Groundwork part of SLR

Native Vegetation Clearance Data Report

RN 12000 Strzelecki Track Upgrade

MM 369 – MM 396

Clearance under the *Native Vegetation Regulations 2017*

Prepared for: Department for Infrastructure and Transport

Date: 17 February 2025

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DOCUMENT CONTROL

PROJECT / DETAILS REPORT

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Client:	Department for Infrastructure and Transport
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1 Applicant Information

Application Details

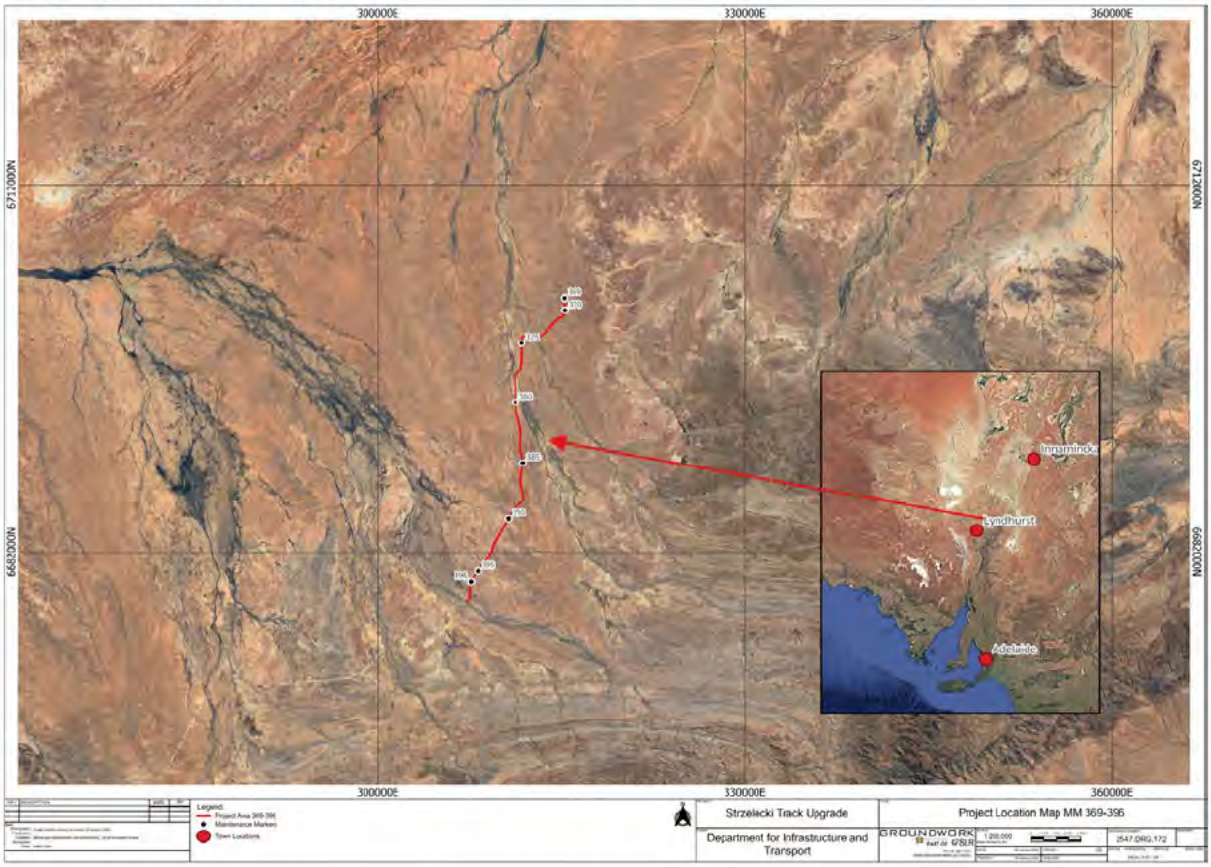
Applicant:	Department for Infrastructure and Transport (DIT)			
Key contact:	Name:	[redacted]		
	Contact details:	[redacted]		
Landowner:	Name:	Road Reserve and Crown Lease		
	Contact details:	As above		
Site address:	RN120000 Strzelecki Track, MM369 – MM396			
Local Government Area:	Pastoral Unincorporated Area		Hundred:	OH (Copley) OH (Marree) OH(Kopperamanna)
Title ID:	CL/6179/606		Parcel ID:	F251575 Q301

Summary of Proposed Clearance

Purpose of clearance	The proposed upgrade of the Strzelecki Track between Maintenance Marker (MM) 369 and MM 396 (the Project Area) forms part of the overall Strzelecki Track upgrade and sealing project and aims to improve transport reliability, travel times, lower transport operating costs and improve road safety. Clearance of vegetation is required where proposed construction activities exceed the current road formation and maintenance activity zone.
Native Vegetation Regulation	*Part 6, Regulation 12 (32)* – Works on behalf of the Commissioner of Highways.
Description of the vegetation under application	A total of 8.54 hectares (ha) of *Sclerolaena spp. +/- Dissocarpus paradoxa* very open low shrubland A total of 0.04 ha of *Eremophila longifolia +/- Acacia spp.* tall open shrubland A total of 0.09 ha of *Acacia victoriae +/- Eremophila duttonii* open shrubland A total of 2.23 ha of *Acacia victoriae* open shrubland A total of 0.09 ha of *Eucalyptus camaldulensis* open forest A total of 0.56 ha of *Maireana astrotricha* open shrubland A total of 2.8 ha of *Maireana pyramidata +/- Atriplex vesicaria* open shrubland

	A total of 2.36 ha of *Santalum lanceolata +/- Acacia victoriae* tall shrubland A total of 1.22 ha of *Sclerolaena spp. +/- Maireana pyramidata* open low shrubland A total of 4.37 ha of *Maireana astrotricha +/- Maireana pyramidata* open shrubland
Total proposed clearance - area (ha) and number of trees	22.3 ha are proposed to be cleared.
Level of clearance	Level 4
Overlay (planning and design code)	Zone – Remote Areas – RA Overlays - Gas and Liquid Petroleum Pipelines, Gas and Liquid Petroleum Pipeline (Facilities), Hazards (Bushfire – Outback), Heritage Adjacency, Hazards (Flooding – Evidence Required), Key Outback and Rural Routes, Native Vegetation, Prescribed Wells Area, State Heritage Place – 65, State Heritage Place – 71, Water Resources, and Significant Landscape Protection.

Map of proposed clearance area



Mitigation hierarchy	Typical road drawings have been produced with the aim to avoid and reduce the native vegetation clearance impacts as well as the potential impacts to heritage sites. The planned Strzelecki Track upgrades are located at areas that have been exposed to a moderate level of previous vegetation clearance associated with road construction and maintenance activities.

	Cut-off drains have been positioned predominantly within existing historical cut- off drains locations, with others located in areas with no previous vegetation clearance. However, clearance is unable to be avoided as cut-off drains are essential to clearing the road of water during rainfall events to maintain road user safety. Similarly, water crossings are required to facilitate the movement of water across the roadway, to ensure safety of road users. Clearance is unable to be avoided to ensure appropriate tying-in with surrounding landscape to ensure that water can flow freely away from the road formation. 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 have been minimised to the lowest possible to achieve the sealing of the roadway and to be an appropriate size for the traffic volume and design speed. Dimensions of cut-off drains and water crossings have been planned to reduce the impact of vegetation clearance whilst still allowing the necessary construction activities to be completed. All contractors will be made aware of the environmental obligations through the implementation of a Contractors Environmental Management Plan (CEMP) during construction to ensure there is no unnecessary damage to surrounding vegetation. 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 $95,114.78, including administration fee of $4,958.60, to be paid into the Native Vegetation Fund (NVF).

2 Purpose of Clearance

2.1 Description

Groundwork part of SLR (Groundwork) have been engaged by DIT to undertake a native vegetation assessment for the purpose of clearance for the Project Area as part of the overall Strzelecki Track Upgrade Project. The Project Area forms part of Stage 3 of the overall upgrade and is currently within the pre-delivery phase. The Strzelecki Track Upgrade Project intends to seal the entirety of the Track over several stages and successive years. Currently, sealing works have been completed for some sections, with some currently in the construction phase. Other sections are still in either design or planning stages.

2.2 Background

The Strzelecki Track is primarily utilised as a transport route for the oil and gas facilities located within the Cooper Basin and the southern access route for the Innamincka township. The direct benefits of the Strzelecki Track upgrade project include, improved transport reliability and safety, improved travel times and lower transport and vehicle operating costs for road users. The Strzelecki Track upgrade is a priority for the Australian and South Australian Governments as it is the only viable land route between Adelaide and the Cooper Basin and is of importance to the expanding oil and gas industry, as well as the pastoral industry in the north east of South Australia.

2.2.1 Interim Biogeographical Regionalisation of Australia (IBRA)

The Project Area is located within the Stony Plains IBRA Region and the Murnpeowie IBRA Subregion. The Stony Plains Region is located across the central to north western parts of the South Australian Arid Lands Landscape Board Region. It is a region of extensive arid stony silcrete tablelands (breakaways), gibber, and gypsum plains crossed by large river floodplains with sparse low chenopod shrublands on duplex soils. Climate is characterised by hot temperatures and persistently low rainfall. Vegetation growth is limited by rainfall and consists of Saltbush, Bluebush, Samphire, Mitchell Grass, or Short-lived Bindyi communities on the Gibber plains with dune fields, swales, and sandy plains dominated by Sandhill Cane-grass. Drainage channels consist of denser vegetation and streams are fringed with Coolabah and River Red Gum (South Australian Arid Lands Biodiversity Strategy - Stony Plains Conservation Priorities, South Australian Arid Lands NRM Board, Department for Environment and Heritage, 2009).

2.2.2 Climate

The nearest weather station is located at Leigh Creek (No. 017110). The regional climate is characterised as arid to semi-arid and is persistently dry. Review of the Government of South Australia's Enviro Data application *NatureMaps* (*NatureMaps*) climate data references a mean annual rainfall of 186 millimetres (mm).

2.3 General Location Map

The Strzelecki Track is located approximately 550 kilometres (km) to the north east of Adelaide, South Australia, refer to **Drawing No. 2547.DRG.172 – Project Location Map MM 369-396** for a visual

representation of the Project Area. Vegetation survey plans for the Project Area are provided as outlined below:

- **Drawing No. 2547.DRG.140 – NVC Proposal – MM 369 - 396 - Section 1**
- **Drawing No. 2547.DRG.141 – NVC Proposal – MM 369 - 396 - Section 2**
- **Drawing No. 2547.DRG.142 – NVC Proposal – MM 369 - 396 - Section 3**
- **Drawing No. 2547.DRG.143 – NVC Proposal – MM 369 - 396 - Section 4**
- **Drawing No. 2547.DRG.144 – NVC Proposal – MM 369 - 396 - Section 5**
- **Drawing No. 2547.DRG.145 – NVC Proposal – MM 369 - 396 - Section 6**
- **Drawing No. 2547.DRG.146R1 – NVC Proposal – MM 369 - 396 - Section 7**

2.4 Details of the Proposal

The proposed upgrade of the Project Area on the Strzelecki Track is between MM 369 and MM 396 and forms part of the overall Strzelecki Track upgrades and sealing project, aiming to improve transport reliability travel times, lower transport operating costs and improve road safety.

The upgraded typical road formation will be based on single lanes of 3.5 metres (m) width, with a sealed shoulder of one (1) m, an unsealed shoulder of one (1) m, totalling in a road formation of 11 m. Longitudinal drainage and batters will extend from the unsealed shoulder, with a 1 in 6 slope into the drain, a 1.5 m drain, and 1 in 4 slope extending out of the drain. A total Construction Activity Zone (CAZ) of 18 m either side of the existing centreline will be required. Cut-off drains will be utilised to ensure water movement away from the road formation in rain events.

Sections identified as minor water crossings and flood ways will be stabilised with a required CAZ of 18 m either side of the existing centreline. Ten major waterways along the Project Area have been identified and have had detailed designs created. A CAZ of 18 m either side of the centreline is required for these sections. Two creek lines are already sealed but may require some maintenance within the existing formation depending on condition.

Construction material will be sourced locally, utilising an existing borrow pit that will be extended. Two (2) existing disturbed areas will also be utilised as stack sites for material, and an existing camp site will be reinstate for use during construction. A series of Maintenance Turn Around Points (MTPs) will also be utilised during construction.

Most of the above construction activities will be contained within the existing road formation and maintenance activity zone (MAZ) and will not require approval for native vegetation clearance, however, there are some areas where activities extend beyond the current MAZ and approval for vegetation clearance is required. It is these areas that are included within this application. Specifically, these areas are:

- A linear strip of vegetation either side of the road formation, of approximately 3.8 m, where the CAZ will extend past the current MAZ,
- Four (4) new MTPs,
- The extension of one (1) cut-off drain, and
- The extension of one (1) borrow pit.

2.5 Approvals Required or Obtained

A review of *NatureMaps* indicated that there has been one (1) other Native Vegetation clearance application relevant along the entire corridor of the Project Area, in 2008 (2008_3120). This was likely associated with other road upgrade activities.

Other environmental legislation relevant to the project includes:

- *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The EPBC Act provides protection for 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 South Australia Act 2019, landholders have a legal responsibility to manage declared pest plants and animals and prevent land and water degradation. The South Australian Arid Lands Landscape Board has the statutory role of enforcing this within the Project Area. Approval may be required for movement of Declared Plant and Water Affecting Activities (WAA) as associated with the Project.
- *Aboriginal Heritage Act 1988* (AH Act). Approval required if damage to Aboriginal Heritage Sites (reported / registered or undocumented) is required. Ministerial authorisation under section 23 of AH Act.

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.

2.6 Native Vegetation Regulation

The proposed works are intended to be undertaken within the provisions of clearance of native vegetation provided under the *Native Vegetation Regulations 2017*, Part 6, Regulations 12 (32) – Works on behalf of Commissioner of Highways.

2.7 Development Application Information (if applicable)

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

3 Method

3.1 Flora Assessment

An online search was undertaken for EPBC Act Matters of National Environmental Significance (MNES) relevant to flora along with a review of *NatureMaps* for historical records of any rare or endangered flora species within 50 km of the Project Area.

Following a review of the background information and literature, an assessment of the Project Area was undertaken in December 2024 by Groundwork Accredited Consultants involving a general vegetation assessment utilising the Native Vegetation Council's (NVC) Rangeland Assessment methodology of the Project Area and identification of suitable growing conditions for species of conservation significance.

The Project Area was surveyed for:

- Remnant and regrowth native vegetation,
- Condition of vegetation,
- Introduced plant species, and
- Suitable growing conditions for identified threatened species.

Representative photographs of the vegetation within the Project Area as well as descriptions of the vegetation are provided within **Section 4.1. Vegetation Assessment**.

3.2 Fauna Assessment

An online search was undertaken for EPBC Act MNES relevant to fauna, as well as a review of *NatureMaps* to determine the potential presence of any rare or endangered fauna species recorded within 50 km of the Project Area.

During the field assessment, vegetation was surveyed to determine habitat potential for all fauna species, in particular threatened species identified through the desktop assessment. Opportunistic records of fauna species were also captured. The likelihood of fauna species identified within the desktop searches as being present within the Project Area was assessed based on the species known habitat preferences and the vegetation associations identified onsite and are detailed within **Section 4.2 Threatened Species Assessment**.

4 Assessment Outcomes

4.1 Vegetation Assessment

The vegetation survey was undertaken in February 2024 by Matthew Jones (Technical Director – Environmental Management, Permitting and Compliance, Native Vegetation Accredited Consultant), and Louise Jaunay (Associate Consultant – Ecology and biodiversity, Native Vegetation Accredited Consultant) from Groundwork. The vegetation assessment identified the majority of perennial species to be in moderate to good condition with some species flowering and setting seed. Due to rainfall over the early Summer 2024 period, there was evidence of short-lived ephemeral species, some identifiable, some not. During drier periods, cover is usually less dense with annual species.

The topography and vegetation associations changed moving through the Project Area. Generally, the Project Area is located within expansive Gibber Plains, dissected by a number of water ways of varying size. This created alternations between dry, expansive plains, flood plains, and creek lines. There are no Heritage Agreements within a 50 km radius of the project area. Vulkathunha-Gammon Ranges National Park is the closest protected area to the Project Area, located approximately 30 km south.

Full assessment of the vegetation attributes and condition scores are provided within **Attachment 1 – Rangeland Assessment Scoresheets**. A list of flora species recorded onsite are provided within **Attachment 2 – Plant Species Recorded (Native and Introduced)**.

Inspection of the Project Area confirmed the presence of native vegetation with the following 10 vegetation associations identified:

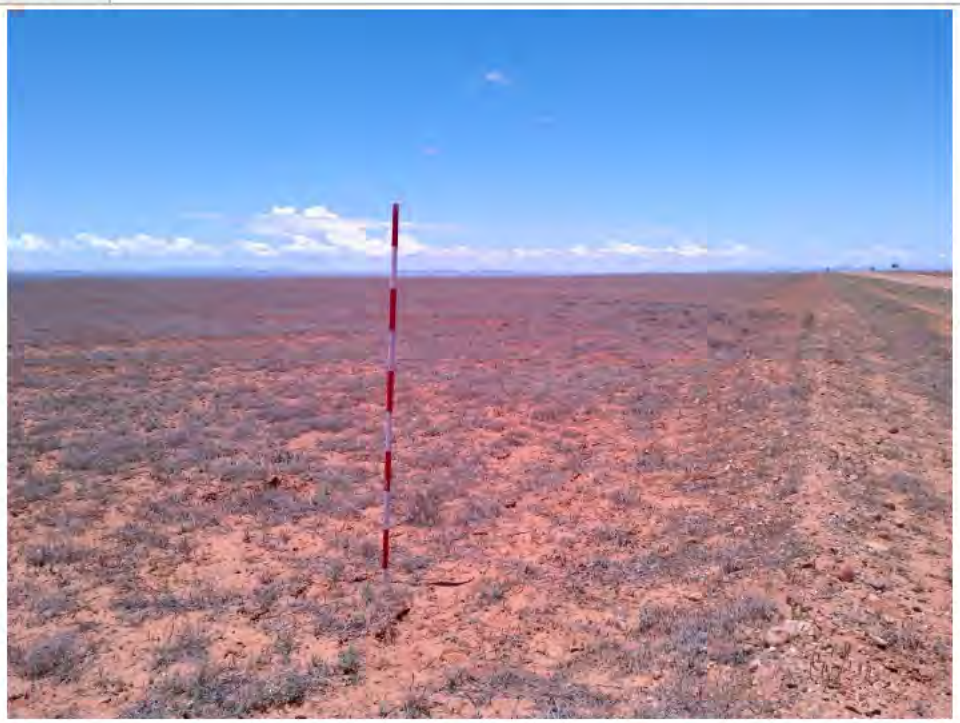
- *Sclerolaena spp. +/- Dissocarpus paradoxa* very open low shrubland
- *Eremophila longifolia +/- Acacia spp.* tall open shrubland
- *Acacia victoriae +/- Eremophila duttonii* open shrubland
- *Acacia victoriae* open shrubland
- *Eucalyptus camaldulensis* open forest
- *Maireana astrotricha* open shrubland
- *Maireana pyramidata +/- Atriplex vesicaria* open shrubland
- *Santalum lanceolata +/- Acacia victoriae* tall shrubland
- *Sclerolaena spp. +/- Maireana pyramidata* open low shrubland
- *Maireana astrotricha +/- Maireana pyramidata* open shrubland

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 1 – Vegetation Association 1** to **Table 10 – Vegetation Association 10** for details of the vegetation associations.

The vegetation associations are connected to surrounding native vegetation and are consistent with regional associations which are well represented. Land use is predominately grazing, with the vegetation showing some evidence of current grazing, particularly within water ways.

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 water ways have been identified as falling within the impact area.

Table 1 – Vegetation Association 1

Vegetation Association 1	*Sclerolaena spp. +/- Dissocarpus paradoxa* very open low shrubland
 **Representative Photo 1 – Gibber Plain with sparse chenopod shrubs Latitude 29° 47'46.45"S, Longitude 139°5'19.61"E**	
General description	Vegetation located on Gibber Plains. Dominated by very low chenopod shrubs, particularly species of *Sclerolaena*. Occasional *Maireana astrotricha*, either as an individual or small clump. Notable presence of dried annual species, as prior conditions had allowed for vegetation germination. Very low evidence of current grazing pressure on perennial species, this may have been due to general lack of palatable species across the higher plains. Very low weed species noted within the areas under application. Vegetation is of a density and condition expected of the region. Dominant native species include: o *Sclerolaena cuneata* o *Sclerolaena brachytpera* o *Atriplex holocarpa* o *Dissocarpus paradoxa* o *Sida sp.* o *Astrebla pectinata* Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full 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 Vegetation Association 1 during the field assessment.

Landscape context score	1.16	**Vegetation condition score**	41.40	**Conservation significance score**	1.10
Unit biodiversity score	52.83	**Area (ha)**	8.54	**Total biodiversity score**	451.17

Table 2 – Vegetation Association 2

Vegetation Association 2	*Eremophila longifolia* +/- *Acacia spp.* tall open shrubland

Representative Photo 2 – Narrow drainage line fringed with vegetation association. Latitude 29° 48'33.41"S, Longitude 139°4'50.62"E

General description	Vegetation located in small drainage lines. Very narrow association, restricted to lower lying wetter areas. Dominated by *Eremophila longifolia*, with lots of regeneration noted. Other taller shrub species consisting of *Pittosporum angustifolium* and *Santalum lanceolatum*. Notable presence of dried annual species, as prior conditions had allowed for vegetation germination. High evidence of current grazing pressure on perennial species, with stock likely attracted to the higher, denser vegetation through the drainage lines. Weed species noted within the areas under application. Vegetation is of a density and condition expected of the region. Dominant native species include: o *Eremophila longifolia* o *Pittosporum angustifolium* o *Santalum lancelatum* o *Acacia victoriae* o *Acacia salicina* o *Sclerolaena longicuspis*

	○ *Rhagodia spinescens* Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full 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 Vegetation Association 2 during the field assessment.				
Landscape context score	1.16	**Vegetation condition score**	39.63	**Conservation significance score**	1.10
Unit biodiversity score	50.57	**Area (ha)**	0.04	**Total biodiversity score**	2.02

Table 3 – Vegetation Association 3

Vegetation Association 3	*Acacia victoriae* +/- *Eremophila duttonii* open shrubland
 **Representative Photo 3 – Shallow drainage depression through hillside with higher shrubs as compared to surrounding vegetation.** **Latitude 29° 48'44.16"S, Longitude 139°4'38.69"E**	
General description	Vegetation located within drainage lines down hillsides. Dominated by *Acacia victoriae* and *Eremophila duttonii* with low chenopods. Rocky ground with minor evidence of erosion from water movement. Some presence of dried annual species, as prior conditions had allowed for vegetation germination. Some evidence of current grazing pressure on perennial species, with stock likely attracted to the higher, denser vegetation through the drainage lines. Some weed species noted within the areas under application. Vegetation is of a density and condition expected of the region. Dominant native species include:

	○ *Acacia victoriae* ○ *Acacia tetragonophylla* ○ *Eremophila duttonii* ○ *Sida intricata* ○ *Sclerolaena longicuspis* ○ *Astrebla pectinata* Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full 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 Vegetation Association 3 during the field assessment.

Landscape context score	1.16	**Vegetation condition score**	34.72	**Conservation significance score**	1.10
Unit biodiversity score	44.30	**Area (ha)**	0.09	**Total biodiversity score**	3.99

Table 4 – Vegetation Association 4

Vegetation Association 4	*Acacia victoriae* open shrubland

Representative Photo 4 – Acacia victoriae shrubland on wide floodplain Latitude 29° 49'12.41"S, Longitude 139°3'50.65"E

General description	Vegetation located lower lying floodplains adjacent larger water courses. Dominated by *Acacia victoriae* over *Rhagodia spinescens* Notable presence of dried annual species, as prior conditions had allowed for vegetation germination.

	Many, very small, recently germinated plants, too small for identification, but likely a combination of introduced weed species and native annuals. Some low evidence of current grazing pressure on perennial species. Some weed species noted within the areas under application. Vegetation is of a density and condition expected of the region. Dominant native species include: o *Acacia victoriae* o *Maireana astrotricha* o *Atriplext holocarpa* o *Sclerolaena cuneata* o *Rhagodia spinescens* o *Santalum lanceolatum* Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full 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 Vegetation Association 4 during the field assessment.				
Landscape context score	1.16	**Vegetation condition score**	43.00	**Conservation significance score**	1.10
Unit biodiversity score	54.87	**Area (ha)**	2.23	**Total biodiversity score**	122.36

Table 5 – Vegetation Association 5

Vegetation Association 5	*Eucalyptus camaldulensis* open forest

Representative Photo 5 – Mature River Red Gum trees in creek bed

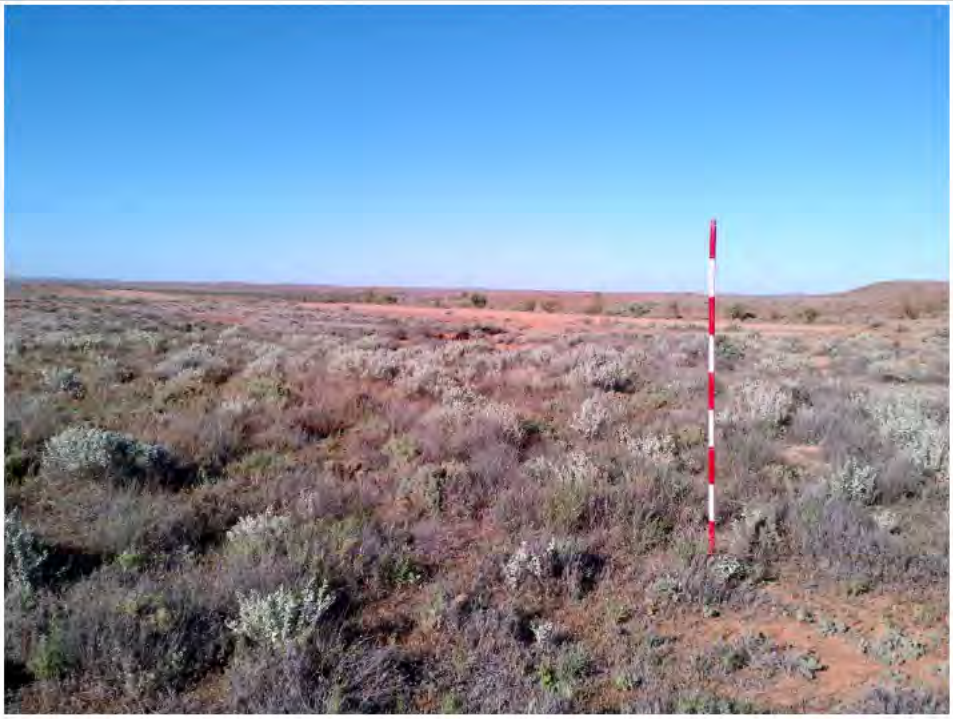
Latitude 29° 49'9.73"S, Longitude 139°3'44.08"E					
General description	Vegetation restricted to major creek lines. Generally low density of vegetation, particularly of understorey species as creek beds are very stony and wash through with large rain events. Occasional dense stand of *Melaleuca glomerata*. Low evidence of current grazing pressure on perennial species, this may have been due to general lack of palatable species within the creek beds. Low weed species noted within the areas under application. Vegetation is of a density and condition expected of the region. Dominant native species include: o *Eucalyptus camaldulensis* (mature trees not to be impacted) o *Acacia salicina* o *Melaleuca glomerata* o *Acacia victoriae* o *Cymbopogon ambiguus* Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full 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 Vegetation Association 5 during the field assessment.				
Landscape context score	1.16	**Vegetation Condition Score**	37.58	**Conservation significance score**	1.10
Unit biodiversity Score	47.95	**Area (ha)**	0.09	**Total biodiversity Score**	4.32

Table 6 – Vegetation Association 6

Vegetation Association 6	*Maireana pyramidata* +/- *Maireana astrotricha* open shrubland				
 **Representative Photo 6 –** Lower lying flood plain, dominated by *Maireana spp.* **Latitude 29° 50'43.95"S, Longitude 139°2'57.92"E**					
General description	Lower lying flood plain adjacent minor water ways. Vegetation dominated by *Maireana spp.* shrubs with scattered *Acacia victoriae*. Notable presence of dried annual species, as prior conditions had allowed for vegetation germination. Many, very small, recently germinated plants, too small for identification, but likely a combination of introduced weed species and native annuals. Limited evidence of current grazing pressure on perennial species. Weed species likely to be present but not identified at time of assessment. Vegetation is of a density and condition expected of the region. Dominant native species include: o *Maireana pyramidata* o *Maireana astrotricha* o *Sclerolaena holtiana* o *Sclerolaena brachytpera* o *Atriplex holocarpa* Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full 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 Vegetation Association 6 during the field assessment.				
Landscape context score	1.16	**Vegetation condition score**	46.13	**Conservation significance score**	1.10

Unit biodiversity score	58.86	**Area (ha)**	0.56	**Total biodiversity score**	32.96

Table 7 – Vegetation Association 7

Vegetation Association 7	*Maireana pyramidata +/- Atriplex vesicaria* open shrubland
 **Representative Photo 7 –** Gibber Plain with sparse chenopod shrubs **Latitude 29° 57'0.53"S, Longitude 139°2'27.17"E**	
General description	Vegetation located on slopes near drainage lines. Dominated by low chenopod shrubs, particularly species of *Atriplex*, *Maireana* and *Sclerolaena*. Occasional *Acacia victoriae*, either as an individual or small clump. Notable presence of dried annual species, as prior conditions had allowed for vegetation germination. Limited evidence of current grazing pressure on perennial species. Very low weed species noted within the areas under application. Vegetation is of a density and condition expected of the region. Dominant native species include: o *Maireana pyramidata* o *Atriplex vesicaria* o *Sclerolaena longicuspis* o *Maireana astrotricha* o *Sclerolaena brachytpera* Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full 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 Vegetation Association 7 during the field assessment.

Landscape context score	1.16	**Vegetation condition score**	47.58	**Conservation significance score**	1.10
Unit biodiversity score	60.71	**Area (ha)**	2.8	**Total biodiversity score**	169.99

Table 8 – Vegetation Association 8

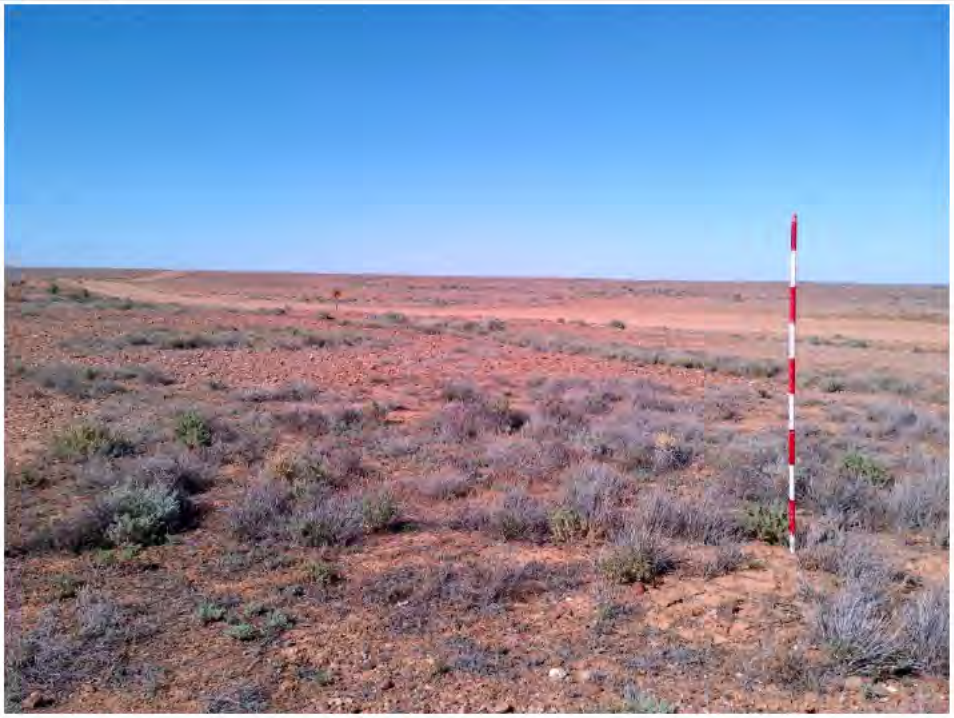
Vegetation Association 8	*Santalum lanceolata +/- Acacia victoriae* tall shrubland

Representative Photo 8 – Gibber Plain with sparse chenopod shrubs
Latitude 29° 57'24.88"S, Longitude 139°2'8.63"E

General description	Convergent smaller drainage lines dissecting through hillsides. Taller vegetation following drainage lines with scattered individuals and clumps between the lines. Notable presence of dried annual species, as prior conditions had allowed for vegetation germination. Very low evidence of current grazing pressure on perennial species, this may have been due to general lack of palatable species across the higher plains. Very low weed species noted within the areas under application. Vegetation is of a density and condition expected of the region. Dominant native species include: o *Sclerolaena cuneata* o *Sclerolaena brachytpera* o *Atriplex holocarpa* o *Dissocarpus paradoxa* o *Sida sp.* o *Aristida sp.*

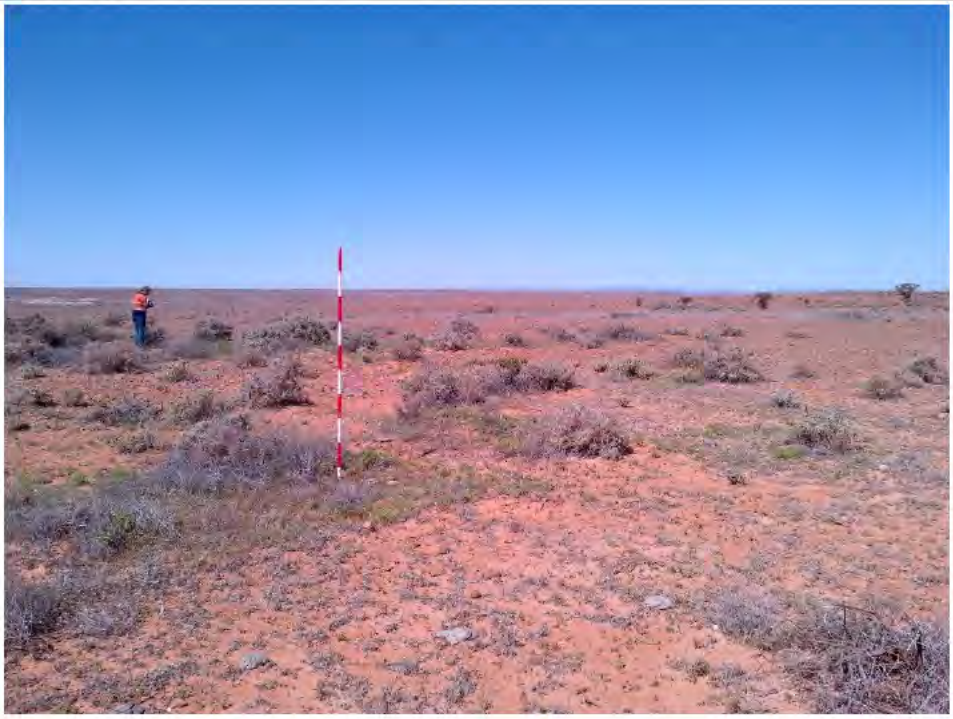
	Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full species list.				
Threatened species or community	No threatened flora species or ecological communities as listed under the EPBC Act or the NP&W Act were recorded within Vegetation Association 8 during the field assessment.				
Landscape context score	1.16	**Vegetation condition score**	54.42	**Conservation significance score**	1.10
Unit biodiversity score	69.44	**Area (ha)**	2.36	**Total biodiversity score**	163.88

Table 9 – Vegetation Association 9

Vegetation Association 9	*Sclerolaena spp. +/- Maireana spp.* open low shrubland
 **Representative Photo 9 – Gibber Plain with sparse chenopod shrubs Latitude 29° 47'46.45"S, Longitude 139°5'19.61"E**	
General description	Vegetation located on stony hillsides between Gibber Plains and drainage lines. Dominated by very low chenopod shrubs, particularly species of *Sclerolaena* and *Maireana*. Notable presence of dried annual species, as prior conditions had allowed for vegetation germination. Low evidence of current grazing pressure on perennial species. Very low weed species noted within the areas under application. Vegetation is of a density and condition expected of the region. Dominant native species include: o *Sclerolaena cuneata* o *Sclerolaena decurrens* o *Sclerolaena brachytpera*

	○ *Atriplex lindleyi* ○ *Atriplex vesicaria* ○ *Maireana pyramidata* ○ *Maireana astrotricha* Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full 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 Vegetation Association 9 during the field assessment.				
Landscape context score	1.16	**Vegetation condition score**	46.60	**Conservation significance score**	1.10
Unit biodiversity score	59.46	**Area (ha)**	1.22	**Total biodiversity score**	72.54

Table 10 - Vegetation Association 10

Vegetation Association 10	*Maireana astrotricha +/- Maireana pyramidata* open shrubland
 **Representative Photo 10 – Gibber Plain with patchy chenopod shrubs** **Latitude 29° 29'55.37"S, Longitude 139°5'26.65"E**	
General description	Vegetation located on Gibber Plains. Dominated by low chenopod shrubs, particularly species of *Maireana*. Notable presence of dried annual species, as prior conditions had allowed for vegetation germination. Some evidence of current grazing pressure on perennial species. Some weed species noted within the areas under application. Vegetation is of a density and condition expected of the region. Dominant native species include:

	○ *Maireana pyramidata* ○ *Maireana astrotricha* ○ *Sclerolaena longicuspis* ○ *Rhagodia spinescens* ○ *Sclerolaena brachytpera* Refer to **Attachment 1 – Rangeland Assessment Scoresheets** and **Attachment 2 – Plant Species Recorded (Native and Introduced)** for a detailed overview of the assessment outcomes and full 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 Vegetation Association 9 during the field assessment.				
Landscape context score	1.16	**Vegetation condition score**	43.05	**Conservation significance score**	1.10
Unit biodiversity score	54.93	**Area (ha)**	4.37	**Total biodiversity score**	240.04

4.2 Threatened Species Assessment

4.2.1 Threatened Flora

A search of *Naturemaps* (2024) found 12 threatened flora species that have previously been recorded within 50 km of the Project Area and within the preceding 20 years:

- *Maireana melanocarpa* (Rare) – One (1) observation 50 km from the Project Area. Last observed in 2023.
- *Eriocaulon carsonii ssp. carson*ii (Endangered) – 69 observations between 40 - 50 km from the Project Area. Last observed in 2015.
- *Acacia araneosa* (Endangered) –Two (2) observations 50 km from the Project Area. Last observed in 2009.
- *Acacia confluens* (Vulnerable) – 14 observations 50 km from the Project Area. Last observed in September 2024.
- *Daviesia stricta* (Rare) – One (1) observation 40 km from the Project Area. Last observed in 2012.
- *Swainsona leeana* (Rare) – One (1) observation 35 km from the Project Area. Last observed in 2010.
- *Goodenia saccate* (Rare) – Three (3) observations 45 km from the Project Area. Last observed in 2015.
- *Codonocarpus pyramidalis* (Endangered) – 91 observations 50 km from the Project Area. Last observed in 2019.
- *Abutilon oxycarpum ssp. prostrate* (Rare [EPBC Act]) – One (1) observation 50 km from the Project Area. Last observed in September 2024.
- *Potamogeton ochreatus* (Rare) – One (1) observation 40 km from the Project Area. Last observed in 2012. Requires water, therefore excluded from assessment.
- *Philotheca angustifolia* ssp. *angustifolia* (Rare) – One (1) observation 40 km from the Project Area. Last observed in 2012.

- *Santalum spicatum* (Vulnerable) – One (1) observation 50 km from the Project Area. Last observed in 2016.

An EPBC Protected Matters Search report (2024) lists the Matters of National Environmental Significance (MNES) in relation to flora that may occur within 50 km of the project footprint, refer to **Attachment 3 – *Environment Protection Biodiversity Conservation Act 1999* Protected Matters Report**.

In summary, the EPBC Protected Matters Search Identified four (4) Listed Threatened Species of flora that may occur: *Eriocaulon carsonii* ssp. *carsonii* (Salt Pipewort), *Acacia araneosa* (Spidery Wattle), *Frankenia plicata* (Sea Heath), and *Codonocarpus pyramidalis* (Slender Bell-fruit).

An assessment of the likelihood of occurrence of listed species has been completed based upon proximity of recent records to the Project Area, species known habitat requirements, and available habitat recorded onsite through field inspections. Refer to **Attachment 4 – Threatened Species Summary** and **Drawing No. 2547.DRG.133 – Threatened Flora Observations**. In summary, all threatened species are considered 'unlikely' to occur or were excluded due to inconsistent habitat requirements.

4.2.2 Threatened Fauna

A search of *NatureMaps* (2024) sought to identify species of State or National Rated Significance previously recorded within 50 km of the Project Area and within the preceding 20 years. A total of 13 State or Nationally listed species were identified in the *NatureMaps* search. An EPBC Protected Matters Search report listed 13 Nationally threatened fauna species additional to those identified through *NatureMaps* that may occur within proximity (50 km buffer applied) to the Project Area. Refer to **Attachment 4 – Threatened Species Summary** and **Attachment 3 – *Environment Protection Biodiversity Conservation Act 1999* Protected Matters Report** for a full report of the species results. Aquatic fauna and sub-species with known distribution outside of the Site were excluded from the results.

An assessment of the likelihood of occurrence of listed species within the Project Area has been completed based upon proximity of recent records, species known habitat requirements, and available habitat recorded onsite through field inspections. Refer to **Attachment 4 – Threatened Species Summary** and **Drawing No. 2547.DRG.134 – Threatened Fauna Observations (MM 369 – MM 396)**. In summary, one (1) species, *Neophema elegans elegans* (Elegant Parrot), was considered 'likely' to occur, and three (3) species, *Amytornis modestus* (Thick-billed Grasswren), *Aphelocephala leucopsis leucopsis* (Southern Whiteface), and *Falco subniger* (Black Falcon), were considered 'possible' to occur. All other species were either excluded or considered 'unlikely' to occur.

The vegetation within the Project Area may provide suitable habitat for multiple fauna species, most notably for bird species. Despite the potential presence of threatened and common fauna species, the proposed works are unlikely to have a significant impact on any fauna populations, based on the narrow linear nature of the works and the location (proximity to the road resulting in increased disturbance and therefore low-quality habitat) and the availability of better-quality vegetation adjacent to the Site.

A project area inspection was undertaken between 03 December and 04 December by Groundwork to assess the on-site habitat and opportunistic fauna observations. The inspection did not find any listed fauna species within the Project Area.

Given the results of the desktop assessment, species found onsite, and scale of proposed impacts, an EPBC Act referral will not be required.

4.3 Cumulative Impact

The planned works are part of a larger project with the entirety of the Strzelecki Track to be upgraded to a seal road. This has involved vegetation clearance at multiple locations and further clearance associated with other stages will also be required. The works are located within close proximity to the existing road boundary, where there is a history of maintenance and construction activities. Sites previously disturbed through construction have regenerated native vegetation well, as evident in the current inspection. It is likely that disturbed areas within the current project, such as batters, will regenerate in a similar fashion. The Project will utilise historical borrow pits that have been established and used for ongoing maintenance activities along the road, therefore reducing the cumulative 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, rubbish, and alterations to surface water through the installation of water crossings. An Environment and Heritage Impact Assessment has been conducted, as per DIT protocol, with mitigation measures for each of these aspects outlined within the assessment. A WAA Assessment has also been conducted to outline any potential impacts to mapped watercourses.

The preparation of a CEMP and a Soil, Erosion, and Drainage Management Plan will manage potential damaging impacts from aspects such as dust and sediment deposition. Appropriate waste management strategies are required to be implemented to ensure no adverse impacts from waste materials left onsite and the design of any floodway infrastructure will ensure the existing surface water flow paths are not altered.

Weed invasion is possible due to the movement of vehicles and machinery within the application areas, with several declared weed species being previously recorded within the region. Introduction of weed species may result in a degradation of remnant surrounding vegetation, however, during construction, strict hygiene practices must be adhered to ensure weed species are not spread or introduced as per the DIT's procedures.

Future clearance of vegetation surrounding the Project Area is unlikely, given the extent of the proposed upgrade works. If future maintenance activities do result in impacts to vegetation, this is likely to be regrowth vegetation within the approved MAZ and is likely to contribute only to a minor accumulation of clearance effect.

4.4 Address the Mitigation Hierarchy

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

Typical road drawings have been produced with the aim to avoid and reduce the native vegetation clearance impacts as well as the potential impacts to heritage sites.

The planned Strzelecki Track upgrades are located at areas that have been exposed to a moderate level of previous vegetation clearance associated with road construction and maintenance activities.

Cut-off drains have been positioned predominantly within existing historical cut- off drains locations, with others located in areas with no previous vegetation clearance. However, clearance is unable to be avoided as cut-off drains are essential to clearing the road of water during rainfall events to maintain road user safety. Similarly, water crossings are required to facilitate the movement of water across the

roadway, to ensure safety of road users. Clearance is unable to be avoided to ensure appropriate tying-in with surrounding landscape to ensure that water can flow freely away from the road formation.

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 have been minimised to the lowest possible to achieve the sealing of the roadway and to be an appropriate size for the traffic volume and design speed.

Dimensions of cut-off drains and water crossings have been planned to reduce the impact of vegetation clearance whilst still allowing the necessary construction activities to be completed.

All contractors will be made aware of the environmental obligations through the implementation of a Contractors Environmental Management Plan (CEMP) during construction to ensure there is no unnecessary damage to surrounding vegetation.

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

It is expected that native vegetation will naturally regenerate all disturbed areas, consistent with observations of past clearance.

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.**

DIT intend to pay into the NVF, the amount required for the SEB, as calculated in **Table 13 – Totals Summary Table**.

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

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

Table 11 – Principles of Clearance Assessment

Principle of clearance	Relevant information	Assessment against the principles	Moderating factors that may be considered by the NVC
Principle 1(b) – significance	The vegetation under application contains habitat components, such as ground-level complexities that provide habitat for fauna species,	Seriously at Variance: Yes	Given the shape, size, and landscape context of the vegetation under application, it is unlikely clearance will lead to

Principle of clearance	Relevant information	Assessment against the principles	Moderating factors that may be considered by the NVC
as a habitat for wildlife	particularly small birds and reptiles. The vegetation is connected with surrounding vegetation that provides similar structure and is not in isolation. Threatened Fauna Scores – All Vegetation Associations: 0.1 Unit Biodiversity Scores – VA1 – 52.83 VA2 – 50.57 VA3 – 44.30 VA4 – 54.87 VA5 – 47.95 VA6 – 58.86 VA7 – 60.71 VA8 – 69.44 VA9 – 59.46 VA10 – 54.93		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 either side of an existing road, therefore clearance will not fragment an existing fauna population into two (2) or more populations. The application area consists of vegetation associations that are regionally well represented and are not critical habitat for any fauna species. Habitat within the application area is likely to provide for common fauna species only. 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. No threatened species have been recorded within the application area therefore clearance is unlikely to interfere with the recovery of any threatened fauna species.
Principle 1(c) – plants of a rare, vulnerable or endangered species	No threatened flora species were recorded within the application areas during the field assessment. Given the disturbance history and physical characteristics (such as soil type) of the Project Area it is unlikely the threatened flora species identified within the desktop assessment would be present. The desktop assessment identified 12 threatened flora species	<u>Seriously at Variance:</u> No <u>At Variance:</u> No	No threatened flora species were recorded during the field assessment and given the proximity of recent records and grazing regime of the vegetation; it is unlikely any threatened flora species would be present within the Project Area. If any threatened flora populations were to be present, given the shape, size,

Principle of clearance	Relevant information	Assessment against the principles	Moderating factors that may be considered by the NVC
	recorded within 50 kms of the Site within the preceding 20 years. Of these, all were considered unlikely to occur within the application areas. Threatened Flora Scores: All Vegetation Associations – 0		and landscape context of the vegetation under application, it is unlikely clearance will lead to a long-term decrease in the size of any flora populations. Furthermore, in the unlikely event threatened flora species were to be present within the application area, it is likely that given the shape and size of the area, a very small portion would be affected.
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. Conservation Significance Scores: All Vegetation Associations – 1.26	<u>Seriously at Variance:</u> No <u>At Variance:</u> No	Not Applicable.

4.6 Risk Assessment

Determine the level of risk associated with the application

Table 12 – Risk Assessment

Total clearance	No. of trees	N/A
	Area (ha)	22.3
	Total biodiversity Score	1263.27
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1(b)
Risk assessment outcome		Level 4

5 Clearance Summary

Table 13 – Clearance Area Summary Table

Block	Site	Threatened Ecological community Score	Threatened plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	SEB Points required	SEB payment	Admin Fee
A	1	1	0	0.1	52.83	8.54	451.17	1	496.29	$33,527.46	$1,844.01
A	2	1	0	0.1	50.57	0.04	2.02	1	2.22	$149.97	$8.25
A	3	1	0	0.1	44.30	0.09	3.99	1	4.39	$296.57	$16.31
A	4	1	0	0.1	54.87	2.23	122.36	1	134.60	$5,373.17	$295.53
A	5	1	0	0.1	47.95	0.09	4.32	1	4.75	$320.89	$17.65
A	6	1	0	0.1	58.86	0.56	32.96	1	36.26	$2,449.59	$134.73
A	7	1	0	0.1	60.71	2.8	169.99	1	186.99	$12,632.33	$694.78
A	8	1	0	0.1	69.44	2.36	163.88	1	180.27	$12,178.35	$669.81
A	9	1	0	0.1	59.46	1.22	72.54	1	79.79	$5,390.31	$296.47
A	10	1	0	0.1	54.93	4.37	240.04	1	264.04	$17,837.54	$981.06
					Total	**22.3**	**1263.27**		**1389.6**	**$90,156.18**	**$4,958.60**

Table 14 – Totals Summary Table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	1263.27	1389.6	$90,156.18	$4,958.60	$95,114.78

Economies of Scale Factor	0.110
Rainfall (mm)	186

6 Significant Environmental Benefit

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

ACHIEVING AN SEB

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

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

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

☐ Apply to have SEB Credit assigned from another person or body. The 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.

PAYMENT SEB

Payment of $93,807.66, including administration fee of $4,890.46, to be paid into the NVF.

DRAWINGS

300000E 330000E 360000E

6712000N

6682000N

369
370
375
380
385
390
395
396

Innamincka
Lyndhurst
Adelaide

REV	DESCRIPTION	DATE	BY

Data
Photography: Google Satellite imagery accessed 30-January-2025
Topography:
Cadastre: Data.sa.gov.au Boundaries are indicative only not all boundaries shown
Ecosystem:
Other: SAR G 2024

Legend:
- Project Area 369-396
- Maintenance Markers
- Town Locations

N

PROJECT: Strzelecki Track Upgrade

CLIENT: Department for Infrastructure and Transport

TITLE: Project Location Map MM 369-396

GROUNDWORK PART OF SLR
PH +61 3871 0411
WWW.GROUNDWORKPLUS.COM.AU

SCALE: 1:250,000 When Printed On A3
0 1,000 2,000 3,000 4,000 m

DRAWING NUMBER: 2547.DRG.172

REVISION:

DATE: 30-January-2025 DRAWN: CL
PRINTED: 30-January-2025 CHECKED:

DATUM: HORIZONTAL / VERTICAL / EPSG:7854
MGA / AHD / 54

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369
367.899
367.906
370
368.719
368.719
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369.481
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370.134
370.29
370.469
370.689
370.879
371
371.113
371.039
371.251

Legend:
- Cultural Approved Pit 480 Extension Area
- VA1
- VA2
- VA3
- VA4
- VA10
- MAZ Area
- MTP MM 350 to 400
- Floodways MM 350 to 400
- Cut off Drains MM 350 to 400
- Road Maintenance Markers (Project Area)

313000E 313500E 314000E 314500E 315000E 315500E

REV	DESCRIPTION	DATE	BY

Data Sources
Photography: Google Satellite imagery accessed 22-November-2024
Topography:
Cadastre: Data.sa.gov.au Boundaries shown are indicative only
Ecosystem:
Other: SARIG 2021

N

PROJEC: Strzelecki Track Upgrade MM 367-369

CLIEN: Department for Infrastructure and Transport

LE: NVC Proposal - MM 369 - 396 - Section 1

GROUNDWORK PART OF SLR
WWW.GROUNDWORK.COM.AU

SCALE: 1:10,000 When Printed On A3
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CHECKED:
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REV SION:
DA UM HORIZON AL/VER CAL/ZONE: MGA / AHD / 54
EPSG 7854

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372
373.435
373.474
375
373.583
373.611
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374.697
374.807
374.921
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375.025
374.588
375.295
375.365
375.4
375.514
375.578
375.73
375.902
376.196
376.329
376.422
376.492

Legend:
- Proposed Alternative Stack Site
- Proposed Boundary Hut South Stack Site
- Existing Stack Site
- VA1
- VA4
- VA5
- VA6
- VA10
- MAZ Area
- MTP MM 350 to 400
- Floodways MM 350 to 400
- Cut off Drains MM 350 to 400
- Road Maintenance Markers (Project Area)

REV	DESCRIPTION	DATE	BY

Base Data Sources
Photography: Google Satellite imagery accessed 22-November-2024
Topography:
Cadastre: Data.sa.gov.au Boundaries shown are indicative only
Ecosystem:
Other: SARIG 2021

N

PROJECT: Strzelecki Track Upgrade MM 367-369

CLIENT: Department for Infrastructure and Transport

LEVEL: NVC Proposal - MM 369 - 396 - Section 2

GROUNDWORK PART OF SLR

SCALE: 1:10,000 When Printed On A3

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DRAWN: LJ

CHECKED:

DRAWING NUMBER: 2547.DRG.141

REVISION:

DATUM: MGA HORIZON: AHD VERTICAL ZONE: 54 EPSG: 7854

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378.855
378.955
379.069
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379.428
379.564
379.776
380.144
380.267

Legend:
- VA1
- VA4
- VA6
- VA10
- MAZ Area
- MTP MM 350 to 400
- Floodways MM 350 to 400
- Cut off Drains MM 350 to 400
- Road Maintenance Markers (Project Area)

REV	DESCRIPTION	DATE	BY

Data Sources
Photography: Google Satellite imagery accessed 22-November-2024
Topography: Data.sa.gov.au Boundaries shown are indicative only
Cadastre:
Ecosystem:
Other: SARIG 2021

N

PROJECT: Strzelecki Track Upgrade MM 367-369

CLIENT: Department for Infrastructure and Transport

LEVEL: NVC Proposal - MM 369 - 396 - Section 3

GROUNDWORK PART OF SLR

SCALE: 1:10,000 When Printed On A3

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DRAWN:

CHECKED:

DRAWING NUMBER: 2547.DRG.142

REVISION:

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

EPSG 7854

REV	DESCRIPTION	DATE	BY

Photography: Google Satellite imagery accessed 22-November-2024
Topography:
Cadastre: Data.sa.gov.au Boundaries shown are indicative only
Ecosystem:
Other: SARIG 2021

N

PROJECT: Strzelecki Track Upgrade MM 367-369

CLIENT: Department for Infrastructure and Transport

TITLE: NVC Proposal - MM 369 - 396 - Section 4

GROUNDWORK PART OF SLR

SCALE: 1:10,000 When Printed On A3

0 50 100 150 200 m

DRAWING NUMBER: 2547.DRG.143

REVISION:

DATE: 22-NOVEMBER-2024

DRAWN:

PRINTED: 22-NOVEMBER-2024

CHECKED:

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

EPSG 7854

310500E 311000E 311500E 312000E 312500E 313000E

6688500N 6688000N 6687500N 6687000N 6686500N 6686000N 6685500N

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384.478
384.639
384.891
385.137
385.745
386.295
386.314
386.437
387.102
387.163
387.449
387.592
387.79
387.99

Legend:
VA1
VA7
VA10
MAZ Area
MTP MM 350 to 400
Floodways MM 350 to 400
Cut off Drains MM 350 to 400

REV	DESCRIPTION	DATE	BY

Data Sources
Photography: Google Satellite imagery accessed 22-November-2024
Topography / Cadastre: Data.sa.gov.au Boundaries shown are indicative only
Ecosystem / Other: SARIG 2021

PROJECT: Strzelecki Track Upgrade MM 367-369

CLIENT: Department for Infrastructure and Transport

LEVEL: NVC Proposal - MM 369 - 396 - Section 5

GROUNDWORK PART OF SLR
WWW.GROUNDWORK.COM.AU

SCALE: 1:10,000 When Printed On A3
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DRAWN: LJ
CHECKED:
DATE:
PRINTED:
DRAWING NUMBER: 2547.DRG.144
REVISION:
DATUM / HORIZONTAL / VERTICAL / ZONE: MGA / AHD / 54
EPSG 7854

308500E 309000E 309500E 310000E 310500E

6685000N 6684500N 6684000N 6683500N 6683000N 6682500N 6682000N

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391.323
391.307
391.802
391.709
392.127
392.093

Legend:
- VA7
- VA8
- MAZ Area
- MTP MM 350 to 400
- Floodways MM 350 to 400
- Cut off Drains MM 350 to 400
- Road Maintenance Markers (Project Area)

REV	DESCRIPTION	DATE	BY

Base Data Source
Photography: Google Satellite imagery accessed 22-November-2024
Topography:
Cadastre: Data.sa.gov.au Boundaries shown are indicative only
Ecosystem:
Other: SARIG 2021

N

PROJECT: Strzelecki Track Upgrade MM 367-369

CLIENT: Department for Infrastructure and Transport

TITLE: NVC Proposal - MM 369 - 396 - Section 6

GROUNDWORK PLUS PART OF SLR

SCALE: 1:10,000 When Printed On A3

0 50 100 150 200 m

DRAWN: LJ

CHECKED:

DRAWING NUMBER: 2547.DRG.145

REVISION:

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

EPSG 7854

306500E 307000E 307500E 308000E 308500E 309000E

6681500N 6681000N 6680500N 6680000N 6679500N 6679000N 6678500N 6678000N

392.195
392.44
393.071
393.238
393.319
393.383
393.482
393.55
393.643
395
393.895
393.884
393.995
394.3
394.33
394.326
396
394.682
394.811
394.95
395.028
395.248
395.386
395.738
395.783
395.916
396.283

Legend:
- Existing Stack Site
- Existing Camp Site
- VA7
- VA8
- VA9
- MAZ Area
- MTP MM 350 to 400
- Floodways MM 350 to 400
- Cut off Drains MM 350 to 400
- Road Maintenance Markers (Project Area)

REV	DESCRIPTION	DATE	BY
1	Amendment to vegetation association area	Feb 2025	LJ

Base Sources
Photography: Google Satellite imagery accessed 22-November-2024
Topography:
Cadastre: Data.sa.gov.au Boundaries shown are indicative only
Ecosystem:
Other: SAR © 2021

PROJEC: Strzelecki Track Upgrade MM 367-369

CLIEN: Department for Infrastructure and Transport

LE: NVC Proposal - MM 369 - 396 - Section 7

GROUNDWORK PART OF SLR WWW.GROUNDWORK.COM.AU

SCALE: 1:10,000 When Printed On A3 — 0 50 100 150 200 m

DRAWN: LJ

CHECKED:

DRAWING NUMBER: 2547.DRG.146

REVISION: 1

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

EPSG 7854

ATTACHMENTS

Attachment 1

Rangeland Assessment Scoresheets

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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 astrotricha	Low Bluebush	P	2			Adult	11.40
Astrebla pectinata	Barley Mitchell-grass	P	2			Adult	
Abutilon halophilum	Plains Lantern-bush	P	2			Adult	
Eragrostis sp.	Love-grass	P	2			Adult	
Arabidella glaucescens		P	2			Young	

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	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	

Vegetation Condition Scores

SITE (name):	VA1	**SIZE OF SITE (Ha)**	8.54
VEGETATION ASSOCIATION DESCRIPTION	Sclerolaena spp +/- Dissocarpus paradoxa low very open shru		
LANDSCAPE TYPE	Plain – level		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	

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.)	☐	☑	☐	1
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)			**9**

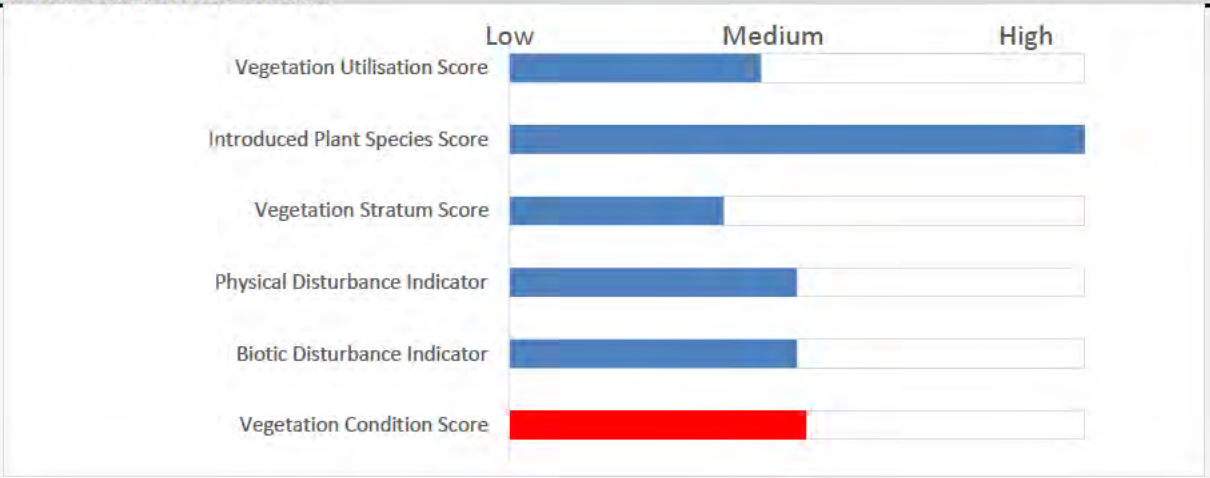
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☐	☐	
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?		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)		11.40

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**41.40**



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)	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	**22**
Score	0.1
CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**41.40**
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)	451.17

Photo Point and Vegetation Survey Location	Direction of the Photo
Insert Photopoint Photo	

GPS Reference	
Datum	
Zone (52, 53 or 54)	
Easting (6 digits)	
Northing (7 digits)	

Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**496.29**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	66.17
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$33,527.46
Administration fee (GST inclusive)	$1,844.01
Total Payment Required	**$35,371.47**

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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)		
Eremophila longifolia	Weeping Emubush	HP		2		Mixed	13.13
Acacia victoriae ssp.	Elegant Wattle	P	2			Mixed	
Rhagodia spinescens	Spiny Saltbush	P	2			Adult	
Eragrostis sp.	Love-grass	P	2			Adult	
Acacia salicina	Willow Wattle	U	2			Mixed	
Pittosporum angustifolium	Native Apricot	HP		2		Mixed	
Santalum lanceolatum	Plumbush	HP		2		Mixed	
Abutilon leucopetalum	Desert Lantern-bush	P	2			Adult	
Acacia tetragonophylla	Dead Finish	P	2			Adult	
Einadia nutans ssp.	Climbing Saltbush	P	2			Adult	
Lycium australe	Australian Boxthorn	U	2			Adult	
Ptilotus obovatus	Silver Mulla Mulla	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	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Tribulus terrestris	Caltrop		Yes	*
Carrichtera annua	Ward's Weed		Yes	*
Sisymbrium erysimoides	Smooth Mustard		Yes	*
Cynodon dactylon var. dactylon	Couch		Yes	*

Vegetation Condition Scores

SITE (name):	VA2	**SIZE OF SITE (Ha)**	0.04
VEGETATION ASSOCIATION DESCRIPTION	Eremophila longifolia +/- Acacia spp. +/- Santalum lanceolatur		
LANDSCAPE TYPE	Drainage lines / floodouts		
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	☐	☑	☐	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.)	☐	☑	☐	1
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☑	☐	☐	0
Destabilised creek channel banks (if present), characterised by no vegetation or stabilizing roots, deflation and bank erosion. Inspect banks on both sides of channels.	☑	☐	☐	0
	Total Score (Max 18 - weighted by 3)			**3**

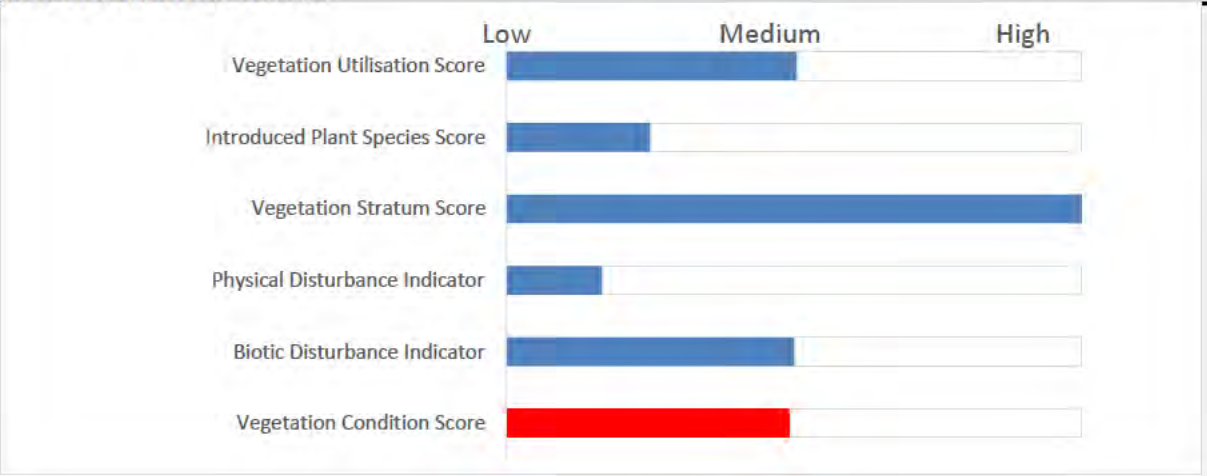
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☑	☐	
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)	13.13

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**39.63**



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)	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)	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	**22**
Score	0.1
CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**39.63**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	50.57
Total Biodiversity Score (Biodiversity Score x hectares)	2.02

Photo Point and Vegetation Survey Location	Direction of the Photo
Insert Photopoint Photo	

GPS Reference	
Datum	
Zone (52, 53 or 54)	
Easting (6 digits)	
Northing (7 digits)	

Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**2.22**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	0.30
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$149.97
Administration fee (GST inclusive)	$8.25
Total Payment Required	**$158.22**

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	8.07	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	0.50	Standard

Future Negative UBS Score	48.55
Future Positive UBS Score	55.72
UBS Gain Score	7.17
Estimate of SEB Points provided	**0.29**

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

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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 victoriae ssp.	Elegant Wattle	P	2	1		Mixed	10.22
Eremophila duttonii	Harlequin Emubush	U	2			Mixed	
Astrebla pectinata	Barley Mitchell-grass	P	2			Adult	
Abutilon halophilum	Plains Lantern-bush	P	2			Adult	
Acacia tetragonophylla	Dead Finish	P	2			Adult	
Enchylaena tomentosa var.	Ruby Saltbush	P	2			Adult	
Eragrostis sp.	Love-grass	P	2			Adult	
Lycium australe	Australian Boxthorn	U			2	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	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Carrichtera annua	Ward's Weed		Yes	*

Vegetation Condition Scores

SITE (name):	VA3	**SIZE OF SITE (Ha)**	0.09
VEGETATION ASSOCIATION DESCRIPTION	Acacia victoriae +/- Eremophila duttonii open shrubland		
LANDSCAPE TYPE	Drainage lines / floodouts		
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	☐	☑	☐	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.)	☐	☑	☐	1
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☑	☐	☐	0
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)			**6**

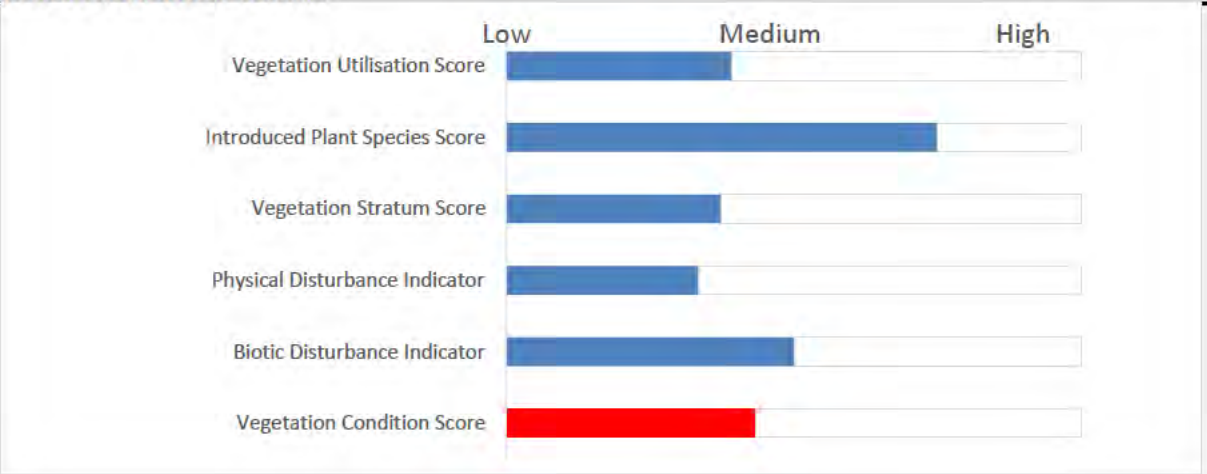
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☐	☐	
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)	10.22

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**34.72**



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)	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	**22**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**34.72**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	44.30
Total Biodiversity Score (Biodiversity Score x hectares)	3.99

Photo Point and Vegetation Survey Location	Direction of the Photo
Insert Photopoint Photo	

GPS Reference	
Datum	
Zone (52, 53 or 54)	
Easting (6 digits)	
Northing (7 digits)	

Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**4.39**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	0.59
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$296.57
Administration fee (GST inclusive)	$16.31
Total Payment Required	**$312.88**

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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 victoriae ssp.	Elegant Wattle	P	2			Mixed	19.50
Maireana astrotricha	Low Bluebush	P	2			Mixed	
Rhagodia spinescens	Spiny Saltbush	P	2			Mixed	
Santalum lanceolatum	Plumbush	HP	2			Mixed	
Acacia tetragonophylla	Dead Finish	P	2			Mixed	
Acacia salicina	Willow Wattle	U	2			Mixed	

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	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Carrichtera annua	Ward's Weed		Yes	*
Tribulus terrestris	Caltrop		Yes	*
Cucumis myriocarpus ssp. myriocarpu	Paddy Melon		Yes	*

Vegetation Condition Scores

SITE (name):	VA4	**SIZE OF SITE (Ha)**	2.23
VEGETATION ASSOCIATION DESCRIPTION	Acacia victoriae open shrubland		
LANDSCAPE TYPE	Drainage lines / floodouts		
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	☐	☑	☐	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.)	☐	☑	☐	1
Evidence of animal tracks, vehicle tracks or other physical disturbance to the natural land surface	☑	☐	☐	0
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)			**6**

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)			**10.0**

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)	19.50

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**43.00**

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)	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)	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	**22**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**43.00**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	54.87
Total Biodiversity Score (Biodiversity Score x hectares)	122.36

Photo Point and Vegetation Survey Location	**Direction of the Photo**
Insert Photopoint Photo	

GPS Reference	
Datum	
Zone (52, 53 or 54)	
Easting (6 digits)	
Northing (7 digits)	

Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**134.60**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	17.95
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.065
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$5,373.17
Administration fee (GST inclusive)	$295.52
Total Payment Required	**$5,668.69**

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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 camaldulensis ssp.	River Red Gum	U	2			Mixed	12.08
Acacia salicina	Willow Wattle	U	2			Mixed	
Melaleuca glomerata	Inland Paper-bark	U	2			Mixed	
Acacia victoriae ssp.	Elegant Wattle	P	2			Mixed	
Lycium australe	Australian Boxthorn	U	2			Adult	
Cymbopogon ambiguus	Lemon-grass	U	2			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	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Argemone ochroleuca ssp. ochroleuca	Mexican Poppy		Yes	*
Cynodon dactylon var. dactylon	Couch		Yes	*

Vegetation Condition Scores

SITE (name):	VA5	**SIZE OF SITE (Ha)**	0.09
VEGETATION ASSOCIATION DESCRIPTION	Eucalyptus camaldulensis open forest		
LANDSCAPE TYPE	Drainage lines / floodouts		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	

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.)	☑	☐	☐	0
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.	☑	☐	☐	0
	Total Score (Max 18 - weighted by 3)			3

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)			**10.0**

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)	12.08

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**37.58**

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)	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	**22**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**37.58**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	47.95
Total Biodiversity Score (Biodiversity Score x hectares)	4.32

Photo Point and Vegetation Survey Location	Direction of the Photo
Insert Photopoint Photo	

GPS Reference	
Datum	
Zone (52, 53 or 54)	
Easting (6 digits)	
Northing (7 digits)	

Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**4.75**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	0.63
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$320.89
Administration fee (GST inclusive)	$17.65
Total Payment Required	**$338.54**

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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 astrotricha	Low Bluebush	P	2			Mixed	16.13
Acacia victoriae ssp.	Elegant Wattle	P	2			Adult	
Maireana pyramidata	Black Bluebush	P	2			Mixed	
Arabidella glaucescens		P	2			Young	

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	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	

Vegetation Condition Scores

SITE (name):	VA6	**SIZE OF SITE (Ha)**	0.56
VEGETATION ASSOCIATION DESCRIPTION	Maireana astrotricha open shrubland		
LANDSCAPE TYPE	Drainage lines / floodouts		
SURFACE CHARACTER **Dominant**	Cracking	**Minor**	

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.)	☐	☑	☐	1
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)			**9**

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)	☐	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)	16.13

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**46.13**

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)	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	**22**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**46.13**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	58.86
Total Biodiversity Score (Biodiversity Score x hectares)	32.96

Photo Point and Vegetation Survey Location	**Direction of the Photo**
Insert Photopoint Photo	

GPS Reference	
Datum	
Zone (52, 53 or 54)	
Easting (6 digits)	
Northing (7 digits)	

Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**36.26**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	4.83
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$2,449.59
Administration fee (GST inclusive)	$134.73
Total Payment Required	**$2,584.32**

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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	17.58
Atriplex vesicaria	Bladder Saltbush	HP	2			Mixed	
Astrebla pectinata	Barley Mitchell-grass	P	2			Adult	
Maireana astrotricha	Low Bluebush	P	2			Mixed	
Acacia victoriae ssp.	Elegant Wattle	P	2			Adult	
Maireana coronata	Crown Fissure-plant	P	2			Mixed	

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	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	

Vegetation Condition Scores

SITE (name):	VA7	**SIZE OF SITE (Ha)**	2.8
VEGETATION ASSOCIATION DESCRIPTION	Maireana pyramidata +/- Atriplex vesicaria open shrubland		
LANDSCAPE TYPE	Ranges and hill slopes		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	

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.)	☐	☑	☐	1
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)			**9**

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)	☐	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)	17.58

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**47.58**

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)	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	**22**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**47.58**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	60.71
Total Biodiversity Score (Biodiversity Score x hectares)	169.99

Photo Point and Vegetation Survey Location	**Direction of the Photo**
Insert Photopoint Photo	

GPS Reference	
Datum	
Zone (52, 53 or 54)	
Easting (6 digits)	
Northing (7 digits)	

Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**186.99**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	24.93
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$12,632.33
Administration fee (GST inclusive)	$694.78
Total Payment Required	**$13,327.11**

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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	17.42
Atriplex vesicaria	Bladder Saltbush	HP	2			Mixed	
Santalum lanceolatum	Plumbush	HP	2			Mixed	
Maireana astrotricha	Low Bluebush	P	2			Mixed	
Acacia victoriae ssp.	Elegant Wattle	P	2			Adult	
Maireana coronata	Crown Fissure-plant	P	2			Mixed	
Rhagodia spinescens	Spiny Saltbush	P	2			Mixed	
Cymbopogon ambiguus	Lemon-grass	U	2			Mixed	
Pittosporum angustifolium	Native Apricot	HP	2			Mixed	
Myoporum insulare	Common Boobialla	P	2			Adult	
Acacia tetragonophylla	Dead Finish	P	2			Adult	
Senna artemisioides ssp. filifolia	Fine-leaf Desert Senna	U	2			Mixed	
Acacia salicina	Willow Wattle	U	2			Mixed	

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	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	
Nicotiana glauca	Tree Tobacco		Yes	*
Sisymbrium erysimoides	Smooth Mustard		Yes	*

Vegetation Condition Scores

SITE (name):	VA8	**SIZE OF SITE (Ha)**	2.12
VEGETATION ASSOCIATION DESCRIPTION	Santalum lanceolata +/- Acacia victoriae tall shrubland		
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.)	☐	☑	☐	1
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.	☑	☐	☐	0
	Total Score (Max 18 - weighted by 3)			**6**

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)	17.42

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**54.42**

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)	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	**22**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**54.42**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	69.44
Total Biodiversity Score (Biodiversity Score x hectares)	147.21

Photo Point and Vegetation Survey Location	**Direction of the Photo**
Insert Photopoint Photo	

GPS Reference	
Datum	
Zone (52, 53 or 54)	
Easting (6 digits)	
Northing (7 digits)	

Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**161.93**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	21.59
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$10,939.37
Administration fee (GST inclusive)	$601.67
Total Payment Required	**$11,541.04**

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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	16.60
Abutilon halophilum	Plains Lantern-bush	P	2			Mixed	
Atriplex vesicaria	Bladder Saltbush	HP	2			Adult	
Maireana astrotricha	Low Bluebush	P	2			Mixed	
Maireana coronata	Crown Fissure-plant	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	
Aphelocephala leucopsis leucopsis	Southern Whiteface	VU		Yes	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	

Vegetation Condition Scores

SITE (name):	VA9	**SIZE OF SITE (Ha)**	1.22
VEGETATION ASSOCIATION DESCRIPTION	Sclerolaena spp. +/- Maireana pyramidata open low shrubland		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	

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.)	☐	☑	☐	1
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)			**9**

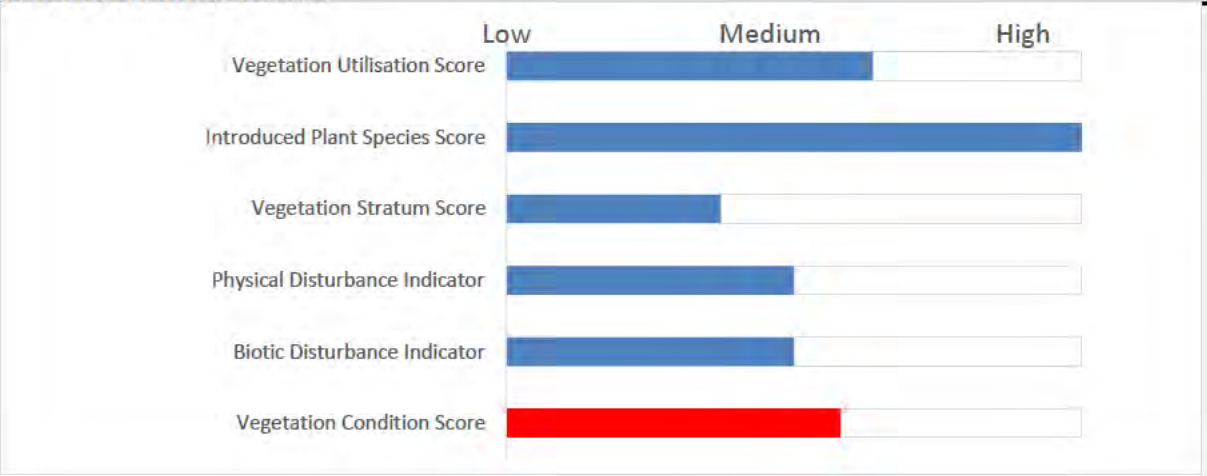
Vegetation Stratum (tick the Present box for all stratum that are present or tick for Absent box of any stratum that should be present but have been removed)	**Present**	**Absent**	*Note; don't tick either box if stratum was likely never present - e.g. Trees stratum in a low shrubland*
Trees/shrubs >3m	☐	☐	
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)	☐	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)	16.60

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**46.60**



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)	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	**22**
Score	0.1
CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**46.60**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =	
UNIT BIODIVERSITY SCORE	59.46
Total Biodiversity Score (Biodiversity Score x hectares)	72.54

Photo Point and Vegetation Survey Location	Direction of the Photo
Insert Photopoint Photo	
	GPS Reference
	Datum
	Zone (52, 53 or 54)
	Easting (6 digits)
	Northing (7 digits)
	Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**79.79**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	10.64
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$5,390.31
Administration fee (GST inclusive)	$296.47
Total Payment Required	**$5,686.78**

Rangelands Assessment Scoresheet

(Version - 1 Sept 2024)

Block (name)	Strzelecki Track
Landscapes Region	South Australian Arid Lands
IBRA Sub Region	Murnpeowie
Property Name	DIT

ASSESSOR(S)	LJ
DATE OF ASSESSMENT	03-06 Dec 2024

Map of the Block (Including the Sites)

Insert Map

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	
<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

% native veg. protected in IBRA Sub region	1
0-2% = 0.05 pts; >2-5% = 0.04 pts; >5-10% = 0.03 pts; >10-25% = 0.02 pt; >25% = 0.01 pt	0.05

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)	**1.16**

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	1		Mixed	13.05
Rhagodia spinescens	Spiny Saltbush	P	2	1		Mixed	
Sida petrophila	Rock Sida	U	2			Mixed	
Maireana astrotricha	Low Bluebush	P	2	1		Mixed	
Eremophila duttonii	Harlequin Emubush	U		2		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	
Falco subniger	Black Falcon		R	Yes	
Neophema elegans elegans	Elegant Parrot		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
Passer domesticus domesticus	House Sparrow	Yes		*
Bos taurus	Cattle (European Cattle)	Yes		*
Canis lupus	Feral Dog, Dingo	Yes		*
Canis lupus dingo	Dingo	Yes		*
Canis sp.		Yes		*
Capra hircus	Goat (Feral Goat)	Yes		*
Equus asinus	Donkey (Feral Donkey)	Yes		*
Equus sp.		Yes		*
Felis catus	Domestic Cat (Feral Cat)	Yes		*
Mus musculus	House Mouse	Yes		*
Oryctolagus cuniculus	Rabbit (European Rabbit)	Yes		*
Ovis aries	Sheep (Feral Sheep)	Yes		*
Vulpes vulpes	Fox (Red Fox)	Yes		*

Introduced Flora Species - Recorded or Observed

Species	Common Name	Past Record	Observed	

Vegetation Condition Scores

SITE (name):	VA10	**SIZE OF SITE (Ha)**	4.37
VEGETATION ASSOCIATION DESCRIPTION	Maireana astrotricha +/- Maireana pyramidata open shrubland		
LANDSCAPE TYPE	Plain – undulating		
SURFACE CHARACTER **Dominant**	Stony	**Minor**	

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.)	☐	☑	☐	1
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)			**9**

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)	☐	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)		13.05

Vegetation Condition Score Calculation

VEGETATION CONDITION SCORE	**43.05**

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)	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	**22**
Score	0.1

CONSERVATION SIGNIFICANCE SCORE	**1.1**

Total Scores for the Site

LANDSCAPE CONTEXT SCORE	**1.16**
VEGETATION CONDITION SCORE	**43.05**
CONSERVATION SIGNIFICANCE SCORE	**1.10**

Vegetation Condition x Landscape Context x Conservation Significance =

UNIT BIODIVERSITY SCORE	54.93
Total Biodiversity Score (Biodiversity Score x hectares)	240.04

Photo Point and Vegetation Survey Location	**Direction of the Photo**
Insert Photopoint Photo	

GPS Reference	
Datum	
Zone (52, 53 or 54)	
Easting (6 digits)	
Northing (7 digits)	

Description

SEB Offset Calculations
(when assessing a proposed clearance site)

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	**264.04**

SEB - Payment	
SEB points of gain/ha Factor	7.5
Approximate SEB hectares required	35.21
Management Cost ($/ha)	$24,764
Economies of Scale Factor	0.11
Mean Annual rainfall for the site (mm)	186
Payment into the Fund (GST exclusive)	$17,837.54
Administration fee (GST inclusive)	$981.06
Total Payment Required	**$18,818.60**

Attachment 2

Plant Species Recorded (Native and Introduced)

Plant Species Recorded (Native and Introduced)

Species	Common Name	EPBC Act	NP&W Act	Introduced	VA1	VA2	VA3	VA4	VA5	VA6	VA7	VA8	VA9	VA10
Abutilon halophilum	Plains Lantern-bush				✓		✓						✓	
Abutilon leucopetalum	Desert Lantern-bush					✓								
Acacia salicina	Willow Wattle					✓		✓	✓			✓		
Acacia tetragonophylla	Dead Finish					✓	✓	✓				✓		
Acacia victoriae ssp.	Elegant Wattle					✓	✓	✓	✓	✓	✓	✓		
Amyema sp.	Mistletoe					✓								
Arabidella glaucescens					✓					✓				
Argemone ochroleuca ssp. ochroleuca	Mexican Poppy			*					✓					
Aristida sp.	Three-awn/Wire-grass										✓			
Astrebla pectinata	Barley Mitchell-grass				✓		✓				✓		✓	
Atriplex holocarpa	Pop Saltbush				✓	✓		✓		✓				
Atriplex lindleyi ssp.	Baldoo												✓	✓
Atriplex vesicaria	Bladder Saltbush										✓	✓	✓	
Carrichtera annua	Ward's Weed			*		✓	✓	✓						
Convolvulus sp.	Bindweed						✓							
Cucumis argenteus	Snake Vine							✓						
Cucumis myriocarpus ssp. myriocarpus	Paddy Melon			*				✓						

Cymbopogon ambiguus	Lemon-grass					✓			✓			✓		
Cynodon dactylon var.	Couch					✓			✓					
Dissocarpus paradoxus	Ball Bindyi				✓									
Einadia nutans ssp.	Climbing Saltbush					✓								
Enchylaena tomentosa var.	Ruby Saltbush						✓							
Enneapogon avenaceus	Common Bottle-washers													
Eragrostis dielsii	Mulka				✓									
Eragrostis sp.	Love-grass					✓	✓						✓	
Eremophila duttonii	Harlequin Emubush						✓							✓
Eremophila freelingii	Rock Emubush													
Eremophila longifolia	Weeping Emubush					✓								
Eucalyptus camaldulensis ssp.	River Red Gum								✓					
Gramineae sp.	Grass Family									✓		✓		
Lycium australe	Australian Boxthorn					✓	✓		✓					
Maireana astrotricha	Low Bluebush				✓			✓		✓	✓	✓	✓	✓
Maireana coronata	Crown Fissure-plant										✓	✓	✓	
Maireana pyramidata	Black Bluebush									✓	✓	✓	✓	✓
Malvastrum americanum var. americanum	Malvastrum													
Melaleuca glomerata	Inland Paper-bark								✓					

Minuria sp.	Minuria				✓		✓			✓	✓	✓		
Myoporum montanum	Native Myrtle											✓		
Nicotiana glauca	Tree Tobacco			*								✓		✓
Nicotiana velutina	Velvet Tobacco									✓				
Osteocarpum sp.	Bonefruit													
Pittosporum angustifolium	Native Apricot					✓						✓		
Plantago sp.	Plantain									✓				✓
Ptilotus obovatus	Silver Mulla Mulla					✓								
Pterocaulon sphacelatum	Apple-bush					✓	✓	✓	✓			✓		
Rhagodia spinescens	Spiny Saltbush					✓		✓				✓		✓
Salsola australis	Buckbush				✓		✓	✓		✓	✓	✓	✓	✓
Santalum lanceolatum	Plumbush					✓		✓				✓		✓
Sclerolaena brachyptera	Short-wing Bindyi				✓					✓	✓	✓	✓	
Sclerolaena cuneata	Tangled Bindyi				✓			✓					✓	
Sclerolaena decurrens	Green Bindyi										✓		✓	✓
Sclerolaena holtiana	Holt's Bindyi									✓				
Sclerolaena intricata	Tangled Bindyi							✓					✓	
Sclerolaena lanicuspis	Spinach Bindyi						✓							
Sclerolaena longicuspis	Long-spine Bindyi				✓	✓	✓				✓			✓
Sclerolaena patenticuspis	Spear-fruit Bindyi													
Senna artemisioides ssp. filifolia	Fine-leaf Desert Senna											✓		
Sida corrugata var.	Corrugated Sida													
Sida intricata	Twiggy Sida				✓		✓	✓		✓	✓			
Sida petrophila	Rock Sida													✓

Sida sp.						✓								
Sisymbrium erysimoides	Smooth Mustard			*		✓						✓		
Tribulus terrestris	Caltrop			*		✓		✓						
Vittadinia sp.	New Holland Daisy								✓					✓
Wahlenbergia sp.	Native Bluebell					✓								

Attachment 3

Environmental Protection Biodiversity Conservation Act 1999 Protected Matters Report

EPBC Act Protected Matters Report

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

Report created: 12-Nov-2024

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	29
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:	None
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:	1
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	6
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 Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
The community of native species dependent on natural discharge of groundwater from the Great Artesian Basin	Endangered	Community likely to occur within area	In buffer area only

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Amytornis merrotsyi merrotsyi			
Short-tailed Grasswren (Flinders Ranges) [86269]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Amytornis modestus			
Thick-billed Grasswren [84121]	Vulnerable	Species or species habitat known to occur within area	In feature area
Aphelocephala leucopsis			
Southern Whiteface [529]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat known to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat may occur within area	In buffer area only
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat known to occur within area	In feature area
Pedionomus torquatus Plains-wanderer [906]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat may occur within area	In feature area
Polytelis alexandrae Princess Parrot, Alexandra's Parrot [758]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat may occur within area	In buffer area only
FISH			
Mogurnda clivicola Flinders Ranges Mogurnda, Flinders Ranges Purple-spotted Gudgeon [66693]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
MAMMAL			

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Notomys fuscus](#) Dusky Hopping-mouse, Wilkiniti [125]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Petrogale xanthopus xanthopus](#) Yellow-footed Rock-wallaby (SA and NSW) [66646]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
[Pseudomys australis](#) Plains Rat, Palyoora, Plains Mouse [108]	Vulnerable	Species or species habitat known to occur within area	In feature area
PLANT			
[Acacia araneosa](#) Spidery Wattle, Balcanoona Wattle [20767]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
[Acacia carneorum](#) Needle Wattle, Dead Finish, Purple-wood Wattle [66685]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Acacia menzelii](#) Menzel's Wattle [9218]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Codonocarpus pyramidalis](#) Slender Bell-fruit, Camel Poison [19507]	Vulnerable	Species or species habitat known to occur within area	In feature area
[Eriocaulon carsonii](#) Salt Pipewort, Button Grass [10584]	Endangered	Species or species habitat known to occur within area	In buffer area only
[Frankenia plicata](#) [4225]	Endangered	Species or species habitat known to occur within area	In feature area
[Pterostylis xerophila](#) Desert Greenhood [7997]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Swainsona murrayana](#) Slender Darling-pea, Slender Swainson, Murray Swainson-pea [6765]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Xerothamnella parvifolia](#) [3141]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			
[Aprasia pseudopulchella](#) Flinders Ranges Worm-lizard [1666]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Listed Migratory Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
[Apus pacificus](#) Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
[Motacilla cinerea](#) Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
[Motacilla flava](#) Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
[Charadrius veredus](#) Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Gallinago hardwickii			
Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis			
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos			
Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Chalcites osculans as Chrysococcyx osculans			
Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine area	In feature area
Charadrius veredus			
Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area overfly marine area	In buffer area only
Gallinago hardwickii			
Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
Haliaeetus leucogaster			
White-bellied Sea-Eagle [943]		Species or species habitat may occur within area	In buffer area only
Merops ornatus			
Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea			
Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava			
Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Neophema chrysostoma			
Blue-winged Parrot [726]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato)			
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves [Resource Information]

Protected Area Name	Reserve Type	State	Buffer Status
Vulkathunha-Gammon Ranges	National Park	SA	In buffer area only

Nationally Important Wetlands [Resource Information]

Wetland Name	State	Buffer Status
Lake Eyre Mound Springs	SA	In buffer area only

EPBC Act Referrals [Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Expansion of the Olympic Dam copper, uranium, gold and silver mine, processing plant and associated	2005/2270	Controlled Action	Post-Approval	In feature area
Four Mile Extension to the Beverley Uranium Mine	2008/4252	Controlled Action	Post-Approval	In buffer area only
Mt Gee Uranium Mining	2007/3716	Controlled Action	Completed	In buffer area only
Prominent Hill Copper-Gold Project	2005/2040	Controlled Action	Post-Approval	In feature area
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
Referral decision				
Four Mile Extension to the Beverley Uranium Mine	2008/4231	Referral Decision	Completed	In buffer area only

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

4 LIMITATIONS

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

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

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

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

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

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

Acknowledgements

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

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

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

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

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Attachment 4

Threatened Species Summary

Table 1 – Threatened Flora Observations

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
PLANTS							
Maireana melanocarpa	Black-fruit Bluebush	R		NatureMaps (2024)	02-Jan-2023	Found on sandy rises around salt lakes. SA: LE FR EA (eFlora SA 2007).	**Excluded.** One (1) observation present 50 km from Project Area. There are no salt lakes present within proximity to the Project Area.
Eriocaulon carsonii ssp. carsonii	Salt Pipewort	E	EN	Nature Maps (2024) Protected Matters Search (2024)	11-Jun-2015	Currently inhabits nine spring complexes in South Australia, twelve in Queensland and one in New South Wales. Occurs in the Bourke, Lake Frome, Lake Eyre and Springvale spring super groups (DCCEEW n.d).	**Unlikely.** 69 observations within approximately 35 - 45 km from the Project Area. This species requires water. While some ephemeral watercourses are present, due to the age of the last recorded observation is it unlikely that this species will be observed.
Acacia araneosa	Spidery Wattle	E	VU	Nature Maps (2024) Protected Matters Search (2024)	29-Apr-2009	Endemic to SA. The species is restricted to a small area of northern Flinders Ranges in the Vulkathunha–Gammon Ranges National Park and the adjacent Arkaroola Sanctuary. The population is known from approximately 1000 individuals (DSEWPCb, 2013). Preferred habitat is calcareous soil on hillsides	**Excluded.** Two (2) observations approximately 50 km from the Project Area. Distribution is restricted to a small region within protected area.

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
						and ridges, associated with dry open woodland of Eucalyptus gillii (Curly Mallee) and Triodia irritans (Spinifex) (Orchard & Wilson 2001). The annual rainfall average is about 200 mm.	
Acacia confluens	Arkaroola Wattle	V		NatureMaps (2024)	18-Sep-2024	Endemic to South Australia occurring in the Northern part of the Flinders Ranges from Mount Lyndhurst eastwards through Arkaroola, Paralana Springs area to the western side of Moolawatana, just into the Lake Eyre region (eFloraSA n.d.). LE, FR and EA regions.	**Unlikely.** 14 observations occur approximately 50 km from the Project Area. All observations are restricted to habitat noticeably different in structure to the Project Area.
Daviesia stricta	Flinders Ranges Bitter-pea	R		NatureMaps (2024)	25-May-2012	Distribution: S.Aust: FR, EA, endemic to inland areas of South Australia (eFlora SA 2007). Grows in shrubland on ridge-tops in the Flinders Ranges of South Australia (Atlas of Living Australia n.d.).	**Unlikely.** One (1) observation is present approximately 40 km from the Project Area. Species is associated with ridge-tops, inconsistent with the topography within the Project Area.
Swainsona leeana	Lee's Swainson-pea	R		NatureMaps (2024)	10-Oct-2010	South Australia regions in LE, FR, and EP (eFloraSA n.d.). Grows in stony soil or clay-loam in dry water courses in scattered locations in the	**Unlikely.** One (1) observation is present approximately 35 km from the Project Area. The species is associated with dry

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
						Flinders Ranges and Kati Thanda-Lake Eyre regions of SA (Atlas of Living Australia n.d.).	watercourses, of which there are multiple with the Project Ara. However due to the distance and the age of the last known observation it is unlikely to occur.
Goodenia saccata	Flinders Ranges Goodenia	R		NatureMaps (2024)	21-Sep-2015	Distribution: On stony slopes and creek beds, S.Aust: FR (eFlora SA 2007). Also found in the ranges of the Lake Torrens basin (Atlas of Living Australia n.d.).	**Unlikely.** Three (3) observations are present approximately 45 km from the Project Area. The species is associated with stony slopes and creek beds, of which are present within the Project Area. However, due to the distance of observations it is unlikely this species would occur.
Codonocarpus pyramidalis	Slender Bell-fruit	E	VU	Nature Maps (2024) Protected Matters Search (2024)	11-Jul-2019	Occurs as scattered individuals across areas of the Flinders Ranges, Northern Lofty Ranges and the eastern regions of South Australia such as within the Murray Darling Basin, Eyre Peninsula, Yorke and Adelaide (DCCEW n.d.). Grows along the crests of hills and ridges, slopes and along creeks, where the soil is either a loamy sand or	**Unlikely.** 91 observations are present approximately 50 km from the Project Area. Due to the distance of observations it is unlikely this species would occur.

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
						sandy clay loam with the pH between 8.5-9 (Davies 1995a).	
Abutilon oxycarpum ssp. Prostrate	Flannel Weed – unspecified sub-species		R	NatureMaps (2024)	18-Sep-2024	*Abutilon oxycarpum* is found naturally on rocky hill slopes, creek banks in dry sclerophyll, and sometimes rainforest, in all Australian states with the exception of Tasmania (Australian Plants Society NSW 2020). Two varieties are known, however habitat requirements for these subspecies is largely undocumented.	One (1) observation is present approximately 50 km from the Project Area. Due to the number and distance of observations it is unlikely this species would occur.
Potamogeton ochreatus	Blunt Pondweed	R		NatureMaps (2024)	23-May-2012	Occurs in still or flowing water to 4.5 m deep. SA: GT FR EA EP MU SL KI SE. Also from all States. New Zealand (eFlora SA 2007).	**Excluded.** One (1) observation is present approximately 40 km from the Project Area. Excluded due to species requirement for still or flowing deep water which is not present.
Philotheca angustifolia ssp. angustifolia	Narrow-leaf Wax-flower	R		NatureMaps (2024)	22-May-2012	Grows in open woodland and mallee in central Victoria and in south-eastern South Australia (iNaturalist n.d.). Occurs in the FR, EP, NL, MU, YP, SL, KI & SE regions of SA On the EP, associated with the Cleve	**Unlikely.** One (1) observation is present approximately 40 km from the Project Area. Due to the distance of observations from and the lack of suitable

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
						Hills and the Koppio Hills Woodland environments.	habitat type it is unlikely this species would occur.
Santalum spicatum	Sandalwood	V		NatureMaps (2024)	23-Jun-2016	Once found across the southwest of Australia and inland regions of low rainfall prior to over-harvesting and land-clearing reducing the range and population (Atlas of Living Australia n.d.). This species grows on loam and among rocks in woodland and tall shrubland. It occurs mostly in the southern half of Western Australia and in South Australia (Australian Plants Online, 2003)	**Unlikely.** One (1) observation is present approximately 50 km from the Project Area. Due to the number and distance of observations it is unlikely this species would occur.
Frankenia plicata	Sea Heath		EN	Protected Matters Search (2024)	Unknown (Species or species habitat known to occur within feature area)	Occurs in South Australia from north of Port Augusta to the Northern Territory border, and from Port Augusta north-east to Maree. Grows in a range of habitats including on small hillside channels, swales of loamy sands to clay. Found in a wide range of vegetation communities that have good drainage (DCCEEW 2008).	**Unlikely.** NatureMaps records exist around MM 320 along the Strzelecki Track, approximately 49 km from the current Project Area. These records are dated from 1994. No other more recent records exist within proximity to the Project Area, therefore the likelihood of occurrence is considered 'unlikely'.

Table 2 – Threatened Fauna Observations

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
BIRDS							
Amytornis merrotsyi	Short-tailed Grasswren	ssp	ssp	NatureMaps (2024)	19-Sep-2024	Inhabit rocky hillsides and gullies, stony rises and ridge-crests covered with mature spinifex *Triodia ssp.* grassland, scattered low shrubs and open overstorey of low trees (Christidis et al. 2008 in BirdLife International 2024). Patchily distributed across Southern South Australia.	**Unlikely.** Nine (9) observations present approximately 40 – 50 km from the Project Area. Despite the recent observation, this species is unlikely to be observed due to the distance of the most recent observation.
Amytornis merrotsyi ssp. merrotsyi	Flinders Ranges Short-tailed Grasswren	V	VU	NatureMaps (2024) Protected Matters Search (2024)	19-Sep-2024	Flinders Ranges subspecies have been reported occurring at approximately 10 sites across their range and there are four main subpopulations: north of Quorn between Dutchman's Stern and Buckaringa and formerly extending to the Ragless Range, in and adjacent to the south-east corner of Ikara-Flinders Ranges National Park; between Black Range and Belton; and in the Gammon Ranges and north of	**Unlikely.** Seven (7) observations are present approximately 40 – 50 km from the Project Area. Known population is restricted to approximately ten (10) sites. Despite the recent observation, this species is unlikely to be observed due to limited distribution.

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
						Arkaroola (Landscape South Australia 2022).	
Amytornis modestus	Thick-billed Grasswren		VU	NatureMaps (2024) Protected Matters Search (2024)	28-Aug-2016	The eastern subspecies of the Thick-billed Grasswren occurs in chenopod shrublands (which occur in the arid and semi-arid zones), especially in shrublands dominated by saltbush *Atriplex spp*. and bluebush *Maireana spp*., sometimes with widely scattered trees. The eastern subspecies is widespread from the Lake Frome basin, west to the eastern Lake Torrens basin, Northwest to near Leigh Creek and Marree, and along the southern and western fringes of the Lake Eyre Basin, and West to the Coober Pedy region. It has also been recently recorded at two sites northwest of Lake Eyre.	**Possible.** Six (6) observations are present approximately 10 - 20 km from the Project Area, on the roadside. The associated habitat of this species is consistent with the surrounding area. A search of the Atlas of Living Australia identified the presence of *Atriplex* and *Maireana* species within the 50 km buffer, and this was confirmed within the field assessment.
Aphelocephala leucopsis leucopsis	Southern Whiteface		sp	NatureMaps (2024) Protected Matters Search (2024)	10-Nov-2023	Inhabits open woodlands from near arid habitats, such as Acacia scrub and hummock grassland, through to the wetter grassy woodlands of SE Australia	**Possible.** Two (2) observations are present approximately 45 km from the Project Area. Given that the most recent observation was in 2023 and

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
						where Eucalyptus dominates (Department for Environment and Heritage 2008). Occurs across southern and central Australia across most of SA, VIC, and NSW, generally avoiding coastal areas in higher rainfall zones (Department for Environment and Heritage 2008).	the Project Area contains some suitable habitat, it is possible that this species may be encountered.
Emblema pictum	Painted Finch	R		NatureMaps (2024)	22-Sep-2024	Found in arid and semi-arid zones, in rocky areas with spinifex grass cover (Elliott and Christie 2010). Distributed across northern and central Australia.	**Unlikely.** A single observation is present approximately 45 km from the Project Area. The field assessment did not find habitat consistent with the preferences of the species.
Falco peregrinus macropus	Peregrine Falcon	R		NatureMaps (2024)	23-Sep-2009	Found in most habitats, rainforests to arid zones, and at most altitudes. Sparsely distributed in SA, with most records in Red Gum woodlands (especially near water), in gorges with rock faces along coastal cliffs (Department for Environment and Water 2008).	**Unlikely.** A single observation is present approximately 45 km from the Project Area. The field assessment confirmed a small amount of Red Gum Woodland, isolated to creek crossings, although none were present in gorges with rock faces.

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
Falco subniger	Black Falcon	R		NatureMaps (2024)	15-Aug-2010	This species is found along tree-lined watercourses and in isolated woodlands, mainly in arid and semi-arid areas (BirdLife Australia, n.d.).	**Possible.** One (1) observation of this species is located 20 km from the Project Area. The field assessment confirmed the presence of some tree-lined watercourses that would provide suitable habitat for the species.
Neophema elegans elegans	Elegant Parrot	R		NatureMaps (2024)	27-Aug-2016	Lives in two separate areas: One in the southwest corner of WA and the other in southern Australia from the Flinders Ranges to just over the NSW and Victorian Borders. Lives in open forests, woodlands, mallee, mulga, salt marsh (Birds in Backyards n.d.).	**Likely.** Three (3) observations are present within 10 – 40 km of the Project Area. The most recent is located on the roadside within 10 km. The presence of the observations on the roadside together with some suitable habitat means that the presence of this species is likely.
Phaps histrionica	Flock Bronzewing	R		NatureMaps (2024)	16-Aug-2013	The Flock Bronzewing is endemic to Australia, occurring mostly in arid, tropical inland areas. The species has a patchy distribution through north-western WA, central-southern Northern Territory, western Queensland, north-eastern South Australia and	**Unlikely.** Two (2) observations approximately 45 km from the Project Area. Preferred habitat type is not thoroughly documented, but the description of arid inland habitat is consistent the environment within the Project Area. However, given

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
						north-western NSW (National Parks and Wildlife Services 1999).	the age of the last observation and its distance, it is unlikely that this species will be encountered.
Falco hypoleucos	Grey Falcon		VU	Protected Matters Search (2024)	Unknown (Species or Species habitat known to occur within feature area)	The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses. The species has been observed hunting in treeless areas and frequents tussock grassland and open woodland, especially in winter (DCCEEW 2022)	**Unlikely.** Dates of the last known (if any) observation are not available, as the species was not identified through *NatureMaps*. The habitat present within the Project Area may be suitable for the species, however, given the lack of observations, it is unlikely to be present.
Neophema chrysostoma	Blue-winged Parrot	V	VU	Protected Matters Search (2024)	Unknown (Species or species habitat known to occur within feature area and within area overfly marine area)	This species mainly occurs in Tasmania and Victoria, particularly in southern Victoria and the midlands and eastern areas of Tasmania however sparser populations are also found in western New South Wales and eastern South Australia, extending to south-west Queensland and occasionally into the Northern Territory. Prefers grasslands and grassy woodlands but will inhabit a range of habitats from	**Unlikely.** NatureMaps shows the species has scattered observations throughout the North East Pastoral region, with the closest record being approximately 60 km south east, recorded in 2021. Given the distance to any previous records, it is unlikely to occur.

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
						coastal, sub-coastal and inland areas, right through to semi-arid zones (Birdlife Australia n.d.).	
MAMMALS							
Macrotis lagotis	Greater Bilby (Bilby)	V	VU	NatureMaps (2024)	12-Dec-2017	Found in a range of habitats from arid rocky soils with little ground cover to semi-arid shrublands and woodlands. They are also known to inhabit spinifex and tussock grassland regions. Once common throughout the arid and semi-arid regions of the Australian mainland, however European settlement brought about changes to habitat. Populations are now found within the Tanami Desert of the Northern Territory; in the Great Sandy and Gibson Deserts; parts of the Pilbara and Kimberley (near Broome) regions of western Australia; and the clayey and stony soils of the Mitchell grasslands of southwest Queensland (The Australian Museum 2022).	**Unlikely.** One (1) observation is present approximately 45 km from the Project Area, however, no suitable habitat within the Project Area.

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
Notomys fuscus	Dusky Hopping-mouse	V	VU	Nature Maps (2024) Protected Matters Search (2024)	07-Aug-2011	Patchy distribution in the arid areas of south-west Queensland, southern NT, north-east SAS and western NSW. Extensive surveys of suitable habitat (e.g., in the Strzelecki dunefields) confirmed that the species is patchily distributed and highly fragmented. There is a band of suitable habitat between Sturt Desert National Park (NP) through to Strzelecki Regional Reserve (RR) and Cobbler Dunes (DCCEEW n.d.).	**Unlikely.** No suitable habitat within Project Area.
Petrogale xanthopus xanthopus	Yellow-footed Rock-wallaby	SP	VU	Nature Maps (2024) Protected Matters Search (2024)	02-Jan-2023	In South Australia, colonies persist in the Gawler Ranges, Flinders Ranges and Olary Hills. At least 24 colonies are known to have become extinct in South Australia. Most of these represent at least half of the known colonies in the Olary Hills and Gawler Ranges regions. The main locations in which the Yellow-footed Rock-wallaby currently exists are Flinders Rangers (North, including	**Unlikely.** 203 observations are present between 20-50 km from the Project Area, mainly restricted to the mountainous area to the south. Considered unlikely to occur due to unsuitable habitat.

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
						Flinders Range National Park), Flinders Ranges (Central), Gawler Ranges, Olary Ranges (DCCEEW n.d.).	
Pseudomys australis	Plains Rat		VU	Protected Matters Search (2024)	Unknown (Species or species habitat known to occur within feature area)	Habitat that is critical to the survival of the species include large open gypseous cracking clay areas with minor drainage features and depressions within stony gibber plains. Plains mice have also been largely associated with vegetation communities that include, Eucalyptus coolabah (Coolibah) low woodland, Atriplex nummularia (Oldman Saltbush), Maireana aphylla (Cottonbush) / Eragrostis setifolia (Bristly Love-grass) / Astrebla pectinata (Barley Mitchell-grass) / Atriplex vesicaria (Bladder Saltbush) Low Very Open Shrubland and Sclerolaena divaricata (Tangled Bindyi) / Eragrostis Setifolia / Atriplex vesicaria Low Open Shrubland (Brandle 1998).	**Unlikely.** Closest known records are approximately 55 km from the Project Area, within the Gammon Ranges. Unlikely to occur within the Project Area due to proximity of records.
REPTILES							

Species Scientific Name	Common Name	NP&W Act	EPBC Act	Data Source	Date of Last Record	Species Known Habitat Preferences	Likelihood of Use for Habitat - Comments
Morelia spilota	Carpet Python	R		NatureMaps (2024)	29-Sep-2005	Found throughout mainland Australia with the exception of the arid centre and western regions. Widely distributed throughout the forest regions of Southwest Australia. Occurs in a wide variety of habitats, including River Red Gum/Riverbox woodlands of the Murray and Darling Rivers, temperate grasslands with hot, dry weather, and often found near human habitation.	**Unlikely.** One (1) observation is present approximately 50km from the Project Area. Due to the distance and age of the last known observation it is unlikely this species would occur.

Table 3 – Species Rating Terms

National Parks and Wildlife Act (NP&W Act)	
Abbreviation	*Meaning*
R	Rare
V	Vulnerable
E	Endangered
ssp	Sub-species
sp	Unspecified species

Environmental Protection Biodiversity Conservation Act (EPBC Act)	
Abbreviation	*Meaning*
R	Rare
VU	Vulnerable
EN	Endangered
ssp	Sub-species
sp	Unspecified species