fund (GST exclusive)	$26,622.91
Administration fee (GST inclusive)	$1,464.26
Total Payment Required	**$28,087.17**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.02	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	4.54	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.67	Standard

Future Negative UBS Score	72.91
Future Positive UBS Score	78.35
UBS Gain Score	5.44
Estimate of SEB Points provided	**20.52**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Vittadinia cuneata var.	Fuzzy New Holland Daisy				Yes
Austrostipa nitida	Balcarra Spear-grass				Yes
Roepera apiculata	Pointed Twinleaf				Yes
Roepera aurantiaca ssp.	Shrubby Twinleaf				Yes
Podolepis capillaris	Wiry Podolepis				Yes

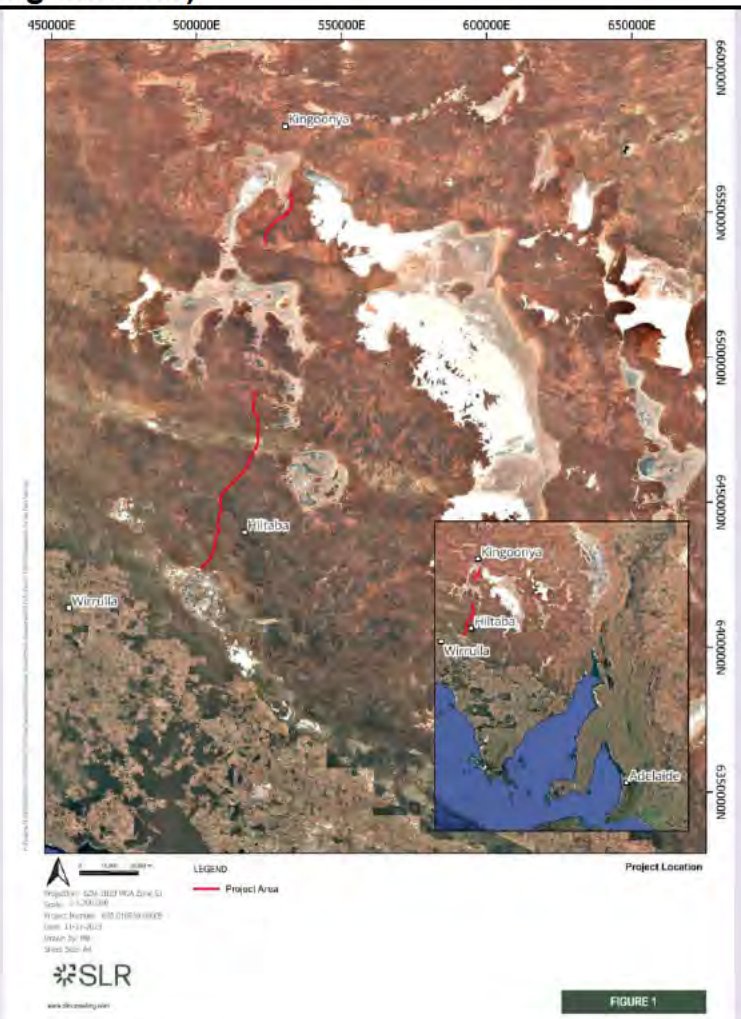
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.2**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Casuarina pauper	Black Oak	P	2			Mixed	10.53
Acacia ligulata	Umbrella Bush	U	2			Adult	
Maireana sedifolia	Bluebush	P		2		Adult	
Atriplex stipitata	Bitter Saltbush	U	2			Adult	
Maireana appressa	Pale-fruit Bluebush	P	2			Adult	
Senna cardiosperma ssp. gawlerensis	Gawler Ranges Senna	P	2			Mixed	
Rhagodia parabolica	Mealy Saltbush	P		2		Adult	
Enchylaena tomentosa var.	Ruby Saltbush	P	2			Adult	
Lycium australe	Australian Boxthorn	U		2		Adult	
Frankenia serpyllifolia	Thyme Sea-heath	U	2			Adult	
Ptilotus obovatus	Silver Mulla Mulla	P	2			Adult	
Atriplex vesicaria	Bladder Saltbush	HP	2			Adult	
Pittosporum angustifolium	Native Apricot	HP	2			Adult	
Hakea leucoptera ssp. leucoptera	Silver Needlewood	U	2			Adult	
Acacia aneura var.	Mulga	HP	2			Adult	
Olearia decurrens	Winged Daisy-bush	P	2			Adult	
Alectryon oleifolius ssp. canescens	Bullock Bush	HP		2		Adult	
Eremophila alternifolia	Narrow-leaf Emubush	P	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Corcorax melanorhamphos	White-winged Chough		R	Yes	Yes
Climacteris affinis	White-browed Treecreeper		R	Yes	
Ardeotis australis	Australian Bustard		V	Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	Yes
Hieraaetus morphnoides	Little Eagle		V	Yes	
Acanthiza iredalei iredalei	Slender-billed Thornbill (western)		R	Yes	

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	

Vegetation Condition Scores

SITE (name):	VA7	**SIZE OF SITE (Ha)**	0.111
VEGETATION ASSOCIATION DESCRIPTION	Casuarina pauper woodland		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Hummock	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☑	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☐	☑	2
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**18**

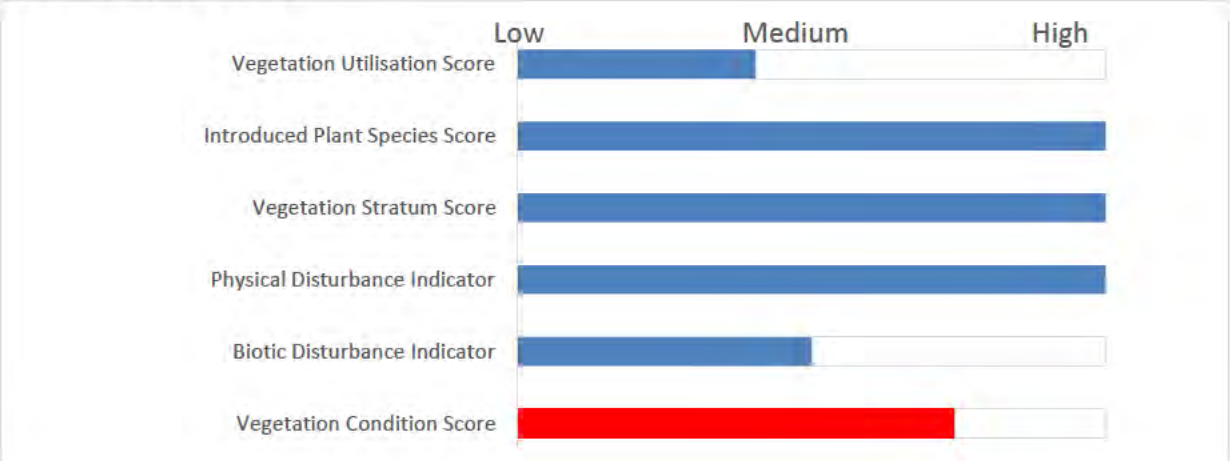
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	No	2
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
Total Score (Max 10 - weighted by 2.5)		**10**

Vegetation Utilisation Score	
Total Score (Max 26)	10.53

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**59.53**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	3
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	**18**
Score	0.08

CONSERVATION SIGNIFICANCE SCORE	1.08

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.20**
VEGETATION CONDITION SCORE	**59.53**
CONSERVATION SIGNIFICANCE SCORE	**1.08**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	77.15
Total Biodiversity Score (Biodiversity Score x hectares)	8.56

Photo Point and Vegetation Survey Location

Direction of the Photo

south west

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	520462
Northing (7 digits)	6480295

Description

Casuarina pauper woodland looking south west

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**9.42**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	1.35
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	215
Payment into the Fund (GST exclusive)	$808.64
Administration fee (GST inclusive)	$44.48
Total Payment Required	**$853.12**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.02	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	4.09	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.70	Standard

Future Negative UBS Score	75.61
Future Positive UBS Score	80.86
UBS Gain Score	5.25
Estimate of SEB Points provided	**0.58**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Austrostipa nitida	Balcarra Spear-grass				Yes
Sclerolaena diacantha	Grey Bindyi				Yes
Roepera eremaea					Yes
Eriochiton sclerolaenoides	Woolly-fruit Bluebush				Yes
Brachyscome sp.	Native Daisy				Yes
Sida corrugata var.	Corrugated Sida				Yes
Salsola australis	Buckbush				Yes

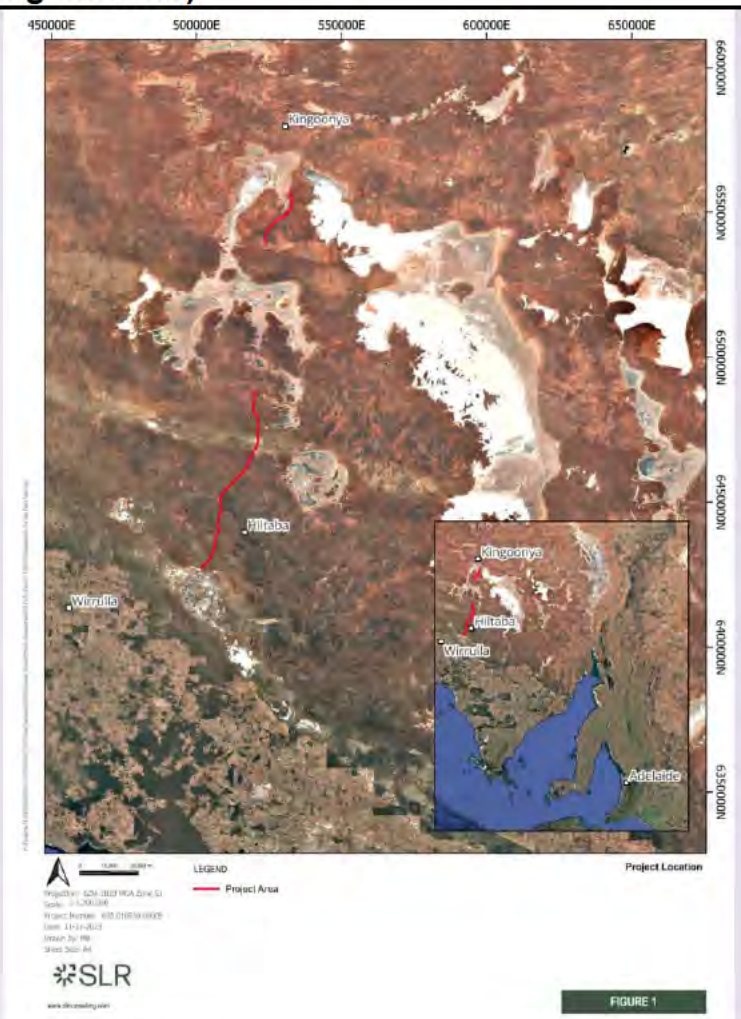
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Yellabinna
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	55
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.01

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.18**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Casuarina pauper	Black Oak	P	2			Mixed	10.53
Acacia ligulata	Umbrella Bush	U	2			Adult	
Maireana sedifolia	Bluebush	P		2		Adult	
Atriplex stipitata	Bitter Saltbush	U	2			Adult	
Maireana appressa	Pale-fruit Bluebush	P	2			Adult	
Senna cardiosperma ssp. gawlerensis	Gawler Ranges Senna	P	2			Mixed	
Rhagodia parabolica	Mealy Saltbush	P		2		Adult	
Enchylaena tomentosa var.	Ruby Saltbush	P	2			Adult	
Lycium australe	Australian Boxthorn	U		2		Adult	
Frankenia serpyllifolia	Thyme Sea-heath	U	2			Adult	
Ptilotus obovatus	Silver Mulla Mulla	P	2			Adult	
Atriplex vesicaria	Bladder Saltbush	HP	2			Adult	
Pittosporum angustifolium	Native Apricot	HP	2			Adult	
Hakea leucoptera ssp. leucoptera	Silver Needlewood	U	2			Adult	
Acacia aneura var.	Mulga	HP	2			Adult	
Olearia decurrens	Winged Daisy-bush	P	2			Adult	
Alectryon oleifolius ssp. canescens	Bullock Bush	HP		2		Adult	
Eremophila alternifolia	Narrow-leaf Emubush	P	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Corcorax melanorhamphos	White-winged Chough		R	Yes	Yes
Climacteris affinis	White-browed Treecreeper		R	Yes	
Ardeotis australis	Australian Bustard		V	Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	Yes
Hieraaetus morphnoides	Little Eagle		V	Yes	
Acanthiza iredalei iredalei	Slender-billed Thornbill (western)		R	Yes	

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	

Vegetation Condition Scores

SITE (name):	VA7	**SIZE OF SITE (Ha)**	1.084
VEGETATION ASSOCIATION DESCRIPTION	Casuarina pauper woodland		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Hummock	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☑	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☐	☑	2
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**18**

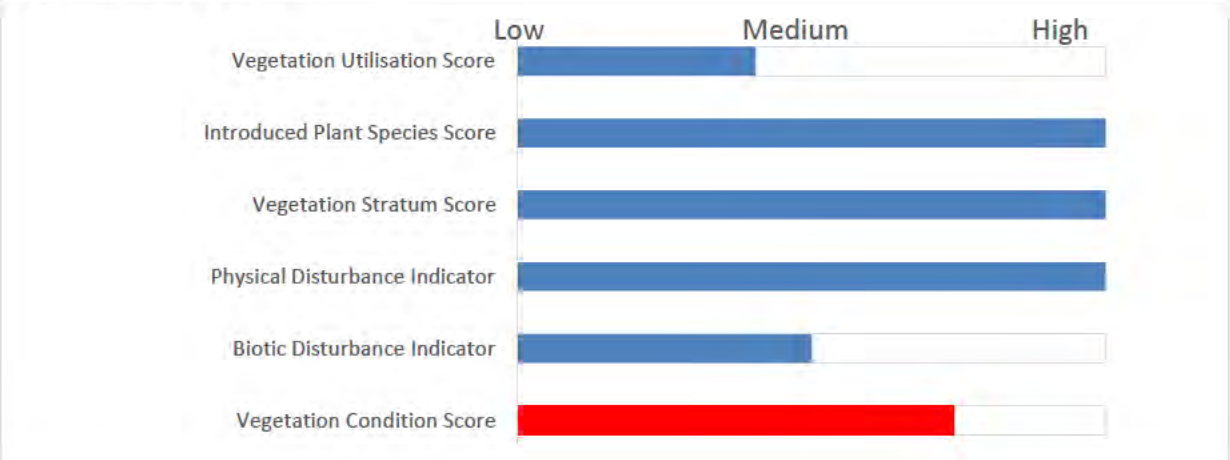
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	No	2
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
Total Score (Max 10 - weighted by 2.5)		**10**

Vegetation Utilisation Score	
Total Score (Max 26)	10.53

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**59.53**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	3
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	**18**
Score	0.08

CONSERVATION SIGNIFICANCE SCORE	1.08

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.18**
VEGETATION CONDITION SCORE	**59.53**
CONSERVATION SIGNIFICANCE SCORE	**1.08**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	75.87
Total Biodiversity Score (Biodiversity Score x hectares)	82.24

Photo Point and Vegetation Survey Location

Direction of the Photo

south west

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	520462
Northing (7 digits)	6480295

Description

Casuarina pauper woodland looking south west

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**90.46**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	12.92
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	215
Payment into the Fund (GST exclusive)	$7,765.33
Administration fee (GST inclusive)	$427.09
Total Payment Required	**$8,192.42**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.02	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	4.09	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.70	Standard

Future Negative UBS Score	74.35
Future Positive UBS Score	79.51
UBS Gain Score	5.16
Estimate of SEB Points provided	**5.59**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Austrostipa nitida	Balcarra Spear-grass				Yes
Sclerolaena diacantha	Grey Bindyi				Yes
Roepera eremaea					Yes
Eriochiton sclerolaenoides	Woolly-fruit Bluebush				Yes
Brachyscome sp.	Native Daisy				Yes
Sida corrugata var.	Corrugated Sida				Yes
Salsola australis	Buckbush				Yes

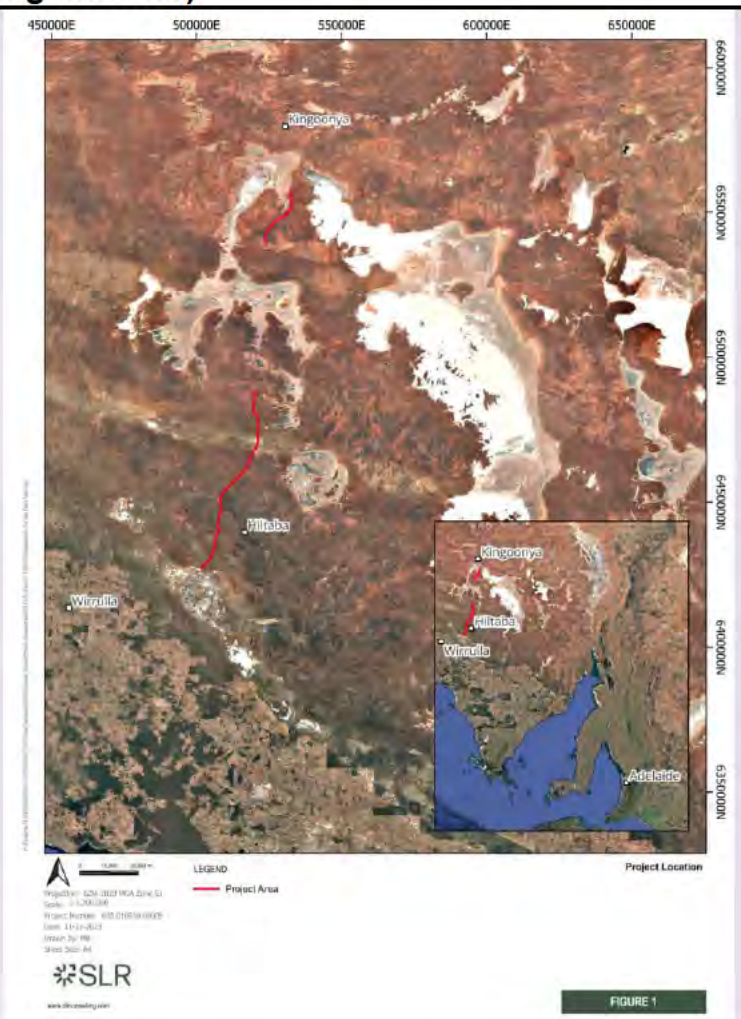
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.2**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Eucalyptus oleosa ssp.	Red Mallee	U	2			Mixed	10.85
Senna cardiosperma ssp. gawlerensis	Gawler Ranges Senna	P	2			Mixed	
Senna artemisioides ssp. X petiolaris		U	2			Mixed	
Atriplex stipitata	Bitter Saltbush	U		2		Adult	
Atriplex nummularia ssp. nummularia	Old-man Saltbush	P	2			Adult	
Enchylaena tomentosa var.	Ruby Saltbush	P	2			Adult	
Alectryon oleifolius ssp. canescens	Bullock Bush	HP		2		Adult	
Maireana astrotricha	Low Bluebush	P		2		Adult	
Maireana sedifolia	Bluebush	P	2			Adult	
Maireana trichoptera	Hairy-fruit Bluebush	P	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Acanthiza iredalei iredalei	Slender-billed Thornbill (western)		R	Yes	
Hylacola cauta cauta	Shy Heathwren (EP, YP, FR, MM, upper SE)		R	Yes	
Pachycephala inornata	Gilbert's Whistler		R	Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	Yes
Pseudomys australis	Plains Mouse	VU	V	Yes	
Hieraaetus morphnoides	Little Eagle		V	Yes	
Neophema elegans elegans	Elegant Parrot		R	Yes	
Myiagra inquieta	Restless Flycatcher		R	Yes	
Corcorax melanorhamphos	White-winged Chough		R	Yes	Yes

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Leontodon rhagadioloides	Cretan Weed		Yes	*
Salvia verbenaca var.	Wild Sage		Yes	*
Brassica sp.			Yes	*
Medicago sp.	Medic		Yes	*
Onopordum sp.	Thistle		Yes	*
Heliotropium sp.	Heliotrope		Yes	
Marrubium vulgare	Horehound		Yes	*

Vegetation Condition Scores

SITE (name):	VA8	**SIZE OF SITE (Ha)**	0.463
VEGETATION ASSOCIATION DESCRIPTION	Eucalyptus oleosa ssp. open woodland in drainage line		
LANDSCAPE TYPE	Drainage lines / floodouts		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☑	☐	☐	2
		Total Score (Max 10 - weighted by 2.5)		**7.5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☑	☐	1
		Total Score (Max 18 - weighted by 3)		**12**

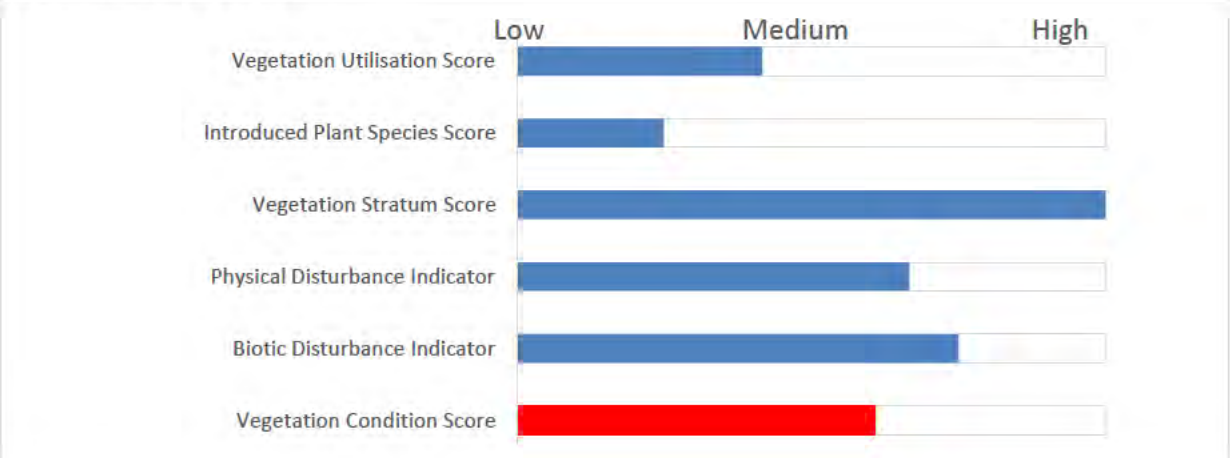
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	Yes	0
Introduced species dominate (>50% of vegetation cover)	☐	1
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☑	
Very sparse to nil introduced species present (<5% of vegetation cover)	☐	
Total Score (Max 10 - weighted by 2.5)		**2.5**

Vegetation Utilisation Score	
Total Score (Max 26)	10.85

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**48.85**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	6
State **Vulnerable** species observed or locally recorded (2.5 pt each)	1
State **Endangered** species observed or locally recorded (5 pt each)	0
Nationally **Vulnerable** species observed or locally recorded (10 pts each)	2
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	**28.5**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

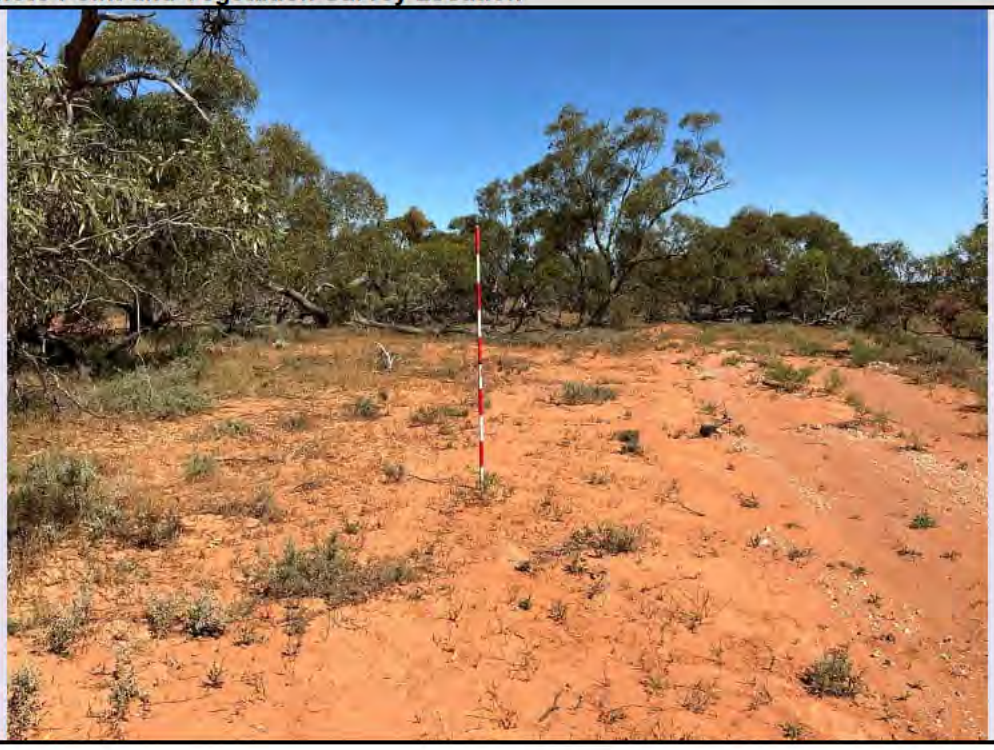
Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.20**
VEGETATION CONDITION SCORE	**48.85**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	64.48
Total Biodiversity Score (Biodiversity Score x hectares)	29.85

Photo Point and Vegetation Survey Location



Direction of the Photo

South

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	508593
Northing (7 digits)	6448505

Description

Eucalyptus open woodland in drainage line/washout with high weed occurrence

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**32.84**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	4.69
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	250
Payment into the Fund (GST exclusive)	$3,277.99
Administration fee (GST inclusive)	$180.29
Total Payment Required	**$3,458.28**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.03	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	6.23	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.59	Standard

Future Negative UBS Score	62.55
Future Positive UBS Score	69.33
UBS Gain Score	6.78
Estimate of SEB Points provided	**3.14**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Salsola australis	Buckbush				Yes
Sida corrugata var.	Corrugated Sida				Yes
Convolvulus sp.	Bindweed				Yes
Solanum petrophilum	Rock Nightshade				Yes
Euphorbia drummondii					Yes
Vittadinia cervicularis var. cervicula	Waisted New Holland Daisy				Yes
Eriochiton sclerolaenoides	Woolly-fruit Bluebush				Yes
Austrostipa nitida	Balcarra Spear-grass				Yes
Sida corrugata var.	Corrugated Sida				Yes
Dissocarpus paradoxus	Ball Bindyi				Yes
Podolepis capillaris	Wiry Podolepis				Yes
Oxalis perennans	Native Sorrel				Yes

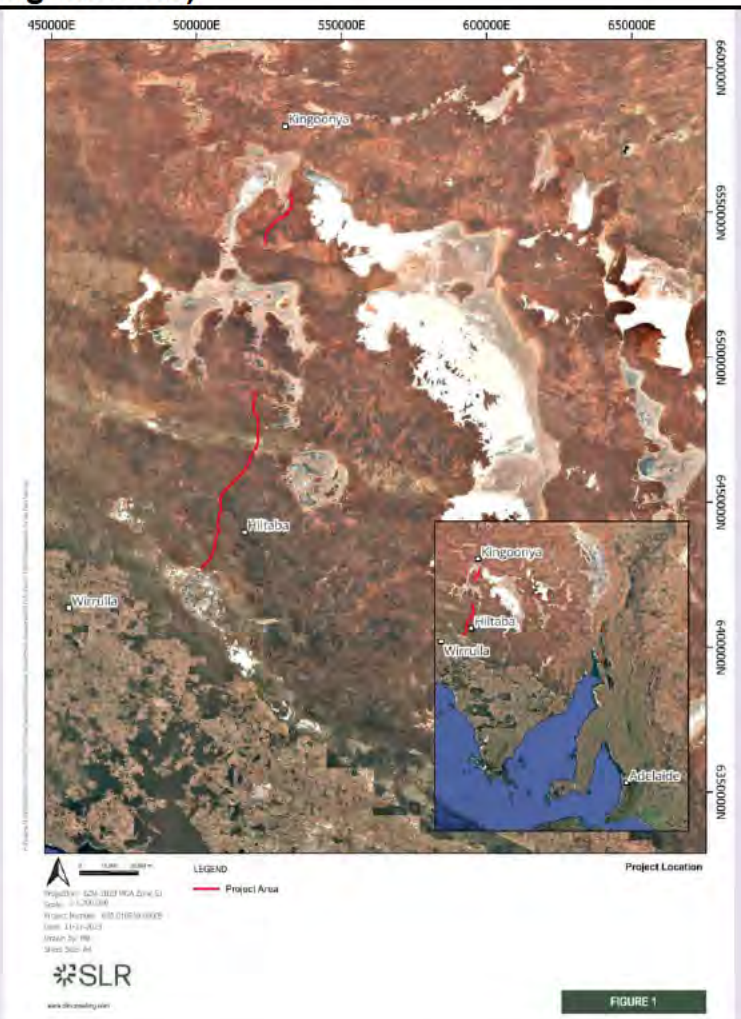
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.2**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Atriplex vesicaria	Bladder Saltbush	HP	2			Adult	9.80
Maireana georgei	Satiny Bluebush	P	2			Adult	
Frankenia serpyllifolia	Thyme Sea-heath	U	2			Adult	
Maireana appressa	Pale-fruit Bluebush	P	2			Adult	
Atriplex stipitata	Bitter Saltbush	U	2			Adult	
Rhagodia spinescens	Spiny Saltbush	P	2			Adult	
Tecticornia tenuis	Slender Samphire	P	2			Adult	
Tecticornia halocnemoides ssp. longispicat	Grey Samphire	P	2			Adult	
Abutilon cryptopetalum ssp.	Hill Lantern-bush	P	2			Adult	
Roepera aurantiaca ssp.	Shrubby Twinleaf	U	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Ardeotis australis	Australian Bustard		V	Yes	
Neophema elegans elegans	Elegant Parrot		R	Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	
Threatened Flora Species - Recorded or Observed		**Threatened Species**			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Reichardia tingitana	False Sowthistle		Yes	*
Bromus rubens	Red Brome		Yes	*
Hordeum vulgare	Barley		Yes	*
Mesembryanthemum sp.	Iceplant		Yes	*

Vegetation Condition Scores

SITE (name):	VA9	**SIZE OF SITE (Ha)**	4.09
VEGETATION ASSOCIATION DESCRIPTION	Atriplex spp. Low chenopod Shrubland		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☐	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☐	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

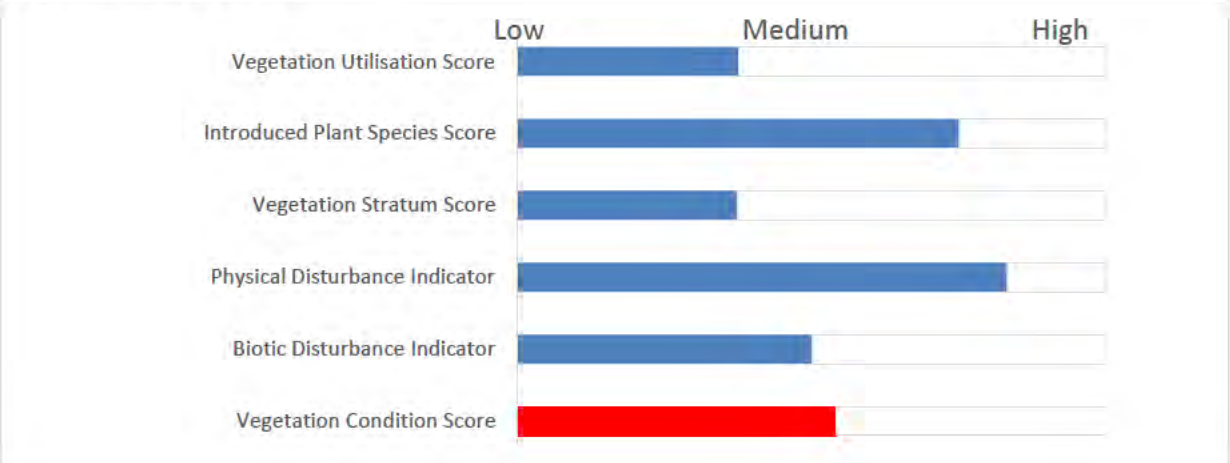
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☐	☐	
Shrubs 1- 3m	☐	☑	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**6.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	No	2
Introduced species dominate (>50% of vegetation cover)	☐	1
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☑	
Very sparse to nil introduced species present (<5% of vegetation cover)	☐	
Total Score (Max 10 - weighted by 2.5)		**7.5**

Vegetation Utilisation Score	
Total Score (Max 26)	9.80

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**43.30**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	1
State **Vulnerable** species observed or locally recorded (2.5 pt each)	1
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	**13.5**
Score	0.08

CONSERVATION SIGNIFICANCE SCORE	1.08

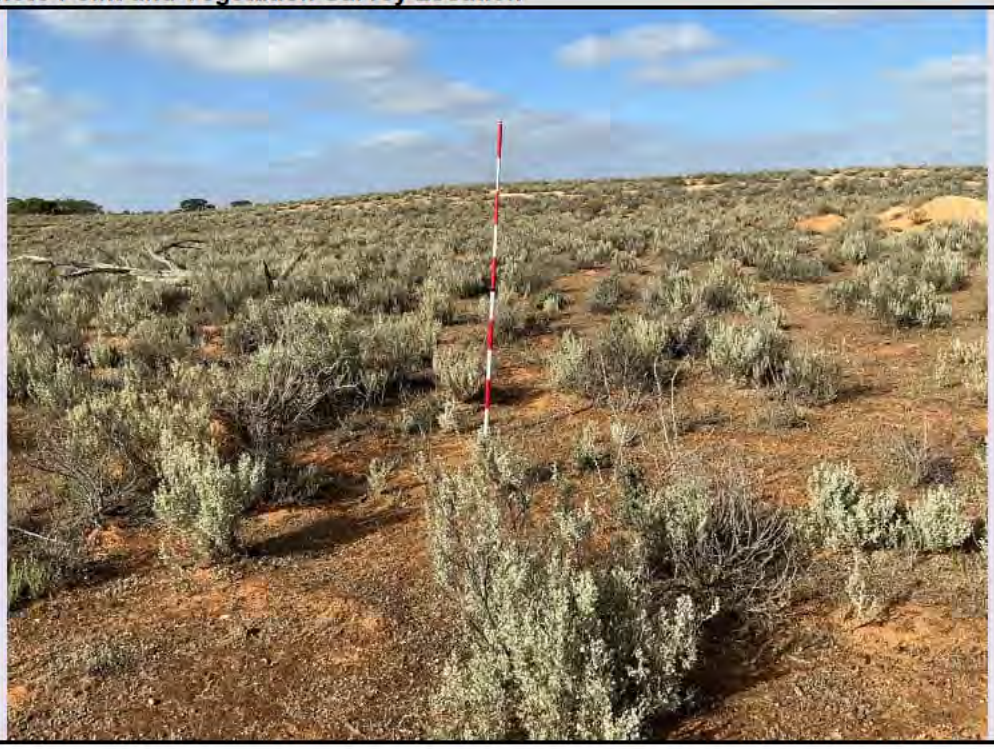
Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.20**
VEGETATION CONDITION SCORE	**43.30**
CONSERVATION SIGNIFICANCE SCORE	**1.08**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	56.12
Total Biodiversity Score (Biodiversity Score x hectares)	229.53

Photo Point and Vegetation Survey Location



Direction of the Photo

East

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	500276
Northing (7 digits)	6426157

Description

Atriplex low shrubland looking east

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**252.48**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	36.07
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	250
Payment into the Fund (GST exclusive)	$25,201.83
Administration fee (GST inclusive)	$1,386.10
Total Payment Required	**$26,587.93**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.04	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	7.34	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.53	Standard

Future Negative UBS Score	53.88
Future Positive UBS Score	61.16
UBS Gain Score	7.28
Estimate of SEB Points provided	**29.78**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Eriochiton sclerolaenoides	Woolly-fruit Bluebush				Yes
Sclerolaena obliquicuspis	Oblique-spined Bindyi				Yes
Austrostipa nitida	Balcarra Spear-grass				Yes
Angianthus tomentosus	Hairy Angianthus				Yes
Brachyscome ciliaris var.	Variable Daisy				Yes
Rytidosperma sp.	Wallaby-grass				Yes
Sclerolaena brachyptera	Short-wing Bindyi				Yes

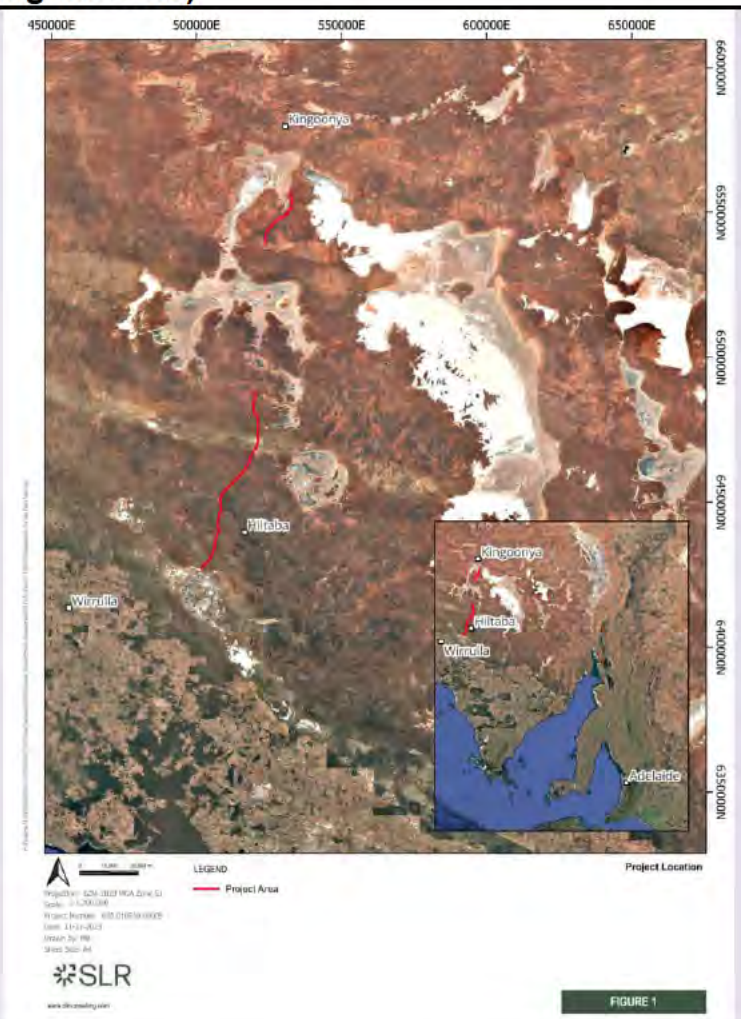
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Yellabinna
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	55
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.01

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.18**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Atriplex vesicaria	Bladder Saltbush	HP	2			Adult	9.80
Maireana georgei	Satiny Bluebush	P	2			Adult	
Frankenia serpyllifolia	Thyme Sea-heath	U	2			Adult	
Maireana appressa	Pale-fruit Bluebush	P	2			Adult	
Atriplex stipitata	Bitter Saltbush	U	2			Adult	
Rhagodia spinescens	Spiny Saltbush	P	2			Adult	
Tecticornia tenuis	Slender Samphire	P	2			Adult	
Tecticornia halocnemoides ssp. longispicat	Grey Samphire	P	2			Adult	
Abutilon cryptopetalum ssp.	Hill Lantern-bush	P	2			Adult	
Roepera aurantiaca ssp.	Shrubby Twinleaf	U	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Ardeotis australis	Australian Bustard		V	Yes	
Neophema elegans elegans	Elegant Parrot		R	Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	
Threatened Flora Species - Recorded or Observed		**Threatened Species**			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Reichardia tingitana	False Sowthistle		Yes	*
Bromus rubens	Red Brome		Yes	*
Hordeum vulgare	Barley		Yes	*
Mesembryanthemum sp.	Iceplant		Yes	*

Vegetation Condition Scores

SITE (name):	VA9	**SIZE OF SITE (Ha)**	0.316
VEGETATION ASSOCIATION DESCRIPTION	Atriplex spp. Low chenopod Shrubland		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☐	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☐	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

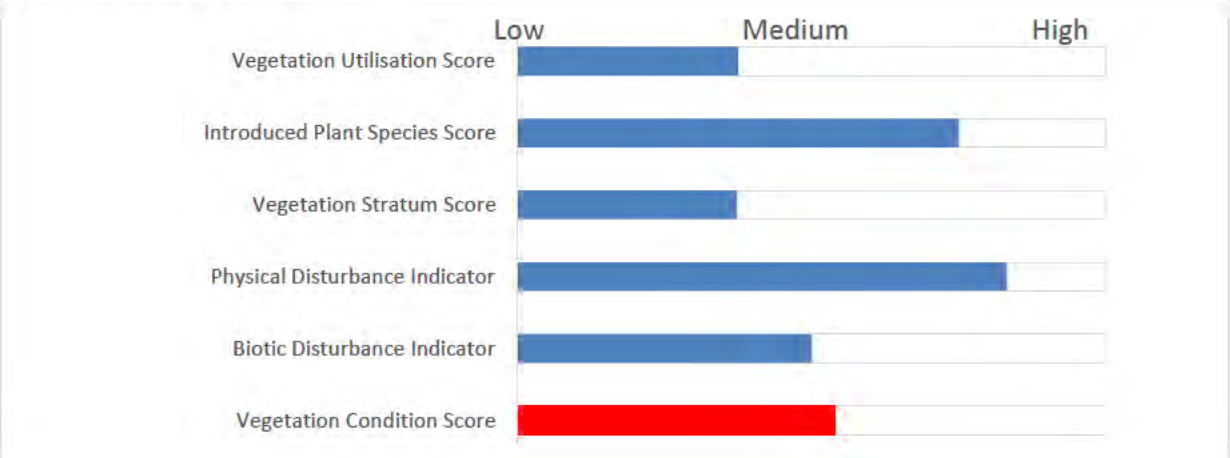
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☐	☐	
Shrubs 1- 3m	☐	☑	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**6.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	No	2
Introduced species dominate (>50% of vegetation cover)	☐	1
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☑	
Very sparse to nil introduced species present (<5% of vegetation cover)	☐	
Total Score (Max 10 - weighted by 2.5)		**7.5**

Vegetation Utilisation Score	
Total Score (Max 26)	9.80

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**43.30**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	1
State **Vulnerable** species observed or locally recorded (2.5 pt each)	1
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	**13.5**
Score	0.08

CONSERVATION SIGNIFICANCE SCORE	1.08

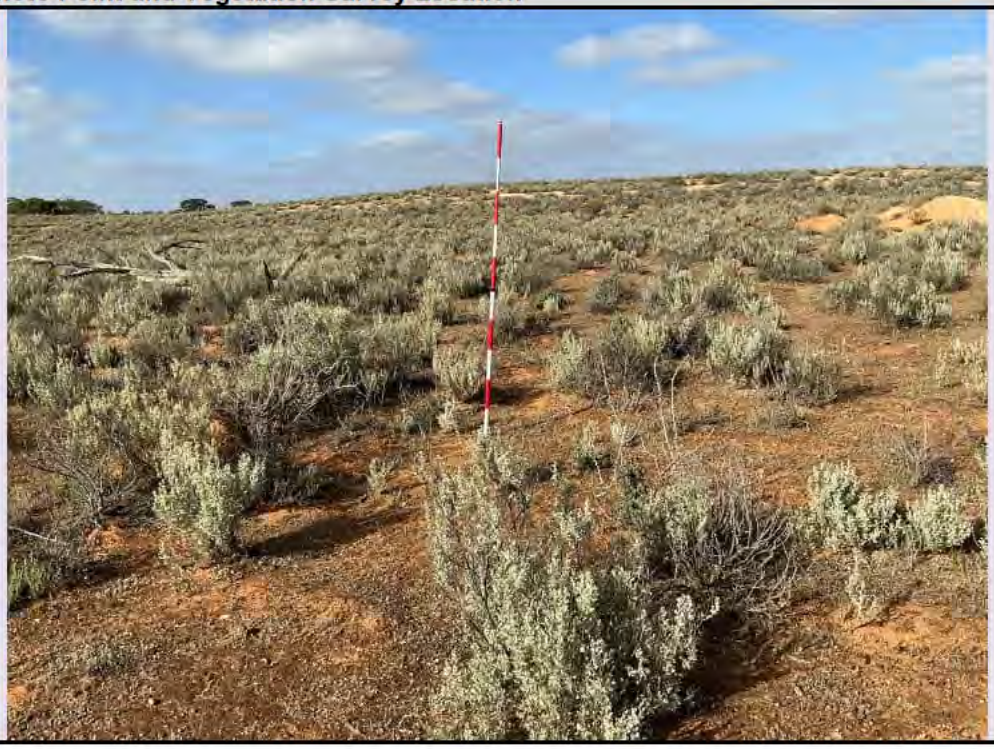
Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.18**
VEGETATION CONDITION SCORE	**43.30**
CONSERVATION SIGNIFICANCE SCORE	**1.08**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	55.18
Total Biodiversity Score (Biodiversity Score x hectares)	17.44

Photo Point and Vegetation Survey Location



Direction of the Photo

East

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	500276
Northing (7 digits)	6426157

Description

Atriplex low shrubland looking east

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**19.18**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	2.74
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	244
Payment into the Fund (GST exclusive)	$1,868.54
Administration fee (GST inclusive)	$102.77
Total Payment Required	**$1,971.31**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.04	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	7.34	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.53	Standard

Future Negative UBS Score	52.97
Future Positive UBS Score	60.14
UBS Gain Score	7.17
Estimate of SEB Points provided	**2.27**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Eriochiton sclerolaenoides	Woolly-fruit Bluebush				Yes
Sclerolaena obliquicuspis	Oblique-spined Bindyi				Yes
Austrostipa nitida	Balcarra Spear-grass				Yes
Angianthus tomentosus	Hairy Angianthus				Yes
Brachyscome ciliaris var.	Variable Daisy				Yes
Rytidosperma sp.	Wallaby-grass				Yes
Sclerolaena brachyptera	Short-wing Bindyi				Yes

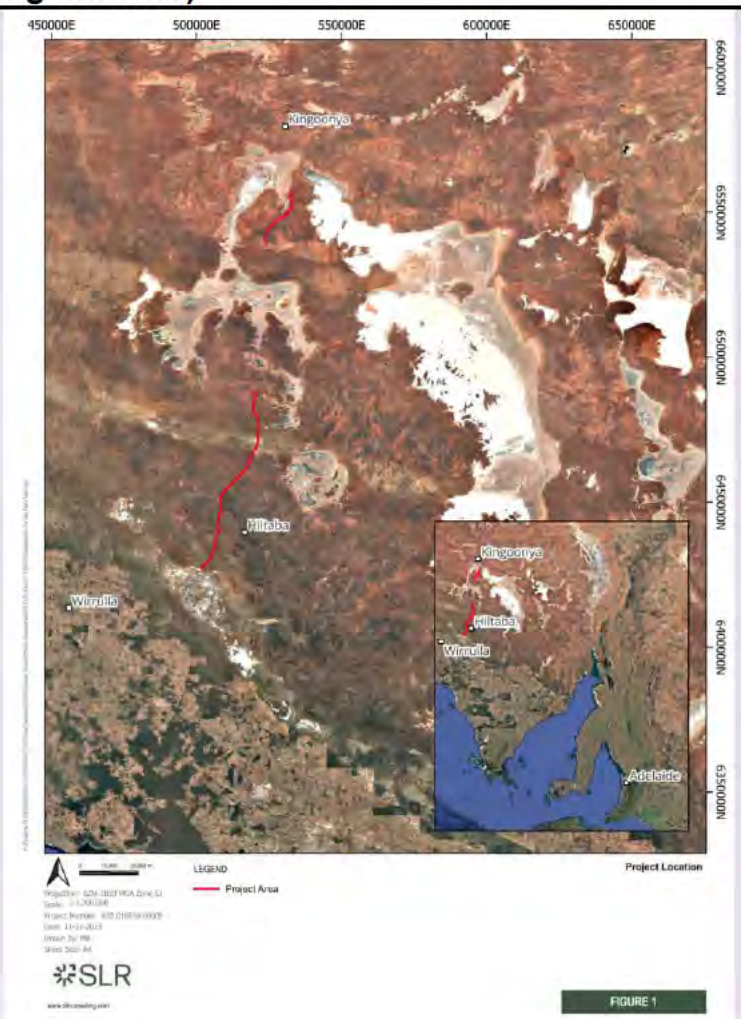
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (South)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	5
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.06
Size of the Block	500
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.03
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	Yes
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.08

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.2**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Acacia ligulata	Umbrella Bush	U	2			Adult	6.71
Melaleuca uncinata	Broombush	U	2			Adult	
Dodonaea viscosa ssp. angustissima	Narrow-leaf Hop-bush	U		1		Adult	
Triodia sp.		U	2			Adult	
Sida petrophila	Rock Sida	U	2			Adult	
Maireana appressa	Pale-fruit Bluebush	P		1		Adult	
Eucalyptus brachycalyx	Gilja	U	2			Adult	
Exocarpos aphyllus	Leafless Cherry	P		1		Adult	
Roepera aurantiaca ssp.	Shrubby Twinleaf	U	2			Adult	
Senna artemisioides ssp. X petiolaris		U	2			Adult	
Lycium australe	Australian Boxthorn	U		1		Adult	
Maireana sedifolia	Bluebush	P	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Petrogale xanthopus xanthopus	Yellow-footed Rock-wallaby	VU	V	Yes	Yes
Sminthopsis psammophila	Sandhill Dunnart	EN	V	Yes	
Ardeotis australis	Australian Bustard		V	Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	Yes
Corcorax melanorhamphos	White-winged Chough		R	Yes	
Hieraaetus morphnoides	Little Eagle		V	Yes	
Acanthiza iredalei iredalei	Slender-billed Thornbill (western)		R	Yes	
Amytornis merrotsyi pedleri	Gawler Ranges Short-tailed Grasswren	EN	E	Yes	Yes

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Carthamus lanatus	Saffron Thistle		Yes	*

Vegetation Condition Scores

SITE (name):	VA10	**SIZE OF SITE (Ha)**	0.478
VEGETATION ASSOCIATION DESCRIPTION	Melaleuca uncinata +/- Exocarpus aphylla over Dodonaea vis		
LANDSCAPE TYPE	Outcrop (rocks)		
SURFACE CHARACTER **Dominant**	Hummock	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☑	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☐	☑	2
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**18**

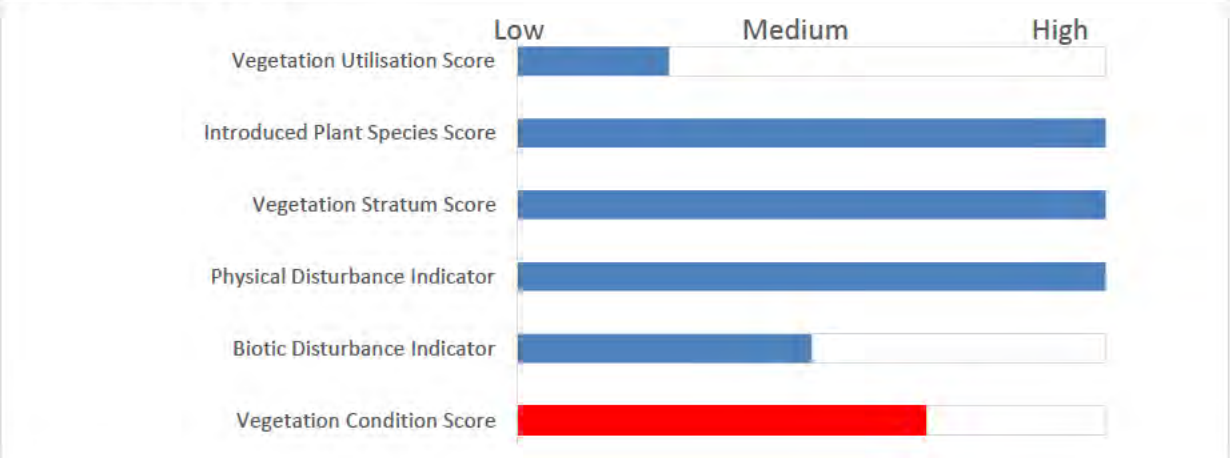
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
Total Score (Max 16 - weighted by 4)			**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	No	2
Introduced species dominate (>50% of vegetation cover)	☐	2
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☐	
Very sparse to nil introduced species present (<5% of vegetation cover)	☑	
Total Score (Max 10 - weighted by 2.5)		**10**

Vegetation Utilisation Score	
Total Score (Max 26)	6.71

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**55.71**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	2
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)	2
Nationally **Endangered** or **Critically endangered** species observed or locally recorded (20 pts each)	2
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	**67**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.20**
VEGETATION CONDITION SCORE	**55.71**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	73.54
Total Biodiversity Score (Biodiversity Score x hectares)	35.15

Photo Point and Vegetation Survey Location

Direction of the Photo

West

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	508585
Northing (7 digits)	6448088

Description

Melaleuca and Exocarpus tall shrubland with rocky outcrop supporting Yellow-footed Rock Wallaby

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**38.67**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	5.52
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	259
Payment into the Fund (GST exclusive)	$3,998.89
Administration fee (GST inclusive)	$219.94
Total Payment Required	**$4,218.83**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground

What is the risk of decline or loss of vegetation in the next 20 years?

Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?	
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?	
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).	
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?	

Likely % Loss	0.03	Standard

Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?

Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?	
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?	
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?	

Are the proposed management actions and their scale of impact already required by duty of care or legislation?

Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .	

Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?

Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?	
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.	

Likely Improvement Due to Management	4.86	Standard

In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?

Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?	

Are there other risk factors which make the outcome uncertain? ***NVB assessment only***

Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?	

Likelihood of Achieving the Outcome	0.66	Standard

Future Negative UBS Score	71.33
Future Positive UBS Score	77.77
UBS Gain Score	6.44
Estimate of SEB Points provided	**3.08**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Austrostipa nitida	Balcarra Spear-grass				Yes
Thysanotus baueri	Mallee Fringe-lily				Yes
Eriochiton sclerolaenoides	Woolly-fruit Bluebush				Yes
Podolepis capillaris	Wiry Podolepis				Yes
Roepera apiculata	Pointed Twinleaf				Yes
Ptilotus obovatus	Silver Mulla Mulla				Yes
Angianthus tomentosus	Hairy Angianthus				Yes

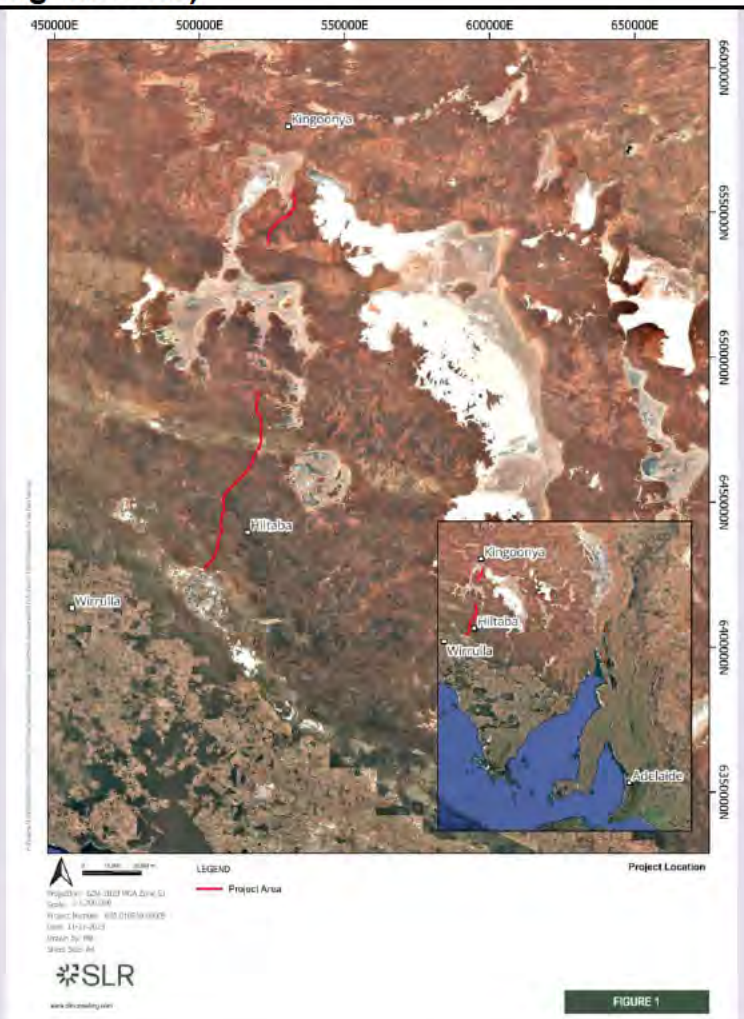
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (North)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	2
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.03
Size of the Block	300
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.02
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	No
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.05

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.13**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Maireana pyramidata	Black Bluebush	P		2		Mixed	10.13
Lycium australe	Australian Boxthorn	U		2		Mixed	
Maireana astrotricha	Low Bluebush	P		2		Mixed	
Atriplex vesicaria	Bladder Saltbush	HP	2			Mixed	
Ptilotus obovatus	Silver Mulla Mulla	P		1		Adult	
Frankenia serpyllifolia	Thyme Sea-heath	U	2			Adult	
Sida petrophila	Rock Sida	U	2			Adult	
Maireana sedifolia	Bluebush	P		2		Adult	
Enchylaena tomentosa var.	Ruby Saltbush	P	2			Adult	
Acacia tetragonophylla	Dead Finish	P	2			Adult	
Eremophila alternifolia	Narrow-leaf Emubush	P	2			Adult	
Atriplex stipitata	Bitter Saltbush	U		1		Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	Common Name	EPBC	SA	Past Record	Observed
Amytornis modestus	Thick-billed Grasswren	VU		Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	Common Name	EPBC	SA	Past Record	Observed

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Mesembryanthemum sp.	Iceplant		Yes	*
Carrichtera annua	Ward's Weed		Yes	*
Cucumis myriocarpus ssp. myriocarpus	Paddy Melon		Yes	*
Schismus barbatus	Arabian Grass		Yes	*

Vegetation Condition Scores

SITE (name):	VA11	**SIZE OF SITE (Ha)**	13.432
VEGETATION ASSOCIATION DESCRIPTION	Very Open low chenopod Shrubland		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☐	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☐	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

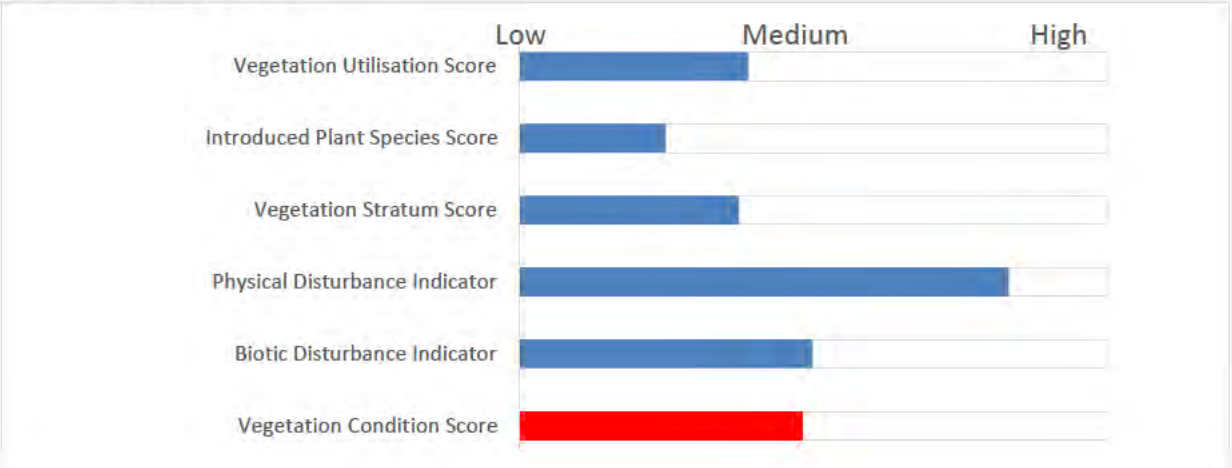
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☐	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☐	☑	
	Total Score (Max 16 - weighted by 4)		**6.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	Yes	0
Introduced species dominate (>50% of vegetation cover)	☐	1
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☑	
Very sparse to nil introduced species present (<5% of vegetation cover)	☐	
	Total Score (Max 10 - weighted by 2.5)	**2.5**

Vegetation Utilisation Score	
Total Score (Max 26)	10.13

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**38.63**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	0
State **Vulnerable** species observed or locally recorded (2.5 pt each)	0
State **Endangered** species observed or locally recorded (5 pt each)	0
Nationally **Vulnerable** species observed or locally recorded (10 pts each)	2
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	**20**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.13**
VEGETATION CONDITION SCORE	**38.63**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	48.02
Total Biodiversity Score (Biodiversity Score x hectares)	645.00

Photo Point and Vegetation Survey Location

Direction of the Photo

East

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	523502
Northing (7 digits)	6541167

Description

Very open low chenopod shrubland subject to grazing pressure

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**709.50**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	101.36
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	190
Payment into the Fund (GST exclusive)	$53,823.40
Administration fee (GST inclusive)	$2,960.29
Total Payment Required	**$56,783.69**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.04	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	8.27	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.49	Standard

Future Negative UBS Score	46.10
Future Positive UBS Score	53.05
UBS Gain Score	6.95
Estimate of SEB Points provided	**93.35**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Salsola australis	Buckbush				Yes
Solanum elaeagnifolium	Silver-leaf Nightshade				Yes
Austrostipa nitida	Balcarra Spear-grass				Yes
Dissocarpus paradoxus	Ball Bindyi				Yes
Sclerolaena divaricata	Tangled Bindyi				Yes
Sclerolaena obliquicuspis	Oblique-spined Bindyi				Yes
Vittadinia cuneata var.	Fuzzy New Holland Daisy				Yes
Atriplex holocarpa	Pop Saltbush				Yes
Malva weinmanniana	Australian Hollyhock				Yes
Sida corrugata var.	Corrugated Sida				Yes
Sida fibulifera	Pin Sida				Yes

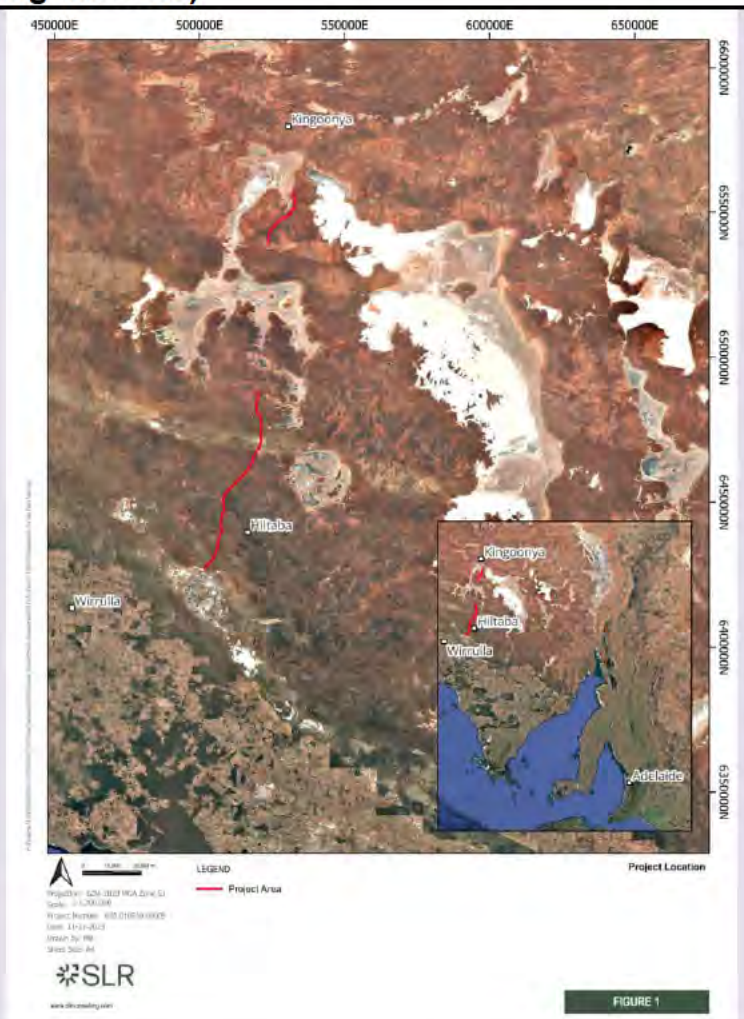
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (North)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	2
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.03
Size of the Block	300
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.02
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	No
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.05

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.13**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact number (tally)	**Modified** number (tally)	**Over utilised** number (tally)		
Eremophila rotundifolia	Round-leaf Emubush	U	2			Adult	8.21
Ptilotus obovatus	Silver Mulla Mulla	P				Adult	
Atriplex stipitata	Bitter Saltbush	U	2			Adult	
Eremophila duttonii	Harlequin Emubush	U		2		Adult	
Acacia tetragonophylla	Dead Finish	P		1		Adult	
Einadia nutans ssp.	Climbing Saltbush	P	2			Adult	
Maireana trichoptera	Hairy-fruit Bluebush	P	2			Adult	
Eremophila alternifolia	Narrow-leaf Emubush	P		1		Adult	
Triodia sp.		U	2			Adult	
Roepera aurantiaca ssp.	Shrubby Twinleaf	U	2			Adult	
Alectryon oleifolius ssp. canescens	Bullock Bush	HP		1		Adult	
Pittosporum angustifolium	Native Apricot	HP	2			Adult	
Lycium australe	Australian Boxthorn	U		1		Adult	
Sida petrophila	Rock Sida	U	2			Young	
Acacia aneura var.	Mulga	HP	2			Adult	
Abutilon fraseri ssp. fraseri	Dwarf Lantern-bush	P	2			Adult	
Maireana georgei	Satiny Bluebush	P	2			Adult	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Amytornis modestus	Thick-billed Grasswren	VU		Yes	
Sminthopsis psammophila	Sandhill Dunnart	EN	V	Yes	
Acanthiza iredalei iredalei	Slender-billed Thornbill (western)		R	Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	Yes
				Yes	
Cinclosoma castanotum	Chestnut Quailthrush (Chestnut-backed Quailthrush		R	Yes	
Pseudomys australis	Plains Mouse	VU	V	Yes	
Threatened Flora Species - Recorded or Observed		**Threatened Species**			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Schismus barbatus	Arabian Grass		Yes	*
Solanum elaeagnifolium	Silver-leaf Nightshade		Yes	*

Vegetation Condition Scores

SITE (name):	VA12	**SIZE OF SITE (Ha)**	1.824
VEGETATION ASSOCIATION DESCRIPTION	Acacia tall very open shrubland in drainage lines over Eremop		
LANDSCAPE TYPE	Drainage lines / floodouts		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☑	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☑	☐	1
		Total Score (Max 18 - weighted by 3)		**12**

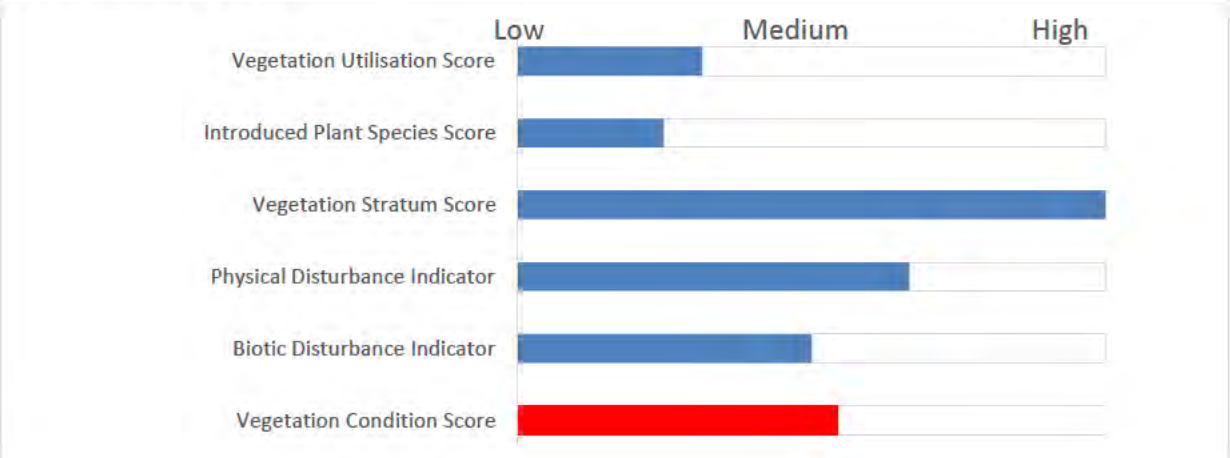
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
	Total Score (Max 16 - weighted by 4)		**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	Yes	0
Introduced species dominate (>50% of vegetation cover)	☐	1
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☑	
Very sparse to nil introduced species present (<5% of vegetation cover)	☐	
Total Score (Max 10 - weighted by 2.5)		**2.5**

Vegetation Utilisation Score	
Total Score (Max 26)	8.21

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**43.71**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	2
State **Vulnerable** species observed or locally recorded (2.5 pt each)	0
State **Endangered** species observed or locally recorded (5 pt each)	0
Nationally **Vulnerable** species observed or locally recorded (10 pts each)	3
Nationally **Endangered** or **Critically endangered** species observed or locally recorded (20 pts each)	1
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	**52**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.13**
VEGETATION CONDITION SCORE	**43.71**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	54.33
Total Biodiversity Score (Biodiversity Score x hectares)	99.10

Photo Point and Vegetation Survey Location

Direction of the Photo

South

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	523911
Northing (7 digits)	6542076

Description

Acacia tall very open shrubland associated with drainage lines

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**109.01**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	15.57
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	190
Payment into the Fund (GST exclusive)	$8,269.61
Administration fee (GST inclusive)	$454.83
Total Payment Required	**$8,724.44**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.04	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	7.26	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.54	Standard

Future Negative UBS Score	52.16
Future Positive UBS Score	59.20
UBS Gain Score	7.04
Estimate of SEB Points provided	**12.84**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Convolvulus remotus	Grassy Bindweed				Yes
Sida corrugata var.	Corrugated Sida				Yes
Atriplex holocarpa	Pop Saltbush				Yes
Sclerolaena bicornis var. bicornis	Goat-head Bindyi				Yes
Dissocarpus paradoxus	Ball Bindyi				Yes
Sclerolaena brachyptera	Short-wing Bindyi				Yes
Sclerolaena cuneata	Tangled Bindyi				Yes
Euphorbia drummondii					Yes
Austrostipa nitida	Balcarra Spear-grass				Yes
Vittadinia cuneata var.	Fuzzy New Holland Daisy				Yes
Roepera apiculata	Pointed Twinleaf				Yes
Swainsona formosa	Sturt Pea				Yes
Austrostipa sp.	Spear-grass				Yes
Daucus glochidiatus	Native Carrot				Yes
Portulaca oleracea	Common Purslane				Yes
Malva sp.	Mallow				Yes
Erodium crinitum	Blue Heron's-bill				Yes
Citrullus amarus	Bitter Melon				Yes
Erodium cygnorum	Blue Heron's-bill				Yes

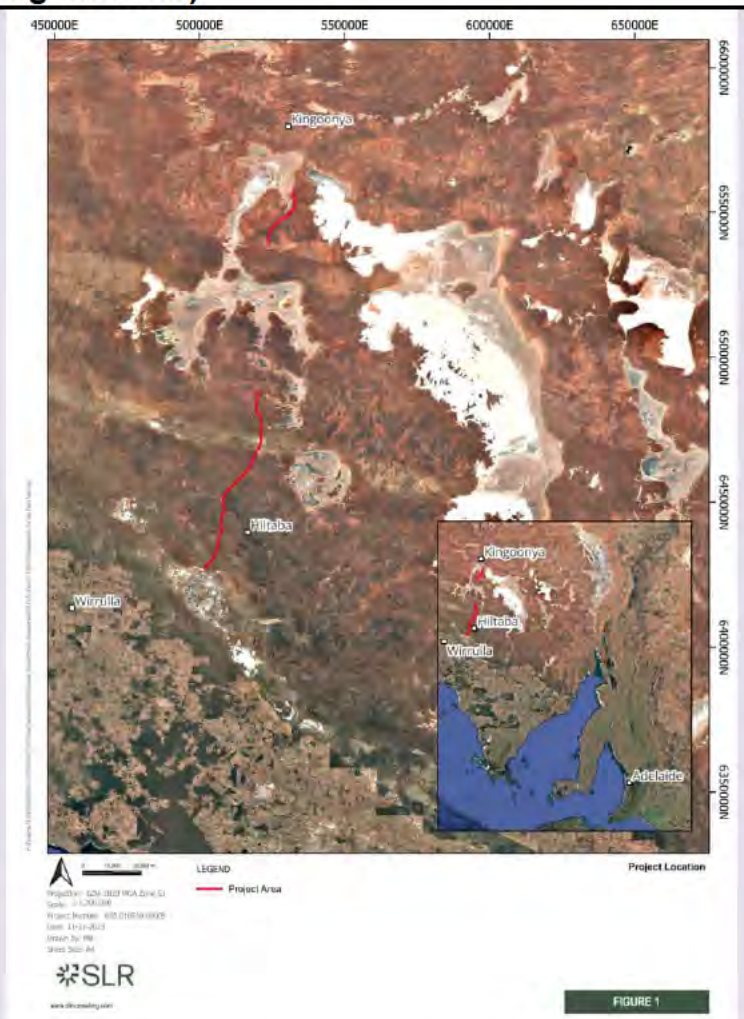
Rangelands Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block (name)	Gawler Ranges Road (North)
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Gawler Volcanics
Property Name	DIT

ASSESSOR(S) (Insert Full Name/s)	Georgia Wilson & Monique Bury
DATE OF ASSESSMENT	24-27 November 2025

Map of the Block (Including the Sites)



Landscape Context Scores

Number of Landform Features within Block	2
1 = 0.01pts, 2 = 0.03pts, >2 = 0.06pts	0.03
Size of the Block	300
<10ha = 0; 10 - <100ha = 0.01pts; 100 - <500ha = 0.02pts; 500 - <1000ha = 0.03pts; 1000 - <2000ha = 0.04pts; 2000 - 5000 = 0.05pts; >5000pts = 0.06pts	0.02
% native veg. protected in IBRA Sub region	7
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.03

Note; Blocks will score a minimum Landscape Context Score of 1

Wetland or Riparian Habitat present	
Does the block contain a wetland feature (Yes/No)	
Permanent or semi permanent = 0.08 pt *Contains water for at least 6 months of the year*	No
Occasionally contains water = 0.05 pts *Contains water approximately once every 5 years*	Yes
Very occasionally contains water = 0.02 pts *Contains water approximately once every 20 years*	Yes
Score	0.05

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.13**

Plant Species	Common name	Palatability	Utilisation enter the tally from datasheet for each category. If a proportion (>50%, <50% or zero) was recorded in the field, enter the code for each proportion (>50% is **2**, <50% is **1**, and 0 is **0**)			Age Class (M/Y/A)	Site Utilisation Score mean
			Intact	Modified	Over utilised		
			number (tally)	number (tally)	number (tally)		
Acacia kempeana	Witchetty Bush	P		1		Mixed	12.50
Triodia sp.		U	2			Adult	
Acacia tarculensis	Steel Bush	P	2			Mixed	
Ptilotus obovatus	Silver Mulla Mulla	P	2			Adult	
Acacia aneura var.	Mulga	HP	2			Adult	
Enchylaena tomentosa var.	Ruby Saltbush	P	2			Adult	
Maireana radiata	Radiate Bluebush	P	2			Adult	
Eremophila duttonii	Harlequin Emubush	U	2			Young	
Einadia nutans ssp.	Climbing Saltbush	P	2			Adult	
Acacia tetragonophylla	Dead Finish	P	2			Mixed	

Threatened Fauna - Recorded or Observed		Threatened Species			
Species	Common Name	EPBC	SA	Past Record	Observed
Amytornis merrotsyi pedleri	Gawler Ranges Short-tailed Grasswren	EN	E	Yes	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	

Threatened Flora Species - Recorded or Observed		Threatened Species			
Species	Common Name	EPBC	SA	Past Record	Observed

Introduced Fauna - Recorded or Observed

Species	Common Name	Past Record	Observed	Introduced Species
Sturnus vulgaris vulgaris	Common Starling		Yes	*
Oryctolagus cuniculus	Rabbit (European Rabbit)		Yes	*
Capra hircus	Goat (Feral Goat)		Yes	*
Ovis aries	Sheep (Feral Sheep)		Yes	*
Bos taurus	Cattle (European Cattle)		Yes	*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
			Yes	
Brassica sp.			Yes	*
Carrichtera annua	Ward's Weed		Yes	*
Mesembryanthemum sp.	Iceplant		Yes	*
Solanum elaeagnifolium	Silver-leaf Nightshade		Yes	*

Vegetation Condition Scores

SITE (name):	VA13	**SIZE OF SITE (Ha)**	1.888
VEGETATION ASSOCIATION DESCRIPTION	Acacia ssp shrubland over Triodia hummock grassland		
LANDSCAPE TYPE	Ranges and hill slopes		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	Cracking

Biotic Disturbance Indicators Sites with trees and large shrubs only (select one tickbox for each row)	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Presence of palatable shrubs or perennial grasses under the canopy of tree/shrub >3m	☐	☑	☐	1
Presence of mostly intact litter mats under canopy of tree/shrub >3m tall (>50% of tree canopy area has intertwined litter or shrub cover)	☐	☑	☐	1
		Total Score (Max 10 - weighted by 2.5)		**5**

Physical Disturbance Indicators	**Dominant >50%**	**Minor <50%**	**None - 0**	**Score**
Prevalence of large patches of bare soil (> 5m x 5m) that shows no signs of productive capacity (ie ephemeral plant litter, stems etc.)	☐	☐	☑	2
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☐	☑	☐	1
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☐	☐	☑	2
		Total Score (Max 18 - weighted by 3)		**15**

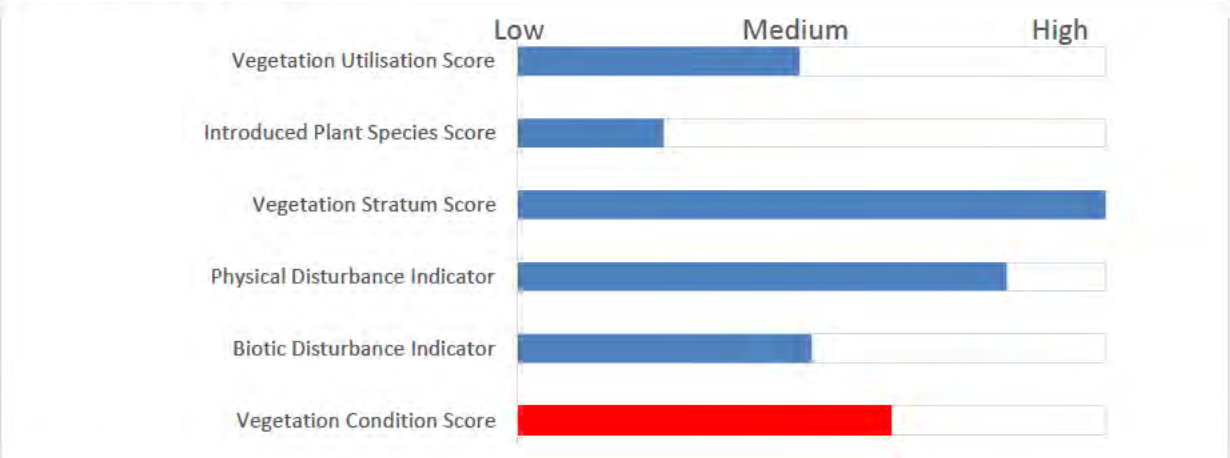
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
Shrubs 1- 3m	☑	☐	
Low shrubs <1m & hummock grasses	☑	☐	
Perennial tussock grasses with basal areas >30mm	☑	☐	
	Total Score (Max 16 - weighted by 4)		**16.0**

Introduced Plant Species	**Select**	**Score**
Declared species present?	Yes	0
Introduced species dominate (>50% of vegetation cover)	☐	1
Moderate invasion of introduced species (5 to 50% of the vegetation cover)	☑	
Very sparse to nil introduced species present (<5% of vegetation cover)	☐	
Total Score (Max 10 - weighted by 2.5)		**2.5**

Vegetation Utilisation Score	
Total Score (Max 26)	12.50

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**51.00**



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Tick if Yes
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) V**ulnerable** community (0.35 pts)	☐
Contains a Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Score**	1

Number of Threatened Plant Species recorded for 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**
Score	0

Potential habitat for Threatened Animal Species (number observed or recorded) for 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 observed or locally recorded (1 pt each)	0
State **Vulnerable** species observed or locally recorded (2.5 pt each)	0
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)	1
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	**30**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	1.1

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.13**
VEGETATION CONDITION SCORE	**51.00**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	63.39
Total Biodiversity Score (Biodiversity Score x hectares)	119.68

Photo Point and Vegetation Survey Location

Direction of the Photo

North

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	524141
Northing (7 digits)	6542673

Description

Acacia ssp. Shrubland with Triodia irritans associated with drainage lines

SEB Offset Calculations
(for a proposed clearance site assessment)

SEB Points Required	
Loss Factor	1.0
Loadings for clearance of protected areas	
Reductions for rehabilitation of impact site	
SEB Uplift Factor	1.10
Total SEB Points Required	**131.65**

SEB - Payment	
SEB points of gain/ha Factor	7
Approximate SEB hectares required	18.81
Management Cost ($/ha)	$25,408
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	190
Payment into the Fund (GST exclusive)	$9,987.10
Administration fee (GST inclusive)	$549.29
Total Payment Required	**$10,536.39**

SEB Points Provided Calculations

Answer these questions when assessing a site within a proposed SEB area

Refer to the SEB Guide (section on 'Adjust the SEB Points of Gain') for more information

Assessment of SEB site - On ground		
What is the risk of decline or loss of vegetation in the next 20 years?		
Has stock grazing been absent from the site for 10 or more years (and cannot be introduced without approval from the NVC)?		
Is the land subject to zoning or a dedication that is generally restrictive of development activities (e.g. conservation zone, recreation or open space zoning or crown land dedication)?		
There are no, or only very minimal, threats identified that would result in the decline of the vegetation condition (excluding threats beyond the control of the SEB offset provider such as climate change).		
Is the land subject to legally binding obligations (contractual or legislated) that provide an existing level of protection for the native vegetation (e.g. restricts the use of the land or prevents the vegetation from being harmed) that is additional to the protections provided by the Native Vegetation Act 1991?		
Likely % Loss	0.03	Standard
Will the proposed SEB area be subject to management actions that are clearly and significantly in excess of the standard requirements as set out in the SEB Policy?		
Will a very high standard of revegetation be conducted, including the establishment of a very high proportion of the species diversity which would be expected within the relevant vegetation community, and all strata (which should be present) represented including grasses, sedges, herbs and ground cover plants?		
Will fencing be installed (in excess of the standard stock exclusion fencing) in order to exclude introduced species or excessive herbivory by native and introduced fauna?		
Will intensive and substantial management of threatened flora or fauna be undertaken which is not required in association with the proposed clearance for which the SEB is being provided?		
Are the proposed management actions and their scale of impact already required by duty of care or legislation?		
Only minimal management actions have been committed to in the proposed SEB management plan, such as minimal control of species declared for control under the *Landscapes SA Act 2019* .		
Are the management interventions practically difficult to achieve or is the recovery of the vegetation likely to be inhibited in some way?		
Are there management issues, beyond the control of the SEB offset provider, that are technically or practically difficult to address preventing them from being managed to their fullest possible extent (e.g. weed infestations within difficult to access terrain)?		
Are there physical or environmental constraints which are likely to significantly impede the rehabilitation of vegetation and slow the rate of recovery? This may include compacted soils or altered soil chemistry (e.g. high nutrients/salinity issues) where the issue will continue or increase, significant erosion that cannot be controlled without impacting native vegetation or extensive die-back or plant diseases.		
Likely Improvement Due to Management	5.80	Standard
In relation to sites requiring substantial revegetation, is it highly likely that a good outcome will be achieved?		
Does the applicant (or site manager/contractor) have significant experience and capability with sufficient resources in delivering habitat reconstruction (revegetation) projects?		
Are there other risk factors which make the outcome uncertain? ***NVB assessment only***		
Is the applicant proposing novel management actions and the outcomes are uncertain? Are there other issues that pose serious risks to the delivery of the offset that are not already addressed by the above questions?		
Likelihood of Achieving the Outcome	0.61	Standard

Future Negative UBS Score	61.49
Future Positive UBS Score	67.79
UBS Gain Score	6.30
Estimate of SEB Points provided	**11.89**

This is an estimate only and will be subject to review and verification by the Native Vegetation Council.

If you answered 'yes' to any question, provide justification in the Data Report

Annual Flora Species - Recorded or Observed		Threatened Species			
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**
Cheilanthes sieberi ssp.	Narrow Rock-fern				Yes
Sida corrugata var.	Corrugated Sida				Yes
Pimelea trichostachya	Spiked Riceflower				Yes
Sclerolaena sp.	Bindyi				Yes
Convolvulus remotus	Grassy Bindweed				Yes
Salsola australis	Buckbush				Yes
Vittadinia cuneata var.	Fuzzy New Holland Daisy				Yes
Austrostipa nitida	Balcarra Spear-grass				Yes
Brachyscome sp.	Native Daisy				Yes
Stackhousia muricata ssp.	Yellow Candles				Yes
Calotis hispidula	Hairy Burr-daisy				Yes
Euphorbia drummondii					Yes
Erodium crinitum	Blue Heron's-bill				Yes

Appendix C Flora and Fauna Species List

Native Vegetation Clearance Data Report

Gawler Ranges Rd – Targeted Re-sheeting Works

Department for Infrastructure and Transport

SLR Project No.: 655.010559.00009

12 March 2026

Flora and Fauna Species Observed List

Table 1: Flora Species Observed

Scientific Name	Common Name	VA1	VA2	VA3	VA4	VA5	VA6	VA7	VA8	VA9	VA10	VA11	VA12	VA13
Abutilon cryptopetalum ssp.	Hill Lantern-bush		✓							✓				
Abutilon fraseri ssp. fraseri	Dwarf Lantern-bush												✓	
Acacia aneura var.	Mulga				✓	✓		✓					✓	✓
Acacia burkittii	Pin-bush Wattle		✓		✓									
Acacia kempeana	Witchetty Bush													✓
Acacia ligulata	Umbrella Bush		✓			✓	✓	✓			✓			
Acacia nyssophylla	Spine Bush						✓							
Acacia papyrocarpa	Western Myall		✓			✓								
Acacia ramulosa var.	Horse Mulga					✓								
Acacia tarculensis	Steel Bush				✓									✓
Acacia tetragonophylla	Dead Finish				✓		✓					✓	✓	✓
Alectryon oleifolius ssp. canescens	Bullock Bush		✓		✓			✓	✓				✓	
Amyema sp.	Mistletoe		✓											
Angianthus tomentosus	Hairy Angianthus									✓	✓			
Atriplex holocarpa	Pop Saltbush											✓	✓	
Atriplex nummularia ssp. nummularia	Old-man Saltbush						✓		✓					
Atriplex stipitata	Bitter Saltbush		✓	✓		✓		✓	✓	✓		✓	✓	
Atriplex vesicaria	Bladder Saltbush	✓		✓		✓		✓		✓		✓		
Austrostipa blackii	Crested Spear-grass					✓								
Austrostipa elegantissima	Feather Spear-grass				✓									

Scientific Name	Common Name	VA1	VA2	VA3	VA4	VA5	VA6	VA7	VA8	VA9	VA10	VA11	VA12	VA13
Austrostipa nitida	Balcarra Spear-grass			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Austrostipa sp.	Spear-grass	✓											✓	
Brachyscome ciliaris var.	Variable Daisy	✓	✓							✓				
Brachyscome sp.	Native Daisy							✓						✓
Callitris glaucophylla	White Cypress-pine		✓				✓							
Calotis hispidula	Hairy Burr-daisy													✓
Casuarina pauper	Black Oak				✓			✓						
Cheilanthes sieberi ssp.	Narrow Rock-fern													✓
Chrysocephalum sp.	Everlasting	✓												
Citrullus amarus	Bitter Melon												✓	
Convolvulus remotus	Grassy Bindweed			✓									✓	✓
Convolvulus sp.	Bindweed								✓					
Cymbopogon ambiguus	Lemon-grass		✓											
Daucus glochidiatus	Native Carrot												✓	
Disphyma crassifolium ssp. clavellatum	Round-leaf Pigface	✓												
Dissocarpus paradoxus	Ball Bindyi								✓			✓	✓	
Dodonaea viscosa ssp. angustissima	Narrow-leaf Hop-bush	✓	✓		✓		✓				✓			
Einadia nutans ssp.	Climbing Saltbush				✓								✓	✓
Enchylaena tomentosa var.	Ruby Saltbush		✓	✓	✓			✓	✓			✓		✓
Eremophila alternifolia	Narrow-leaf Emubush							✓				✓	✓	
Eremophila duttonii	Harlequin Emubush												✓	✓

Scientific Name	Common Name	VA1	VA2	VA3	VA4	VA5	VA6	VA7	VA8	VA9	VA10	VA11	VA12	VA13
Eremophila glabra ssp. glabra	Tar Bush		✓		✓	✓								
Eremophila longifolia	Weeping Emubush						✓							
Eremophila rotundifolia	Round-leaf Emubush												✓	
Eremophila scoparia	Broom Emubush						✓							
Eriochiton sclerolaenoides	Woolly-fruit Bluebush			✓		✓		✓	✓	✓	✓			
Erodium crinitum	Blue Heron's-bill												✓	✓
Erodium cygnorum	Blue Heron's-bill												✓	
Eucalyptus brachycalyx	Gilja		✓								✓			
Eucalyptus gracilis	Yorrell						✓							
Eucalyptus oleosa ssp.	Red Mallee								✓					
Eucalyptus socialis ssp.	Beaked Red Mallee		✓											
Eucalyptus yumbarrana	Yumbarra Mallee						✓							
Euphorbia drummondii	Euphorbia			✓	✓				✓				✓	✓
Exocarpos aphyllus	Leafless Cherry		✓								✓			
Frankenia serpyllifolia	Thyme Sea-heath	✓				✓		✓		✓		✓		
Goodenia havilandii	Hill Goodenia					✓								
Hakea leucoptera ssp. leucoptera	Silver Needlewood					✓		✓						
Halgania cyanea	Rough Blue-flower						✓							
Lycium australe	Australian Boxthorn			✓				✓			✓	✓	✓	
Maireana appressa	Pale-fruit Bluebush							✓		✓	✓			

Scientific Name	Common Name	VA1	VA2	VA3	VA4	VA5	VA6	VA7	VA8	VA9	VA10	VA11	VA12	VA13
Maireana astrotricha	Low Bluebush								✓			✓		
Maireana brevifolia	Short-leaf Bluebush					✓								
Maireana georgei	Satiny Bluebush			✓		✓	✓			✓			✓	
Maireana oppositifolia	Salt Bluebush	✓												
Maireana pyramidata	Black Bluebush			✓								✓		
Maireana radiata	Radiate Bluebush													✓
Maireana sedifolia	Bluebush		✓	✓	✓	✓		✓	✓		✓	✓		
Maireana sp.	Bluebush/Fissure-plant				✓									
Maireana trichoptera	Hairy-fruit Bluebush	✓							✓				✓	
Malacocera tricornis	Goat-head Soft-horns	✓												
Malva sp.	Mallow												✓	
Malva weinmanniana	Australian Hollyhock											✓		
Melaleuca eleuterostachya	Hummock Honey-myrtle						✓							
Melaleuca uncinata	Broombush										✓			
Myoporum platycarpum ssp.	False Sandalwood	✓												
Olearia decurrens	Winged Daisy-bush							✓						
Oxalis perennans	Native Sorrel								✓					
Pimelea trichostachya	Spiked Riceflower	✓												✓
Pittosporum angustifolium	Native Apricot		✓					✓					✓	
Podolepis capillaris	Wiry Podolepis	✓	✓				✓		✓		✓			
Portulaca oleracea	Common Purslane	✓											✓	

Scientific Name	Common Name	VA1	VA2	VA3	VA4	VA5	VA6	VA7	VA8	VA9	VA10	VA11	VA12	VA13
Ptilotus gaudichaudii	Paper Fox-tail				✓									
Ptilotus obovatus	Silver Mulla Mulla			✓	✓			✓			✓	✓	✓	✓
Rhagodia parabolica	Mealy Saltbush							✓						
Rhagodia sp.	Saltbush		✓											
Rhagodia spinescens	Spiny Saltbush				✓	✓				✓				
Rhodanthe moschata	Musk Daisy		✓											
Roepera apiculata	Pointed Twinleaf						✓				✓		✓	
Roepera aurantiaca ssp.	Shrubby Twinleaf		✓		✓		✓			✓	✓		✓	
Roepera eremaea	Twinleaf							✓						
Rytidosperma sp.	Wallaby-grass					✓				✓				
Salsola australis	Buckbush			✓				✓	✓			✓		✓
Santalum lanceolatum	Plumbush		✓											
Sclerolaena bicornis var. bicornis	Goat-head Bindyi					✓							✓	
Sclerolaena brachyptera	Short-wing Bindyi									✓			✓	
Sclerolaena cuneata	Tangled Bindyi												✓	
Sclerolaena diacantha	Grey Bindyi	✓						✓				✓		
Sclerolaena divaricata	Tangled Bindyi											✓		
Sclerolaena obliquicuspis	Oblique-spined Bindyi									✓		✓		
Sclerolaena sp.	Bindyi													✓
Senecio gregorii	Fleshy Groundsel		✓											
Senna artemisioides ssp. X coriacea	Broad-leaf Desert Senna		✓											
Senna artemisioides ssp. X petiolaris	Senna						✓		✓		✓			

Scientific Name	Common Name	VA1	VA2	VA3	VA4	VA5	VA6	VA7	VA8	VA9	VA10	VA11	VA12	VA13
Senna cardiosperma ssp. gawlerensis	Gawler Ranges Senna				✓	✓	✓	✓	✓					
Sida ammophila	Sand Sida			✓										
Sida corrugata var.	Corrugated Sida			✓		✓		✓	✓			✓	✓	✓
Sida fibulifera	Pin Sida											✓		
Sida petrophila	Rock Sida				✓						✓	✓	✓	
Solanum coactiliferum	Tomato-bush		✓											
Solanum petrophilum	Rock Nightshade			✓	✓	✓			✓					
Solanum sturtianum	Sturt's Nightshade					✓								
Stackhousia muricata ssp.	Yellow Candles													✓
Swainsona formosa	Sturt Pea												✓	
Tecticornia halocnemoides ssp. longispicata	Grey Samphire									✓				
Tecticornia halocnemoides ssp. tenuis		✓												
Tecticornia pruinosa	Bluish Samphire	✓												
Tecticornia tenuis	Slender Samphire	✓								✓				
Thysanotus baueri	Mallee Fringe-lily										✓			
Triodia sp.	Spinifex						✓				✓		✓	✓
Vittadinia cervicularis var. cervicularis	Waisted New Holland Daisy								✓					
Vittadinia cuneata var.	Fuzzy New Holland Daisy				✓		✓					✓	✓	✓
Waitzia acuminata var. acuminata	Orange Immortelle		✓											
Westringia rigida	Stiff Westringia		✓			✓	✓							

Table 2: Introduced Flora Species Observed

Scientific Name	Common Name	VA1	VA2	VA3	VA4	VA5	VA6	VA7	VA8	VA9	VA10	VA11	VA12	VA13
Brassica sp.	Mustard Weed				✓				✓					✓
Bromus rubens	Red Brome									✓				
Carrichtera annua	Ward's Weed			✓	✓	✓						✓		✓
Carthamus lanatus	Saffron Thistle										✓			
Cucumis myriocarpus ssp. myriocarpus	Paddy Melon											✓		
Erodium botrys	Long Heron's-bill	✓												
Heliotropium sp.	Heliotrope								✓					
Hordeum vulgare	Barley									✓				
Leontodon rhagadioloides	Cretan Weed								✓					
Marrubium vulgare	Horehound								✓					
Medicago sp.	Medic			✓					✓					
Mesembryanthemum nodiflorum	Slender Iceplant	✓												
Mesembryanthemum sp.	Iceplant									✓		✓		✓
Onopordum sp.	Thistle								✓					
Reichardia tingitana	False Sowthistle									✓				
Salvia verbenaca var.	Wild Sage			✓	✓				✓					
Schismus barbatus	Arabian Grass											✓	✓	
Solanum elaeagnifolium	Silver-leaf Nightshade			✓	✓							✓	✓	✓

Table 3: Opportunistic Fauna Species Observed

Scientific Name	**Common Name**
Acanthiza iredalei iredalei	Slender-billed Thornbill (western) (*NP&W Act* – Rare)
Acanthiza uropygialis	Chestnut-rumped Thornbill
Anthus australis	Australian Pipit
Aphelocephala leucopsis leucopsis	Southern Whiteface (*EPBC Act* – Vulnerable)
Aquila audax	Wedge-tailed Eagle
Artamus cyanopterus	Black-faced Woodswallow
Barnardius zonarius	Australian Ringneck
Cacatua galerita	Sulphur-crested Cockatoo
Cacatua sanguinea gymnopis	Little Corella
Cincloramphus cruralis	Brown Songlark
Cinclosoma cinnamomeum	Cinnamon Quailthrush
Corcorax melanorhamphos	White-winged Chough (*NP&W Act* – Rare)
Cracticus torquatus leucopterus	Grey Butcherbird
Ctenotus schomburgkii	Common Sandplain Ctenotus
Ctenotus sp.	Ctenotus
Dromaius novaehollandiae	Emu
Eolophus roseicapilla	Galah
Epthianura albifrons	White-fronted Chat
Falco berigora berigora	Brown Falcon
Falco cenchroides cenchroides	Nankeen Kestrel
Gavicalis virescens	Singing Honeyeater
Gymnorhina tibicen	Australian Magpie
Lalage tricolor	White-winged Triller
Macropus (Osphranter) rufus	Red Kangaroo
Macropus fuliginosus	Western Grey Kangaroo
Malurus lamberti	Variegated Fairywren
Malurus leucopterus leuconotus	White-winged Fairywren
Malurus splendens	Splendid Fairy Wren
Manorina flavigula	Yellow-throated Miner
Melanodryas cucullata	Hooded Robin
Ocyphaps lophotes lophotes	Crested Pigeon
Pomatostomus superciliosus	White-Browed Babbler
Taeniopygia guttata castanotis	Zebra Finch
Tiliqua rugosa	Sleepy Lizard
Todiramphus pyrrhopygius	Red-backed Kingfisher

Scientific Name	**Common Name**
Todiramphus sanctus	Sacred Kingfisher
Varanus gouldii	Sand Goanna

Table 4: Introduced Fauna Species Observed

Scientific Name	**Common Name**
Bos taurus	Cattle
Capra hircus	Goat
Oryctolagus cuniculus	European Rabbit
Ovis aries	Sheep
Sturnus vulgaris	Common Starling

Appendix D EPBC Act PMST Report

Native Vegetation Clearance Data Report

Gawler Ranges Rd – Targeted Re-sheeting Works

Department for Infrastructure and Transport

SLR Project No.: 655.010559.00009

12 March 2026

Australian Government

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

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

Report created: 21-Nov-2025

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	17
Listed Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

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

Commonwealth Lands:	15
Commonwealth Heritage Places:	None
Listed Marine Species:	13
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

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

State and Territory Reserves:	2
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	4
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Species		[Resource Information]
Status of Conservation Dependent and Extinct are not MNES under the EPBC Act. Number is the current name ID.		
Scientific Name	Threatened Category	Presence Text
BIRD		
Amytornis modestus Thick-billed Grasswren [84121]	Vulnerable	Species or species habitat likely to occur within area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat known to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat known to occur within area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat known to occur within area
Pedionomus torquatus Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Polytelis alexandrae		
Princess Parrot, Alexandra's Parrot [758]	Vulnerable	Species or species habitat may occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat may occur within area
MAMMAL		
Pseudomys australis		
Plains Rat, Palyoora, Plains Mouse [108]	Vulnerable	Species or species habitat may occur within area
Sminthopsis psammophila		
Sandhill Dunnart [291]	Endangered	Species or species habitat likely to occur within area
PLANT		
Frankenia plicata		
[4225]	Endangered	Species or species habitat likely to occur within area
Hibbertia crispula		
Ooldea Guinea-flower [15222]	Vulnerable	Species or species habitat likely to occur within area
Limosella granitica		
Granite Mudwort [6704]	Vulnerable	Species or species habitat may occur within area
Pterostylis xerophila		
Desert Greenhood [7997]	Vulnerable	Species or species habitat may occur within area
Swainsona pyrophila		
Yellow Swainson-pea [56344]	Vulnerable	Species or species habitat may occur within area

Listed Migratory Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		

Scientific Name	Threatened Category	Presence Text
Motacilla cinerea		
Grey Wagtail [642]		Species or species habitat may occur within area
Motacilla flava		
Yellow Wagtail [644]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Calidris melanotos		
Pectoral Sandpiper [858]		Species or species habitat may occur within area
Charadrius veredus		
Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]

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

Commonwealth Land Name	State
Defence	
Defence - WOOMERA AIR WEAPONS RANGE [40057]	SA
Defence - WOOMERA AIR WEAPONS RANGE [40056]	SA

Commonwealth Land Name	State
Defence - WOOMERA AIR WEAPONS RANGE [40042]	SA
Defence - WOOMERA AIR WEAPONS RANGE [40041]	SA
Defence - WOOMERA AIR WEAPONS RANGE [40084]	SA
Transport and Regional Services - Australian National Railways Commission	
Commonwealth Land - Australian National Railways Commission [40837]	SA
Commonwealth Land - Australian National Railways Commission [41386]	SA
Commonwealth Land - Australian National Railways Commission [41387]	SA
Commonwealth Land - Australian National Railways Commission [40838]	SA
Commonwealth Land - Australian National Railways Commission [40816]	SA
Commonwealth Land - Australian National Railways Commission [40839]	SA
Commonwealth Land - Australian National Railways Commission [40831]	SA
Commonwealth Land - Australian National Railways Commission [40830]	SA
Commonwealth Land - Australian National Railways Commission [40815]	SA
Unknown	
Commonwealth Land - [40832]	SA

Listed Marine Species [Resource Information]

Scientific Name	Threatened Category	Presence Text
Bird		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area overfly marine area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
[Neophema chrysostoma](#) Blue-winged Parrot [726]	Vulnerable	Species or species habitat known to occur within area overfly marine area
[Tringa nebularia](#) Common Greenshank, Greenshank [832]	Endangered	Species or species habitat may occur within area overfly marine area

Extra Information

State and Territory Reserves		[Resource Information]
Protected Area Name	Reserve Type	State
Bon Bon Station	Conservation Reserve	SA
Lake Gairdner	National Park	SA

EPBC Act Referrals			[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status
[Hawks Nest Iron Ore Project](#)	2024/10008		Completed
Controlled action			
[Nava-1 Cable System](#)	2001/510	Controlled Action	Completed
Not controlled action			
[Construction of the Tunkillia Gold Mine and associated infrastructure](#)	2013/6816	Not Controlled Action	Completed
[Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia](#)	2015/7522	Not Controlled Action	Completed

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

4 LIMITATIONS

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

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

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

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

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

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

Acknowledgements

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

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

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

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

Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

Australian Government

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

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

Report created: 21-Nov-2025

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	None
Listed Threatened Species:	19
Listed Migratory Species:	10

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

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

Commonwealth Lands:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	15
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

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

State and Territory Reserves:	13
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	1
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Species		[Resource Information]
Status of Conservation Dependent and Extinct are not MNES under the EPBC Act. Number is the current name ID.		
Scientific Name	Threatened Category	Presence Text
BIRD		
Amytornis merrotsyi pedleri		
Gawler Ranges Short-tailed Grasswren, Short-tailed Grasswren (Gawler Ranges) [86270]	Endangered	Species or species habitat known to occur within area
Amytornis textilis myall		
Western Grasswren (Gawler Ranges) [64454]	Vulnerable	Species or species habitat may occur within area
Aphelocephala leucopsis		
Southern Whiteface [529]	Vulnerable	Species or species habitat known to occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Falco hypoleucos		
Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area
Leipoa ocellata		
Malleefowl [934]	Vulnerable	Species or species habitat known to occur within area
Neophema chrysostoma		
Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area

Scientific Name	Threatened Category	Presence Text
Pedionomus torquatus		
Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area
Polytelis alexandrae		
Princess Parrot, Alexandra's Parrot [758]	Vulnerable	Species or species habitat may occur within area
Stagonopleura guttata		
Diamond Firetail [59398]	Vulnerable	Species or species habitat may occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat may occur within area
MAMMAL		
Petrogale xanthopus xanthopus		
Yellow-footed Rock-wallaby (SA and NSW) [66646]	Vulnerable	Species or species habitat known to occur within area
Sminthopsis psammophila		
Sandhill Dunnart [291]	Endangered	Species or species habitat known to occur within area
PLANT		
Caladenia tensa		
Greencomb Spider-orchid, Rigid Spider-orchid [24390]	Endangered	Species or species habitat known to occur within area
Hibbertia crispula		
Ooldea Guinea-flower [15222]	Vulnerable	Species or species habitat likely to occur within area
Limosella granitica		
Granite Mudwort [6704]	Vulnerable	Species or species habitat known to occur within area
Pterostylis xerophila		
Desert Greenhood [7997]	Vulnerable	Species or species habitat known to occur within area
Swainsona pyrophila		
Yellow Swainson-pea [56344]	Vulnerable	Species or species habitat likely to occur within area

Listed Migratory Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]

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

Commonwealth Land Name	State
Defence	
Defence - WOOMERA AIR WEAPONS RANGE [40084]	SA

Listed Marine Species [Resource Information]

Scientific Name	Threatened Category	Presence Text
Bird		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area
Bubulcus ibis as Ardea ibis		
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area
Calidris acuminata		
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat known to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area
Calidris melanotos		
Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area
Chalcites osculans as Chrysococcyx osculans		
Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area overfly marine area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat likely to occur within area overfly marine area
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat may occur within area overfly marine area

Extra Information

State and Territory Reserves		[Resource Information]
Protected Area Name	Reserve Type	State
Gawler Ranges	National Park	SA
Gawler Ranges	Conservation Park	SA
Hiltaba Nature Reserve	Private Nature Reserve	SA

Protected Area Name	Reserve Type	State
Lake Gairdner	National Park	SA
Pureba	Conservation Park	SA
Unnamed (No.HA1032)	Heritage Agreement	SA
Unnamed (No.HA1045)	Heritage Agreement	SA
Unnamed (No.HA1056)	Heritage Agreement	SA
Unnamed (No.HA267)	Heritage Agreement	SA
Unnamed (No.HA524)	Heritage Agreement	SA
Unnamed (No.HA547)	Heritage Agreement	SA
Unnamed (No.HA916)	Heritage Agreement	SA
Yellabinna	Regional Reserve	SA

EPBC Act Referrals			[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action			
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

4 LIMITATIONS

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

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

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

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

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

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

Acknowledgements

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

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

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

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

Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

Appendix E Threatened Species Likelihood of Occurrence Assessment

Native Vegetation Clearance Data Report

Gawler Ranges Rd – Targeted Re-sheeting Works

Department for Infrastructure and Transport

SLR Project No.: 655.010559.00009

12 March 2026

Table 1: Habitat Suitability

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
FLORA							
Acacia iteaphylla (Flinders Ranges Wattle)	R		3	19/11/2012	South	Found on the northern Eyre Peninsula, eastward to the Flinders Ranges and the northern Mount Lofty Ranges. It grows on hillsides amongst rocky outcrops or in valleys along rocky creek banks (Plants of South Australia, 2025).	**Possible.** Several records within close proximity to MM 172 – MM 180, likely to be present in the southern extent of the Project Area.
Acacia toondulya (Toondulya Wattle)	R		3	13/11/2012	South	This species is restricted to the western Gawler Ranges, on Toondulya Bluff, east of the hills around Hiltaba, and south of Lake Acraman and north on Waverly Hill. It grows on low rounded hills of granite and shale on red-brown loam in open shrubland (Plants of South Australia, 2025).	**Possible.** Several records within close proximity to MM 172 – MM 180, likely to be present in the southern extent of the Project Area near Hiltaba.
Anthocercis anisantha ssp. anisantha (Port Lincoln Ray-flower)	R		3	9/10/2025	South	This species typically grows in coastal regions, thriving in heathland and woodland communities (FloraSA, 2025).	**Unlikely.** One record within 16 km of the southern extent of the Project Area, and one is approximately 40 km away. Suitable habitat exists. However, unlikely to occur within area proposed for clearance due to degradation of vegetation on edge of road.
Austrostipa plumigera	R		3	22/10/2008	South	Found scattered in the western region of South Australia, growing on calcrete and calcareous loams (Plants of South Australia, 2025).	**Unlikely.** Several records exist within 50 km of the Southern

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
(Hairy-bristle Spear-grass)							Project Area, and suitable habitat exists within black oak woodland. However, unlikely to occur within area proposed for clearance due to degradation of vegetation on edge of road.
Austrostipa vickeryana (Vickery's Spear-grass)	R*		3	21/04/2007	North, South	Found scattered in the central part of South Australia, growing on sand associated with limestone and gypsum in inland saline areas (Plants of South Australia, 2025).	**Unlikely.** There are four records within 50 km of the Project Area, and suitable habitat occurs. However, unlikely to occur within area proposed for clearance due to degradation of vegetation on edge of road.
Caladenia tensa (Greencomb Spider-orchid)		EN	5	Known	South	Grows in eucalyptus and cypress woodland and prefers dry woodland and mallee on sandy loams (Plants of South Australia, 2025).	**Unlikely.** No records within 50 km. Suitable habitat exists.
Ceratogyne obionoides (Wingwort)	R		3	20/09/2009	South	Found on the upper Eyre Peninsula in South Australia, growing on sandhills (Plants of South Australia, 2025).	**Unlikely**. Project Area does not contain sandhills.
Embadium stagnense (Arcoona Slipper-plant)	R		3	4/09/2025	South	Endemic to South Australia and found in central South Australia, mainly between Cooper Pedy and Oodnadatta, growing on gypseous soils (Seeds of South Australia, 2025).	**Possible.** One record from 1995 is approximately 200 m away from the road near MM 45. There are several records within 13 km of the southern extent of the Project Area.

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
Frankenia plicata (Melville)	V	EN	5	Likely	North	Grows in a range of vegetation communities with good drainage, especially in small hillside channels. It prefers sales of loamy sands to clay soils (Department of Agriculture, Water and the Environment, 2008).	**Unlikely.** No records within 50 km.
Glossostigma sp. Long stout-pedicelled	V		3	15/11/2012	South	This species is known to grow in and beside ephemeral pools in clay to loam soils, often on gibber plains in South Australia (FloraSA, 2025).	**Unlikely.** One record within nine km, however, suitable habitat does not exist within the Project Area.
Gratwickia monochaeta (One-bristle Everlasting)	R		3	20/09/2009	South	Endemic to South Australia and found in the central parts and on the Eyre Peninsula, growing on various sites but usually in sand (Plants of South Australia, 2025).	**Unlikely.** Project Area does not support habitat for this species and the records are over 20 km away.
Grevillea anethifolia (Spiny Cream Spider Flower)	R		3	21/11/2012	South	This can be found growing on sandy to sandy loam soils, in mallee shrubland and open sclerophyll woodland (Australian Plants Society NSW, 2020).	**Unlikely.** Species may have suitable habitat near the southern extent of the Project Area. There are several records within 50 km of the southern Project Area. However, unlikely to occur within area proposed for clearance due to degradation of vegetation on edge of road.
Hibbertia crispula (Ooldea Guinea-flower)	V	VU	3, 5	Likely, 22/11/2012	North, South	Ooldea Guinea-flower is known from only two locations, the Lake Everard region and the Ooldea region of South Australia. It grows on red sand (Department of Agriculture, Water and the Environment, 2008b).	**Unlikely.** One record within three km of the northern extent of the Priority 3 work area. However, unlikely to occur

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
							within area proposed for clearance due to degradation of vegetation on edge of road.
Leptomeria preissiana (Preiss Currant-bush)	E		3	7/09/2019	South	This species is found on the northern Eyre Peninusla and in the Gawler Ranges in South Australia, growing in granite crevices (Plants of South Australia, 2025).	**Unlikely.** Project Area does not contain suitable habitat, despite there being a record within 30 km.
Leptorhynchos melanocarpus (Lake Acraman Button-daisy)	V		3	19/09/2009	South	This species is endemic to South Australia and is found only at Lake Acraman on the northern Eyre Peninsula. It grows on gypseous mounds and is more abundant after heavy rains (Plants of South Australia, 2025).	**Unlikely.** Project Area does not contain suitable habitat due to the distance from Lake Acraman.
Limosella granitica (Granite Mudwort)	V	VU	3, 5	Known, 21/09/2019	South	This species is confined to seasonally wet rock-pools (gnamma holes) on the top of granite inselbergs and outcrops in northern Eyre Peninsula (Department of the Environment, Water, Heritage and the Arts, 2008).	**Unlikely.** There are two records within 50 km, however, suitable habitat does not occur within the Project Area.
Melaleuca armillaris ssp. akineta (Needle-leaf Honey-myrtle)	R		3	16/11/2012	South	This species can be found in ridges and granite outcrops and is often associated with woodland and heath communities (Australian Plants Society NSW. 2020).	**Likely.** Several records near the roadside at the southern extent of the Project Area, near Hiltaba.
Melaleuca leiocarpa (Pungent Honey-myrtle)	R		3	20/09/2009	South	Found in the Gawler Ranges and the northern Eyre Peninsula in South Australia. It grows on rocky lateritic soils and red sand on hillslopes, outcrops and sandplains (Plants of South Australia, 2025).	**Unlikely.** Two records within three km of Gawler Ranges Road near MM 126 to MM 128. However, unlikely to occur within area proposed for clearance due to degradation

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
							of vegetation on edge of road.
Melaleuca oxyphylla (Pointed-leaf Honey-myrtle)	R		3	18/08/2013	South	This species occurs in the Eyre Peninsula, mostly between Minnipa and Cowell, growing along creeks in clay soils (Brophy, J.J, *et al*., 2013).	**Unlikely.** Suitable habitat does not occur in the Project Area, and records are over 40 km away.
Phyllangium sulcatum (Rock Mitrewort)	V		3	20/09/2009	South	Found on the northern Eyre Peninsula and the Flinders Ranges in South Australia. Grows in sheltered, rocky areas on shallow soils overlaying rock (Plants of South Australia, 2025).	**Unlikely.** Suitable habitat does not occur in the Project Area.
Pterostylis xerophila (Desert Greenhood)	V	VU	3, 5	Known, 7/10/2025	South	In South Australia, this species occurs in dry woodland on fertile red loamy soils, on or around granite or quartzite rock outcrops. It is commonly found in areas with Broombush (*Melaleuca uncinata*), Ridge-fruited Mallee (*Eucalyptus incrassata*), Beaked Red Mallee (*Eucalyptus socialis*) and/or Narrow-leaf Red Mallee (*Eucalyptus leptophylla*) (Department of Sustainability and Environment, 2010).	**Unlikely.** Two records within 50 km of the Southern Project Area. Suitable habitat may occur in VAs that contain rocky outcrop. However, unlikely to occur within area proposed for clearance due to degradation of vegetation on edge of road.
Rhodanthe oppositifolia ssp. oppositifolia (Twin-leaf Everlasting)	V		3	9/10/2025	South	This species grows on sand over limestone, stony loam and clay in saline depressions, breakaways and stony ridges (Plants of South Australia, 2025).	**Unlikely.** Suitable habitat does not occur in the Project Area.
Santalum spicatum (Sandalwood)	V		3	17/05/2012	North, South	This species grows naturally among rocks and woodland in arid areas of southern Western Australia and northern South Australia (Botanic Gardens of South Australia, 2025).	**Likely.** Several records of this species, specifically one record within 800 m of MM

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
							133, and another within 500 m of the road near MM 171.
Schoenus sculptus (Gimlet Bog-rush)	R		3	20/09/2009	South	This species grows in seasonally wet, sandy areas (Plants of South Australia, 2025).	**Unlikely.** Suitable habitat does not occur in the Project Area.
Senecio gawlerensis (Gawler Ranges Groundsel)	R		3	28/08/2007	South	Rocky outcrops towards the summit of hills and upper slopes (Botanic Gardens of South Australia, 2025).	**Likely.** Several records near the roadside at the southern extent of the Project Area, near Hiltaba. The closest record is approximately 500 m away from the Priority 2 Re-sheeting area.
Stenanthemum arens	R		3	16/11/2012	South	Grows on the base of rocky hillsides and foot slopes (FloraSA, 2025).	**Likely.** Several records near the roadside at the southern extent of the Project Area, near Hiltaba. The closest record is approximately 500 m away from the Priority 2 Re-sheeting area.
Swainsona dictyocarpa (Coondambo Pea)	V		3	4/10/2010	North	Endemic to South Australia and found only in a restricted area near Bitter Well, Coondambo in red sandy plains (Plants of South Australia, 2025).	**Unlikely.** One record within 50 km, however, the Project Area is a significant distance from the species' known habitat.
Swainsona microcalyx (Wild Violet)	R		3	27/10/2010	North, South	Found in an area north of the Eyre Peninsula in South Australia, usually on flat, sandy margins of salt lakes with ephemeral herbs (Plants of South Australia, 2025).	**Unlikely.** Several records within 50 km and suitable habitat exists. However, unlikely to occur

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
							within area proposed for clearance due to degradation of vegetation on edge of road.
Swainsona pyrophila (Yellow Swainson-pea)	R	VU	5	Likely	South	The Yellow Swainson-pea occurs in mallee vegetation communities on a variety of soil types, including well-drained sands, sandy loams and heavier clay loams, and is usually only found after fire (Tonkinson, D.; Robertson, G., 2010).	**Unlikely.** No records within 50 km. Suitable habitat may exist.
Wurmbea decumbens (Trailing Nancy)	R		3	28/08/2007	South	This species can be found growing on rocky hills on sheltered southern slopes at the base of rocks (Plants of South Australia, 2025).	**Unlikely.** One record exists approximately 45 km from the southern extent of the Project Area.
Wurmbea stellata (Star Nancy)	R		3	19/09/2009	South	This species can be found scattered in the arid and semi-arid areas, growing on red clay soils in plains and rock hills (Plants of South Australia, 2025).	**Unlikely.** One record exists approximately 35 km from the southern extent of the Project Area, near Lake Acraman.
FAUNA							
Acanthiza iredalei iredalei (Slender-billed Thornbill (western)	R		3	19/04/2007	North, South	Their preferred habitat includes shrublands, sometimes near mangroves, salt lakes, or salt flats. They usually choose chenopod shrublands dominated by Samphire (*Sarcocornia spp.*), Bluebush (*Maireana spp.*) or Saltbush (*Atriplex spp.*). This species will occasionally use low heath on sand plains (Department for Environment and Heritage, 2013).	**Known.** Observed during the 2025 survey by SLR within VA2 and a historical record exists approximately 1 km away from the southern extent of the Project Area, near MM 179. Species may utilise vegetation communities where shrubland exists.

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
Amytornis merrotsyi pedleri (Gawler Ranges Short-tailed Grasswren)	E	EN	3, 5	Known, 5/10/2017	South	This species relies on rocky (granitic) hilltops, ridges and hillsides with spinifex (*Triodia sp.*) tussock grassland and scattered spiny shrubs, particularly Acacia and Grevillea. They are known to occur in the Hiltaba nature reserve run by Nature Foundation, located within the Project Area (Department of the Environment, 2014).	**Highly Likely.** Historical records exist approximately 50 m away from the southern extent of the Project Area, near MM 174. Species may utilise vegetation within VA6 and VA10.
Amytornis modestus (Thick-billed Grasswren)		VU	5	Likely	North	This species is limited to chenopod shrublands (which occur in the arid and semi-arid zones), especially shrublands dominated by Saltbush (*Atriplex spp.*) and Bluebush (*Maireana spp.*), sometimes with widely scattered trees and in drainage lines (Threatened Species Scientific Committee, 2016).	**Possible.** No records within 50 km, there is a limited survey effort in the area, and species with similar habitat requirements are nearby.
Aphelocephala leucopsis (Southern Whiteface)	23/09/ 2012	VU	3, 5	Known, 15-Apr-2023	North, South	Southern whitefaces live in a wide range of open woodlands and shrublands where there is an understorey of grasses or shrubs, or both. These areas are usually in habitats dominated by acacias or eucalypts on ranges, foothills and lowlands, and plains (Department of Climate Change, Energy, the Environment and Water, 2023).	**Known.** Species observed during the 2025 survey by SLR. Several historical records at the Project Area and surrounds.
Aphelocephala pectoralis (Chestnut-breasted Whiteface)	R		3	16/09/2022	North	This species is only found in the rocky deserts of central and northeastern South Australia. They inhabit stony hills, tablelands, breakaways and rises associated with stony plains. They prefer low and very open constant shrubland of low bluebush, saltbush and a variety of grasses (South Australian Arid Lands Natural Resources Management Board, 2009).	**Unlikely.** One record within 40 km of the northern Project Area, however, this area does not support the habitat requirements for this species.

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
Ardeotis australis (Australian Bustard)	V		3	27/04/2013	South	The Australian Bustard lives on dry plains, grasslands, spinifex plains, low shrublands and open woodlands. They favour tussock and hummock grasslands. Occasionally, they are seen in modified habitat areas such as farmlands, golf courses and near dams (Atlas of Living Australia, 2025).	**Likely.** Multiple records within 50 km of the Project Area, in similar habitat.
Biziura lobata menziesi (Musk Duck)	R		3	8/08/2007	North	The Musk Duck inhabits deep, still lakes and wetlands with areas of both open water and reed beds. This species prefers deep water with extensive bordering reedbeds in freshwater marshes, swamps and lakes. They are also found in estuaries, lagoons and sheltered coasts. They rarely emerge from the water (Atlas of Living Australia, 2025).	**Unlikely.** Project Area does not contain suitable habitat.
Calidris acuminata (Sharp-tailed Sandpiper)		VU	5	Known	North, South	The Sharp-tailed Sandpiper inhabits intertidal mudflats, as well as freshwater swamps and saltwater lakes. As a migratory species, this bird can usually be found in South Australia from September until April (Conservation Advice for Calidris acuminata – Department of Climate Change, Energy, the Environment and Water, 2024).	**Possible.** Saltwater lakes are present within the Project Area and one record exists within 50 km of the southern Project Area. Species may utilise VA1.
Calidris ferruginea (Curlew Sandpiper)	E	CR	5	Likely	North, South	This species inhabits intertidal mudflats, freshwater swamps and saltwater lakes (Atlas of Living Australia, 2025).	**Unlikely.** No records within 50 km of the Project Area. Suitable habitat in saltwater lakes, does exist.
Cinclosoma castanotum	R		3	21/09/2012	North	The Chestnut-backed Quail-thrush is commonly found in mallee habitats characterised by low shrubs and undergrowth. They prefer areas that	**Possible.** Suitable habitat exists, and species in the same genus

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
(Chestnut-backed Quail-thrush)						contain spinifex, chenopods, and various Acacia shrubs (Office of Environment & Heritage, 2017).	(*Cinclosoma sp.*) were identified during the current survey. Species may utilise vegetation within VA6, VA10 and VA13.
Climacteris affinis (White-browed Treecreeper)	R		3	23/09/2012	North	White-browed Treecreepers inhabit arid and semi-arid woodlands dominated by mulga (*Acacia aneura*), belah (*Casuarina spp.*), native pine (*Callitris spp.*), and buloke (*Allocasuarina spp.*). They prefer areas with old-growth trees and dense shrub layers (Wingmate, 2025).	**Possible.** The Project Area supports habitat for this species, however, records are approximately 40 km from the Northern Project Area. Species may utilise VA7.
Corcorax melanorhamphos (White-winged Chough)	R		3	17/09/2007	South	The White-winged Chough is mostly a sedentary and colonial species that inhabits woodlands and taller mallee, where it feeds on the ground amongst the leaf litter. This species tends to prefer wetter areas with leaf litter for feeding and available mud for nest building. This species will inhabit dry woodlands near permanent water sources (Department for Environment and Heritage, 2008b).	**Known.** Species was observed during the current survey by SLR, and suitable habitat exists throughout the southern Project Area. Species may utilise vegetation communities where woodland and mallee exist.
Hieraaetus morphnoides (Little Eagle)	V		3	22/09/2012	North	The Little Eagle is found in open forest, woodlands and croplands. This species occupies habitats rich in prey within open eucalypt forest, woodland or open woodland. They are sometimes found in Sheoak or acacia woodlands. The nesting sites require a tall living tree within a remnant patch of vegetation, where pairs build a large stick nest in winter and lay in early spring (Office of Environment and Heritage NSW, 2021).	**Likely.** Suitable habitat exists; however, only two records occur, approximately 40 km from the Project Area. Species may utilise vegetation communities where woodland exists.

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
Hylacola cauta cauta (Shy Heathwren (EP, YP, FR, MM, upper SE))	R		3	18/09/2007	South	They inhabit mostly mallee woodland that has relatively dense shrub and heath understorey. They prefer habitats with dense shrubby understorey in mallee woodlands, shrublands, or heathland, often among spinifex and shrubs such as Banksia, Hakea, and Grevillea (Wingmate, 2025).	**Possible.** There are multiple records within 30 km and suitable habitat exists in the Project Area. Species may utilise vegetation communities where woodland exists.
Leipoa ocellata (Malleefowl)	V	VU	3, 5	Known, 11/10/2009	South	The Malleefowl will inhabit a wide range of habitats but they are commonly found in scrubland and woodland dominated by mallee and Acacia species (Department for Environment and Heritage, 2024).	**Possible.** Several records within 50 km of the southern extent of the Project Area ad suitable habitat exists. However, unlikely to occur within area proposed for clearance due to degradation of vegetation on edge of road. Species may utilise vegetation communities where dominant mallee woodland exists.
Lerista distinguenda (Southwestern Four-toed Slider)	R		3	1/10/2010	South	This species predominantly occurs in the southwest of Western Australia, and a small population exists in western South Australia. They prefer areas with substantial leaf litter, logs and rocks (Friends of Queens Park Bushland, 2024).	**Unlikely.** There is only one record within 50 km of the Project Area, and the Project Area would provide limited habitat.
Lichenostomus cratitius occidentalis (Purple-gaped Honeyeater (mainland SA))	R		3	19/09/2007	South	This species inhabits dense mallee woodlands, heathlands, and shrubby areas, often with broombush or flowering eucalypts (Wingmate, 2025).	**Possible.** Suitable habitat exists in the southern Project Area, however, the closest records are 40 km away. Species may utilise vegetation

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
							communities where dominant mallee woodland exists.
Melanodryas cucullata (Hooded Robin)	ssp	ssp	3	23/04/2013	North, South	They prefer dry eucalypt and acacia woodlands and shrublands with an open understorey, some grassy areas and a complex ground layer. They avoid woodlands with tall trees or dense tree cover but sometimes occur in tall, dense heaths with scattered open areas. The threatened subspecies is *Melanodryas cucullata cucullata* (South-eastern Hooded Robin) which is not known to occur in the Gawler Ranges region (Department of Climate Change, Energy, the Environment and Water, 2023).	**Unlikely.** The threatened subspecies is not known to occur in the Gawler Ranges.
Microeca fascinans (Jacky Winter)	ssp		3	22/09/2012	North, South	The Jacky Winter inhabits eucalypt and mallee woodland with an open shrub layer and bare ground. This species is often seen in farmlands and parks. They are occasionally seen in shrubland. The threatened subspecies is *Microeca fascinans fascinans*.(Eastern Jacky Winter) (Department for Environment and Heritage, 2008c).	**Unlikely.** The threatened subspecies is not known to occur in the Gawler Ranges region.
Myiagra inquieta (Restless Flycatcher)	R		3	21/10/2008	South	The Restless Flycatcher frequents open forests and woodlands and is often seen in farmland. This species inhabits River Red Gum. This species also occurs in open mallee (*E. oleosa, E. gracilis*) low woodland to low open forest. During winter, individuals will disperse widely and are often seen in roadside vegetation (Department of Environment and Heritage, 2008d).	**Likely.** Several records are within 50 km of the southern Project Area, with the closest being one km away. Suitable habitat exists. Species may utilise vegetation communities where dominant open woodland exists, particularly within *E. oleosa* in VA8.

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
Neophema chrysostoma (Blue-winged Parrot)	V	VU	5	Known	North, South	They tend to favour grasslands and grassy woodlands and are often found near wetlands, both near the coast and in semi-arid zones. The species can also be seen in altered environments such as airfields, golf courses and paddocks (Department of Climate Change, Energy, the Environment and Water, 2023c).	**Unlikely.** No records within 50 km. Suitable habitat may exist in small sections.
Neophema elegans elegans (Elegant Parrot)	R		3	23/09/2007	South	The Elegant Parrot lives in a variety of open environments, including coastal dunes, mallee, eucalypt woodland, grasslands, saltbush and bluebush plains, and lightly wooded agricultural areas (Wingmate, 2025).	**Possible.** The southern extent of the Project Area contains suitable habitat, however, the closest records are approximately 40 km away. Species may utilise vegetation communities where woodland or chenopod shrubland exists.
Nesoptilotis leucotis (White-eared Honeyeater)		ssp	3	19/04/2013	South	The White-eared Honeyeater inhabits forests, woodlands, heathlands, mallee and dry inland scrublands. A eucalyptus canopy, rough bark and a shrub layer are the most important requirements for this species. The threatened subspecies is *Nesoptilotis leucotis thomasi,* which is restricted to Kangaroo Island (Atlas of Living Australia, 2025).	**Unlikely.** The threatened subspecies does not occur in the region.
Pachycephala inornata (Gilbert's Whistler)	R		3	23/09/2012	North, South	Gilbert's Whistlers inhabit semi-arid regions. They are usually found in tall mallee with sparse shrubby understorey, prickly acacia thickets, casuarina woodlands, and occasionally in taller eucalypt forests (Wingmate, 2025).	**Highly Likely.** Several records of the species in both sections of the Project Area, and suitable habitat exists. Species may utilise vegetation

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
							communities where dominant mallee woodland exists.
Petrogale xanthopus xanthopus (Yellow-footed Rock-wallaby (SA and NSW))	V	VU	3, 5	Known, 14/12/2018	South	The Yellow-footed Rock-wallaby inhabits rocky outcrops, boulder piles, cliffs, gorges and steep rocky slopes in semi-arid woodlands (Atlas of Living Australia, 2025).	**Possible.** Species habitat known to occur in the Hiltaba Nature Reserve. Potential scats observed during the 2025 survey by SLR. If species were to occur it would be foraging or moving to rocky outcrop areas. Species may utilise rocky outcrop area within VA10.
Pseudomys australis (Plains Mouse)	V	VU	3	23/09/2012	North	The Plains Mouse can be found in large open gypseous cracking clay areas associated with minor drainage features and depressions within gibber stony plains. The presence of cracking clay soils appears to be more critical than the type or structure of vegetation, as this species has been recorded in various vegetation communities, as well as areas where vegetation is virtually absent during dry periods. The Plains Mouse is most often found in *Eucalyptus coolabah* low woodland and chenopod shrubland. They are nocturnal and live in burrows located at the base of bushes or within cracks (Moseby, K., 2012).	**Possible.** Suitable habitat exists, and survey effort is poor in the northern extent of the Project Area. Species may utilise vegetation communities where cracking clay is present amongst chenopod shrubland within the Project Area.
Sminthopsis psammophila (Sandhill Dunnart)	V	EN	5	Known	North, South	A critical part of habitat for the Sandhill Dunnart is the presence of spinifex hummocks (*Triodia spp.*) in association with sand dunes. In South Australia, the species will inhabit low, open mallee woodland over a diverse shrub layer and relatively dense	**Possible.** No records within 50 km, there is a limited survey effort in the area, and species with similar habitat requirements are nearby. Species may

Species (common name)	NP&W Act	EPBC Act	Data source	PMST presence/ Date of last record	Project Area Location	Species known habitat preferences	Likelihood of use for habitat – Comments
						spinifex with a diversity of Triodia species (Department for Environment and Water, 2019).	utilise vegetation within VA6, VA10 and VA13.
*Strepera versicolor (*Grey Currawong)	ssp		3	24/03/2021	North, South	The Grey Currawong utilises a wide range of habitats, including eucalypt woodlands, mallee, shrublands, farmland and orchards. This species prefers areas with large bushland reserves close by. It has not adapted to urbanisation as it still prefers natural food and shelter within areas with different layers of vegetation. The listed threatened species is *Strepera versicolor plumbea* (South-Western Grey Currawong), which is listed as Endangered under the NP&W Act (Lucid Central, 2025).	**Unlikely.** The threatened subspecies does not occur in the region.
*Tringa nebularia (*Common Greenshank)		EN	3	19/04/2007	North, South	The Common Greenshank forages at the edge of wetlands, in soft mud on mudflats, in channels, or within shallows around the edge of waterbodies. These locations are often situated near or among mangroves or other sparse, emergent or fringing vegetation such as sedges or saltmarsh. (Department of Climate Change, Energy, the Environment and Water, 2024b)	**Unlikely.** There are two records within approximately four km of the Project Area, however, suitable habitat does not occur within the Project Area.
Source: 1- BDBSA, 2 - AoLA, 3 – *NatureMaps* 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act: E= Endangered, V = Vulnerable, R= Rare thanks EPBC Act: Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable							

Table 2: Criteria for the Likelihood of Occurrence of Species Within the Study Area

Likelihood	Criteria
Highly Likely/Known	Recorded in the last 10 years, the species does not have highly specific niche requirements, the habitat is present and falls within the known range of the species distribution or;

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

Reference List

Atlas of Living Australia. Website accessed 2/12/2025. https://www.ala.org.au/

Australian Plants Society NSW. (2020). Website accessed 2/12/2025. https://austplants.com.au/

Botanic Gardens of South Australia. Plant Selector. Website accessed 2/12/2025. https://plantselector.botanicgardens.sa.gov.au/Plants/Details/16215

Brophy, Joseph J.; Craven, Lyndley A.; Doran, John C. (2013). Melaleucas : their botany, essential oils and uses. Canberra: Australian Centre for International Agricultural Research. p. 263. ISBN 9781922137517.

Department for Environment and Heritage. (2008). *Acanthiza iredalei rosinae* - Slender-billed Thornbill (St Vincent Gulf). Government of South Australia.

Department for Environment and Heritage. (2008b). *Corcorax melanorhamphos* White-winged Chough. Government of South Australia.

Department for Environment and Heritage. (2008c). *Microeca fascinans fascinans* Jacky Winter. Government of South Australia.

Department for Environment and Heritage. (2008d). *Myiagra inquieta* Restless Flycatcher. Government of South Australia.

Department for Environment and Heritage. (2024). National recovery plan for Malleefowl (*Leipoa ocellata*). Government of South Australia.

Department for Environment and Water (2019). National Recovery Plan for the Sandhill Dunnart (*Sminthopsis psammophila*). Department for Environment and Water, South Australia.

Department of Agriculture, Water and the Environment. (2008). Approved Conservation Advice for *Frankenia plicata*. Australian Government.

Department of Agriculture, Water and the Environment. (2008b). Approved Conservation Advice for *Hibbertia crispula*. Australian Government.

Department of Climate Change, Energy, the Environment and Water. (2023). Conservation Advice for *Aphelocephala leucopsis* (southern whiteface). Australian Government.

Department of Climate Change, Energy, the Environment and Water. (2024). *Calidris acuminata* (Sharp-tailed Sandpiper). Canberra.

Department of Climate Change, Energy, the Environment and Water. (2023b). Conservation Advice for *Melanodryas cucullata cucullata* (hooded robin (south-eastern)). Canberra.

Department of Climate Change, Energy, the Environment and Water. (2023c). Conservation Advice for *Neophema chrysostoma* (Blue-winged Parrot). Canberra.

Department of Climate Change, Energy, the Environment and Water. (2024b). Conservation Advice for *Tringa nebularia* (common greenshank). Canberra.

Department of Sustainability and Environment. (2010). National Recovery Plan for the Desert Greenhood *Pterostylis xerophila*. Australian Government.

Department of the Environment (2014). Conservation Advice *Amytornis merrotsyi pedleri* short-tailed grasswren (Gawler Ranges). Canberra.

Department of the Environment, Water, Heritage and the Arts. (2008). Approved Conservation Advice for *Limosella granitica* (Granite Mudwort). Australian Government.

Flora SA. (2025). Website accessed 1/12/2025. https://flora.sa.gov.au/

Friends of Queens Park Bushland. (2024). South-western Orange-tailed Slider. Website accessed 2/12/2025. https://www.friendsofqueensparkbushland.org.au/wildlife/southwestern-four-toed-lerista/

Lucid Central. (2025). Strepera versicolor. Website accessed 2/12/2025. https://keyserver.lucidcentral.org/key-server/data/03050501-000c-4503-8203-0a030507090d/media/Html/Strepera_versicolor.htm

Moseby, K. (2012) National Recovery Plan for the Plains Mouse *Pseudomys australis*. Department of Environment, Water and Natural Resources, South Australia.

Office of Environment & Heritage. (2017). Chestnut Quail-thrush – profile. NSW Government. Website accessed 2/12/2025. https://threatenedspecies.bionet.nsw.gov.au/profile?id=10168

Office of Environment and Heritage NSW. (2021). Little Eagle – Profile. NSW Government. Website accessed 2/12/2025. https://threatenedspecies.bionet.nsw.gov.au/profile?id=20131

Plants of South Australia. (2025). Website accessed 1/12/2025. https://syzygium.xyz/saplants/species.html

Seeds of South Australia. (2025). Department for Environment and Water. Website accessed 1/12/2025. https://spapps.environment.sa.gov.au/SeedsOfSA/Flora5/saflora.html

South Australian Arid Lands Natural Resources Management Board. (2009). Chestnut-breasted Whiteface *Aphelocephala pectoralis*. Government of South Australia.

Threatened Species Scientific Committee (2016). Conservation Advice *Amytornis modestus* thick-billed grasswren. Canberra: Department of the Environment.

Tonkinson, D.; Robertson, G. (2010). National Recovery Plan for the Yellow Swainson-pea *Swainsona pyrophila*. Australian Government.

Wingmate. (2025). Birds. Website accessed 2/12/2025. https://www.wingmate.au/au/birds/treecreeper/white-browed-treecreeper

Appendix F Photo Log

Native Vegetation Clearance Data Report

Gawler Ranges Rd – Targeted Re-sheeting Works

Department for Infrastructure and Transport

SLR Project No.: 655.010559.00009

12 March 2026

Photo Log

Photo 1: Significant road damage located outside of re-sheeting scope, near MM 170.	Photo 2: Road damage, near MM 196.	Photo 3: Track damage (erosion), in the track to Pit 1345.

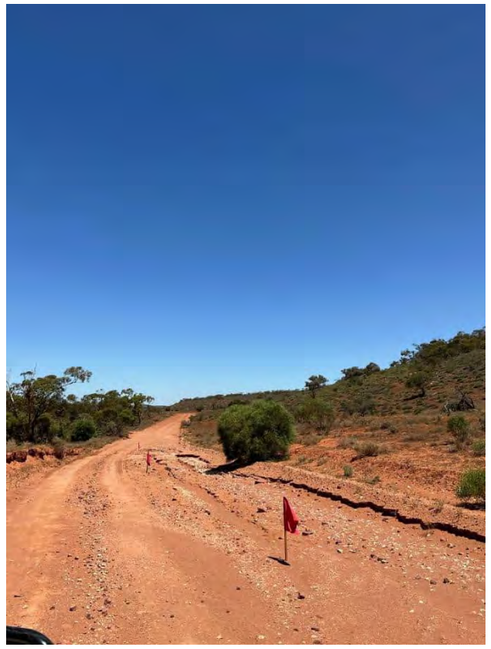
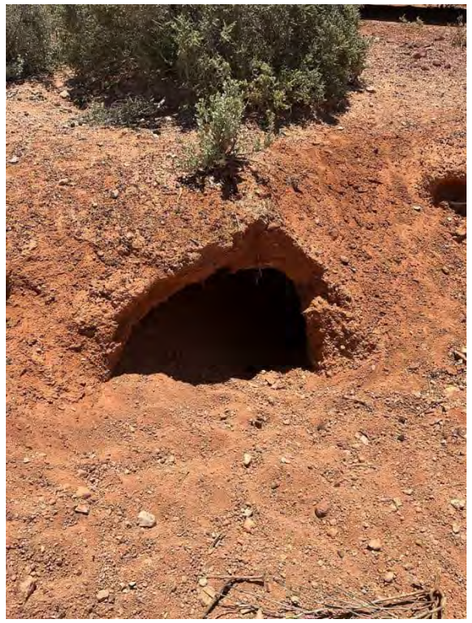
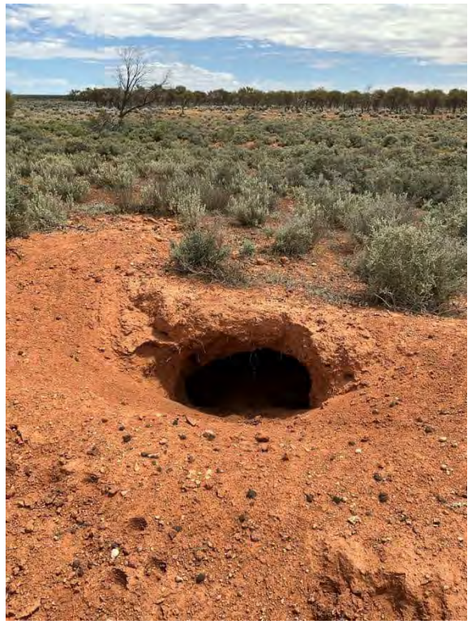
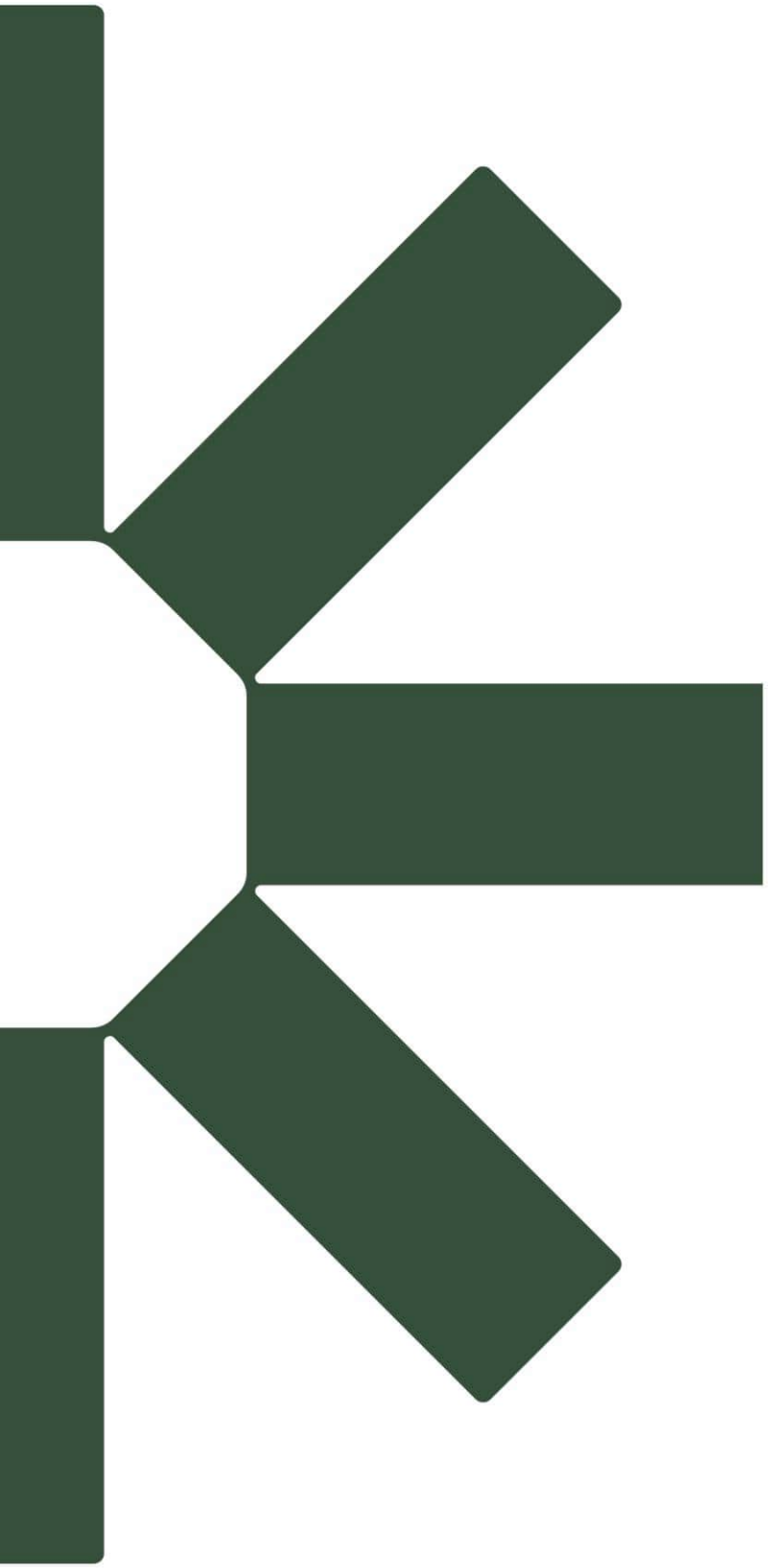



Photo 4: Area for potential new pit 1288.	**Photo 5: Potential mouse burrows near TND at MM 27.285.**	**Photo 6: Potential mouse/marsupial burrow in Priority 3 re-sheeting.**
		

Photo 7: Potential mouse/marsupial burrow in Priority 2 re-sheeting.	Photo 8: Potential mouse/marsupial burrow in Priority 3 re-sheeting.	Photo 9: Potential mouse/marsupial burrow near Pit 1348.
		
Photo 10: Active wombat warren in Priority 3 re-sheeting, near MM 145.	**Photo 11: Active wombat warrens near Pit 1288.**	**Photo 12: Wombat warrens near Pit 1288, looking towards Gawler Ranges Road.**
		

Photo 13: Wombat warrens bordering Pit 1288.	Photo 14: Active wombat warren in a historical pit near Pit 1345.	Photo 15: Active wombat warren near Pit 1288.
		
Photo 13: Grid 779, significant damage.	**Photo 14: Grid 781, significant damage.**	
		



Making Sustainability Happen