



**JS Ayre & Associates**

PO Box 123

EDWARDSTOWN SA 5039

M: 0416 151 234

E: ayrej@ihug.com.au

# Native Vegetation Clearance

VS 2022/24

Hog Bay Road Kangaroo Island

MM 0 – MM 52

Road Upgrade Project

Data Report

Clearance under the *Native Vegetation Regulations 2017*

21 August 2022

Prepared by JS Ayre & Associates

# Table of contents

1. Application information
2. Purpose of clearance
  - 2.1 Description
  - 2.2 Background
  - 2.3 Details of the proposal
  - 2.4 Approvals required or obtained
  - 2.5 Native Vegetation Regulation
  - 2.6 Development Application information (if applicable)
3. Method
  - 3.1 Flora assessment
  - 3.2 Fauna assessment
4. Assessment outcomes
  - 4.1 Vegetation assessment
  - 4.2 Threatened Species assessment
  - 4.3 Cumulative impacts
  - 4.4 Addressing the Mitigation hierarchy
  - 4.5 Principles of clearance
  - 4.6 Risk Assessment
5. Clearance summary
6. Significant environmental benefit
7. Appendices


# 1. Application information

## Application Details

Applicant:	Department for Infrastructure and Transport		
Key contact:			
Landowner:	The Crown		
Site Address:	Hog Bay Road, MM 0 (Playford Highway) to MM 52 (Penneshaw)		
Local Government Area:	Kangaroo Island Council	Hundred:	Menzies,
Title ID:	N/A Road Reserve	Parcel ID	N/A Road Reserve

## Summary of proposed clearance

Purpose of clearance	Clearance is required to facilitate road upgrade works including shoulder sealing, culvert upgrades, curve widening and hazard protection or removal.
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 32, Works on behalf of Commissioner of Highways
Description of the vegetation under application	<p><u>Size, type and general condition</u> – total 1.1455ha made up of:</p> <p>VA 1. 0.098 ha of <i>Eucalyptus diversifolia</i>, <i>E. cosmophylla</i> mallee woodland</p> <p>VA 2. 0.02 ha of <i>Eucalyptus rugosa</i>, <i>E. diversifolia</i> mallee woodland</p> <p>VA 3. 0.336 ha of <i>Eucalyptus cneorifolia</i>, <i>E. diversifolia</i> mallee woodland</p> <p>VA 4. 0.303 ha of <i>Eucalyptus cneorifolia</i>/ <i>E. diversifolia</i>/ <i>E. rugosa</i> open forest</p> <p>VA 5. 0.114 ha of <i>Eucalyptus cneorifolia</i>, <i>E. cosmophylla</i>, <i>E. diversifolia</i>, mid mallee</p> <p>VA 6. 0.0635 ha of <i>Myoporum insulare</i>, <i>Leucopogon parviflorus</i>, <i>Olearia axillaris</i> tall shrubland</p> <p>VA 7. 0.0825 ha of <i>Melaleuca halmaturorum</i>, <i>M. brevifolia</i>, <i>M. lanceolata</i> low woodland</p> <p>VA 8. 0.07 ha of <i>Leucopogon parviflorus</i>, <i>Olearia axillaris</i>, <i>Myoporum insulare</i> shrubland</p> <p>VA 9. 0.0585 ha of <i>Melaleuca halmaturorum</i>, <i>M. brevifolia</i> shrubland</p>
Total proposed clearance - area (ha) and number of trees	1.1455 ha of remnant vegetation is likely to be impacted.
Level of clearance	Level 4
Overlay (Planning and Design Code)	N/A

Map of proposed clearance area	
	
Mitigation hierarchy	There is minimal scope for amendments or alternatives as standards for design and safety need to be adhered to. Guard rails proposed for sites with high value vegetation, otherwise requiring removal to meet safety standards.
SEB Offset proposal	Payment of <b>\$58,367.53</b>

## 2. Purpose of clearance

### 2.1 Description

The Department for Infrastructure and Transport (DIT) proposes to upgrade Hog Bay Road to improve road safety, vehicle flow, freight productivity and to improve north-south connection to the main arterial route to enhance bushfire resilience. Much of the road, which travels between Kingscote (Playford Highway junction) and Penneshaw, is fringed with remnant vegetation, some of which will be impacted by shoulder sealing, curve widening, culvert upgrades and hazard protection or removal.

### 2.2 Background

Hog Bay Road is an arterial road providing the main transport link between the town of Kingscote and Penneshaw, where the ferry from Cape Jervis docks. The road upgrade works is scheduled to occur in three parts – the realignment of the junctions of Hog Bay Road with Arronmore Road and Elsegood Road (VS 2022/21); general infrastructure upgrade works from MM 0 – MM 52 (this report); and an overtaking lane at MM 50 – MM 52 (VS 2022/022). Each of the parts are subject to separate clearance applications (submitted, or in progress).

Roadsides in the area of works are mostly well vegetated, with road reserves from around 20m and up to 100m wide, often linking to significant patches of remnant vegetation on private land. Most of the adjacent properties are farmland used for sheep grazing. Small townships and localities occur within a few hundred meters off the main road, including Brown Beach, American Beach, Baudin Beach and Nepean Bay.



**Figure 1.** Location of the site

### 2.3 Details of the proposal

The project scope includes the following works:

- Shoulder sealing along most of the road length
- Curve widening at approximately 20 locations
- Guard fence replacement, installation or extension to protect hazards
- Upgrades to approximately 40 culverts
- Hazard removal where protection is not feasible

The design aims to achieve a lane width of 3.3m, plus 1m sealed shoulders (2m on outside curves), 0.5m of unsealed shoulder, and 1m deflection zone behind guard fence. This additional 1m was also applied where no guard fence is proposed, serving as a 1.0m contractor's activity zone (CAZ). A minimum 6m from centreline was assessed, with minimum 7m where curve widening was proposed.

Ninety sites were assessed as potentially impacted, including up to 40 culvert sites, some on both sides. Table 1 gives an indication of the impacted sites, their location, and vegetation community. The estimated area of impact is considered worst-case scenario, accounting for the maximum area likely to result from final design and contractor's activity zones during construction.

## 2.4 Approvals required or obtained

- Native Vegetation Act 1991  
An application to clear native vegetation is required. This data report and accompanying scoresheets and shapefile is in part fulfillment of this requirement.
- Environment Protection and Biodiversity Conservation Act 1999 (impacts on MNES)  
The road occurs in areas that are identified as MNES under this Act. Whilst the impact is not considered significant, a referral may be required.
- Landscapes SA (e.g. water affecting activity permit)  
The works may impact watercourses and permits may be required under this Act
- Aboriginal Heritage Act 1988– work will be mainly within the previously disturbed shoulder and verge and is not considered to pose a high risk of encountering Aboriginal sites or objects. The Departmental SOP is a guideline for the assessment and management of Aboriginal objects, sites and remains, should any be disturbed during construction of infrastructure projects or maintenance activities. This will be provided to all contractors.

## 2.5 Native Vegetation Regulation

Regulation 12, Schedule 1; clause 32, Works on behalf of Commissioner of Highways

## 2.6 Development Application information (if applicable)

Not applicable

# 3. Method

## 3.1 Flora assessment

Desktop reviews of relevant databases and websites were undertaken prior to site assessment. An online search was undertaken for Environment Protection and Biodiversity Conservation (EPBC) Act "Matters of Environmental Significance" and an interrogation of the BDBSA databases was completed as background to the field assessment.

Thirty three threatened plant species were recorded in the database search with the search criteria of within 5km of the site, recorded since 1995 (see Appendix 3). Two - *Beyeria subsecta* and *Xanthorrhoea semiplana ssp. tateana* - were found during the assessment. The survey was undertaken in mid-winter, when many annual species are not evident, and diagnostic features on most of the perennial species, such as flowers or fruit, are not present, making species confirmation sometimes difficult.

Two EPBC and/or State threatened communities are potentially present amongst the vegetation impacted.

The assessment took place over the 13<sup>th</sup> – 17<sup>th</sup> and 20<sup>th</sup> – 23<sup>rd</sup> June 2022. The scope of works was outlined, discussed and refined prior to the field survey. The scope document was employed as the route was assessed in MM order from MM 0, near Kingscote, to MM 52, near Penneshaw. Potential impacts from culvert upgrades, shoulder sealing, curve widening, earthworks to increase shoulder width, scour repair work and guard fence installation or hazard removal were assessed across the route.

Vegetation associations were assigned to each site (with reference to Willoughby *et al.* 2001<sup>1</sup>) based on the broader area of vegetation in the road reserve (and beyond). Except for determining the vegetation association, species lists are focused on the area likely to be impacted by the works. These are generally limited to the first 0-2m from the current edge of shoulder for shoulder sealing and guard fence installation works; and up to 3m from current edge of shoulder for curve widening works. Where vegetation occurred within this zone, it was recorded as a potential

---

<sup>1</sup> Willoughby, N., Opperman, A. and Inns, R. W. (2001) Biodiversity Plan for Kangaroo island South Australia. Dept for Environment and Heritage, South Australia.

impact. Culvert impacts are generally assessed as vegetation occurring within a 10m x 10m area from the current culvert, into the road reserve.

Where disjunct assessment sites were considered to have attributes cohesive with a particular vegetation association, these are aggregated on scoresheets. The vegetation association at the numerous culverts assessed, for example, was almost exclusively *Melaleuca halmaturorum* shrubland, and despite being distant from each other, are recorded as one association on the bushland scoresheets.

A few of the very small (e.g. 5m<sup>2</sup>) sites recorded have been included in the main IBRA association assigned to the majority of the community. It was considered inefficient to separate them from the larger IBRA associations, which had negligible impact on final scores.

SA Water are in the process of installing a pipeline along much of the route (assessed by Ecological Associates Pty Ltd<sup>2</sup>). Where these pipeline works have been undertaken, and clearance appears to have already occurred, a brief review was conducted to determine if the road upgrade would have further impact. Where it would not, these areas have been excluded from this report.

### 3.2 Fauna assessment

A systematic dedicated fauna assessment was undertaken by an experienced field biologist. This was complemented by incidental and opportunistic fauna observations by vegetation assessors as the survey progressed.

Initial desktop assessment of databases including the EPBC Act "Matters of Environmental Significance", and BDBSA revealed records of 63 (Tables 2, 3 and 4) threat rated species within a corridor extending five kilometres either side of the length of the Penneshaw to Kingscote road. However, due to the proximity of significant sections of the road to the sea, many of these are oceanic, shoreline or waterbird species which can be excluded from the assessment.

Given the lengthy, narrow, linear nature of the potential impact area, trapping and other direct fauna survey techniques were impractical and not feasible to cover its entirety. Minimal disturbance, indirect methods were recommended as the best option for obtaining a comprehensive understanding of the fauna present in this situation. These included:

- searching larger representative samples of the major native vegetation associations along the roadside, recording observations, tracks and traces and any other signs of vertebrate species present. To provide a systematic approach, sampling occurred over one hour at each of 20 individual sites, representative of the variety of vegetation associations of, each plot of 100m long by 50m deep, adjacent to the road. Particular attention was given to searching for significant tree hollows and inspecting dense thickets which could provide sheltered day time rest sites for macropods. Ultimately, the presence of these larger mammal species was frequently recorded through the skeletal remains of road-killed individuals
- spotlighting at each of the nominated 20 sites for approximately 30 minutes, to confirm, if possible, the presence of nocturnal active species indicated by the diurnal inspection, and other species not anticipated, plus nocturnal bird species which are difficult to find during the day
- opportunistic recording of species observed along the roadside whilst carrying out the systematic surveys described above, including spotlighting, supplemented with short searches at less significant areas of roadside vegetation as necessary

Sixty two fauna species (or evidence of) were observed during the field survey, including 12 listed as threatened, eleven within 5km of the impacted sites (Brown-headed Honeyeater, Purple-gaped Honeyeater, White-eared Honeyeater, Scarlet Robin, Shy Heathwren, Striated Thornbill, Yellow-tailed Black-cockatoo, Peregrine Falcon, Common Brushtail Possum, Short-beaked Echidna and Heath Goanna). The Bush Stone-curlew was heard at night, proximity to sites is unknown.

See Part 4.2 and Appendix 1 and 2 for further details.

---

<sup>2</sup> Ecological Associates Pty Ltd (Marcus Cooling) (2020) Native Vegetation Clearance, Kangaroo Island Pipeline Stage 1 Data Report (unpublished)  
Page 7 of 64



# 4. Assessment Outcomes

## 4.1 Vegetation Assessment

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

- *Landform, geography and soils*

MM 0 – 6 Cygnet River Land System – comprising low lying alluvial and colluvial plains and valley flats, with the Cygnet River floodplain occurring from west to east and low lying saline coastal plains to the east. Soils are alkaline duplex, loamy clay, sandy topsoil over clay, and clay. The vegetation is primarily *Eucalyptus cneorifolia* mallee woodland in elevated areas, with *E. camaldulensis* along creeklines, and *Melaleuca halmaturorum* shrubland over saline tolerant species in lowlying areas and drainage channels.

MM 6 – 9 Nepean Bay Land System – low-lying coastal flats with sandy beach ridges, bordered by the sea to the east and escarpment slopes to the south, and arable plains to the west. Soils are deep siliceous sand, calcareous siliceous sands and silt loam to sandy loam. Vegetation is generally *E. cneorifolia*/*E. diversifolia*/*E. rugosa* mallee, *Melaleuca* shrublands, and heathy communities on higher areas.

MM9 -13 Cygnet Escarpment Land System - consisting of slopes and gullies, bordered by upland plateau areas to the south, and lowland plains to the north. The western edge is bordered by a saline drainage depression. Soils are stony texture contrast soil, rocky soil, sand over clay. Vegetation is as above.

MM 13 – 23 Bugga Bugga Land System – of rises and plateau areas, with drainage depressions and a few lagoonal depressions. The catchment of Bugga Bugga Creek forms the main part of this system. Also included is a narrow ridge to the west of this catchment area. To the east and north-east are coastal slopes and gullies. To the north are plateau areas, predominantly 'gilgaied' with cracking clay soils. To the south are low-lying plains with saline lagoonal depressions. Soils are ironstone, cracking texture contrast soil, stony, deep sands and cracking clay. Vegetation as above.

MM 23 – 25 Flour Cask Bay Land System – formed with undulating rises, and some remnant jumbled calcreted dune areas which form part of an old beach ridge. Surrounded on most sides by low-lying plains with lagoons, adjacent to other remnant dune areas in the north-east. An old beach ridge lies between this system and the ocean. Soils are shallow soil on calcrete, sand over sodic clay. Vegetation is made up of *E. diversifolia*/*E. rugosa* mallee and *Leucopogon parviflorus*, *Myoporum insulare* shrublands and samphire communities in the low areas near Pelican Lagoon.

MM 25 – 27.5 Prospect Hill Land System - an old beach ridge area with some modern sand dunes and many old remnant calcreted areas. D'Estrees Bay and Pennington Bay to the south; the American River inlet, rises and coastal slopes to the northeast; and low-lying plains with lagoons to the north and west are within this system. Older beach ridges lie parallel to this system further inland. Prospect Hill, also known as Mount Thisby, is a very high dune near the western edge of this system. Soils are shallow soil on calcrete to deep shell sand. Vegetation as above.

MM 27.5 – 45 Pelican Lagoon Land System - this system forms the land bridge between the Dudley Peninsula and the main part of Kangaroo Island, dominated by old calcreted jumbled dunes. Plains, flats and depressions also occur, many of which are calcreted. Coastal sand dunes occur; and tidal flats are widespread. Soils range from shallow calcareous loamy sand, calcareous loam, to wet saline shallow soil on calcrete. Vegetation is mostly *E. cneorifolia*, *E. diversifolia* and *E. rugosa*, *Melaleuca lanceolata* mallee, with heathland and shrubland also present.

MM 45 – 52 Dudley Land System - this is a highly dissected plateau area, with adjacent slopes, drainage depressions and creek gullies, coastal slopes and gullies, coastal cliffs, a few outwash plains, and a few coastal swamps and dunes. Soils are deep texture contrast soil, Ironstone soil and texture contrast soil on weathered rock. Vegetation is predominantly *E. cneorifolia* mallee woodland



- Landform feature of significance (rivers, creeks, rocky outcrops, etc.)*

Nepean Bay vegetation and wetlands are notable around MM 6-9, and many sweeping rural and coastal views are offered along the route. Probably the most significant feature is American River lagoon, occurring north of the road from MM 27- 35. Access to Mt Thisby is around MM 26 and this feature forms a significant landmark for travellers in this vicinity.

Only one significant river crosses the work site; Cygnet River, MM 0.8 Stream order 6. Numerous insignificant creeks (stream order 1 and 2) cross the site between MM 1 and MM 24.
- General overview of the vegetation under application as a whole (e.g. contains x number of vegetation associations / trees)*

Ninety individual sites were assessed as potentially impacted by the works. These were assigned to the following vegetation associations (bolded = potentially EPBC listed communities):

  - VA 1. *Eucalyptus diversifolia/ E. cosmophylla* mallee woodland (twelve sites)
  - VA 2. *Eucalyptus rugosa/ E. diversifolia* mallee woodland (one site)
  - **VA 3. *Eucalyptus cneorifolia/ E. diversifolia* mallee woodland** (fifteen sites)
  - **VA 4. *Eucalyptus cneorifolia/ E. diversifolia/ E. rugosa* open forest** (seven sites)
  - **VA 5. *Eucalyptus cneorifolia/ E. cosmophylla/ E. diversifolia*, mid mallee** (four sites)
  - VA 6. *Myoporum insulare/ Leucopogon parviflorus/ Olearia axillaris* tall shrubland (eleven sites)
  - VA 7. *Melaleuca halmaturorum/ M. brevifolia, M. lanceolata* low woodland (three sites)
  - VA 8. *Leucopogon parviflorus/ Olearia axillaris/ Myoporum insulare* shrubland (one site)
  - **VA 9. *Melaleuca halmaturorum/ M. brevifolia* shrubland** (thirty five sites)
- General description of the vegetation relating to type and condition (i.e. is the vegetation relatively homogeneous, or there significant variation)*

Table 1. identifies the site locations, impact type and their corresponding vegetation association. Within associations some heterogeneity was noted, especially within the KI Narrow Leaf Mallee community. Where these were significant, separate vegetation associations were assigned, but it is accepted that some communities, especially where disjunct, exhibited significant variation.
- Provide a description of the landscape context for the vegetation (e.g. isolated patch of vegetation in cropping landscape) and proximity to protected areas (Conservation Parks, Heritage Agreements, etc.)*

The vegetation assessed comprises roadside vegetation covering a range of associations occurring in a patchy fragmented landscape where remnant vegetation is mostly on roadsides and/or in small pockets or patches on private property, very little of which is conserved. One Heritage Agreement, HA 235, crosses the site, at approximate MM11 – 13.2 and there are several within a 5km radius of the site. Cygnet Estuary, Pelican Lagoon and Dudley Conservation Parks are within 5km of the site.
- Provide a description of the landscape context for the vegetation (e.g. isolated patch of vegetation in cropping landscape) and proximity to protected areas (Conservation Parks, Heritage Agreements, etc.)*

The vegetation assessed comprises roadside vegetation covering a range of associations occurring in a patchy fragmented landscape where remnant vegetation is mostly on roadsides and/or in small pockets or patches on private property, very little of which is conserved. One Heritage Agreement, HA 235, crosses the site, at approximate MM11 – 13.2 and there are several within a 5km radius of the site. Cygnet Estuary, Pelican Lagoon and Dudley Conservation Parks are within 5km of the site. Fourteen DIT RSSD sites occur on the Hog Bay Road, most of which include sites assessed as impacted. The RSSD sites are numbered 5, 22, 29, 30, 31, 32, 33, 34, 45, 46, 47, 53, 54 and 434.

**Table 1.** Sites, impact type and vegetation association

SITE #	LOCATION	AREA m <sup>2</sup>	IMPACT TYPE	VEGETATION ASSOCIATION
1	MM 1.333 LHS	5	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
2	MM 1.900 LHS	20	Curve widening	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
3	MM 2.00 LHS	5	Culvert upgrade	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
4	MM 2.634 RHS	25	Shoulder sealing	VA7 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> , <i>M. lanceolata</i> low woodland
5	MM 2.730 LHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
6	MM 3.187 – 3.232 LHS	45	Shoulder sealing	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
7	MM 3.152 – 3.232 RHS	80	Shoulder sealing	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
8	MM 3.001 LHS, RHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
9	MM 3.110 LHS	15	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
10	MM 3.920 LHS	5	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
11	MM 4.094 – 4.324 RHS	60	Curve widening	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
12	MM 4.500 LHS & RHS	5	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
13	MM 5.920 – 5.940 LHS	40	Curve widening	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
14	MM 6.073 – 6.180 RHS	215	Curve widening	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
15	MM 6.093 – 6.200 LHS	275	Curve widening	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
16	MM 6.40 – 6.41 RHS	10	Shoulder sealing	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
17	MM 6.45 – 6.510 RHS	120	Shoulder sealing	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
18	MM 6.58 RHS	75	Shoulder sealing	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species

OFFICIAL

SITE #	LOCATION	AREA m <sup>2</sup>	IMPACT TYPE	VEGETATION ASSOCIATION
19	MM 6.74 -6.80 RHS	50	Shoulder sealing	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
20	MM 6.843 LHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
21	MM 6.970 LHS & RHS	20	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
22	MM 7.43 LHS & RHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
23	MM 7.460 LHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
24	MM 7.67 LHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
25	MM 7.750 LHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
26	MM 7.80 LHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
27	MM 7.84 LHS	20	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
28	MM 8.15 LHS & RHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
29	MM 8.0 – 8.4 LHS	400	Shoulder sealing	VA7 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> , <i>M. lanceolata</i> low woodland
30	MM 8.0 – 8.4 RHS	400	Shoulder sealing	VA7 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> , <i>M. lanceolata</i> low woodland
31	MM 8.4 LHS & RHS	20	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
32	MM 8.40 8.80 LHS	600	Shoulder sealing	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> Mallee Woodland
33	MM 8.40 - 8.98 RHS	1200	Shoulder sealing	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> Mallee Woodland
34	MM8.72 LHS	5	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
35	MM 8.72 RHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
36	MM 9.05 – 9.3 RHS	600	Guard fence	VA5 <i>Eucalyptus cneorifolia</i> , <i>E. cosmophylla</i> , <i>E. diversifolia</i> , mid mallee
37	MM 9.080 LHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
38	MM 9.080 RHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
39	MM 10.4 – 10.47 RHS	140	Shoulder sealing	VA5 <i>Eucalyptus cneorifolia</i> , <i>E. cosmophylla</i> , <i>E. diversifolia</i> , mid mallee

OFFICIAL

SITE #	LOCATION	AREA m <sup>2</sup>	IMPACT TYPE	VEGETATION ASSOCIATION
40	MM 10.43 – 10.44 both sides	100	Bridge guard fence	VA5 <i>Eucalyptus cneorifolia</i> , <i>E. cosmophylla</i> , <i>E. diversifolia</i> , mid mallee
41	MM 10.5 – 10.8 RHS	300	Shoulder sealing	VA5 <i>Eucalyptus cneorifolia</i> , <i>E. cosmophylla</i> , <i>E. diversifolia</i> , mid mallee
42	MM 11.2 – 11.5 LHS	150	Scour repairs	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
43	MM 12.30 -12.40 RHS	100	Scour repairs	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
44	MM 12.390 LHS	5	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
45	MM 12.390 RHS	5	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
46	MM 12.750 LHS	20	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
47	MM 12.750 RHS	20	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
48	MM 13.370 RHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
49	MM 16.180 LHS	5	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
50	MM 16.180 RHS	5	Culvert upgrade	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> Mallee Woodland
51	MM 18.630 LHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
52	MM 18.630 RHS	10	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
53	MM 19.010 LHS	5	Culvert upgrade	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
54	MM 20.090 LHS	5	Culvert upgrade	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
55	MM 20.090 RHS	20	Culvert upgrade	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
56	MM 20.660 LHS	10	Culvert upgrade	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
57	MM 20.660 RHS	10	Culvert upgrade	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
58	MM 21.350 LHS	5	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
59	MM 21.350 RHS	5	Culvert upgrade	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species
60	MM 23.150 - 23.155 RHS	5	Curve widening	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
61	MM 23.7 RHS	10	Shoulder sealing	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland

OFFICIAL

SITE #	LOCATION	AREA m <sup>2</sup>	IMPACT TYPE	VEGETATION ASSOCIATION
62	MM 23.77 – 23.85 RHS	160	Shoulder sealing	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
63	MM 24.030 – 24.110 LHS	160	Shoulder sealing	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
64	MM 24.020 – 24.100 RHS	160	Shoulder sealing	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
65	MM 24.45 to 24.55 RHS	100	Curve widening	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
66	MM 26.060 - 26.160 RHS	100	Curve widening	VA1 <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland
67	MM 26.790 – 26.850 LHS	60	Curve widening	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
68	MM 26.790 – 26.850 RHS	60	Shoulder sealing	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
69	MM 27.050 – 27.110 RHS	90	Shoulder sealing	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
70	MM 27.180 – 27.290 RHS	110	Shldr seal and scour repair	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
71	MM 31.260 – 31.280 RHS	20	Shoulder sealing	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
72	MM32.710 – 32.820 LHS	110	Earthworks for shldr widening	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
73	MM32.710 - 32.820 RHS	110	Shoulder sealing	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
74	MM 32.90 - 33.00 LHS	100	Earthworks for shoulder widening	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
75	MM 33.2 – 33.350 RHS	225	Curve widening	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
76	MM 34.170 – 34.330 LHS	70	Davies Road Junction	VA6 <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> tall shrubland
(No site 77)				
78	MM 43.1 – 43.2 LHS	200	Earthworks for shoulder widening	VA2 <i>Eucalyptus rugosa</i> , <i>E. diversifolia</i> +/- <i>E. cneorifolia</i> mallee woodland
79	MM 45.90 – 46.25 RHS	700	Earthworks for shoulder widening	VA8 <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> , <i>Myoporum insulare</i> , +/- <i>Acacia leiophylla</i> Shrubland

SITE #	LOCATION	AREA m <sup>2</sup>	IMPACT TYPE	VEGETATION ASSOCIATION
80	MM 46.590 LHS	5	Culvert upgrade	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
81	MM 46.70 – 46.80 LHS	200	Earthworks for shoulder widening	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
82	MM 47.2 – 47.5 LHS	600	Earthworks for shoulder widening	VA3 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> mallee woodland
83	MM 47.540 RHS	100	Culvert upgrade	VA4 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> , <i>E. rugosa</i> mallee forest
84	MM 47.630 – 47.670 LHS	40	Shoulder sealing	VA4 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> , <i>E. rugosa</i> mallee forest
85	MM 47.8 – 47.85 LHS	50	Shoulder sealing	VA4 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> , <i>E. rugosa</i> mallee forest
86	MM 49.080 – 49.56 LHS	960	Guard fence*/hazard removal	VA4 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> , <i>E. rugosa</i> mallee forest
87	MM 49.48 – 49.56 RHS	1560	Guard fence*/hazard removal	VA4 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> , <i>E. rugosa</i> mallee forest
88	MM 49.65 – 49.70 LHS	100	Curve widening (small bank excavation required)	VA4 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> , <i>E. rugosa</i> mallee forest
89	MM 49.990 – 50.1 LHS	220	Curve widening (small bank excavation required)	VA4 <i>Eucalyptus cneorifolia</i> , <i>E. diversifolia</i> , <i>E. rugosa</i> mallee forest
90	MM 52 LHS	20	Bridge/footpath	VA9 <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> shrubland over swamp species

**Site maps showing areas of proposed impact - Figures 2 to 9 below**





Figure 2. Sites 1 to 12





Figure 3. Sites 13 to 38





Figure 4. Sites 22 to 48





Figure 5. Sites 49 to 59





Figure 6. Sites 60 to 70





Figure 7. Sites 71 to 76





Figure 8. Sites 78 to 85





Figure 9. Sites 79 to 90



**Details of the vegetation associations proposed to be impacted**

Vegetation Association	VA1; <i>Eucalyptus diversifolia</i> , <i>E. cosmophylla</i> +/- <i>E. cneorifolia</i> mallee woodland.
------------------------	--



Photo 1. Facing south, MM 23.7 RHS



Photo 2. Facing southeast, MM 26.06 RHS

General description	<p>Bushland scoresheets VA1 Amberley; and VA1 Gantheaume.          Includes sites # 2, 42, 43, 53, 57, 60 – 66.          Impacted by culvert upgrades, curve widening, scour repair work and shoulder sealing.          Dominant species is <i>Eucalyptus diversifolia</i> with <i>E. cosmophylla</i>, +/- <i>E. cneorifolia</i> and an understorey comprising <i>Myoporum insulare</i>, <i>Melaleuca halmaturorum</i>, <i>M. lanceolata</i>, <i>Acacia</i> and <i>Allocasuarina</i> spp. Narrow strips at some sites show higher levels of disturbance than wider areas connected to bigger remnants on private property.          Disturbed by works on the roadside and edge effects, worse within the first 2-3m from shoulder. Most sites have Bridal Creeper.</p>				
Threatened species or community	<p>Listed flora and fauna historically recorded can be found in Appendix 1 and 3          Listed flora observed: <i>Xanthorrhoea semiplana ssp tateana</i> (State R) was present in the association, but not in the impacted zone.          Listed fauna observed within 5km:</p> <ul style="list-style-type: none"> <li>• Brown Headed Honeyeater (sites 2, 53, 57 and 60-66)</li> <li>• Bush Stone Curlew (sites 2, 42, 43)</li> <li>• Peregrine Falcon (site 2)</li> <li>• Purple-gaped Honeyeater (53, 57, 60-65)</li> <li>• Scarlet Robin (sites 2, 42, 43, 60-66)</li> <li>• Shy Heathwren (sites 60-66)</li> <li>• Striated Thornbill (42, 43, 60-66)</li> <li>• White-eared Honeyeater (sites 42, 43, 53, 57, 60-65)</li> <li>• Yellow-tailed Black Cockatoo (sites 2, 42, 43, 60-66)</li> <li>• Common Brushtail Possum (sites 2, 42, 43)</li> <li>• Short-beaked Echidna (sites 2, 42, 43, 53, 57, 60-65)</li> </ul>				
Landscape context score AMBERLEY	1.16	Vegetation Condition Score	46.08	Conservation significance score	1.14
Unit biodiversity Score	60.93	Area (ha)	0.0780	Total biodiversity Score	4.75
Landscape context score GANTHEUAME	1.11	Vegetation Condition Score	46.08	Conservation significance score	1.14
Unit biodiversity Score	58.30	Area (ha)	0.02	Total biodiversity Score	1.17



Vegetation Association	VA2; <i>Eucalyptus rugosa</i> , <i>E. diversifolia</i> +/- <i>E. cneorifolia</i> mallee woodland.
------------------------	---



Photo 3. Facing northeast, MM43.1 LHS (works begin ahead of the vehicle)

General description	Bushland scoresheet VA2 Coranda. Includes site # 78. Impacted by excavation for shoulder sealing Dominant species include <i>Eucalyptus rugosa</i> , <i>E. diversifolia</i> with an understorey of <i>Melaleuca sp.</i> , <i>Acacia sp.</i> <i>Myoporum insulare</i> . Disturbed by edge effects, worse within the first 2-3m from shoulder. Most sites have Bridal Creeper.				
Threatened species or community	Listed flora and fauna historically recorded can be found in Appendix 1 and 3 Listed flora observed: none Listed fauna observed within 5km: <ul style="list-style-type: none"> <li>• Brown Headed Honeyeater</li> <li>• Bush Stone Curlew</li> <li>• Purple-gaped Honeyeater</li> <li>• Scarlet Robin</li> <li>• Striated Thornbill</li> <li>• White-eared Honeyeater</li> <li>• Yellow-tailed Black Cockatoo</li> <li>• Short-beaked Echidna</li> <li>• Heath Goanna</li> </ul>				
Landscape context score	1.09	Vegetation Condition Score	39.97	Conservation significance score	1.10
Unit biodiversity Score	47.92	Area (ha)	0.020	Total biodiversity Score	0.96



Vegetation Association | VA 3; *Eucalyptus cneorifolia*, *E. diversifolia* mallee woodland over tall shrubs



Photo 4. Facing southwest, MM 3.09 RHS



Photo 5. Looking south, MM 8.4 RHS

General description	<p>Bushland scoresheets VA3 Amberley; VA3 Coranda; VA3 Cygnet.                  Incudes sites # 6, 7, 11, 13-15, 32, 33, 50, 54 - 56, 80 – 82.                  Impacted by shoulder sealing, curve widening, culvert upgrade and excavation for shoulder works.                  Dominant species are <i>Eucalyptus cneorifolia</i>, <i>E. diversifolia</i>, with <i>Dodonaea viscosa ssp. angustissima</i>, <i>Myoporum insulare</i> and smaller shrubs in the understorey . Disturbed by edge effects, worse within the first 2-3m from shoulder. Most sites have Bridal Creeper.</p>				
Threatened species or community	<p>This community potentially meets the criteria for KI Mallee (<i>Eucalyptus cneorifolia</i>) Woodland <b>EPBC CR rated, SA E rated</b> community. Further investigation may be required to determine conformity.                  Listed flora and fauna historically recorded can be found in Appendix 1 and 3                  Listed flora observed - none                  Listed fauna observed within 5km:</p> <ul style="list-style-type: none"> <li>• Brown Headed Honeyeater (sites 6, 7, 11, 50, 54,-56, 80-82)</li> <li>• Bush Stone Curlew (sites 6, 7, 11, 13-15, 32, 33, 50, 80 – 82)</li> <li>• Peregrine Falcon (site 6, 7, 11, 13-15, 32, 33)</li> <li>• Purple-gaped Honeyeater (sites 13-15, 32, 33, 50, 54 - 56)</li> <li>• Scarlet Robin (sites 6, 7, 11, 13-15, 32, 33, 50, 80 – 82)</li> <li>• Striated Thornbill (6, 7, 11, 13-15, 32, 33, 80 – 82)</li> <li>• White-eared Honeyeater (sites 13-15, 32, 33, 50, 54 - 56)</li> <li>• Yellow-tailed Black Cockatoo (sites 6, 7, 11, 13-15, 32, 33, 50)</li> <li>• Common Brushtail Possum (sites 6, 7, 11, 13-15, 32, 33)</li> <li>• Short-beaked Echidna (sites 6, 7, 11, 13-15, 32, 33, 50, 54 - 56, 80 – 82)</li> </ul>				
Landscape context score AMBERLEY	1.11	Vegetation Condition Score	38.95	Conservation significance score	1.50
Unit biodiversity Score	64.85	Area (ha)	0.004	Total biodiversity Score	0.26
Landscape context score CORANDA	1.12	Vegetation Condition Score	38.95	Conservation significance score	1.50
Unit biodiversity Score	65.44	Area (ha)	0.0805	Total biodiversity Score	5.27
Landscape context score	1.14	Vegetation Condition Score	38.95	Conservation significance score	1.50
Unit biodiversity Score	66.60	Area (ha)	0.2515	Total biodiversity Score	16.75



Vegetation Association

VA 4; *Eucalyptus cneorifolia* +/- *E. diversifolia* +/- *E. rugosa* open forest



Photo 6. Looking southwest, MM 47.6 LHS



Photo 7. Facing north, MM 49.6 LHS



General description	<p>Bushland scoresheet VA4 Coranda. Includes site # 83 - 89. Impacted by shoulder sealing, guard fence/hazard removal, and excavation for shoulder sealing Dominant species is <i>Eucalyptus cneorifolia</i>, with <i>E. diversifolia</i>/<i>E. rugosa</i> present at varying density across the sites. At some locations the understorey is fairly dense and includes <i>Melaleuca sp.</i>, <i>Acacia sp.</i> <i>Myoporum insulare</i>. Other sites are almost devoid of understorey species. Disturbed by weeds and edge effects, but generally in good condition , with richer species complement further away from the road. Bridal Creeper present at some sites</p>				
Threatened species or community	<p>This community potentially meets the criteria for KI Mallee (<i>Eucalyptus cneorifolia</i>) Woodland <b>EPBC CR rated, SA E rated</b> community. Further investigation may be required to determine conformity. Listed flora and fauna historically recorded can be found in Appendix 1 and 3 Listed flora observed: none Listed fauna observed within 5km:</p> <ul style="list-style-type: none"> <li>• Brown Headed Honeyeater (sites 83 - 89)</li> <li>• Bush Stone Curlew (sites 83 - 89)</li> <li>• Scarlet Robin (sites 83 - 89)</li> <li>• Striated Thornbill (sites 83 - 89)</li> <li>• Short-beaked Echidna (sites 83 – 89)</li> </ul>				
Landscape context score	1.10	Vegetation Condition Score	42.84	Conservation significance score	1.5
Unit biodiversity Score	70.68	Area (ha)	0.303	Total biodiversity Score	21.42



Vegetation Association	VA 5; <i>Eucalyptus cneorifolia</i> , <i>E. cosmophylla</i> , <i>E. diversifolia</i> , mid mallee
------------------------	---



Photo 8. Looking south, MM 9.0 RHS

General description	<p>Bushland scoresheet VA5 Amberley. Includes sites # 36, 39 - 41 Impacted by shoulder sealing, bridge guard fence replacement Dominant species include <i>E. cneorifolia</i>, <i>E. diversifolia</i> equally, <i>E. cosmophylla</i> over shrubby <i>Melaleuca sp.</i>, <i>Myoporum insulare</i>, and <i>Leucopogon parviflorus</i>. Disturbed by fire, in fair to poor condition, with segments with less disturbance. Bridal Creeper present at most sites.</p>
---------------------	---

Threatened species or community	<p>This community potentially meets the criteria for KI Mallee (<i>Eucalyptus cneorifolia</i>) Woodland <b>EPBC CR rated, SA E rated</b> community. Further investigation may be required to determine conformity. Listed flora and fauna historically recorded can be found in Appendix 1 and 3 Listed flora observed - <i>Xanthorrhoea semiplana ssp tateana</i> (State R) was present in the association, but not in the impacted zone. Listed fauna observed within 5km:</p> <ul style="list-style-type: none"> <li>• Bush Stone Curlew (sites 36, 39 - 41)</li> <li>• Peregrine Falcon (sites 36, 39)</li> <li>• Purple-gaped Honeyeater (sites 36, 39 - 41)</li> <li>• Scarlet Robin (sites 36, 39 - 41)</li> <li>• Striated Thornbill (sites 36, 39 - 41)</li> <li>• White-eared Honeyeater (sites 36, 39 - 41)</li> <li>• Yellow-tailed Black Cockatoo (sites 36, 39 - 41)</li> <li>• Common Brushtail Possum (sites 36, 39 - 41)</li> <li>• Short-beaked Echidna (sites 36, 39 - 41)</li> </ul>
---------------------------------	--

Landscape context score	1.13	Vegetation Condition Score	36.90	Conservation significance score	1.54
Unit biodiversity Score	64.21	Area (ha)	0.114	Total biodiversity Score	7.32



Vegetation Association | VA 6; *Myoporum insulare*, *Leucopogon parviflorus*, *Olearia axillaris* tall shrubland.




Photo 9. Looking southeast, MM 27.05 RHS



Photo 10. Facing northeast, MM 26.7 LHS

General description	Bushland scoresheet VA6. Includes sites # 3, 67 - 76 Impacted by shoulder sealing, culvert upgrade, and scour repair work. Dominant species include <i>Myoporum insulare</i> , <i>Leucopogon parviflorus</i> with emergent <i>E. diversifolia</i> . Limited disturbance evident, Bridal Creeper present at some sites.				
Threatened species or community	Listed flora and fauna historically recorded can be found in Appendix 1 and 3 Listed flora observed: none Listed fauna observed within 5km: <ul style="list-style-type: none"> <li>• Brown-headed Honeyeater (site 3)</li> <li>• Bush Stone Curlew (site 3)</li> <li>• Peregrine Falcon (site 3)</li> <li>• Purple-gaped Honeyeater (sites 67-76)</li> <li>• Scarlet Robin (sites 3, 67 - 76)</li> <li>• Shy Heathwren (sites 67 - 76)</li> <li>• Striated Thornbill (sites 67 - 76)</li> <li>• Yellow-tailed Black Cockatoo (sites 3, 67 - 76)</li> <li>• Common Brushtail Possum (site 3)</li> <li>• Short-beaked Echidna (sites 3, 67 - 76)</li> </ul>				
Landscape context score	1.08	Vegetation Condition Score	36.90	Conservation significance score	1.10
Unit biodiversity Score	43.84	Area (ha)	0.0635	Total biodiversity Score	2.78



Vegetation Association		VA 7; <i>Melaleuca halmaturorum</i> , <i>M. brevifolia</i> , <i>M. lanceolata</i> low woodland.			
					
Photo 11. Facing east, MM 8.0 LHS					
General description		Bushland scoresheet VA7 Cygnet. Includes sites # 4, 29, 30 Impacted by shoulder sealing. Dominant species include <i>Melaleuca halmaturorum</i> , <i>M. lanceolata</i> . Disturbance evident within first 2-3m from shoulder where grassy weeds predominate. Bridal Creeper present at site 4.			
Threatened species or community		Listed flora and fauna historically recorded can be found in Appendix 1 and 3 Listed flora observed: none Listed fauna observed within 5km: <ul style="list-style-type: none"> <li>• Brown-headed Honeyeater (site 4)</li> <li>• Bush Stone Curlew (sites 4, 29, 30)</li> <li>• Peregrine Falcon (sites 4, 29, 30)</li> <li>• Purple-gaped Honeyeater (sites 29, 30)</li> <li>• Scarlet Robin (sites 4, 29, 30)</li> <li>• Striated Thornbill (sites 29, 30)</li> <li>• White-eared Honeyeater (sites 29, 30)</li> <li>• Yellow-tailed Black Cockatoo (sites 4, 29, 30)</li> <li>• Common Brushtail Possum (sites 4, 29, 30)</li> <li>• Short-beaked Echidna (sites 4, 29, 30)</li> </ul>			
Landscape context score	1.14	Vegetation Condition Score	48.50	Conservation significance score	1.10
Unit biodiversity Score	60.82	Area (ha)	0.0825	Total biodiversity Score	5.02

Vegetation Association	VA 8; <i>Leucopogon parviflorus</i> , <i>Olearia axillaris</i> , <i>Myoporum insulare</i> , +/- <i>Acacia leiophylla</i> shrubland
------------------------	--



Photo 12. Looking toward south, MM 45.9 RHS

General description	Bushland scoresheet VA8 Coranda. Includes site # 79 Impacted by earthworks for shoulder sealing. Dominant species include <i>Leucopogon parviflorus</i> , <i>Myoporum insulare</i> . Limited disturbance evident except on edges of shoulder where grassy weeds predominate
---------------------	---

Threatened species or community	Listed flora and fauna historically recorded can be found in Appendix 1 and 3 Listed flora observed - none Listed fauna observed within 5km: <ul style="list-style-type: none"> <li>• Brown-headed Honeyeater</li> <li>• Bush Stone Curlew</li> <li>• Scarlet Robin</li> <li>• Striated Thornbill</li> <li>• White-eared Honeyeater</li> <li>• Short-beaked Echidna (sites</li> <li>• Heath Goanna</li> </ul>
---------------------------------	---

Landscape context score	1.12	Vegetation Condition Score	45.94	Conservation significance score	1.10
Unit biodiversity Score	56.60	Area (ha)	0.07	Total biodiversity Score	3.96



Vegetation Association | VA 9; *Melaleuca halmaturorum*, *M. brevifolia* shrubland over swamp species.



Photo 13. Facing southwest, MM 3.1 RHS



Photo 14. Viewed towards west, MM 4.5 RHS



General description	<p>Bushland scoresheet VA9 Cygnet; VA9 Amberley.                  Includes sites # 1, 5, 8-10, 12, 16-28, 31, 34, 35, 37, 38, 44 - 49, 51, 52, 58, 59, 90                  Most of the sites in this association are culverts requiring upgrade. Impact at each site is often no more than 5m<sup>2</sup>. Other sites impacted by shoulder sealing and a footpath (site 90).                  Dominant species is <i>Melaleuca halmaturorum</i>, with Samphire and succulent species in the ground layer                  Some sites highly disturbed by historical culvert maintenance, hydrological changes.                  Overstorey density varies between sites. Weeds predominate on the edge of the shoulder and around culvert heads. Bridal Creeper present at many sites</p>				
Threatened species or community	<p>Taylor (2008)<sup>3</sup> lists <i>Melaleuca brevifolia</i> / <i>M. gibbosa</i> +/- <i>M. halmaturorum</i> as a <b>Rare plant community</b> on KI, and Cooling (2020)<sup>4</sup> notes that <i>Melaleuca halmaturorum</i> / <i>M. brevifolia</i>, <i>shrubland over samphire</i> is <b>Vulnerable under the EPBC Act</b>. Further investigation may be required to confirm the status of the community assessed.                  Listed flora and fauna historically recorded can be found in Appendix 1 and 3                  Listed flora observed – <i>Beyeria subtecta</i> (EPBC VU and State V) was present in the association. Impact on one individual is likely.                  Listed fauna observed within 5km:</p> <ul style="list-style-type: none"> <li>• Brown-headed Honeyeater (sites 1, 5, 8-10, 12, 49, 51, 52, 58, 59, 90)</li> <li>• Bush Stone Curlew (sites 1, 5, 8-10, 12, 16-28, 31, 34, 35, 37, 38, 44 - 49, 90)</li> <li>• Peregrine Falcon (sites 1, 5, 8-10, 12, 16-28, 31, 34, 35, 37)</li> <li>• Purple-gaped Honeyeater (sites 12, 16-28, 31, 34, 35, 37, 38, 44 - 49, 51, 52, 58, 59)</li> <li>• Scarlet Robin (sites 5, 8-10, 12, 16-28, 31, 34, 35, 37, 38, 44 - 49, 58, 59, 90)</li> <li>• Striated Thornbill (sites 1, 5, 8-10, 12, 16-28, 31, 34, 35, 37, 38, 44 - 46, 58, 59, 90)</li> <li>• White-eared Honeyeater (sites 12, 16-28, 31, 34, 35, 37, 38, 44 - 49, 51, 52, 58, 59)</li> <li>• Yellow-tailed Black Cockatoo (sites 1, 5, 8-10, 12, 16-28, 31, 34, 35, 37, 38, 44 - 49, 58, 59)</li> <li>• Common Brushtail Possum (sites 1, 5, 8-10, 12, 16-28, 31, 34, 35, 37, 38, 44)</li> <li>• Short-beaked Echidna (sites 1, 5, 8-10, 12, 16-28, 31, 34, 35, 37, 38, 44 - 49, 51, 52, 58, 59, 90)</li> </ul>				
Landscape context score AMBERLEY	1.11	Vegetation Condition Score	48.50	Conservation significance score	1.61
Unit biodiversity Score	86.67	Area (ha)	0.0135	Total biodiversity Score	1.17
Landscape context score CYGNET	1.12	Vegetation Condition Score	48.50	Conservation significance score	1.61
Unit biodiversity Score	87.45	Area (ha)	0.0585	Total biodiversity Score	3.94

<sup>3</sup> Taylor, D. A (2008) Recovery Plan for Nationally threatened Plant Species on Kangaroo Island, South Australia. Department of Environment and Heritage SA.

<sup>4</sup> Ecological Associates Pty Ltd (Marcus Cooling) (2020) Native Vegetation Clearance, Kangaroo Island Pipeline Stage 1 Data Report (unpublished)



## 4.2 Threatened Species assessment

### Results of review of existing records

Databases interrogated to determine threatened fauna recorded within 5km of the site(s), since 1995 provided the following results:

- fifty four bird species (7 highly likely or known; 8 possible; and 3 not likely to find habitat at the sites)
- five mammal species (2 highly likely/known; 1 possible, 1 not likely)
- four reptile species (1 highly likely/known, 3 not likely)
- no amphibian species

The following table documents threatened species historically recorded, or noted during the survey, with potential to find habitat in the vegetation assessed.

**Table 2: Threat rated bird species observed on site, or recorded within 5km of the application area since 1995, or for which the vegetation is considered to provide suitable habitat.**

COMMON NAME	SPECIES	EPBC Act	NPW Act SA	NUMBER OF RECORDS (BDBSA)	DATE OF LAST RECORD (BDBSA)	Source	Main Habitat	LIKELIHOOD ASSESSMENT AND JUSTIFICATION
Australasian Bittern	<i>Botaurus poiciloptilus</i>	EN			1-Jan-1984	2	wetland	Unlikely – no suitable habitats present along proposed route.
Australasian Shoveler	<i>Spatula rhynchotis</i>		R	2	23-Feb-2010	1	water bird	Unlikely – no suitable habitats present along proposed route.
Australian Fairy Tern	<i>Sternula nereis nereis</i>	VU			12-Nov-2011	2	shorebird	Unlikely – no suitable habitats present along proposed route.
Banded Stilt	<i>Cladorhynchus leucocephalus</i>		V	14	06-Feb-2005	1	water bird	Unlikely – no suitable habitats present along proposed route.
Bar-tailed Godwit	<i>Limosa lapponica baueri</i>	VU	R	37	06-Jun-2010	1, 2	migratory shorebird	Unlikely – no suitable habitats present along proposed route.
Beautiful Firetail (MLR, KI)	<i>Stagonopleura bella samueli</i>	of concern	R	2	30-Nov-2012	1	dense, low undergrowth with water nearby	Possible – particularly in dense vegetation along drainage line intersections with road, but not recorded during field survey
Black Falcon	<i>Falco subniger</i>		R	1	18-Feb-2013	1	open arid & semi arid plains with scattered trees	Unlikely – considered vagrant on Kangaroo Island (Gillam & Urban 2014) <sup>5</sup>
Black-browed Albatross	<i>Thalassarche melanophris</i>	VU	ssp	1	08-May-1982	1	oceanic	Will not be present – offshore, marine species
Black-tailed Godwit	<i>Limosa limosa melanuroides</i>		R	1	07-Feb-2010	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route.

<sup>5</sup> Gillam, S. and Urban, R. (2014) *Regional Species Conservation Assessment Project, Phase 1 Report: Regional Species Assessments, Kangaroo Island NRM Region*. Department of Environment, Water and Natural Resources, South Australia.

OFFICIAL

COMMON NAME	SPECIES	EPBC Act	NPW Act SA	NUMBER OF RECORDS (BDBSA)	DATE OF LAST RECORD (BDBSA)	Source	Main Habitat	LIKELIHOOD ASSESSMENT AND JUSTIFICATION
Brown Quail	<i>Coturnix ypsilophora australis</i>		V	1	07-Jul-2013	1	variety of low, damp, rank vegetation	Unlikely – no suitable habitats present along proposed route. Also very rare on KI, with nearest of four records for the island, at Kingscote
Brown-headed Honeyeater (KI)	<i>Melithreptus brevirostris magnirostris</i>	EN		5	17-Nov-1990	1, 2, 3	forests & woodlands	Highly Likely/Known – recorded at four of 20 survey sites; three of tall mallee woodland and one mature Callitris woodland
Bush Stone-curlew	<i>Burhinus grallarius</i>		R	61	19-Sep-2021	1	woodland, grassland	Possible - woodland edge habitats may provide suitable daytime rest spots. Heard in distance at night at three of 20 sample sites
Common Sandpiper	<i>Actitis hypoleucos</i>		R	6	06-Feb-2005	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Curlew Sandpiper	<i>Calidris ferruginea</i>	CR	E	16	16-Feb-1985	1, 2	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Eastern Osprey	<i>Pandion haliaetus cristatus</i>		E	4	05-Nov-1990	1	coastal, estuarine, wetland	Unlikely - may fly over occasionally, but proposed route does not provide any significant habitat
Fairy Prion	<i>Pachyptila turtur subantarctica</i>	VU				2	oceanic	Will not be present – offshore, marine species
Far Eastern Curlew	<i>Numenius madagascariensis</i>	CR	E	48	10-Feb-2012	1, 2	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Flame Robin	<i>Petroica phoenicea</i>		V	1	01-Jan-1976	1	woodlands & forest	Unlikely – considered vagrant on Kangaroo Island (Gillam & Urban 2014)
Freckled Duck	<i>Stictonetta naevosa</i>		V	1	09-Feb-2003	1	water bird	Unlikely – no suitable habitats present along proposed route
Glossy Black-Cockatoo (KI)	<i>Calyptorhynchus lathami halmaturinus</i>	EN	E	6	13-Mar-2019	1, 2	woodlands & forest	Possible - could pass through the roadside woodlands, but required habitat attributes, particularly large nesting hollows and Allocasuarina food trees not present along route
Great Knot	<i>Calidris tenuirostris</i>	CR	E	1	13-Nov-2011	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route



OFFICIAL

COMMON NAME	SPECIES	EPBC Act	NPW Act SA	NUMBER OF RECORDS (BDBSA)	DATE OF LAST RECORD (BDBSA)	Source	Main Habitat	LIKELIHOOD ASSESSMENT AND JUSTIFICATION
Greater Sand Plover	<i>Charadrius leschenaultii leschenaultii</i>	sp	R	7	30-Nov-2012	1, 2	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Grey Currawong	<i>Strepera versicolor</i>		ssp	6	24-Oct-2020	1	woodlands & forests	Not relevant - not KI sub species, but far western sub species
Grey-headed Albatross	<i>Thalassarche chrysostoma</i>	EN	V	1	03-Sep-1968	1	oceanic	Will not be present – offshore, marine species
Grey-tailed Tattler	<i>Tringa brevipes</i>		R	7	09-Jan-1996	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Hooded Plover	<i>Thinornis cucullatus cucullatus</i>	VU	V	92	17-Nov-2014	1, 2	coastal	Unlikely – no suitable habitats present along proposed route
Indian Yellow-nosed Albatross	<i>Thalassarche carteri</i>	VU	E	1	21-Aug-1982	1,	oceanic	Will not be present – offshore, marine species
Lesser Sand Plover	<i>Charadrius mongolus mongolus</i>	sp	E	1	13-Oct-1994	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Lewin's Rail	<i>Lewinia pectoralis pectoralis</i>		V	1	21-Apr-2005	1	wetland	Unlikely – no suitable habitats present along proposed route
Little Egret	<i>Egretta garzetta nigripes</i>		R	8	30-Nov-2012	1	water bird	Unlikely – no suitable habitats present along proposed route
Little Wattlebird (KI)	<i>Anthochaera chrysoptera halmaturina</i>	VU		6	10-Apr-2017	1, 2	woodlands, forest, Banksia heathlands & gardens	Possible– but not recorded during field survey work
Musk Duck	<i>Biziura lobata menziesi</i>		R	10	30-Nov-2012	1	water bird	Unlikely – no suitable habitats present along proposed route
Northern Giant Petrel	<i>Macronectes halli</i>	VU		1	01-Jul-1982	1, 2	oceanic	Unlikely – no suitable habitats present along proposed route

OFFICIAL

COMMON NAME	SPECIES	EPBC Act	NPW Act SA	NUMBER OF RECORDS (BDBSA)	DATE OF LAST RECORD (BDBSA)	Source	Main Habitat	LIKELIHOOD ASSESSMENT AND JUSTIFICATION
Pacific Golden Plover	<i>Pluvialis fulva</i>		R	7	16-Feb-1985	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Pacific Reef Heron	<i>Egretta sacra sacra</i>		R	5	10-Feb-2012	1	shorebird	Unlikely – no suitable habitats present along proposed route
Peregrine Falcon	<i>Falco peregrinus macropus</i>		R	2	01-Jan-1987	1	diverse; rainforest to arid shrublands	Possible – but habitats along proposed route do not provide critical nesting opportunities of cliffs or large trees. Wide ranging species with large territory, seen flying overhead at one of 20 survey sites.
Pied Oystercatcher	<i>Haematopus longirostris</i>		R	154	17-Nov-2014	1	shorebird	Unlikely – no suitable habitats present along proposed route
Purple-gaped Honeyeater	<i>Lichenostomus cratitius</i>	of concern	ssp	6	11-Apr-2017	1, 3	Mallee woodlands with shrubby understorey	Highly Likely/Known – recorded in mallee woodland at four of 20 survey sites. Mainland sub species is Rare, but KI sub species is considered "of concern" by Birdlife Australia
Red Knot (ssp. rogersi)	<i>Calidris canutus rogersi</i>	EN	E	4	13-Nov-2011	1, 2	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Restless Flycatcher	<i>Myiagra inquieta</i>		R	3	10-Apr-2017	1	open forest, woodland, farmland	Possible - but not recorded during field survey
Rock Parrot	<i>Neophema petrophila zietzi</i>		R	1	30-Nov-2012	1	coastal	Unlikely – no suitable habitats present along proposed route
Ruddy Turnstone	<i>Arenaria interpres interpres</i>		R	11	11-Feb-2012	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Sanderling	<i>Calidris alba alba</i>		R	7	05-Mar-1986	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Scarlet Robin	<i>Petroica boodang boodang</i>		R	18	19-Sep-2021	1, 3	woodlands & forests	Highly Likely/Known – recorded at five of 20 survey sites, in variations of mallee woodland, Callitris woodland and tall open Melaleuca shrubland



COMMON NAME	SPECIES	EPBC Act	NPW Act SA	NUMBER OF RECORDS (BDBSA)	DATE OF LAST RECORD (BDBSA)	Source	Main Habitat	LIKELIHOOD ASSESSMENT AND JUSTIFICATION
Shy Heathwren	<i>Hylacola cauta</i>	VU	R	1	26-Oct-2016	1, 2, 3	mallee & coastal thickets	Highly Likely/Known – heard calling at one of 20 survey sites, in dense coastal shrubland
Sooty Oystercatcher	<i>Haematopus fuliginosus fuliginosus</i>		R	76	20-Dec-2016	1	shorebird	Unlikely – no suitable habitats present along proposed route
South Australian Bassian Thrush	<i>Zoothera lunulata halmaturina</i>	VU	R			2	woodlands & forest with dense canopy, open understorey and deep litter	Possible -, but not recorded during field survey. Can be difficult to detect due to its quiet nature, slow movement and effective camouflage
Striated Thornbill (KI)	<i>Acanthiza lineata whitei</i>	VU		14	09-Apr-2017	1, 2, 3	Eucalypt forests & woodlands	Highly Likely/Known – recorded at five of 20 survey sites, all of which were mallee (Eucalypt woodland) habitats
Whimbrel	<i>Numenius phaeopus variegatus</i>		R	8	06-Feb-2011	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route
White-bellied Sea Eagle	<i>Haliaeetus leucogaster</i>		E	7	15-Oct-2015	1	wetlands, coastal	Unlikely - may fly over occasionally, but proposed route does not provide any significant habitat
White-bellied Whipbird (KI)	<i>Psophodes leucogaster lashmari</i>	EN	R	1	05-Oct-2021	1, 2	dense heath & mallee with thick litter	Possible – particularly in areas of dense coastal vegetation near Prospect Hill at the southern end of Pelican Lagoon, but was not recorded during field survey
White-eared Honeyeater (KI)	<i>Nesoptilotis leucotis thomasi</i>	EN		3	07-Nov-1990	1, 2, 3	forest, woodland, heathland	Highly Likely/Known – recorded at six of 20 survey sites, most in mallee with dense understorey, but also in mature Callitris woodland with open understorey
Wood Sandpiper	<i>Tringa glareola</i>		R	1	23-Feb-2010	1	migratory shorebird	Unlikely – no suitable habitats present along proposed route
Yellow-tailed Black Cockatoo	<i>Zanda funerea whiteae</i>		V	11	19-Sep-2021	1,3	forest, woodlands	Known – recorded as seen or heard flying overhead at 5 of 20 survey sites

Source 1 = Biodiversity Data Base of South Australia (BDBSA); 2 = EPBC Act Protected Matters Report, created 22/4/2022; 3 = observed/recorded in the field. Key to conservation codes: CR = Critically Endangered, EN, E = Endangered, VU, V = Vulnerable, R = Rare

**Table 3: Threat rated mammal species observed on site, or recorded within 5km of the application area since 1995, or for which the vegetation is considered to provide suitable habitat.**

COMMON NAME	SPECIES	EPBC Act	NPW Act SA	NUMBER OF RECORDS (BDBSA)	DATE OF LAST RECORD (BDBSA)	Source	Main Habitat	LIKELIHOOD ASSESSMENT AND JUSTIFICATION
Common Brushtail Possum	<i>Trichosurus vulpecula</i>		R	33	13-Apr-2017	1	forest, woodland, mallee	Highly Likely/Known - multiple records during field survey, including seven fresh roadkills and two seen while spotlighting; also recorded at two of 20 survey sites, one spotlighting and one by roadkill remains. In the absence of foxes on KI, this possum is able to occupy all habitats and is most often seen on the ground, rather than arboreal habitats as on the mainland
Short-beaked Echidna (KI)	<i>Tachyglossus aculeatus multiaculeatus</i>	EN	E	19	06-Jun-2020	1, 2	forest, woodland, mallee	Highly Likely/Known - in most habitats. Fresh or recent diggings recorded at 12 of 20 survey sites
Southern Brown Bandicoot (SA mainland and KI)	<i>Isoodon obesulus obesulus</i>	EN	V	60	13-Jul-2017	1, 2	forest, woodland, shrublands, with dense understorey	Possible - in areas of denser ground cover, but not recorded during field survey, including no sign of characteristic diggings. There are numerous records in other nearby areas of the Dudley Peninsula.
Southern Right Whale	<i>Eubalaena australis</i>	EN				2	oceanic	Will not be present – offshore, marine species
Australian Sea-lion	<i>Neophoca cinerea</i>	EN				2	coastal marine	Unlikely – no suitable habitats present along proposed route

**Source 1 = Biodiversity Data Base of South Australia (BDBSA); 2 = EPBC Act Protected Matters Report, created 22/4/2022.**

**Key to conservation codes: CR = Critically Endangered, EN, E = Endangered, VU, V = Vulnerable, R = Rare**



**Table 4: Threat rated reptile species observed on site, or recorded within 5km of the application area since 1995, or for which the vegetation is considered to provide suitable habitat.**

COMMON NAME	SPECIES	EPBC Act	NPW Act SA	NUMBER OF RECORDS (BDBSA)	DATE OF LAST RECORD (BDBSA)	Source	Main Habitat	LIKELIHOOD ASSESSMENT AND JUSTIFICATION
Heath Goanna	<i>Varanus rosenbergi</i>		V	17	19-Sep-2021	1	mallee, woodland, heathland	Likely – difficult to determine at the time of year the field survey was undertaken (June) as reptiles are largely inactive, but two old burrows were seen at one survey site, and an old roadkill located just outside Kingscote
Leatherback Turtle	<i>Dermochelys coriacea</i>	EN	V	1	01-Jan-1994	1, 2	oceanic	Will not be present – offshore, marine species
Loggerhead Sea Turtle	<i>Caretta caretta</i>	EN	E	1	01-Apr-1975	1, 2	oceanic	Will not be present – offshore, marine species
Tiger Snake	<i>Notechis scutatus</i>	ssp		5	26-Mar-2017	1		Not relevant - not KI sub species, but southern Flinders Ranges race

**Source 1 = Biodiversity Data Base of South Australia (BDBSA); 2 = EPBC Act Protected Matters Report, created 22/4/2022.**

**Key to conservation codes: CR = Critically Endangered, EN, E = Endangered, VU, V = Vulnerable, R = Rare**

Criteria for the likelihood of occurrence of species within the Study area.

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

### 4.3 Cumulative impact

The cumulative impacts must consider all the clearance that is likely to result from the application, including the following;

- clearance directly required for the development (e.g. access, building footprints, associated infrastructure – power and water, etc.),  
These impacts have been included in the total impact for the upgrade site. Stack sites are yet to be nominated but potential sites, with minimal or degraded native vegetation present, have been reviewed as a preliminary action.
- subsequent clearance that will be permitted or required (e.g. 10m around a building, 20m around a dwelling, clearance for fire protection),  
Not applicable to this type of development.
- indirect clearance that may occur as a result of the development (e.g. dust generation smoothing vegetation, altered hydrology inundating or drying vegetation, impacting on tree root zones (the application of fill) impacting on tree health)  
All such impacts have been included in the assessment. Environmental management methods will be employed during construction to minimise these impacts.,
- future stages or associated components of a development,  
The project is part of an upgrade of the length of the Hog Bay Road from Playford Highway near Kingscote, to Penneshaw. Other parts include an overtaking lane (no native vegetation impacts), and junction upgrade subject to a separate vegetation assessment (in progress).

### 4.4 Address the Mitigation Hierarchy

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

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

Sites for safety upgrades are prioritized based on results of road safety audits and road crash history data. In many cases, there is minimal scope for amendments or alternatives as standards for design and safety need to be adhered to.

The cryptic nature of tree root systems makes it difficult to predict impact, and so an overestimate of impacts is usually recorded in order to adequately account for and offset potential impacts. It is likely that some of the vegetation included in the impacts tally will not suffer any detrimental impact. Everything has been done to ensure potential impacts are included in this assessment.

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

The works are programmed to occur where justified by road safety audits and crash data. There is limited scope for amendments or alternatives. Guard rail is proposed for sites to protect high value vegetation, which would otherwise be required to be removed to achieve road safety standards.

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

This is not an option at the development site; however, the appropriate SEB offset will be provided.

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

The appropriate SEB offset requirement will be met, in this case via a payment into the Native Vegetation Fund.

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

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

Principle of clearance	Considerations
<b>Principle 1a - it comprises a high level of diversity of plant species</b>	<u>Relevant information</u> VA1: Native species – 32, Introduced species – 11 Bushland Plant Diversity Score – 24 VA2: Native species – 29, Introduced species – 7 Bushland Plant Diversity Score – 24 VA3: Native species – 34, Introduced species – 7 Bushland Plant Diversity Score – 24 VA4: Native species – 18, Introduced species – 5 Bushland Plant Diversity Score – 21 VA5: Native species – 17, Introduced species – 8 Bushland Plant Diversity Score – 21 VA6: Native species – 16, Introduced species – 6 Bushland Plant Diversity Score – 21 VA7: Native species – 17, Introduced species – 8 Bushland Plant Diversity Score – 24 VA8: Native species – 17, Introduced species – 6 Bushland Plant Diversity Score – 21 VA9: Native species – 19, Introduced species – 8 Bushland Plant Diversity Score – 24
	<u>Assessment against the principles</u> <b>Seriously at Variance</b> VA1, VA2, VA3, VA4, VA5, VA6, VA7, VA8 and VA9 <u>At Variance</u> N/A
	<u>Moderating factors that may be considered by the NVC</u> The areas of clearance proposed for each impacted site is between 0.02 ha (VA2) and 0.336 ha (VA3); a relatively small area comprising <0.25% of the total of each vegetation association.
<b>Principle 1b - significance as a habitat for wildlife</b>	<u>Relevant information</u> Threatened fauna species that were recorded or may use the vegetation are listed in Part 4.2 above, and in Appendix 1.  With 11 threatened species observed within 5km of the impacted sites (Brown-headed Honeyeater, Purple-gaped Honeyeater, White-eared Honeyeater, Scarlet Robin, Shy Heathwren, Striated Thornbill, Yellow-tailed Black-cockatoo, Peregrine Falcon, Common Brushtail Possum, Short-beaked Echidna and Heath Goanna), and 8 possibly finding suitable habitat at the sites assessed (Beautiful Firetail, Bush Stone-curlew, Glossy Black Cockatoo, Little Wattlebird, Restless



Flycatcher, SA Bassian Thrush, White-bellied Whipbird and Southern Brown Bandicoot), the habitat across the range of vegetation associations is important for threatened species.

Sixty two fauna species were observed during the field survey (see Appendix 2), including 12 listed as threatened (one heard at an unknown distance). Although these were observed across different habitats, this is considered a high diversity of fauna species for the project site.

Most of the sites are connected to other remnant patches, providing potential movement corridors across the landscape. In an island site this is particularly important for escape from fire events.

VA1 Amberley IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 60.93	VA5 Amberley IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 64.21
VA1 Gantheaume IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 58.30	VA6 Gantheaume IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 43.84
VA2 Coranda IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 47.92	VA7 Cygnet IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 60.82
VA3 Amberley IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 64.85	VA8 Coranda IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 56.60
VA3 Coranda IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 65.44	VA9 Amberley IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 86.67
VA3 Cygnet IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 66.60	VA9 Cygnet IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 87.45
VA4 Coranda IBRA Threatened Fauna Score – 0.1 Unit biodiversity Score – 70.68	

Assessment against the principles

**Seriously at Variance**

With a threatened fauna score of 0.1 for each vegetation association, all VA's 1-9 are SAV  
In addition, VA 1, 3, 4, 5, 7, 8 and 9 have a UBS of greater than 50.

At Variance –

N/A

Moderating factors that may be considered by the NVC

*Impact significance* – the amount of vegetation potentially impacted across the whole project site is only 1.1145ha. Given the project is 52 km long, this infers a very small average width of vegetation impacted at each site. The greatest width recorded as potentially impacted was 2m (generally where curves are to be widened); the smallest, 0.5m. Areas around culvert heads were usually less than 5m<sup>2</sup>.

*Non-essential habitat* – although several threatened species were present, they were rarely observed in the first few metres of road reserve vegetation, but more often present in larger

	<p>remnants adjacent, but distant from the road. The part of road reserve impacted is unlikely to constitute essential habitat for threatened species.</p>
<p><b>Principle 1c - plants of a rare, vulnerable or endangered species</b></p>	<p><u>Relevant information</u> Threatened flora species that were recorded or may use the vegetation are listed in Part 4.2 above, and in Appendix 3.</p> <p>The list includes several species which were not detectable during the period of survey – including Orchid species - or where distinguishing features were not present for species identification, such as grasses. It is possible that some of the more cryptic or annual species are present at some of the sites, however the likelihood of such occurring in the first metre or two of road reserve vegetation is considered low. Listed grass specie may well be present at some sites.</p> <p>Plant species that are recorded in the area and which may be present but due to dormancy, or lack of identifying features, were not observed, include:  <i>Caladenia ovata</i> – EPBC VU, State R  <i>Caladenia reticulata</i> – State R  <i>Caladenia sanguinea</i> – State R  <i>Pterostlis melagramma</i> – State E  <i>Austrostipa dendiflora</i> – State R  <i>Austrostipa multispiculis</i> – State R</p> <p>The following threatened species were recorded on site:  <i>Beyeria subtectata</i> (Kangaroo Island Turpentine Bush – EPBC VU, State E), present in VA9 at site 58. One individual may be impacted by works, with negligible impact on the population.  <i>Xanthorrhoea semiplana ssp tateana</i> (Tate’s Grass Tree – State R), present in VA1 and VA5 at sites 41, 42 and 43. The plants were outside the area of impact.</p> <p>Threatened Flora Score(s);  VA2, VA3, VA4, VA6, VA7, VA8 = 0.  VA1, VA5 = 0.04  VA9 = 0.16</p>
	<p><u>Assessment against the principles</u>  <b>Seriously at Variance</b>  VA9 is SAV  <u>At Variance</u> –  VA1, VA5 is at variance</p>
<p><b>Principle 1d - vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered:</b></p>	<p><u>Relevant information</u>  Vegetation Associations xxx potentially meet criteria for the EPBC Critically Endangered Kangaroo Island Narrow-leaved Mallee Woodland plant community, and the DEH Endangered <i>Eucalyptus cneorifolia</i>, <i>E. rugosa</i> Mallee over <i>Rhagodia candolleana</i> community.</p> <p>Threatened Community Score –  VA 1, 2, 6, 7 and 8 = 1  VA 3, 4 and 5 = 1.4  VA 9 = 1.34</p>

	<p><u>Assessment against the principles</u>  <b><u>Seriously at Variance</u></b>                  VA3, VA4, VA5, and VA9</p> <hr/> <p><u>Moderating factors that may be considered by the NVC</u>  <i>Impact significance</i> – the amount of vegetation potentially impacted across the threatened communities is 0.8115ha, with VA3 = 0.0336ha; VA4 = 0.303ha; VA5 = 0.114 ha; VA9 = 0.0585ha (comprising largely small patches at culverts).</p> <p><i>Area of Impact</i> – the area equates to less than 1% within the immediate vicinity overall.</p> <p><i>Condition of the vegetation</i> – whilst the broader association is in good condition without disturbance from rabbits, the impacted vegetation is confined to road reserve, and mostly to the first 1-2m where degradation is at its highest with weed infiltration and other disturbances prevalent.</p>
<p><b>Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.</b></p>	<p><u>Relevant information</u></p> <p>Cygnets IBRA Association remnancy – 27%                  Total Biodiversity Score – 25.71 (combined scores of all sites within Cygnets IBRA)</p> <p>Amberley IBRA Association remnancy – 21%                  Total Biodiversity Score – 13.50 (combined scores of all sites within Amberley IBRA)</p> <p>Gantheaume IBRA Association remnancy – 88%                  Total Biodiversity Score – 2.59 (combined scores of all sites within Gantheaume IBRA)</p> <p>Coranda IBRA Association remnancy – 28%                  Total Biodiversity Score – 31.61 (combined scores of all sites within Coranda IBRA)</p> <p>Kangaroo Island IBRA Subregion remnancy – 52%                  Total Biodiversity Score – 71.41 (combined scores of all sites)</p> <p>Due largely to the absence of rabbits, the vegetation assessed is in good condition with high relative diversity. Much of it is continuous with larger remnants, increasing its value as potential habitat for threatened species, and its potential for longevity.</p> <p>Vegetation on road reserves is an important contributor to the cohesiveness of remnant vegetation on this part of the Island. Where the road reserve is relatively narrow and more fragmented (approximate MM's 1-6, 13.5 – 18, 19 – 24.5, 29 – 34, and 42 – 46) the potential impact of threats become more significant (edge effects, feral animals/birds, weed invasion, damage from road maintenance and improvement).</p> <p>The presence of feral deer, pigs and goats are a potential threat to the health and longevity of remnants. Weed invasion is also of concern, and a significant threat is the presence of Bridal Creeper, which was found in almost all sites assessed. At the time of survey, new growth was beginning, not an accurate indication of the total density of this weed likely at peak season.</p> <p>The potential for spreading Phytophthora threatens the health and continuity of the vegetation. Suitable hygiene practices are to be employed for construction works in accordance with the DIT SOP.</p> <hr/> <p><u>Assessment against the principles</u>  <b><u>Seriously at Variance</u></b>                  At the Local level, sites 3, 65-70 are SAV. At the Regional level, all sites are SAV</p>



	<p><u>At Variance</u> All remaining sites not included above</p>
	<p><u>Moderating factors that may be considered by the NVC</u> <i>Impact significance</i> Sites in VA3, VA4, VA5 and VA9 are (potentially) within EPBC listed plant communities</p>
<p><b>Principle 1f - it is growing in, or in association with, a wetland environment.</b></p>	<p><u>Relevant information</u>  Sites in VA9, including almost all culvert upgrade sites, are associated with drainage lines, into which most ultimately drain, and/or samphire/saltmarsh wetlands.  Stream orders of bridge and road verge sites associated with creeks are: MM 9.05, Site 36, Stream Order 1; MM10.05 – 10.8, Site 41, Stream Order 2; MM 43.1, Site 78, adjacent Stream Order 4 (Deep Creek); and MM 52, Site 90, Stream Order 3.  The amount of impact likely at culvert sites ranges from 5m<sup>2</sup> to 20m<sup>2</sup>, whilst total impact, including culvert sites, associated with wetlands in VA9 is 0.0585ha . It is not considered that the proposed clearance at numerous small sites which are already disturbed, will have a significant impact on hydrology or water quality.</p>
	<p><u>Assessment against the principles</u> <u>Seriously at Variance</u> N/A – impact is not considered significant</p>
	<p><u>Moderating factors that may be considered by the NVC</u> N/A</p>
<p><b>Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.</b></p>	<p><u>Relevant information</u> The proposed impact includes sites which are all highly visible to the travelling public and locals. The road is the main tourist, freight and commercial route from the mainland to the rest of KI and is thus highly trafficked.  Vegetation clearance is minimal and consists of usually less than 1m from the shoulder along relatively short lengths, and is considered unlikely to be noticed once complete, by most people. However, given the high profile of the EPBC rated community coming into/out of Penneshaw around MM 46 – MM 50, it is likely that these works will be subject to intense public interest.</p>
	<p>N/A</p>
	<p><u>Moderating factors that may be considered by the NVC</u> N/A</p>

## 4.6 Risk Assessment

### Determine the level of risk associated with the application

<p><b>Total clearance</b></p>	No. of trees	N/A
	Area (ha)	1.1455
	Total biodiversity Score	74.77
<p><b>Seriously at variance with principle 1(b), 1(c) or 1 (d)</b></p>		(b), (c), (d)
<p><b>Risk assessment outcome</b></p>		Level 4

# 5. Clearance summary

## Clearance Area(s) Summary table

Block	Sites	Species diversity score	Threatened Ecological community Score	Threatened plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	Loadings	Reductions	SEB Points required	SEB payment	Admin Fee
VA1 Amberley	2, 42, 43, 53, 57, 60 - 64	24	1	0.04	0.1	60.93	0.078	4.75	1	0	0	4.99	3,383.71	186.10
VA1 Gantheaume	65, 66	24	1	0.04	0.1	58.30	0.02	1.17	1	0	0	1.22	838.41	46.11
VA2 Coranda	78	24	1	0	0.1	47.92	0.02	0.96	1	0	0	1.01	701.19	38.57
VA3 Amberley	50, 54, 55, 56	24	1.4	0	0.1	64.85	0.004	0.26	1	0	0	0.27	182.87	10.06
VA3 Coranda	80, 81, 82	24	1.4	0	0.1	65.44	0.0805	5.27	1	0	0	5.53	3,713.46	204.24
VA3 Cygnet	6, 7, 11, 13 - 15, 32, 33	24	1.4	0	0.1	66.60	0.2515	16.75	1	0	0	17.59	11,808.86	649.49
VA4 Coranda	83 - 89	21	1.4	0	0.1	70.68	0.303	21.42	1	0	0	22.49	17,534.04	964.37
VA5 Amberley	36, 39 - 41	21	1.4	0.04	0.1	64.21	0.114	7.32	1	0	0	7.69	5,057.76	278.18
VA6 Gantheaume	3, 67 - 76	21	1	0	0.1	43.84	0.0635	2.78	1	0	0	2.92	2,138.29	117.61
VA7 Cygnet	4, 29, 30	24	1	0	0.1	60.82	0.0825	5.02	1	0	0	5.27	3,346.92	184.08
VA8 Coranda	79	21	1	0	0.1	56.60	0.07	3.96	1	0	0	4.16	2,943.32	161.88
VA9 Amberley	37, 38, 44 - 49, 51, 52, 58, 59, 90	24	1.35	0.16	0.1	86.67	0.0135	1.17	1	0	0	1.23	846.23	46.54
VA9 Cygnet	1, 5, 8 - 12, 16 - 28, 31, 34, 35	24	1.35	0.16	0.1	87.45	0.045	3.94	1	0	0	4.13	2,829.61	155.63
<b>Total</b>							<b>1.1455</b>	<b>74.77</b>				<b>78.50</b>	<b>\$55,324.67</b>	<b>\$3,042.86</b>

**Totals summary table**

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
<b>Application</b>	74.77	78.50	\$55,324.67	\$3,042.86	\$58,367.53

<b>Economies of Scale Factor</b>	0.5
<b>Rainfall (mm)</b>	515 (averaged)

# 6. Significant Environmental Benefit

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

**ACHIEVING AN SEB**

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

Pay into the Native Vegetation Fund.

**PAYMENT SEB**

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

- Payment amount required (including admin. fee) **\$58,367.53**



# 7. Appendices

## Appendix 1. Threatened Fauna Species List

COMMON NAME	SPECIES	EPBC Act	NPW Act SA	DATE OF LAST RECORD (BDBSA)
Australasian Bittern	<i>Botaurus poiciloptilus</i>	EN		1-Jan-1984
Australasian Shoveler	<i>Spatula rhynchotis</i>		R	23-Feb-2010
Australian Fairy Tern	<i>Sternula nereis nereis</i>	VU		12-Nov-2011
Banded Stilt	<i>Cladorhynchus leucocephalus</i>		V	06-Feb-2005
Bar-tailed Godwit	<i>Limosa lapponica baueri</i>	VU	R	06-Jun-2010
Beautiful Firetail (MLR, KI)	<i>Stagonopleura bella samueli</i>	of concern	R	30-Nov-2012
Black Falcon	<i>Falco subniger</i>		R	18-Feb-2013
Black-browed Albatross	<i>Thalassarche melanophris</i>	VU	ssp	08-May-1982
Black-tailed Godwit	<i>Limosa limosa melanuroides</i>		R	07-Feb-2010
Brown Quail	<i>Coturnix ypsilophora australis</i>		V	07-Jul-2013
Brown-headed Honeyeater (KI)	<i>Melithreptus brevirostris magnirostris</i>	EN		17-Nov-1990
Bush Stone-curlew	<i>Burhinus grallarius</i>		R	19-Sep-2021
Common Sandpiper	<i>Actitis hypoleucos</i>		R	06-Feb-2005
Curlew Sandpiper	<i>Calidris ferruginea</i>	CR	E	16-Feb-1985
Eastern Osprey	<i>Pandion haliaetus cristatus</i>		E	05-Nov-1990
Fairy Prion	<i>Pachyptila turtur subantarctica</i>	VU		
Far Eastern Curlew	<i>Numenius madagascariensis</i>	CR	E	10-Feb-2012
Flame Robin	<i>Petroica phoenicea</i>		V	01-Jan-1976
Freckled Duck	<i>Stictonetta naevosa</i>		V	09-Feb-2003
Glossy Black-Cockatoo (KI)	<i>Calyptorhynchus lathami halmaturinus</i>	EN	E	13-Mar-2019
Great Knot	<i>Calidris tenuirostris</i>	CR	E	13-Nov-2011
Greater Sand Plover	<i>Charadrius leschenaultii leschenaultii</i>	sp	R	30-Nov-2012
Grey Currawong	<i>Strepera versicolor</i>		ssp	24-Oct-2020
Grey-headed Albatross	<i>Thalassarche chrysostoma</i>	EN	V	03-Sep-1968
Grey-tailed Tattler	<i>Tringa brevipes</i>		R	09-Jan-1996
Hooded Plover	<i>Thinornis cucullatus cucullatus</i>	VU	V	17-Nov-2014
Indian Yellow-nosed Albatross	<i>Thalassarche carteri</i>	VU	E	21-Aug-1982
Lesser Sand Plover	<i>Charadrius mongolus mongolus</i>	sp	E	13-Oct-1994
Lewin's Rail	<i>Lewinia pectoralis pectoralis</i>		V	21-Apr-2005
Little Egret	<i>Egretta garzetta nigripes</i>		R	30-Nov-2012
Little Wattlebird (KI)	<i>Anthochaera chrysoptera halmaturina</i>	VU		10-Apr-2017
Musk Duck	<i>Biziura lobata menziesi</i>		R	30-Nov-2012
Northern Giant Petrel	<i>Macronectes halli</i>	VU		01-Jul-1982

COMMON NAME	SPECIES	EPBC Act	NPW Act SA	DATE OF LAST RECORD (BDBSA)
Pacific Golden Plover	<i>Pluvialis fulva</i>		R	16-Feb-1985
Pacific Reef Heron	<i>Egretta sacra sacra</i>		R	10-Feb-2012
Peregrine Falcon	<i>Falco peregrinus macropus</i>		R	01-Jan-1987
Pied Oystercatcher	<i>Haematopus longirostris</i>		R	17-Nov-2014
Purple-gaped Honeyeater	<i>Lichenostomus cratitius</i>	of concern	ssp	11-Apr-2017
Red Knot (ssp. rogersi)	<i>Calidris canutus rogersi</i>	EN	E	13-Nov-2011
Restless Flycatcher	<i>Myiagra inquieta</i>		R	10-Apr-2017
Rock Parrot	<i>Neophema petrophila zietzi</i>		R	30-Nov-2012
Ruddy Turnstone	<i>Arenaria interpres interpres</i>		R	11-Feb-2012
Sanderling	<i>Calidris alba alba</i>		R	05-Mar-1986
Scarlet Robin	<i>Petroica boodang boodang</i>		R	19-Sep-2021
Shy Heathwren	<i>Hylacola cauta</i>	VU	R	26-Oct-2016
Sooty Oystercatcher	<i>Haematopus fuliginosus fuliginosus</i>		R	20-Dec-2016
South Australian Bassian Thrush	<i>Zoothera lunulata halmaturina</i>	VU	R	
Striated Thornbill (KI)	<i>Acanthiza lineata whitei</i>	VU		09-Apr-2017
Whimbrel	<i>Numenius phaeopus variegatus</i>		R	06-Feb-2011
White-bellied Sea Eagle	<i>Haliaeetus leucogaster</i>		E	15-Oct-2015
White-bellied Whipbird (KI)	<i>Psophodes leucogaster lashmari</i>	EN	R	05-Oct-2021
White-eared Honeyeater (KI)	<i>Nesoptilotis leucotis thomasi</i>	EN		07-Nov-1990
Wood Sandpiper	<i>Tringa glareola</i>		R	23-Feb-2010
Yellow-tailed Black Cockatoo	<i>Zanda funerea whiteae</i>		V	19-Sep-2021

Appendix 2. Fauna recorded during site assessment

Common Name	Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Grand Total	Vert Group	SANPWS	EPBC
Brown Tree Frog	<i>Litoria ewingii</i>									1	1											2	A		
Burrowing Frog	<i>Neobatrachus pictus</i>		1					1			1											3	A		
Common Froglet	<i>Crinia signifera</i>	1	1		1			1	1		1	1										7	A		
Australian Boobook (KI)	<i>Ninox boobook</i>						1															1	B		
Australian Golden Whistler	<i>Pachycephala pectoralis</i>			1												1		1	1	1		5	B		
Australian Magpie	<i>Gymnorhina tibicen</i>	1	1	1	1	1	1				1	1	1	1								10	B		
Australian Raven (YP, eastern SA, KI)	<i>Corvus coronoides coronoides</i>												1									1	B		
Australian White Ibis	<i>Threskiornis molucca molucca</i>	1	1																			2	B		
Black-faced Cuckooshrike	<i>Coracina novaehollandiae</i>	1				1	1		1			1										5	B		
Black-winged Currawong (KI)	<i>Strepera versicolor halmaturina</i>		1	1	1	1	1	1	1		1	1	1		1	1		1	1	1	1	16	B		
Brown Thornbill (KI)	<i>Acanthiza pusilla zietzi</i>	1	1	1		1			1	1	1	1	1	1		1		1	1	1	1	15	B		
Brown-headed Honeyeater (KI)	<i>Melithreptus brevirostris magnirostris</i>	1										1								1		4	B		EN
Brush Bronzewing	<i>Phaps elegans</i>																	1				1	B		
Bush Stonecurlew	<i>Burhinus grallarius</i>	1			1			1														4	B	R	
Common Blackbird*	<i>Turdus merula merula</i>														1							1	B		
Common Bronzewing	<i>Phaps chalcoptera</i>				1	1											1					3	B		
Crescent Honeyeater (KI and MLR)	<i>Phylidonyris pyrrhopterus halmaturinus</i>	1	1		1	1	1	1	1	1	1	1	1		1	1	1	1	1	1	1	18	B		
Eastern Barn Owl	<i>Tyto javanica delicatula</i>								1										1			2	B		
Eastern Spinebill (KI, MLR, southern FR)	<i>Acanthorhynchus tenuirostris halmaturinus</i>					1	1	1		1	1		1				1	1	1			10	B		
Eurasian Skylark*	<i>Alauda arvensis arvensis</i>										1											1	B		
European Goldfinch*	<i>Carduelis carduelis britannica</i>										1											1	B		
Fairy Martin	<i>Petrochelidon ariel</i>														1							1	B		
Galah (most of SA)	<i>Eolophus roseicapilla albiceps</i>		1							1	1									1	1	5	B		
Grey Fantail	<i>Rhipidura albiscapa</i>	1	1			1				1		1		1	1	1	1	1	1		1	11	B		
Grey Shrike-thrush	<i>Colluricincla harmonica</i>								1													1	B		
Little Raven	<i>Corvus mellori</i>	1		1	1	1	1		1		1	1	1		1		1			1	1	13	B		
Masked Lapwing	<i>Vanellus miles</i>	1				1																2	B		
Nankeen Kestrel	<i>Falco cenchroides</i>	1																				1	B		
New Holland Honeyeater (KI)	<i>Phylidonyris novaehollandiae campbelli</i>			1	1	1	1		1		1	1	1	1			1					10	B		




OFFICIAL

Common Name	Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Grand Total	Vert Group	SANPWS	EPBC
Peregrine Falcon	<i>Falco peregrinus macropus</i>		1																			1	B	R	
Purple-gaped Honeyeater (KI)	<i>Lichenostomus cratitius cratitius</i>					1						1	1				1					4	B	R	concern
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	1	1					1			1	1		1								6	B		
Red Wattlebird (KI)	<i>Anthochaera carunculata clelandi</i>	1					1	1	1	1	1		1	1			1			1	1	11	B		
Red-browed Finch	<i>Neochmia temporalis temporalis</i>			1																		1	B		
Scarlet Robin	<i>Petroica boodang boodang</i>			1				1					1							1	1	5	B	R	
Shy Heathwren (Kangaroo Island)	<i>Hylacola cauta halmaturina</i>														1							1	B	R	V
Silvereye	<i>Zosterops lateralis</i>	1		1			1		1	1	1	1	1	1	1	1	1	1	1	1	1	15	B		
Spotted Pardalote	<i>Pardalotus punctatus</i>	1	1		1	1		1					1				1					7	B		
Striated Pardalote	<i>Pardalotus striatus</i>	1			1																	2	B		
Striated Thornbill (KI)	<i>Acanthiza lineata whitei</i>				1								1				1	1			1	5	B		V
Superb Fairywren (KI)	<i>Malurus cyaneus ashbyi</i>	1	1	1	1	1		1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	B		
Tawny-crowned Honeyeater	<i>Gliciphila melanops</i>																1					1	B		
Wedge-tailed Eagle	<i>Aquila audax</i>														1							1	B		
Welcome Swallow	<i>Hirundo neoxena neoxena</i>		1								1			1	1							4	B		
White-browed Scrubwren	<i>Sericornis frontalis</i>	1			1			1				1		1	1				1	1		8	B		
White-eared Honeyeater (KI)	<i>Nesoptilotis leucotis thomasi</i>					1	1	1	1			1								1		6	B		EN
Willie Wagtail	<i>Rhipidura leucophrys leucophrys</i>					1					1											2	B		
Yellow-tailed Black Cockatoo	<i>Zanda funerea whiteae</i>	1			1				1				1			1						5	B	V	concern
Common Brushtail Possum	<i>Trichosurus vulpecula</i>	1		1																		2	M	R	
Domestic Cat (Feral Cat)	<i>Felis catus</i>								1													1	M		
Koala	<i>Phascolarctos cinereus</i>					1		1		1		1										4	M		
Short-beaked Echidna (Kangaroo Island)	<i>Tachyglossus aculeatus multiaculeatus</i>		1		1	1	1				1		1	1		1	1	1	1	1	1	12	M	E	EN
Tammar Wallaby	<i>Macropus (Notamacropus) eugenii eugenii</i>	1	1	1	1	1			1		1		1	1	1	1				1		12	M		
Western Grey Kangaroo (KI)	<i>Macropus fuliginosus fuliginosus</i>	1		1	1		1	1	1	1		1	1	1	1	1	1	1	1	1	1	17	M		
Four-toed Earless Skink	<i>Hemiergis peronii</i>			1						1			1	1	1							5	R		
Garden Skink	<i>Lampropholis guichenoti</i>						1															1	R		
Heath Goanna	<i>Varanus rosenbergi</i>																			1		1	R	V	
Mallee Snake-eye	<i>Morethia obscura</i>							1														1	R		
Southern Four-toed Slider	<i>Lerista dorsalis</i>														1							1	R		
Three-toed Earless Skink	<i>Hemiergis decresiensis</i>																				1	1	R		
Tiger Snake	<i>Notechis scutatus</i>							1							1							2	R		
Grand Total		23	16	14	17	19	13	18	17	12	21	18	20	14	17	10	16	13	16	11	14	319			

## Appendix 3. Flora Species List


FAMILY NAME	SPECIES	COMMON NAME	NATIONAL RATING	STATE RATING	DATE OF LAST RECORD
COMPOSITAE	<i>Olearia microdisca</i>	Small-flower Daisy-bush	EN	E	12-Mar-2021
COMPOSITAE	<i>Olearia pannosa</i> ssp. <i>pannosa</i>	Silver Daisy-bush	VU	V	20-Sep-2010
CRASSULACEAE	<i>Crassula exserta</i>	Large-fruit Crassula		R	02-Oct-2000
DILLENIACEAE	<i>Hibbertia glebosa</i> ssp. <i>oblonga</i>			R	14-Jul-2018
DILLENIACEAE	<i>Hibbertia obtusibracteata</i>	Prickly Guinea-flower		V	28-Jan-2019
EUPHORBIACEAE	<i>Beyeria subtecta</i>	Kangaroo Island Turpentine Bush	VU	E	02-Nov-2018
GRAMINEAE	<i>Austrostipa densiflora</i>	Fox-tail Spear-grass		R	12-Oct-2011
GRAMINEAE	<i>Austrostipa multispiculis</i>	Many-flowered Spear-grass		R	05-Jul-1997
LABIATAE	<i>Prostanthera chlorantha</i>	Green Mintbush		R	12-Mar-2021
LABIATAE	<i>Scutellaria humilis</i>	Dwarf Skullcap		R	06-May-2002
LEGUMINOSAE	<i>Daviesia benthamii</i> ssp. <i>humilis</i> (NC)	Mallee Bitter-pea		R	14-Sep-1997
LEGUMINOSAE	<i>Pultenaea insularis</i>	Beyeria Bush-pea		E	06-Jun-2005
LEGUMINOSAE	<i>Pultenaea villifera</i> var. <i>glabrescens</i>	Splendid Bush-pea	VU	V	01-Apr-1995
LEGUMINOSAE	<i>Acacia dodonaeifolia</i>	Hop-bush Wattle		R	17-Oct-2020
LILIACEAE	<i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i>	Tate's Grass-tree		R	07-Mar-2013
MYOPORACEAE	<i>Myoporum parvifolium</i>	Creeping Boobialla		R	30-Sep-2012
MYRTACEAE	<i>Eucalyptus diversifolia</i> ssp. <i>hesperia</i>	Coastal White Mallee		R	28-Apr-2011
MYRTACEAE	<i>Eucalyptus fasciculosa</i>	Pink Gum		R	20-May-2019
MYRTACEAE	<i>Eucalyptus phenax</i> ssp. <i>compressa</i>	Kangaroo Island Mallee		R	20-May-2019
ORCHIDACEAE	<i>Caladenia ovata</i>	Kangaroo Island Spider-orchid	VU	E	24-Sep-2004
ORCHIDACEAE	<i>Caladenia reticulata</i>	Veined Spider-orchid		R	14-Sep-2003
ORCHIDACEAE	<i>Caladenia sanguinea</i>	Crimson Daddy-long-legs		R	10-Sep-1999
ORCHIDACEAE	<i>Pterostylis melagramma</i>	Tall Greenhood		E	14-Apr-2011
PROTEACEAE	<i>Grevillea halmaturina</i> ssp. <i>halmaturina</i>	Prickly Grevillea		R	20-May-2019
PROTEACEAE	<i>Grevillea muricata</i>	Rough Spider-flower		R	28-Jan-2019
RESTIONACEAE	<i>Desmodcladus diacolpicus</i>	Bundled Cord-rush		V	19-Oct-1999
RHAMNACEAE	<i>Spyridium daphnoides</i>	Spoon-leaved Spyridium		R	28-Jan-2019
RHAMNACEAE	<i>Spyridium eriocephalum</i> var. <i>glabrisepalum</i>	Macgillivray Spyridium	VU	E	20-May-2019
RHAMNACEAE	<i>Pomaderris halmaturina</i> ssp. <i>halmaturina</i>	Kangaroo Island Pomaderris	VU	V	28-Mar-2021
RHAMNACEAE	<i>Spyridium scabridum</i>	Rough Spyridium		R	26-Sep-1995
RUTACEAE	<i>Leionema equestre</i>	Kangaroo Island Phebalium	EN	E	09-Dec-2019
RUTACEAE	<i>Correa backhouseana</i> var. <i>orbicularis</i>	Round-leaf Correa		R	05-Dec-2021
UMBELLIFERAE	<i>Hydrocotyle comocarpa</i>	Fringe-fruit Pennywort		R	06-Jun-2020

Appendix 4. Bushland Assessment Scoresheets


Vegetation Condition Scores		Conservation Significance Score																																		
SITE: 2, 42, 43, 53, 57, 60-64		Is the vegetation association considered a Threatened Ecological community or Ecosystem? <input type="checkbox"/> Yes/No																																		
VEGETATION ASSOCIATION DESCRIPTION: E. diversifolia, E. cosmophylla +/- E. cneorifolia Mallee Woodland		State (Provisional List of Threatened Ecosystems of SA) <b>Rare</b> community (0.1 pt) <input type="checkbox"/>																																		
SIZE OF SITE (Ha): 0.078		State (Provisional List of Threatened Ecosystems of SA) <b>Vulnerable</b> community (0.2 pts) <input type="checkbox"/>																																		
		State (Provisional List of Threatened Ecosystems of SA) <b>Endangered</b> community (0.3 pts) <input type="checkbox"/>																																		
<b>Native Plant species diversity</b>		Nationally (EPBC Act) <b>Vulnerable</b> community (0.35 pts) <input type="checkbox"/>																																		
Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)		Contains a Nationally (EPBC Act) <b>Endangered or Critically Endangered</b> community (0.4 pts) <input type="checkbox"/>																																		
<table border="1"> <tr><td>&lt;5% (3 Points)</td><td><input type="checkbox"/></td></tr> <tr><td>5-10% (6 Points)</td><td><input type="checkbox"/></td></tr> <tr><td>11 - 20% (9 Points)</td><td><input type="checkbox"/></td></tr> <tr><td>21 - 30% (12 Points)</td><td><input type="checkbox"/></td></tr> <tr><td>31 - 40 % (15 Points)</td><td><input type="checkbox"/></td></tr> <tr><td>41 - 50% (18 Points)</td><td><input type="checkbox"/></td></tr> <tr><td>51 - 60% (21 Points)</td><td><input type="checkbox"/></td></tr> <tr><td>61 - 70% (24 Points)</td><td><input checked="" type="checkbox"/></td></tr> <tr><td>71 - 80% (27 Points)</td><td><input type="checkbox"/></td></tr> <tr><td>&gt;80% (30 Points)</td><td><input type="checkbox"/></td></tr> </table>		<5% (3 Points)	<input type="checkbox"/>	5-10% (6 Points)	<input type="checkbox"/>	11 - 20% (9 Points)	<input type="checkbox"/>	21 - 30% (12 Points)	<input type="checkbox"/>	31 - 40 % (15 Points)	<input type="checkbox"/>	41 - 50% (18 Points)	<input type="checkbox"/>	51 - 60% (21 Points)	<input type="checkbox"/>	61 - 70% (24 Points)	<input checked="" type="checkbox"/>	71 - 80% (27 Points)	<input type="checkbox"/>	>80% (30 Points)	<input type="checkbox"/>	<table border="1"> <tr><td>No regeneration present (0 Points)</td><td><input type="checkbox"/></td></tr> <tr><td>Very low regeneration, consisting of highly scattered juvenile plants of a limited number of species (3 points)</td><td><input type="checkbox"/></td></tr> <tr><td>Regeneration present, consisting of multiple individual juvenile plants but a limited number of species (6 points)</td><td><input checked="" type="checkbox"/></td></tr> <tr><td>Multiple species regenerating, but low numbers of juvenile plants (9 points)</td><td><input type="checkbox"/></td></tr> <tr><td>Multiple species regenerating with multiple individual juveniles present with varying age classes (12 points)</td><td><input type="checkbox"/></td></tr> <tr><td>Regeneration Score (Max 12)</td><td>6</td></tr> </table>		No regeneration present (0 Points)	<input type="checkbox"/>	Very low regeneration, consisting of highly scattered juvenile plants of a limited number of species (3 points)	<input type="checkbox"/>	Regeneration present, consisting of multiple individual juvenile plants but a limited number of species (6 points)	<input checked="" type="checkbox"/>	Multiple species regenerating, but low numbers of juvenile plants (9 points)	<input type="checkbox"/>	Multiple species regenerating with multiple individual juveniles present with varying age classes (12 points)	<input type="checkbox"/>	Regeneration Score (Max 12)	6	
<5% (3 Points)	<input type="checkbox"/>																																			
5-10% (6 Points)	<input type="checkbox"/>																																			
11 - 20% (9 Points)	<input type="checkbox"/>																																			
21 - 30% (12 Points)	<input type="checkbox"/>																																			
31 - 40 % (15 Points)	<input type="checkbox"/>																																			
41 - 50% (18 Points)	<input type="checkbox"/>																																			
51 - 60% (21 Points)	<input type="checkbox"/>																																			
61 - 70% (24 Points)	<input checked="" type="checkbox"/>																																			
71 - 80% (27 Points)	<input type="checkbox"/>																																			
>80% (30 Points)	<input type="checkbox"/>																																			
No regeneration present (0 Points)	<input type="checkbox"/>																																			
Very low regeneration, consisting of highly scattered juvenile plants of a limited number of species (3 points)	<input type="checkbox"/>																																			
Regeneration present, consisting of multiple individual juvenile plants but a limited number of species (6 points)	<input checked="" type="checkbox"/>																																			
Multiple species regenerating, but low numbers of juvenile plants (9 points)	<input type="checkbox"/>																																			
Multiple species regenerating with multiple individual juveniles present with varying age classes (12 points)	<input type="checkbox"/>																																			
Regeneration Score (Max 12)	6																																			
Native Plant species diversity score (max score of 30) <b>24</b>		<table border="1"> <tr><td>Number of Threatened Flora Species recorded for the site (within the site)</td><td>Number</td></tr> <tr><td>State <b>Rare</b> species recorded (1 pt each)</td><td>1</td></tr> <tr><td>State <b>Vulnerable</b> species recorded (2.5 pt each)</td><td>0</td></tr> <tr><td>State <b>Endangered</b> recorded (5 pts each)</td><td>0</td></tr> <tr><td>Nationally <b>Vulnerable</b> species recorded (10 pts each)</td><td>0</td></tr> <tr><td>Nationally <b>Endangered or Critically endangered</b> species recorded (20 pts each)</td><td>0</td></tr> <tr><td>0 = 0 pts; &lt;2 = 0.04 pts; 2 - &lt;5 = 0.08 pts; 5 - &lt;10 = 0.12 pts; 10 - &lt;20 = 0.16pts; 20 or &gt; = 0.2 pts</td><td>1</td></tr> <tr><td>Threatened Flora Score</td><td>0.04</td></tr> </table>		Number of Threatened Flora Species recorded for the site (within the site)	Number	State <b>Rare</b> species recorded (1 pt each)	1	State <b>Vulnerable</b> species recorded (2.5 pt each)	0	State <b>Endangered</b> recorded (5 pts each)	0	Nationally <b>Vulnerable</b> species recorded (10 pts each)	0	Nationally <b>Endangered or Critically endangered</b> 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 = 0.16pts; 20 or > = 0.2 pts	1	Threatened Flora Score	0.04																	
Number of Threatened Flora Species recorded for the site (within the site)	Number																																			
State <b>Rare</b> species recorded (1 pt each)	1																																			
State <b>Vulnerable</b> species recorded (2.5 pt each)	0																																			
State <b>Endangered</b> recorded (5 pts each)	0																																			
Nationally <b>Vulnerable</b> species recorded (10 pts each)	0																																			
Nationally <b>Endangered or Critically endangered</b> 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 = 0.16pts; 20 or > = 0.2 pts	1																																			
Threatened Flora Score	0.04																																			
<b>Weed Scores</b>		<b>Potential habitat for Threatened Fauna Species (number observed or previously recorded)</b>																																		
Does the site contain plant species declared under the NRM Act 2004 (1.5 points) <input checked="" type="checkbox"/>		<table border="1"> <tr><td>Number</td><td>Number</td></tr> <tr><td>State <b>Rare</b> species observed or locally recorded (1 pt each)</td><td>22</td></tr> <tr><td>State <b>Vulnerable</b> species observed or locally recorded (2.5 pt each)</td><td>6</td></tr> <tr><td>State <b>Endangered</b> species observed or locally recorded (5 pt each)</td><td>2</td></tr> <tr><td>Nationally <b>Vulnerable</b> species observed or locally recorded (10 pts each)</td><td>7</td></tr> <tr><td>Nationally <b>Endangered or Critically endangered</b> species observed or locally recorded (20 pts each)</td><td>7</td></tr> <tr><td>0 = 0 pts; &lt;2 = 0.02 pts; 2 - &lt;5 = 0.04 pts; 5 - &lt;10 = 0.06 pts; 10 - &lt;20 = 0.08pts; 20 or &gt; = 0.1 pts</td><td>257</td></tr> <tr><td>Threatened Fauna Score</td><td>0.1</td></tr> </table>		Number	Number	State <b>Rare</b> species observed or locally recorded (1 pt each)	22	State <b>Vulnerable</b> species observed or locally recorded (2.5 pt each)	6	State <b>Endangered</b> species observed or locally recorded (5 pt each)	2	Nationally <b>Vulnerable</b> species observed or locally recorded (10 pts each)	7	Nationally <b>Endangered or Critically endangered</b> species observed or locally recorded (20 pts each)	7	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	257	Threatened Fauna Score	0.1																	
Number	Number																																			
State <b>Rare</b> species observed or locally recorded (1 pt each)	22																																			
State <b>Vulnerable</b> species observed or locally recorded (2.5 pt each)	6																																			
State <b>Endangered</b> species observed or locally recorded (5 pt each)	2																																			
Nationally <b>Vulnerable</b> species observed or locally recorded (10 pts each)	7																																			
Nationally <b>Endangered or Critically endangered</b> species observed or locally recorded (20 pts each)	7																																			
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	257																																			
Threatened Fauna Score	0.1																																			
Cover rating for all declared weeds (max of 6) <b>1</b>		<b>CONSERVATION SIGNIFICANCE SCORE</b> <b>1.14</b>																																		
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point) <input checked="" type="checkbox"/>		<b>Total Scores for the Site</b>																																		
Cover rating for all environmental weeds (max of 6) <b>2</b>		<table border="1"> <tr><th>Score</th><th>Vegetation Condition x Landscape Context x Conservation Significance =</th></tr> <tr><td>LANDSCAPE CONTEXT SCORE</td><td>1.16</td></tr> <tr><td>VEGETATION CONDITION SCORE</td><td>46.08</td></tr> <tr><td>CONSERVATION SIGNIFICANCE SCORE</td><td>1.14</td></tr> <tr><td><b>UNIT BIODIVERSITY SCORE</b></td><td><b>60.93</b></td></tr> <tr><td><b>Total Biodiversity Score</b></td><td><b>4.75</b></td></tr> <tr><td colspan="2">(Biodiversity Score x hectares)</td></tr> </table>		Score	Vegetation Condition x Landscape Context x Conservation Significance =	LANDSCAPE CONTEXT SCORE	1.16	VEGETATION CONDITION SCORE	46.08	CONSERVATION SIGNIFICANCE SCORE	1.14	<b>UNIT BIODIVERSITY SCORE</b>	<b>60.93</b>	<b>Total Biodiversity Score</b>	<b>4.75</b>	(Biodiversity Score x hectares)																				
Score	Vegetation Condition x Landscape Context x Conservation Significance =																																			
LANDSCAPE CONTEXT SCORE	1.16																																			
VEGETATION CONDITION SCORE	46.08																																			
CONSERVATION SIGNIFICANCE SCORE	1.14																																			
<b>UNIT BIODIVERSITY SCORE</b>	<b>60.93</b>																																			
<b>Total Biodiversity Score</b>	<b>4.75</b>																																			
(Biodiversity Score x hectares)																																				
Weed Score (max score of 15) <b>11.5</b>		<b>Photo Point and Vegetation Survey Location</b>																																		
Is the community naturally treeless? <input type="checkbox"/>		<table border="1"> <tr><td>Direction of the Photo</td><td>South</td></tr> <tr><td>GPS Reference</td><td></td></tr> <tr><td>Datum</td><td>WGS84</td></tr> <tr><td>Zone (52, 53 or 54)</td><td>53</td></tr> <tr><td>Easting (6 digits)</td><td>745157</td></tr> <tr><td>Northing (7 digits)</td><td>8031207</td></tr> <tr><td>Description</td><td>E. diversifolia woodland</td></tr> </table>		Direction of the Photo	South	GPS Reference		Datum	WGS84	Zone (52, 53 or 54)	53	Easting (6 digits)	745157	Northing (7 digits)	8031207	Description	E. diversifolia woodland																			
Direction of the Photo	South																																			
GPS Reference																																				
Datum	WGS84																																			
Zone (52, 53 or 54)	53																																			
Easting (6 digits)	745157																																			
Northing (7 digits)	8031207																																			
Description	E. diversifolia woodland																																			
Mature Tree Score (max 8) <b>6</b>																																				
Fallen timber/debris (max 5) <b>0.5</b>																																				
Hollow-bearing trees Score (max 5) <b>0</b>																																				
Tree Canopy Cover Score (max 5) <b>4</b>																																				
Native:exotic Understorey biomass score (max 5) <b>5</b>																																				
Native Plant life form score (max 20) <b>12</b>		<b>Assessment for Clearance</b>																																		
<b>Vegetation Condition Score calculation</b>		<table border="1"> <tr><td>Approximate hectares required</td><td>0.62</td></tr> <tr><td>Economies of Scale factor</td><td>0.50</td></tr> <tr><td>Mean Annual rainfall for the site (mm)</td><td>507</td></tr> <tr><td>Payment into the fund (GST Exclusive)</td><td>\$3,383.71</td></tr> <tr><td>Administration fee (GST Inclusive)</td><td>\$186.10</td></tr> </table>		Approximate hectares required	0.62	Economies of Scale factor	0.50	Mean Annual rainfall for the site (mm)	507	Payment into the fund (GST Exclusive)	\$3,383.71	Administration fee (GST Inclusive)	\$186.10																							
Approximate hectares required	0.62																																			
Economies of Scale factor	0.50																																			
Mean Annual rainfall for the site (mm)	507																																			
Payment into the fund (GST Exclusive)	\$3,383.71																																			
Administration fee (GST Inclusive)	\$186.10																																			
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms + Mature Trees + Fallen timber/debris + Hollow-bearing trees <b>48.50</b>		Loss Factor <b>1.0</b>																																		
If the community is naturally treeless this score is multiplied by 1.24 <b>4.00</b>		Loadings for clearance of protected areas																																		
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - Biomass score - Tree Canopy Cover Score)exp2/2) <b>4.00</b>		Reductions for rehabilitation of impact site																																		
<b>VEGETATION CONDITION SCORE (Positive veg attributes x ((Negative vegetation attributes + 60) / 80))</b> <b>46.08</b>		SEB Points required <b>4.99</b>																																		
<table border="1"> <tr><th>Low</th><th>Medium</th><th>High</th></tr> <tr><td>Native Plant Species Diversity</td><td></td><td></td></tr> <tr><td>Weed Score</td><td></td><td></td></tr> <tr><td>Native Plant Life Forms</td><td></td><td></td></tr> <tr><td>Regeneration</td><td></td><td></td></tr> <tr><td>Native:exotic Understorey Biomass</td><td></td><td></td></tr> <tr><td>Tree Canopy Cover Score</td><td></td><td></td></tr> <tr><td>Mature Tree Score</td><td></td><td></td></tr> <tr><td>Tree Hollows</td><td></td><td></td></tr> <tr><td>Fallen timber</td><td></td><td></td></tr> <tr><td>Vegetation Condition Score</td><td></td><td></td></tr> </table>		Low	Medium	High	Native Plant Species Diversity			Weed Score			Native Plant Life Forms			Regeneration			Native:exotic Understorey Biomass			Tree Canopy Cover Score			Mature Tree Score			Tree Hollows			Fallen timber			Vegetation Condition Score				
Low	Medium	High																																		
Native Plant Species Diversity																																				
Weed Score																																				
Native Plant Life Forms																																				
Regeneration																																				
Native:exotic Understorey Biomass																																				
Tree Canopy Cover Score																																				
Mature Tree Score																																				
Tree Hollows																																				
Fallen timber																																				
Vegetation Condition Score																																				

VA1 Amberley Scoresheet



Vegetation Condition Scores		Conservation Significance Score	
<b>SITE:</b>	65, 66	<b>Is the vegetation association considered a Threatened Ecological community or Ecosystem?</b>	Yes/No
<b>VEGETATION ASSOCIATION DESCRIPTION</b>	E. diversifolia, E. cosmophylla Mallee Woodland	State (Provisional List of Threatened Ecosystems of SA) <b>Rare</b> community (0.1 pt)	<input type="checkbox"/>
<b>SIZE OF SITE (Ha)</b>	0.02	State (Provisional List of Threatened Ecosystems of SA) <b>Vulnerable</b> community (0.2 pts)	<input type="checkbox"/>
<b>Native Plant species diversity</b>	Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)	State (Provisional List of Threatened Ecosystems of SA) <b>Endangered</b> community (0.3 pts)	<input type="checkbox"/>
<5% (3 Points)	<input type="checkbox"/>	Nationally (EPBC Act) <b>Vulnerable</b> community (0.35 pts)	<input type="checkbox"/>
5-10% (6 Points)	<input type="checkbox"/>	Contains a Nationally (EPBC Act) <b>Endangered or Critically Endangered</b> community (0.4 pts)	<input type="checkbox"/>
11 - 20% (9 Points)	<input type="checkbox"/>	<b>Note: all sites will score a minimum Conservation Significance Score of 1</b>	<b>Threatened CommunityScore</b>
21 - 30% (12 Points)	<input type="checkbox"/>		1
31 - 40 % (15 Points)	<input type="checkbox"/>	<b>Number of Threatened Flora Species recorded for the site (within the site)</b>	<b>Number</b>
41 - 50% (18 Points)	<input type="checkbox"/>	<i>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
51 - 60% (21 Points)	<input type="checkbox"/>	State <b>Rare</b> species recorded (1 pt each)	1
61 - 70% (24 Points)	<input checked="" type="checkbox"/>	State <b>Vulnerable</b> species recorded (2.5 pt each)	0
71 - 80% (27 Points)	<input type="checkbox"/>	State <b>Endangered</b> recorded (5 pts each)	0
>80% (30 Points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species recorded (10 pts each)	0
<b>Native Plant species diversity score (max score of 30)</b>	<b>24</b>	Nationally <b>Endangered or Critically endangered</b> 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 = 0.16pts; 20 or > = 0.2 pts	
<b>Weed Scores</b>		<b>Threatened Flora Score</b>	<b>0.04</b>
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input checked="" type="checkbox"/>		
Cover rating for all declared weeds (max of 6)	1	<b>Potential habitat for Threatened Fauna Species (number observed or previously recorded)</b>	<b>Number</b>
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>	<i>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
Cover rating for all environmental weeds (max of 6)	2	State <b>Rare</b> species observed or locally recorded (1 pt each)	22
<b>Weed Score (max score of 15)</b>	<b>11.5</b>	State <b>Vulnerable</b> species observed or locally recorded (2.5 pt each)	6
		State <b>Endangered</b> species observed or locally recorded (5 pt each)	2
<b>Is the community naturally treeless?</b>	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species observed or locally recorded (10 pts each)	7
<b>Mature Tree Score (max 8)</b>	<b>6</b>	Nationally <b>Endangered or Critically endangered</b> species observed or locally recorded (20 pts each)	7
<b>Fallen timber/debris (max 5)</b>	<b>0.5</b>	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	<b>257</b>
<b>Hollow-bearing trees Score (max 5)</b>	<b>0</b>	<b>Threatened Fauna Score</b>	<b>0.1</b>
<b>Tree Canopy Cover Score (max 5)</b>	<b>4</b>		
<b>Native:exotic Understorey biomass score (max 5)</b>	<b>5</b>	<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.14</b>
<b>Native Plant life form score (max 20)</b>	<b>12</b>		
<b>Vegetation Condition Score calculation</b>		<b>Total Scores for the Site</b>	
<b>Positive Vegetation Attributes Score</b> = Native species diversity + Regeneration + Native Plant Life Forms + Mature Trees + Fallen timber/debris + Hollow-bearing trees	48.50	<b>LANDSCAPE CONTEXT SCORE</b>	<b>1.11</b>
<i>If the community is naturally treeless this score is multiplied by 1.24</i>	4.00	<b>VEGETATION CONDITION SCORE</b>	<b>46.08</b>
<b>Negative Vegetation Attributes Score</b> = (15 - Weeds) + (10 - Biomass score - Tree Canopy Cover Score)x0.272	4.00	<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.14</b>
<b>VEGETATION CONDITION SCORE</b> (Positive veg attributes x (Negative vegetation attributes + 60) / 80)	<b>46.08</b>		
		<b>Vegetation Condition x Landscape Context x Conservation Significance =</b>	<b>UNIT BIODIVERSITY SCORE</b>
			<b>58.30</b>
			<b>Total Biodiversity Score</b>
			<b>(Biodiversity Score x hectares)</b>
			<b>1.17</b>
		<b>Photo Point and Vegetation Survey Location</b>	<b>Direction of the Photo</b>
			<b>South</b>
			<b>GPS Reference</b>
			<b>Datum</b> WGS84
			<b>Zone (52, 53 or 54)</b> 53
			<b>Eastings (6 digits)</b> 747013
			<b>Northings (7 digits)</b> 6030191
			<b>Description</b>
			E. diversifolia woodland on curve
		<b>Assessment for Clearance</b>	<b>Approximate hectares required</b>
		<b>Loss Factor</b>	<b>1.0</b>
		<b>Loadings for clearance of protected areas</b>	<b>Economics of Scale factor</b>
		<b>Reductions for rehabilitation of impact site</b>	<b>0.50</b>
		<b>SEB Points required</b>	<b>512</b>
			<b>Payment into the fund (GST Exclusive)</b>
			<b>\$838.41</b>
			<b>Administration fee (GST Inclusive)</b>
			<b>\$46.11</b>

VA1 Gantheaume Scoresheet

Vegetation Condition Scores		Conservation Significance Score	
<b>SITE:</b>	78	<b>Is the vegetation association considered a Threatened Ecological community or Ecosystem?</b>	Yes/No
<b>VEGETATION ASSOCIATION DESCRIPTION</b>	Eucalyptus rugosa, E. diversifolia, +/- E. cneorifolia Mallee Woodland	State (Provisional List of Threatened Ecosystems of SA) <b>Rare</b> community (0.1 pt)	<input type="checkbox"/>
<b>SIZE OF SITE (Ha)</b>	0.02	State (Provisional List of Threatened Ecosystems of SA) <b>Vulnerable</b> community (0.2 pts)	<input type="checkbox"/>
<b>Native Plant species diversity</b>	Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)	State (Provisional List of Threatened Ecosystems of SA) <b>Endangered</b> community (0.3 pts)	<input type="checkbox"/>
<5% (3 Points)	<input type="checkbox"/>	Nationally (EPBC Act) <b>Vulnerable</b> community (0.35 pts)	<input type="checkbox"/>
5-10% (6 Points)	<input type="checkbox"/>	Contains a Nationally (EPBC Act) <b>Endangered or Critically Endangered</b> community (0.4 pts)	<input type="checkbox"/>
11 - 20% (9 Points)	<input type="checkbox"/>	<b>Note: all sites will score a minimum Conservation Significance Score of 1</b>	<b>Threatened CommunityScore</b>
21 - 30% (12 Points)	<input type="checkbox"/>		1
31 - 40 % (15 Points)	<input type="checkbox"/>	<b>Number of Threatened Flora Species recorded for the site (within the site)</b>	<b>Number</b>
41 - 50% (18 Points)	<input type="checkbox"/>	<i>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
51 - 60% (21 Points)	<input type="checkbox"/>	State <b>Rare</b> species recorded (1 pt each)	0
61 - 70% (24 Points)	<input type="checkbox"/>	State <b>Vulnerable</b> species recorded (2.5 pt each)	0
71 - 80% (27 Points)	<input type="checkbox"/>	State <b>Endangered</b> recorded (5 pts each)	0
>80% (30 Points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species recorded (10 pts each)	0
<b>Native Plant species diversity score (max score of 30)</b>	<b>24</b>	Nationally <b>Endangered or Critically endangered</b> 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 = 0.16pts; 20 or > = 0.2 pts	
<b>Weed Scores</b>		<b>Threatened Flora Score</b>	<b>0</b>
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input checked="" type="checkbox"/>	<b>Potential habitat for Threatened Fauna Species (number observed or previously recorded)</b>	<b>Number</b>
Cover rating for all declared weeds (max of 6)	1	<i>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>	State <b>Rare</b> species observed or locally recorded (1 pt each)	22
Cover rating for all environmental weeds (max of 6)	3	State <b>Vulnerable</b> species observed or locally recorded (2.5 pt each)	6
<b>Weed Score (max score of 15)</b>	<b>10.5</b>	State <b>Endangered</b> species observed or locally recorded (5 pt each)	2
<b>Is the community naturally treeless?</b>	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species observed or locally recorded (10 pts each)	7
<b>Mature Tree Score (max 8)</b>	<b>4</b>	Nationally <b>Endangered or Critically endangered</b> species observed or locally recorded (20 pts each)	7
<b>Fallen timber/debris (max 5)</b>	<b>0.5</b>	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	<b>257</b>
<b>Hollow-bearing trees Score (max 5)</b>	<b>0</b>	<b>Threatened Fauna Score</b>	<b>0.1</b>
<b>Tree Canopy Cover Score (max 5)</b>	<b>4</b>		
<b>Native:exotic Understorey biomass score (max 5)</b>	<b>4</b>	<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.1</b>
<b>Native Plant life form score (max 20)</b>	<b>12</b>		
<b>Vegetation Condition Score calculation</b>		<b>Total Scores for the Site</b>	
<b>Positive Vegetation Attributes Score</b> = Native species diversity + Regeneration + Native Plant Life Forms + Mature Trees + Fallen timber/debris + Hollow-bearing trees	43.50	<b>LANDSCAPE CONTEXT SCORE</b>	<b>1.09</b>
<i>If the community is naturally treeless this score is multiplied by 1.24</i>	8.50	<b>VEGETATION CONDITION SCORE</b>	<b>39.97</b>
<b>Negative Vegetation Attributes Score</b> = (15 - Weeds) + (10 - Biomass score - Tree Canopy Cover Score)x0.272	8.50	<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.10</b>
<b>VEGETATION CONDITION SCORE</b> (Positive veg attributes x (Negative vegetation attributes + 60) / 80)	<b>39.97</b>		
		<b>Vegetation Condition x Landscape Context x Conservation Significance =</b>	<b>UNIT BIODIVERSITY SCORE</b>
			<b>47.92</b>
			<b>Total Biodiversity Score</b>
			<b>(Biodiversity Score x hectares)</b>
			<b>0.96</b>
		<b>Photo Point and Vegetation Survey Location</b>	<b>Direction of the Photo</b>
			<b>SW</b>
			<b>GPS Reference</b>
			<b>Datum</b> WGS84
			<b>Zone (52, 53 or 54)</b> 53
			<b>Eastings (6 digits)</b> 760021
			<b>Northings (7 digits)</b> 6036963
			<b>Description</b>
			Woodland on a curve
		<b>Assessment for Clearance</b>	<b>Approximate hectares required</b>
		<b>Loss Factor</b>	<b>1.0</b>
		<b>Loadings for clearance of protected areas</b>	<b>Economics of Scale factor</b>
		<b>Reductions for rehabilitation of impact site</b>	<b>0.50</b>
		<b>SEB Points required</b>	<b>521</b>
			<b>Payment into the fund (GST Exclusive)</b>
			<b>\$701.19</b>
			<b>Administration fee (GST Inclusive)</b>
			<b>\$38.57</b>

VA2 Coranda Scoresheet

Vegetation Condition Scores		Conservation Significance Score	
SITE:	50, 54, 55, 56	is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
VEGETATION ASSOCIATION DESCRIPTION	E. cneorifolia, E. diversifolia mallee woodland	State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	<input type="checkbox"/>
SIZE OF SITE (Ha)	0.004	State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	<input type="checkbox"/>
		State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	<input checked="" type="checkbox"/>
		Nationally (EPBC Act) Vulnerable community (0.35 pts)	<input type="checkbox"/>
		Contains a Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	<input checked="" type="checkbox"/>
Native Plant species diversity		Note: all sites will score a minimum Conservation Significance Score of 1	Threatened CommunityScore 1.4
Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)		Number of Threatened Flora Species recorded for the site (within the site)	Number
<5% (3 Points)	<input type="checkbox"/>	If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
5-10% (6 Points)	<input type="checkbox"/>	State Rare species recorded (1 pt each)	0
11 - 20% (9 Points)	<input type="checkbox"/>	State Vulnerable species recorded (2.5 pt each)	0
21 - 30% (12 Points)	<input type="checkbox"/>	State Endangered recorded (5 pts each)	0
31 - 40% (15 Points)	<input type="checkbox"/>	Nationally Vulnerable species recorded (10 pts each)	0
41 - 50% (18 Points)	<input type="checkbox"/>	Nationally Endangered or Critically endangered species recorded (20 pts each)	0
51 - 60% (21 Points)	<input type="checkbox"/>	0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.2 pts	0
61 - 70% (24 Points)	<input checked="" type="checkbox"/>	Threatened Flora Score	0
71 - 80% (27 Points)	<input type="checkbox"/>		0
>80% (30 Points)	<input type="checkbox"/>		0
Native Plant species diversity score (max score of 30)	24	Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
Weed Scores		If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input checked="" type="checkbox"/>	State Rare species observed or locally recorded (1 pt each)	22
Cover rating for all declared weeds (max of 6)	1	State Vulnerable species observed or locally recorded (2.5 pt each)	6
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>	State Endangered species observed or locally recorded (5 pt each)	2
Cover rating for all environmental weeds (max of 6)	2	Nationally Vulnerable species observed or locally recorded (10 pts each)	7
Weed Score (max score of 15)	11.5	Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	7
		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	257
Is the community naturally treeless?	<input type="checkbox"/>	Threatened Fauna Score	0.1
Mature Tree Score (max 8)	5	CONSERVATION SIGNIFICANCE SCORE	1.5
Fallen timber/debris (max 5)	1		
Hollow-bearing trees Score (max 5)	0	Total Scores for the Site	
Tree Canopy Cover Score (max 5)	4	Score	
Native:exotic Understorey biomass score (max 5)	5	LANDSCAPE CONTEXT SCORE	1.11
		VEGETATION CONDITION SCORE	38.95
		CONSERVATION SIGNIFICANCE SCORE	1.50
		Vegetation Condition x Landscape Context x Conservation Significance =	UNIT BIODIVERSITY SCORE 64.85
			VEGETATION CONDITION SCORE
			Total Biodiversity Score (Biodiversity Score x hectares)
			0.26
		Photo Point and Vegetation Survey Location	Direction of the Photo
		Native Plant life form score (max 20)	8
			SW
			GPS Reference
			Datum WGS84
			Zone (52, 53 or 54) 53
			Eastings (6 digits) 731564
			Northings (7 digits) 6044396
			Description
			KI Mallee Woodland on curve
		Assessment for Clearance	Approximate hectares required 0.03
		Loss Factor 1.0	Economies of Scale factor 0.50
		Loadings for clearance of protected areas	Mean Annual rainfall for the site (mm) 502
		Reductions for rehabilitation of impact site	Payment into the fund (GST Exclusive) \$182.87
		SEB Points required 0.27	Administration fee (GST Inclusive) \$10.06

VA3 Amberley Scoresheet

Vegetation Condition Scores		Conservation Significance Score	
SITE:	80, 81, 82	is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
VEGETATION ASSOCIATION DESCRIPTION	E. cneorifolia, E. diversifolia Mallee	State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	<input type="checkbox"/>
SIZE OF SITE (Ha)	0.0805	State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts)	<input type="checkbox"/>
		State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts)	<input checked="" type="checkbox"/>
		Nationally (EPBC Act) Vulnerable community (0.35 pts)	<input type="checkbox"/>
		Contains a Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	<input checked="" type="checkbox"/>
Native Plant species diversity		Note: all sites will score a minimum Conservation Significance Score of 1	Threatened CommunityScore 1.4
Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)		Number of Threatened Flora Species recorded for the site (within the site)	Number
<5% (3 Points)	<input type="checkbox"/>	If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
5-10% (6 Points)	<input type="checkbox"/>	State Rare species recorded (1 pt each)	0
11 - 20% (9 Points)	<input type="checkbox"/>	State Vulnerable species recorded (2.5 pt each)	0
21 - 30% (12 Points)	<input type="checkbox"/>	State Endangered recorded (5 pts each)	0
31 - 40% (15 Points)	<input type="checkbox"/>	Nationally Vulnerable species recorded (10 pts each)	0
41 - 50% (18 Points)	<input type="checkbox"/>	Nationally Endangered or Critically endangered species recorded (20 pts each)	0
51 - 60% (21 Points)	<input type="checkbox"/>	0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.2 pts	0
61 - 70% (24 Points)	<input checked="" type="checkbox"/>	Threatened Flora Score	0
71 - 80% (27 Points)	<input type="checkbox"/>		0
>80% (30 Points)	<input type="checkbox"/>		0
Native Plant species diversity score (max score of 30)	24	Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
Weed Scores		If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input checked="" type="checkbox"/>	State Rare species observed or locally recorded (1 pt each)	22
Cover rating for all declared weeds (max of 6)	1	State Vulnerable species observed or locally recorded (2.5 pt each)	6
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>	State Endangered species observed or locally recorded (5 pt each)	2
Cover rating for all environmental weeds (max of 6)	2	Nationally Vulnerable species observed or locally recorded (10 pts each)	7
Weed Score (max score of 15)	11.5	Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	7
		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	257
Is the community naturally treeless?	<input type="checkbox"/>	Threatened Fauna Score	0.1
Mature Tree Score (max 8)	5	CONSERVATION SIGNIFICANCE SCORE	1.5
Fallen timber/debris (max 5)	1		
Hollow-bearing trees Score (max 5)	0	Total Scores for the Site	
Tree Canopy Cover Score (max 5)	4	Score	
Native:exotic Understorey biomass score (max 5)	5	LANDSCAPE CONTEXT SCORE	1.12
		VEGETATION CONDITION SCORE	38.95
		CONSERVATION SIGNIFICANCE SCORE	1.50
		Vegetation Condition x Landscape Context x Conservation Significance =	UNIT BIODIVERSITY SCORE 65.44
			VEGETATION CONDITION SCORE
			Total Biodiversity Score (Biodiversity Score x hectares)
			5.27
		Photo Point and Vegetation Survey Location	Direction of the Photo
		Native Plant life form score (max 20)	8
			SSW
			GPS Reference
			Datum WGS84
			Zone (52, 53 or 54) 53
			Eastings (6 digits) 763252
			Northings (7 digits) 6039712
			Description
			KI Mallee Woodland on a curve
		Assessment for Clearance	Approximate hectares required 0.69
		Loss Factor 1.0	Economies of Scale factor 0.50
		Loadings for clearance of protected areas	Mean Annual rainfall for the site (mm) 502
		Reductions for rehabilitation of impact site	Payment into the fund (GST Exclusive) \$3,713.46
		SEB Points required 5.53	Administration fee (GST Inclusive) \$204.24

VA3 Coranda Scoresheet


Vegetation Condition Scores		Conservation Significance Score	
SITE: 6, 7, 11, 13-15, 32, 33		Is the vegetation association considered a Threatened Ecological community or Ecosystem? <input type="checkbox"/> Yes/No	
VEGETATION ASSOCIATION DESCRIPTION: E. cneorifolia, E. diversifolia Mallee		State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt) <input type="checkbox"/>	
SIZE OF SITE (Ha): 0.2515		State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts) <input type="checkbox"/>	
		State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts) <input checked="" type="checkbox"/>	
		Nationally (EPBC Act) Vulnerable community (0.35 pts) <input type="checkbox"/>	
		Contains a Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts) <input checked="" type="checkbox"/>	
Native Plant species diversity		Note: all sites will score a minimum Conservation Significance Score of 1 Threatened CommunityScore 1.4	
Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)		Number of Threatened Flora Species recorded for the site (within the site) Number	
<5% (3 Points) <input type="checkbox"/>		If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
5-10% (6 Points) <input type="checkbox"/>		State Rare species recorded (1 pt each) 0	
11 - 20% (9 Points) <input type="checkbox"/>		State Vulnerable species recorded (2.5 pt each) 0	
21 - 30% (12 Points) <input type="checkbox"/>		State Endangered recorded (5 pts each) 0	
31 - 40% (15 Points) <input type="checkbox"/>		Nationally Vulnerable species recorded (10 pts each) 0	
41 - 50% (18 Points) <input type="checkbox"/>		Nationally Endangered or Critically endangered species recorded (20 pts each) 0	
51 - 60% (21 Points) <input type="checkbox"/>		0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.2 pts	
61 - 70% (24 Points) <input checked="" type="checkbox"/>		Threatened Flora Score 0	
71 - 80% (27 Points) <input type="checkbox"/>			
>80% (30 Points) <input type="checkbox"/>			
Native Plant species diversity score (max score of 30) 24		Potential habitat for Threatened Fauna Species (number observed or previously recorded) Number	
Weed Scores		If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
Does the site contain plant species declared under the NRM Act 2004 (1.5 points) <input checked="" type="checkbox"/>		State Rare species observed or locally recorded (1 pt each) 22	
Cover rating for all declared weeds (max of 6) 1		State Vulnerable species observed or locally recorded (2.5 pt each) 6	
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point) <input checked="" type="checkbox"/>		State Endangered species observed or locally recorded (5 pt each) 2	
Cover rating for all environmental weeds (max of 6) 2		Nationally Vulnerable species observed or locally recorded (10 pts each) 7	
Weed Score (max score of 15) 11.5		Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each) 7	
		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	
		Threatened Fauna Score 0.1	
		CONSERVATION SIGNIFICANCE SCORE 1.5	
Is the community naturally treeless? <input type="checkbox"/>		Total Scores for the Site	
Mature Tree Score (max 8) 5		Score	
Fallen timber/debris (max 5) 1		LANDSCAPE CONTEXT SCORE 1.14	
Hollow-bearing trees Score (max 5) 0		VEGETATION CONDITION SCORE 38.95	
Tree Canopy Cover Score (max 5) 4		CONSERVATION SIGNIFICANCE SCORE 1.50	
Native:exotic Understorey biomass score (max 5) 5		Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE 66.60	
		Total Biodiversity Score (Biodiversity Score x hectares) 16.75	
Vegetation Condition Score calculation		Photo Point and Vegetation Survey Location	
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms + Mature Trees + Fallen timber/debris + Hollow-bearing trees 41.00		Direction of the Photo SE	
If the community is naturally treeless this score is multiplied by 1.24 4.00		GPS Reference	
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - Biomass score - Tree Canopy Cover Score)exp2/2) 4.00		Datum WGS84	
VEGETATION CONDITION SCORE (Positive veg attributes x (Negative vegetation attributes + 60) / 80) 38.95		Zone (52, 53 or 54) 53	
		Easting (6 digits) 732231	
		Northing (7 digits) 6042745	
		Description K1 mallee on curve	
		Assessment for Clearance	
		Approximate hectares required 2.20	
		Loss Factor 1.0	
		Economies of Scale factor 0.50	
		Loadings for clearance of protected areas 583	
		Mean Annual rainfall for the site (mm) 502	
		Reductions for rehabilitation of impact site	
		Payment into the fund (GST Exclusive) \$11,808.86	
		SEB Points required 17.59	
		Administration fee (GST Inclusive) \$649.49	

VA3 Cygnet Scoresheet


Vegetation Condition Scores		Conservation Significance Score	
SITE: 83 - 89		Is the vegetation association considered a Threatened Ecological community or Ecosystem? <input type="checkbox"/> Yes/No	
VEGETATION ASSOCIATION DESCRIPTION: E. cneorifolia +/- E. diversifolia +/- E. rugosa open forest/woodland		State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt) <input type="checkbox"/>	
SIZE OF SITE (Ha): 0.303		State (Provisional List of Threatened Ecosystems of SA) Vulnerable community (0.2 pts) <input type="checkbox"/>	
		State (Provisional List of Threatened Ecosystems of SA) Endangered community (0.3 pts) <input checked="" type="checkbox"/>	
		Nationally (EPBC Act) Vulnerable community (0.35 pts) <input type="checkbox"/>	
		Contains a Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts) <input checked="" type="checkbox"/>	
Native Plant species diversity		Note: all sites will score a minimum Conservation Significance Score of 1 Threatened CommunityScore 1.4	
Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)		Number of Threatened Flora Species recorded for the site (within the site) Number	
<5% (3 Points) <input type="checkbox"/>		If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
5-10% (6 Points) <input type="checkbox"/>		State Rare species recorded (1 pt each) 0	
11 - 20% (9 Points) <input type="checkbox"/>		State Vulnerable species recorded (2.5 pt each) 0	
21 - 30% (12 Points) <input type="checkbox"/>		State Endangered recorded (5 pts each) 0	
31 - 40% (15 Points) <input type="checkbox"/>		Nationally Vulnerable species recorded (10 pts each) 0	
41 - 50% (18 Points) <input type="checkbox"/>		Nationally Endangered or Critically endangered species recorded (20 pts each) 0	
51 - 60% (21 Points) <input checked="" type="checkbox"/>		0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.2 pts	
61 - 70% (24 Points) <input type="checkbox"/>		Threatened Flora Score 0	
71 - 80% (27 Points) <input type="checkbox"/>			
>80% (30 Points) <input type="checkbox"/>			
Native Plant species diversity score (max score of 30) 21		Potential habitat for Threatened Fauna Species (number observed or previously recorded) Number	
Weed Scores		If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
Does the site contain plant species declared under the NRM Act 2004 (1.5 points) <input checked="" type="checkbox"/>		State Rare species observed or locally recorded (1 pt each) 22	
Cover rating for all declared weeds (max of 6) 1		State Vulnerable species observed or locally recorded (2.5 pt each) 6	
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point) <input checked="" type="checkbox"/>		State Endangered species observed or locally recorded (5 pt each) 2	
Cover rating for all environmental weeds (max of 6) 2		Nationally Vulnerable species observed or locally recorded (10 pts each) 7	
Weed Score (max score of 15) 11.5		Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each) 7	
		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	
		Threatened Fauna Score 0.1	
		CONSERVATION SIGNIFICANCE SCORE 1.5	
Is the community naturally treeless? <input type="checkbox"/>		Total Scores for the Site	
Mature Tree Score (max 8) 6		Score	
Fallen timber/debris (max 5) 1		LANDSCAPE CONTEXT SCORE 1.10	
Hollow-bearing trees Score (max 5) 0		VEGETATION CONDITION SCORE 42.84	
Tree Canopy Cover Score (max 5) 4		CONSERVATION SIGNIFICANCE SCORE 1.50	
Native:exotic Understorey biomass score (max 5) 4		Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE 70.68	
		Total Biodiversity Score (Biodiversity Score x hectares) 21.42	
Vegetation Condition Score calculation		Photo Point and Vegetation Survey Location	
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms + Mature Trees + Fallen timber/debris + Hollow-bearing trees 46.00		Direction of the Photo N	
If the community is naturally treeless this score is multiplied by 1.24 5.50		GPS Reference	
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - Biomass score - Tree Canopy Cover Score)exp2/2) 5.50		Datum WGS84	
VEGETATION CONDITION SCORE (Positive veg attributes x (Negative vegetation attributes + 60) / 80) 42.84		Zone (52, 53 or 54) 53	
		Easting (6 digits) 763603	
		Northing (7 digits) 6041282	
		Description K1 Mallee Woodland approaching Penneshaw	
		Assessment for Clearance	
		Approximate hectares required 2.81	
		Loss Factor 1.0	
		Economies of Scale factor 0.50	
		Loadings for clearance of protected areas 583	
		Mean Annual rainfall for the site (mm) 583	
		Reductions for rehabilitation of impact site	
		Payment into the fund (GST Exclusive) \$17,534.04	
		SEB Points required 22.49	
		Administration fee (GST Inclusive) \$364.37	

VA4 Coranda Scoresheet



Vegetation Condition Scores		Conservation Significance Score	
<b>SITE:</b>	96, 39, 40, 41	<b>Is the vegetation association considered a Threatened Ecological community or Ecosystem?</b>	Yes/No
<b>VEGETATION ASSOCIATION DESCRIPTION</b>	E. cneorifolia, E. diversifolia, E. cosmophylla mid mallee	State (Provisional List of Threatened Ecosystems of SA) <b>Rare</b> community (0.1 pt)	<input type="checkbox"/>
<b>SIZE OF SITE (Ha)</b>	0.114	State (Provisional List of Threatened Ecosystems of SA) <b>Vulnerable</b> community (0.2 pts)	<input type="checkbox"/>
		State (Provisional List of Threatened Ecosystems of SA) <b>Endangered</b> community (0.3 pts)	<input checked="" type="checkbox"/>
		Nationally (EPBC Act) <b>Vulnerable</b> community (0.35 pts)	<input type="checkbox"/>
		Contains a Nationally (EPBC Act) <b>Endangered or Critically Endangered</b> community (0.4 pts)	<input checked="" type="checkbox"/>
<b>Native Plant species diversity</b>		<b>Threatened CommunityScore</b>	1.4
Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)		<b>Number of Threatened Flora Species recorded for the site (within the site)</b>	<b>Number</b>
		<i>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
<5% (3 Points)	<input checked="" type="checkbox"/>	State <b>Rare</b> species recorded (1 pt each)	1
5-10% (6 Points)	<input type="checkbox"/>	State <b>Vulnerable</b> species recorded (2.5 pt each)	0
11 - 20% (9 Points)	<input type="checkbox"/>	State <b>Endangered</b> recorded (5 pts each)	0
21 - 30% (12 Points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species recorded (10 pts each)	0
31 - 40% (15 Points)	<input type="checkbox"/>	Nationally <b>Endangered or Critically endangered</b> species recorded (20 pts each)	0
41 - 50% (18 Points)	<input type="checkbox"/>	0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.2 pts	1
51 - 60% (21 Points)	<input checked="" type="checkbox"/>	<b>Threatened Flora Score</b>	0.04
61 - 70% (24 Points)	<input type="checkbox"/>		
71 - 80% (27 Points)	<input type="checkbox"/>		
>80% (30 Points)	<input type="checkbox"/>		
<b>Native Plant species diversity score (max score of 30)</b>	<b>21</b>		
<b>Weed Scores</b>		<b>Potential habitat for Threatened Fauna Species (number observed or previously recorded)</b>	<b>Number</b>
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input checked="" type="checkbox"/>	<i>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
Cover rating for all declared weeds (max of 6)	1	State <b>Rare</b> species observed or locally recorded (1 pt each)	22
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>	State <b>Vulnerable</b> species observed or locally recorded (2.5 pt each)	6
Cover rating for all environmental weeds (max of 6)	2	State <b>Endangered</b> species observed or locally recorded (5 pt each)	2
<b>Weed Score (max score of 15)</b>	<b>11.5</b>	Nationally <b>Vulnerable</b> species observed or locally recorded (10 pts each)	7
		Nationally <b>Endangered or Critically endangered</b> species observed or locally recorded (20 pts each)	7
		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	<b>257</b>
		<b>Threatened Fauna Score</b>	<b>0.1</b>
		<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.54</b>
<b>Is the community naturally treeless?</b>	<input type="checkbox"/>		
<b>Mature Tree Score (max 8)</b>	<b>4</b>	<b>Total Scores for the Site</b>	
<b>Fallen timber/debris (max 5)</b>	<b>1</b>	<b>LANDSCAPE CONTEXT SCORE</b>	<b>1.13</b>
<b>Hollow-bearing trees Score (max 5)</b>	<b>0</b>	<b>VEGETATION CONDITION SCORE</b>	<b>36.90</b>
<b>Tree Canopy Cover Score (max 5)</b>	<b>3</b>	<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.54</b>
		Vegetation Condition x Landscape Context x Conservation Significance = <b>UNIT BIODIVERSITY SCORE</b> <b>64.21</b>	
		<b>Total Biodiversity Score (Biodiversity Score x hectares)</b> <b>7.32</b>	
<b>Native:exotic Understorey biomass score (max 5)</b>	<b>4</b>	<b>Photo Point and Vegetation Survey Location</b>	<b>Direction of the Photo</b>
			NW
			<b>GPS Reference</b>
			Datum WGS84
			Zone (52, 53 or 54) 53
			Easting (6 digits) 735416
			Northing (7 digits) 6039842
			<b>Description</b>
			KI mallee, shoulder sealing impacts
		<b>Assessment for Clearance</b>	
		Loss Factor	1.0
		Approximate hectares required	0.96
		Economies of Scale factor	0.50
		Loadings for clearance of protected areas	492
		Mean Annual rainfall for the site (mm)	547
		Reductions for rehabilitation of impact site	\$5,057.76
		SEB Points required	7.69
		Payment into the fund (GST Exclusive)	\$278.18
		Administration fee (GST Inclusive)	

VA5 Amberley Scoresheet

Vegetation Condition Scores		Conservation Significance Score	
<b>SITE:</b>	3, 67-76	<b>Is the vegetation association considered a Threatened Ecological community or Ecosystem?</b>	Yes/No
<b>VEGETATION ASSOCIATION DESCRIPTION</b>	Myoporum insulare, Leucopogon paniflorus Shrubland	State (Provisional List of Threatened Ecosystems of SA) <b>Rare</b> community (0.1 pt)	<input type="checkbox"/>
<b>SIZE OF SITE (Ha)</b>	0.0635	State (Provisional List of Threatened Ecosystems of SA) <b>Vulnerable</b> community (0.2 pts)	<input type="checkbox"/>
		State (Provisional List of Threatened Ecosystems of SA) <b>Endangered</b> community (0.3 pts)	<input type="checkbox"/>
		Nationally (EPBC Act) <b>Vulnerable</b> community (0.35 pts)	<input type="checkbox"/>
		Contains a Nationally (EPBC Act) <b>Endangered or Critically Endangered</b> community (0.4 pts)	<input type="checkbox"/>
<b>Native Plant species diversity</b>		<b>Threatened CommunityScore</b>	1
Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)		<b>Number of Threatened Flora Species recorded for the site (within the site)</b>	<b>Number</b>
		<i>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
<5% (3 Points)	<input type="checkbox"/>	State <b>Rare</b> species recorded (1 pt each)	0
5-10% (6 Points)	<input type="checkbox"/>	State <b>Vulnerable</b> species recorded (2.5 pt each)	0
11 - 20% (9 Points)	<input type="checkbox"/>	State <b>Endangered</b> recorded (5 pts each)	0
21 - 30% (12 Points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species recorded (10 pts each)	0
31 - 40% (15 Points)	<input type="checkbox"/>	Nationally <b>Endangered or Critically endangered</b> species recorded (20 pts each)	0
41 - 50% (18 Points)	<input type="checkbox"/>	0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.2 pts	0
51 - 60% (21 Points)	<input checked="" type="checkbox"/>	<b>Threatened Flora Score</b>	0
61 - 70% (24 Points)	<input type="checkbox"/>		
71 - 80% (27 Points)	<input type="checkbox"/>		
>80% (30 Points)	<input type="checkbox"/>		
<b>Native Plant species diversity score (max score of 30)</b>	<b>21</b>	<b>Potential habitat for Threatened Fauna Species (number observed or previously recorded)</b>	<b>Number</b>
<b>Weed Scores</b>		<i>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>	
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input checked="" type="checkbox"/>	State <b>Rare</b> species observed or locally recorded (1 pt each)	22
Cover rating for all declared weeds (max of 6)	1	State <b>Vulnerable</b> species observed or locally recorded (2.5 pt each)	6
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>	State <b>Endangered</b> species observed or locally recorded (5 pt each)	2
Cover rating for all environmental weeds (max of 6)	2	Nationally <b>Vulnerable</b> species observed or locally recorded (10 pts each)	7
<b>Weed Score (max score of 15)</b>	<b>11.5</b>	Nationally <b>Endangered or Critically endangered</b> species observed or locally recorded (20 pts each)	7
		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	<b>257</b>
		<b>Threatened Fauna Score</b>	<b>0.1</b>
		<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.1</b>
<b>Is the community naturally treeless?</b>	<input type="checkbox"/>		
<b>Mature Tree Score (max 8)</b>	<b>4</b>	<b>Total Scores for the Site</b>	
<b>Fallen timber/debris (max 5)</b>	<b>1</b>	<b>LANDSCAPE CONTEXT SCORE</b>	<b>1.08</b>
<b>Hollow-bearing trees Score (max 5)</b>	<b>0</b>	<b>VEGETATION CONDITION SCORE</b>	<b>36.90</b>
<b>Tree Canopy Cover Score (max 5)</b>	<b>3</b>	<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.10</b>
		Vegetation Condition x Landscape Context x Conservation Significance = <b>UNIT BIODIVERSITY SCORE</b> <b>43.84</b>	
		<b>Total Biodiversity Score (Biodiversity Score x hectares)</b> <b>2.78</b>	
<b>Native:exotic Understorey biomass score (max 5)</b>	<b>4</b>	<b>Photo Point and Vegetation Survey Location</b>	<b>Direction of the Photo</b>
			E
			<b>GPS Reference</b>
			Datum WGS84
			Zone (52, 53 or 54) 53
			Easting (6 digits) 747708
			Northing (7 digits) 6030127
			<b>Description</b>
			Myoporum shrubland on curve proposed for widening
		<b>Assessment for Clearance</b>	
		Loss Factor	1.0
		Approximate hectares required	0.37
		Economies of Scale factor	0.50
		Loadings for clearance of protected areas	547
		Mean Annual rainfall for the site (mm)	297
		Reductions for rehabilitation of impact site	\$2,138.29
		SEB Points required	2.92
		Payment into the fund (GST Exclusive)	\$117.61
		Administration fee (GST Inclusive)	


VA6 Gantheume Scoresheet

Vegetation Condition Scores		Conservation Significance Score	
<b>SITE:</b>	4, 29, 30	<b>Is the vegetation association considered a Threatened Ecological community or Ecosystem?</b>	Yes/No
<b>VEGETATION ASSOCIATION DESCRIPTION</b>	Melaleuca halimaturorum, M. brevifolia, shrubland	State (Provisional List of Threatened Ecosystems of SA) <b>Rare</b> community (0.1 pt)	<input type="checkbox"/>
<b>SIZE OF SITE (Ha)</b>	0.0825	State (Provisional List of Threatened Ecosystems of SA) <b>Vulnerable</b> community (0.2 pts)	<input type="checkbox"/>
<b>Native Plant species diversity</b>	Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)	State (Provisional List of Threatened Ecosystems of SA) <b>Endangered</b> community (0.3 pts)	<input type="checkbox"/>
<5% (3 Points)	<input type="checkbox"/>	Nationally (EPBC Act) <b>Vulnerable</b> community (0.35 pts)	<input type="checkbox"/>
5-10% (6 Points)	<input type="checkbox"/>	Contains a Nationally (EPBC Act) <b>Endangered or Critically Endangered</b> community (0.4 pts)	<input type="checkbox"/>
11 - 20% (9 Points)	<input type="checkbox"/>	<b>Note: all sites will score a minimum Conservation Significance Score of 1</b>	<b>Threatened Community Score</b>
21 - 30% (12 Points)	<input type="checkbox"/>	<b>Number of Threatened Flora Species recorded for the site (within the site)</b>	<b>Number</b>
31 - 40% (15 Points)	<input type="checkbox"/>	<b>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</b>	
41 - 50% (18 Points)	<input type="checkbox"/>	State <b>Rare</b> species recorded (1 pt each)	0
51 - 60% (21 Points)	<input type="checkbox"/>	State <b>Vulnerable</b> species recorded (2.5 pt each)	0
61 - 70% (24 Points)	<input checked="" type="checkbox"/>	State <b>Endangered</b> recorded (5 pts each)	0
71 - 80% (27 Points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species recorded (10 pts each)	0
>80% (30 Points)	<input type="checkbox"/>	Nationally <b>Endangered or Critically endangered</b> species recorded (20 pts each)	0
<b>Native Plant species diversity score (max score of 30)</b>	<b>24</b>	0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.2 pts	<b>Threatened Flora Score</b>
<b>Weed Scores</b>			<b>0</b>
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input checked="" type="checkbox"/>		
Cover rating for all declared weeds (max of 6)	1		
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>		
Cover rating for all environmental weeds (max of 6)	2		
<b>Weed Score (max score of 15)</b>	<b>11.5</b>		
<b>Is the community naturally treeless?</b>	<input checked="" type="checkbox"/>		
<i>Trees attributes not scored for treeless community</i>			
<b>Native:exotic Understorey biomass score (max 5)</b>	<b>4</b>		
<b>Native Plant life form score (max 20)</b>	<b>12</b>		
<b>Vegetation Condition Score calculation</b>			
<b>Positive Vegetation Attributes Score</b> = Native species diversity + Regeneration + Native Plant Life Forms + Mature Trees + Fallen timber/debris + Hollow-bearing trees			
<i>If the community is naturally treeless this score is multiplied by 1.24</i>	52.08		
<b>Negative Vegetation Attributes Score</b> = (15 - Weeds) + ((10 - (Biomass score x 2))exp(2/2))	5.50		
<b>VEGETATION CONDITION SCORE</b> (Positive veg attributes x ((Negative vegetation attributes + 60) / 80))	<b>48.50</b>		
<b>Conservation Significance Score</b>			
<b>LANDSCAPE CONTEXT SCORE</b>	<b>1.14</b>	<b>Vegetation Condition x Landscape Context x Conservation Significance =</b>	<b>UNIT BIODIVERSITY SCORE</b>
<b>VEGETATION CONDITION SCORE</b>	<b>48.50</b>		<b>60.82</b>
<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.10</b>	<b>Total Biodiversity Score</b>	<b>5.02</b>
		<b>(Biodiversity Score x hectares)</b>	
<b>Photo Point and Vegetation Survey Location</b>		<b>Direction of the Photo</b>	<b>E</b>
		<b>GPS Reference</b>	
		Date/WGS84	
		Zone (52, 53 or 54)	53
		Easting (6 digits)	733748
		Northing (7 digits)	6041388
		<b>Description</b>	Tea Tree shrubland in low lying areas impacted by shoulder sealing
<b>Assessment for Clearance</b>		<b>Approximate hectares required</b>	<b>0.66</b>
Loss Factor	1.0	<b>Economies of Scale factor</b>	<b>0.50</b>
Loadings for clearance of protected areas		<b>Mean Annual rainfall for the site (mm)</b>	<b>475</b>
Reductions for rehabilitation of impact site		<b>Payment into the fund (GST Exclusive)</b>	<b>\$3,346.92</b>
<b>SEB Points required</b>	<b>6.27</b>	<b>Administration fee (GST inclusive)</b>	<b>\$184.08</b>


VA7 Cynet Scoresheet

Vegetation Condition Scores		Conservation Significance Score	
<b>SITE:</b>	79	<b>Is the vegetation association considered a Threatened Ecological community or Ecosystem?</b>	Yes/No
<b>VEGETATION ASSOCIATION DESCRIPTION</b>	Leucopogon parviflorus, Olearia axillaris, Myoporum insulare, Acacia	State (Provisional List of Threatened Ecosystems of SA) <b>Rare</b> community (0.1 pt)	<input type="checkbox"/>
<b>SIZE OF SITE (Ha)</b>	0.07	State (Provisional List of Threatened Ecosystems of SA) <b>Vulnerable</b> community (0.2 pts)	<input type="checkbox"/>
<b>Native Plant species diversity</b>	Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)	State (Provisional List of Threatened Ecosystems of SA) <b>Endangered</b> community (0.3 pts)	<input type="checkbox"/>
<5% (3 Points)	<input type="checkbox"/>	Nationally (EPBC Act) <b>Vulnerable</b> community (0.35 pts)	<input type="checkbox"/>
5-10% (6 Points)	<input type="checkbox"/>	Contains a Nationally (EPBC Act) <b>Endangered or Critically Endangered</b> community (0.4 pts)	<input type="checkbox"/>
11 - 20% (9 Points)	<input type="checkbox"/>	<b>Note: all sites will score a minimum Conservation Significance Score of 1</b>	<b>Threatened Community Score</b>
21 - 30% (12 Points)	<input type="checkbox"/>	<b>Number of Threatened Flora Species recorded for the site (within the site)</b>	<b>Number</b>
31 - 40% (15 Points)	<input type="checkbox"/>	<b>If a species has both a State (NP&amp;W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</b>	
41 - 50% (18 Points)	<input type="checkbox"/>	State <b>Rare</b> species recorded (1 pt each)	0
51 - 60% (21 Points)	<input checked="" type="checkbox"/>	State <b>Vulnerable</b> species recorded (2.5 pt each)	0
61 - 70% (24 Points)	<input type="checkbox"/>	State <b>Endangered</b> recorded (5 pts each)	0
71 - 80% (27 Points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species recorded (10 pts each)	0
>80% (30 Points)	<input type="checkbox"/>	Nationally <b>Endangered or Critically endangered</b> species recorded (20 pts each)	0
<b>Native Plant species diversity score (max score of 30)</b>	<b>21</b>	0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.1 pts	<b>Threatened Flora Score</b>
<b>Weed Scores</b>			<b>0</b>
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input type="checkbox"/>		
Cover rating for all declared weeds (max of 6)	1		
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>		
Cover rating for all environmental weeds (max of 6)	2		
<b>Weed Score (max score of 15)</b>	<b>13</b>		
<b>Is the community naturally treeless?</b>	<input checked="" type="checkbox"/>		
<i>Trees attributes not scored for treeless community</i>			
<b>Native:exotic Understorey biomass score (max 5)</b>	<b>4</b>		
<b>Native Plant life form score (max 20)</b>	<b>12</b>		
<b>Vegetation Condition Score calculation</b>			
<b>Positive Vegetation Attributes Score</b> = Native species diversity + Regeneration + Native Plant Life Forms + Mature Trees + Fallen timber/debris + Hollow-bearing trees			
<i>If the community is naturally treeless this score is multiplied by 1.24</i>	48.36		
<b>Negative Vegetation Attributes Score</b> = (15 - Weeds) + ((10 - (Biomass score x 2))exp(2/2))	4.00		
<b>VEGETATION CONDITION SCORE</b> (Positive veg attributes x ((Negative vegetation attributes + 60) / 80))	<b>45.94</b>		
<b>Conservation Significance Score</b>			
<b>LANDSCAPE CONTEXT SCORE</b>	<b>1.12</b>	<b>Vegetation Condition x Landscape Context x Conservation Significance =</b>	<b>UNIT BIODIVERSITY SCORE</b>
<b>VEGETATION CONDITION SCORE</b>	<b>45.94</b>		<b>56.60</b>
<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.10</b>	<b>Total Biodiversity Score</b>	<b>3.96</b>
		<b>(Biodiversity Score x hectares)</b>	
<b>Photo Point and Vegetation Survey Location</b>		<b>Direction of the Photo</b>	<b>S</b>
		<b>GPS Reference</b>	
		Date/WGS84	
		Zone (52, 53 or 54)	53
		Easting (6 digits)	761815
		Northing (7 digits)	6039262
		<b>Description</b>	Leucopogon shrubland on curve
<b>Assessment for Clearance</b>		<b>Approximate hectares required</b>	<b>0.52</b>
Loss Factor	1.0	<b>Economies of Scale factor</b>	<b>0.50</b>
Loadings for clearance of protected areas		<b>Mean Annual rainfall for the site (mm)</b>	<b>529</b>
Reductions for rehabilitation of impact site		<b>Payment into the fund (GST Exclusive)</b>	<b>\$2,943.32</b>
<b>SEB Points required</b>	<b>4.16</b>	<b>Administration fee (GST inclusive)</b>	<b>\$161.88</b>

VA8 Coranda Scoresheet

Vegetation Condition Scores		Conservation Significance Score	
<b>SITE:</b>	37, 38, 44 - 49, 51, 52, 58, 59, 90	<b>Is the vegetation association considered a Threatened Ecological community or Ecosystem?</b>	Yes/No
<b>VEGETATION ASSOCIATION DESCRIPTION</b>	Melaleuca halimaturorum shrubland over saline species	State (Provisional List of Threatened Ecosystems of SA) <b>Rare</b> community (0.1 pt)	<input checked="" type="checkbox"/>
<b>SIZE OF SITE (Ha)</b>	0.0135	State (Provisional List of Threatened Ecosystems of SA) <b>Vulnerable</b> community (0.2 pts)	<input type="checkbox"/>
<b>Native Plant species diversity</b>		State (Provisional List of Threatened Ecosystems of SA) <b>Endangered</b> community (0.3 pts)	<input type="checkbox"/>
Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)		Nationally (EPBC Act) <b>Vulnerable</b> community (0.35 pts)	<input checked="" type="checkbox"/>
<5% (3 Points)	<input type="checkbox"/>	Contains a Nationally (EPBC Act) <b>Endangered or Critically Endangered</b> community (0.4 pts)	<input type="checkbox"/>
5-10% (6 Points)	<input type="checkbox"/>	<b>Threatened CommunityScore</b>	1.35
11 - 20% (9 Points)	<input type="checkbox"/>	<b>Number of Threatened Flora Species recorded for the site (within the site)</b>	<b>Number</b>
21 - 30% (12 Points)	<input type="checkbox"/>	*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
31 - 40% (15 Points)	<input type="checkbox"/>	State <b>Rare</b> species recorded (1 pt each)	0
41 - 50% (18 Points)	<input type="checkbox"/>	State <b>Vulnerable</b> species recorded (2.5 pt each)	0
51 - 60% (21 Points)	<input type="checkbox"/>	State <b>Endangered</b> recorded (5 pts each)	0
61 - 70% (24 Points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species recorded (10 pts each)	1
71 - 80% (27 Points)	<input checked="" type="checkbox"/>	Nationally <b>Endangered or Critically endangered</b> species recorded (20 pts each)	0
>80% (30 Points)	<input type="checkbox"/>	0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.2 pts	<b>10</b>
<b>Native Plant species diversity score (max score of 30)</b>	<b>24</b>	<b>Threatened Flora Score</b>	<b>0.16</b>
<b>Regeneration</b>		<b>Potential habitat for Threatened Fauna Species (number observed or previously recorded)</b>	<b>Number</b>
No regeneration present (0 Points)	<input type="checkbox"/>	*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
Very low regeneration, consisting of highly scattered juvenile plants of a limited number of species (3 points)	<input type="checkbox"/>	State <b>Rare</b> species observed or locally recorded (1 pt each)	22
Regeneration present, consisting of multiple individual juvenile plants but a limited number of species (6 points)	<input checked="" type="checkbox"/>	State <b>Vulnerable</b> species observed or locally recorded (2.5 pt each)	6
Multiple species regenerating, but low numbers of juvenile plants (9 points)	<input type="checkbox"/>	State <b>Endangered</b> species observed or locally recorded (5 pt each)	2
Multiple species regenerating with multiple individual juveniles present with varying age classes (12 points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species observed or locally recorded (10 pts each)	7
Regeneration Score (Max 12)	<b>6</b>	Nationally <b>Endangered or Critically endangered</b> species observed or locally recorded (20 pts each)	7
<b>Native Plant life form</b>		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	<b>257</b>
All strata of vegetation heavily impacted and native vegetation represented by only scattered plants (4 points)	<input type="checkbox"/>	<b>Threatened Fauna Score</b>	<b>0.1</b>
All strata of vegetation impacted with limited structural diversity, largely uniform age classes and reduced vegetation cover (8 points)	<input type="checkbox"/>	<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.61</b>
At least one strata of vegetation has been impacted, with reduced structural diversity, elements may be missing (such as plant species that provide specific structural features e.g. sedges or mid layer shrubs) and reduce vegetation cover (12 points)	<input checked="" type="checkbox"/>	<b>Total Scores for the Site</b>	
Limited impacts on native vegetation, with a diversity of structural features and a varied age class, with only a minor loss in structural diversity, vegetation cover or structural elements (16 points)	<input type="checkbox"/>	<b>Score</b>	
All strata of vegetation present, little or no sign of disturbance. A variety of life forms and associated age classes present. Vegetation cover near complete (20 points)	<input type="checkbox"/>	<b>LANDSCAPE CONTEXT SCORE</b>	<b>1.11</b>
Native Plant life form score (max 20)	<b>12</b>	<b>VEGETATION CONDITION SCORE</b>	<b>48.50</b>
		<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.61</b>
<b>Vegetation Condition Score calculation</b>		<b>Vegetation Condition x Landscape Context x Conservation Significance =</b>	<b>UNIT BIODIVERSITY SCORE</b>
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms + Mature Trees + Fallen timber/debris + Hollow-bearing trees			<b>86.67</b>
If the community is naturally treeless this score is multiplied by 1.24	52.08	<b>Vegetation Condition Score</b>	<b>48.50</b>
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - (Biomass score x 2))exp2/2)	5.50	<b>Total Biodiversity Score</b>	<b>1.17</b>
<b>VEGETATION CONDITION SCORE (Positive veg attributes x (Negative vegetation attributes + 60) / 80)</b>	<b>48.50</b>		
<b>Weed Scores</b>		<b>Photo Point and Vegetation Survey Location</b>	<b>Direction of the Photo</b>
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input checked="" type="checkbox"/>		<b>S</b>
Cover rating for all declared weeds (max of 6)	<b>1</b>		<b>GPS Reference</b>
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>		Datum WGS84
Cover rating for all environmental weeds (max of 6)	<b>2</b>		Zone (52, 53 or 54) 53
<b>Weed Score (max score of 15)</b>	<b>11.5</b>		Easting (6 digits) 741318
<b>Is the community naturally treeless?</b>	<input checked="" type="checkbox"/>		Northing (7 digits) 6034544
Tree attributes not scored for treeless community			<b>Description</b>
			Tea tree shrubland over saline species in wet areas
<b>Native:exotic Understorey biomass score (max 5)</b>	<b>4</b>	<b>Assessment for Clearance</b>	
		Loss Factor	1.0
		Approximate hectares required	0.15
		Economies of Scale factor	0.50
		Loadings for clearance of protected areas	\$16
		Mean Annual rainfall for the site (mm)	\$16
		Reductions for rehabilitation of impact site	\$846.23
		SEB Points required	1.23
		Administration fee (GST Inclusive)	\$46.54

VA9 Amberley Scoresheet

Vegetation Condition Scores		Conservation Significance Score	
<b>SITE:</b>	1, 5, 8-12, 16-28, 31, 34, 35,	<b>Is the vegetation association considered a Threatened Ecological community or Ecosystem?</b>	Yes/No
<b>VEGETATION ASSOCIATION DESCRIPTION</b>	Melaleuca halimaturorum shrubland over saline species	State (Provisional List of Threatened Ecosystems of SA) <b>Rare</b> community (0.1 pt)	<input checked="" type="checkbox"/>
<b>SIZE OF SITE (Ha)</b>	0.045	State (Provisional List of Threatened Ecosystems of SA) <b>Vulnerable</b> community (0.2 pts)	<input type="checkbox"/>
<b>Native Plant species diversity</b>		State (Provisional List of Threatened Ecosystems of SA) <b>Endangered</b> community (0.3 pts)	<input type="checkbox"/>
Score the diversity of species present in the site as a proportion to what would be expected in a vegetation of that community in very good condition (approaching a pre-European state)		Nationally (EPBC Act) <b>Vulnerable</b> community (0.35 pts)	<input checked="" type="checkbox"/>
<5% (3 Points)	<input type="checkbox"/>	Contains a Nationally (EPBC Act) <b>Endangered or Critically Endangered</b> community (0.4 pts)	<input type="checkbox"/>
5-10% (6 Points)	<input type="checkbox"/>	<b>Threatened CommunityScore</b>	1.35
11 - 20% (9 Points)	<input type="checkbox"/>	<b>Number of Threatened Flora Species recorded for the site (within the site)</b>	<b>Number</b>
21 - 30% (12 Points)	<input type="checkbox"/>	*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
31 - 40% (15 Points)	<input type="checkbox"/>	State <b>Rare</b> species recorded (1 pt each)	0
41 - 50% (18 Points)	<input type="checkbox"/>	State <b>Vulnerable</b> species recorded (2.5 pt each)	0
51 - 60% (21 Points)	<input type="checkbox"/>	State <b>Endangered</b> recorded (5 pts each)	0
61 - 70% (24 Points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species recorded (10 pts each)	1
71 - 80% (27 Points)	<input checked="" type="checkbox"/>	Nationally <b>Endangered or Critically endangered</b> species recorded (20 pts each)	0
>80% (30 Points)	<input type="checkbox"/>	0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16pts; 20 or > = 0.2 pts	<b>10</b>
<b>Native Plant species diversity score (max score of 30)</b>	<b>24</b>	<b>Threatened Flora Score</b>	<b>0.16</b>
<b>Regeneration</b>		<b>Potential habitat for Threatened Fauna Species (number observed or previously recorded)</b>	<b>Number</b>
No regeneration present (0 Points)	<input type="checkbox"/>	*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
Very low regeneration, consisting of highly scattered juvenile plants of a limited number of species (3 points)	<input type="checkbox"/>	State <b>Rare</b> species observed or locally recorded (1 pt each)	22
Regeneration present, consisting of multiple individual juvenile plants but a limited number of species (6 points)	<input checked="" type="checkbox"/>	State <b>Vulnerable</b> species observed or locally recorded (2.5 pt each)	6
Multiple species regenerating, but low numbers of juvenile plants (9 points)	<input type="checkbox"/>	State <b>Endangered</b> species observed or locally recorded (5 pt each)	2
Multiple species regenerating with multiple individual juveniles present with varying age classes (12 points)	<input type="checkbox"/>	Nationally <b>Vulnerable</b> species observed or locally recorded (10 pts each)	7
Regeneration Score (Max 12)	<b>6</b>	Nationally <b>Endangered or Critically endangered</b> species observed or locally recorded (20 pts each)	7
<b>Native Plant life form</b>		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	<b>257</b>
All strata of vegetation heavily impacted and native vegetation represented by only scattered plants (4 points)	<input type="checkbox"/>	<b>Threatened Fauna Score</b>	<b>0.1</b>
All strata of vegetation impacted with limited structural diversity, largely uniform age classes and reduced vegetation cover (8 points)	<input type="checkbox"/>	<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.61</b>
At least one strata of vegetation has been impacted, with reduced structural diversity, elements may be missing (such as plant species that provide specific structural features e.g. sedges or mid layer shrubs) and reduce vegetation cover (12 points)	<input checked="" type="checkbox"/>	<b>Total Scores for the Site</b>	
Limited impacts on native vegetation, with a diversity of structural features and a varied age class, with only a minor loss in structural diversity, vegetation cover or structural elements (16 points)	<input type="checkbox"/>	<b>Score</b>	
All strata of vegetation present, little or no sign of disturbance. A variety of life forms and associated age classes present. Vegetation cover near complete (20 points)	<input type="checkbox"/>	<b>LANDSCAPE CONTEXT SCORE</b>	<b>1.12</b>
Native Plant life form score (max 20)	<b>12</b>	<b>VEGETATION CONDITION SCORE</b>	<b>48.50</b>
		<b>CONSERVATION SIGNIFICANCE SCORE</b>	<b>1.61</b>
<b>Vegetation Condition Score calculation</b>		<b>Vegetation Condition x Landscape Context x Conservation Significance =</b>	<b>UNIT BIODIVERSITY SCORE</b>
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms + Mature Trees + Fallen timber/debris + Hollow-bearing trees			<b>87.45</b>
If the community is naturally treeless this score is multiplied by 1.24	52.08	<b>Vegetation Condition Score</b>	<b>48.50</b>
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - (Biomass score x 2))exp2/2)	5.50	<b>Total Biodiversity Score</b>	<b>3.94</b>
<b>VEGETATION CONDITION SCORE (Positive veg attributes x (Negative vegetation attributes + 60) / 80)</b>	<b>48.50</b>		
<b>Weed Scores</b>		<b>Photo Point and Vegetation Survey Location</b>	<b>Direction of the Photo</b>
Does the site contain plant species declared under the NRM Act 2004 (1.5 points)	<input checked="" type="checkbox"/>		<b>SE</b>
Cover rating for all declared weeds (max of 6)	<b>1</b>		<b>GPS Reference</b>
Does the site contain environmental weeds (introduced plants with the capacity to invade and exclude native species from bushland. This typically includes species with a BCM weed threat rating of 3, 4 or 5). (1 Point)	<input checked="" type="checkbox"/>		Datum WGS84
Cover rating for all environmental weeds (max of 6)	<b>2</b>		Zone (52, 53 or 54) 53
<b>Weed Score (max score of 15)</b>	<b>11.5</b>		Easting (6 digits) 732453
<b>Is the community naturally treeless?</b>	<input checked="" type="checkbox"/>		Northing (7 digits) 6042510
Tree attributes not scored for treeless community			<b>Description</b>
			Tea tree shrubland over saline species
<b>Native:exotic Understorey biomass score (max 5)</b>	<b>4</b>	<b>Assessment for Clearance</b>	
		Loss Factor	1.0
		Approximate hectares required	0.52
		Economies of Scale factor	0.50
		Loadings for clearance of protected areas	\$12
		Mean Annual rainfall for the site (mm)	\$12
		Reductions for rehabilitation of impact site	\$2,829.61
		SEB Points required	4.13
		Administration fee (GST Inclusive)	\$155.63

VA9 Cynet Scoresheet