



Native Vegetation Clearance

Katharsis – Kangaroo Island by Junctions 90

Data Report

Clearance under the *Native Vegetation Regulations 2017*

17th December, 2025

Prepared by Michelle Haby



Table of contents

1. Application information
2. Purpose of clearance
 - 2.1 Description
 - 2.2 Background
 - 2.3 General location map
 - 2.4 Details of the proposal
 - 2.5 Approvals required or obtained
 - 2.6 Native Vegetation Regulation
 - 2.7 Development Application information (if applicable)
3. Method
 - 3.1 Flora assessment
 - 3.2 Fauna assessment
4. Assessment outcomes
 - 4.1 Vegetation assessment
 - 4.2 Threatened Species assessment
 - 4.3 Cumulative impacts
 - 4.4 Addressing the Mitigation hierarchy
 - 4.5 Principles of clearance
 - 4.6 Risk Assessment
 - 4.7 NVC Guidelines
5. Clearance summary
6. Significant environmental benefit
7. Appendices
 - 7.1 Fauna Survey (desktop)
 - 7.2 Bushland Assessment Scoresheets
 - 7.3 Flora Species List
 - 7.4 Copies of associated approvals
 - 7.5 Letter of Instruction
 - 7.6 Landscape Planting Palette

1. Application information

Application Details

Applicant:			
Key contact:		; Mb:	; E:
Landowner:	Smiths Pty Ltd		
Site Address:	6546 North Coast Road, Middle River SA 5223		
Local Government Area:	Kangaroo Island	Hundred:	Duncan
Title ID:	CT/6028/127	Parcel ID	D79262 A1

Summary of proposed clearance

Purpose of clearance	Clearance required for the construction of a tourism facility and vehicular access
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 33, House or Buildings
Description of the vegetation under application	<u>Size, type and general condition</u> – 34.97 ha of Sugar Gum (<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i>) Woodlands in poor to good condition; 1.2 ha of Drooping Sheoak (<i>Allocasuarina verticillata</i>) Woodland in very poor condition; 1 ha of Kangaroo Thorn (<i>Acacia paradoxa</i>) shrubland in poor condition
Total proposed clearance - area (ha) and number of trees	0.474 ha of poor to moderate quality vegetation is proposed to be cleared. No clearance will be undertaken within the Asset Protection Zone
Level of clearance	Level 3
Overlay (Planning and Design Code)	Native Vegetation Overlay

Map of proposed clearance area



Mitigation hierarchy	Existing tracks and historically cleared areas have been incorporated into the design to minimise clearance for this development. All buildings have been positioned within open pasture to avoid clearance for their construction.
SEB Offset proposal	Payment of \$16,352.58 into the Fund

2. Purpose of clearance

2.1 Description

Clearance is required for the construction of a tourism facility inclusive of accommodation cabins and visitor facilities and associated infrastructure such as the widening of the existing western access track. A condition of development authorisation will be sought from the Planning Authorities which positively prohibits any clearance beyond that which is being applied for. This condition will prohibit further clearance post construction to create an Asset Protection Zones around the various accommodation cabins and visitor facilities.

2.2 Background

Middle River is located on the north coast of Kangaroo Island halfway between Kingscote and Cape Borda. Approximately half of the locality has been cleared for agricultural purposes. This clearance began prior to official settlement in 1836 and culminated during the Soldier Settlement Scheme in the 1950-60's.

6546 North Coast Road is located on the coast on the far western side of the Middle River locality. The property was mostly cleared for agricultural purposes in the early days and has been actively grazed by stock since this time. The present landholder currently has a lease arrangement with a neighbour for the occasional grazing of cattle, however is proposing to construct an eco-regenerative tourism development that combines world class farming practises with a tourism facility that enables a reconnection between clients and the natural environment.

The allotment is landlock by neighbouring properties except for an "axe-handle" on the eastern side that runs southward to join up with North Coast Rd, however no access track has ever been created along it. An easement was created along the western boundary of the neighbouring property to the south to gain access to the property, however the ensuing track was not entirely constructed within this easement. The landholder applied for and was granted approval (2025_3076) from the Native Vegetation Branch to construct an access track down the "axe-handle" (Figure 1). Following further investigation, advice from the NVB that widening of the access track on the east was unlikely to gain support and the landholders preference to minimise vegetation clearance the easement has become the preferred access option. This Data Report deals with the correct placement and widening of this track to satisfy CFS requirements and minor clearance for the construction of the tourist facility. No further developments that require the removal of native vegetation are proposed at this time.

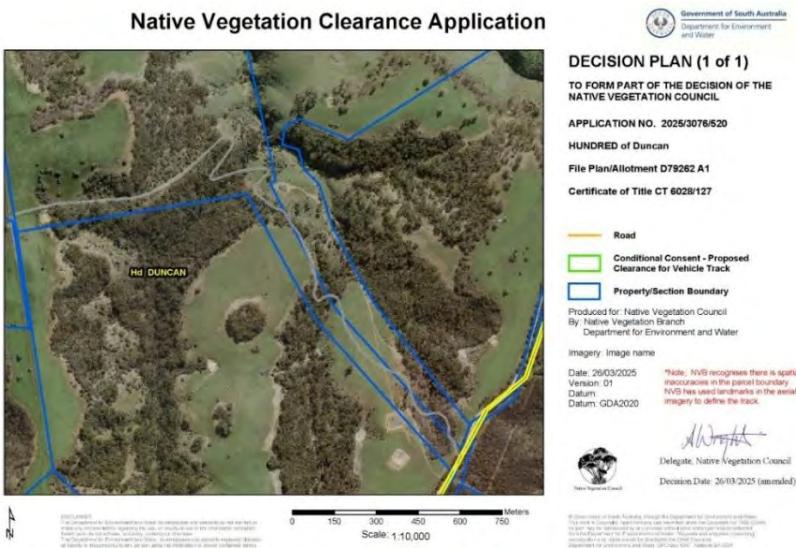


Figure 1. Decision notification for the access track along the "axe-handle" into 6546 North Coast Rd, Middle River

2.3 General location map

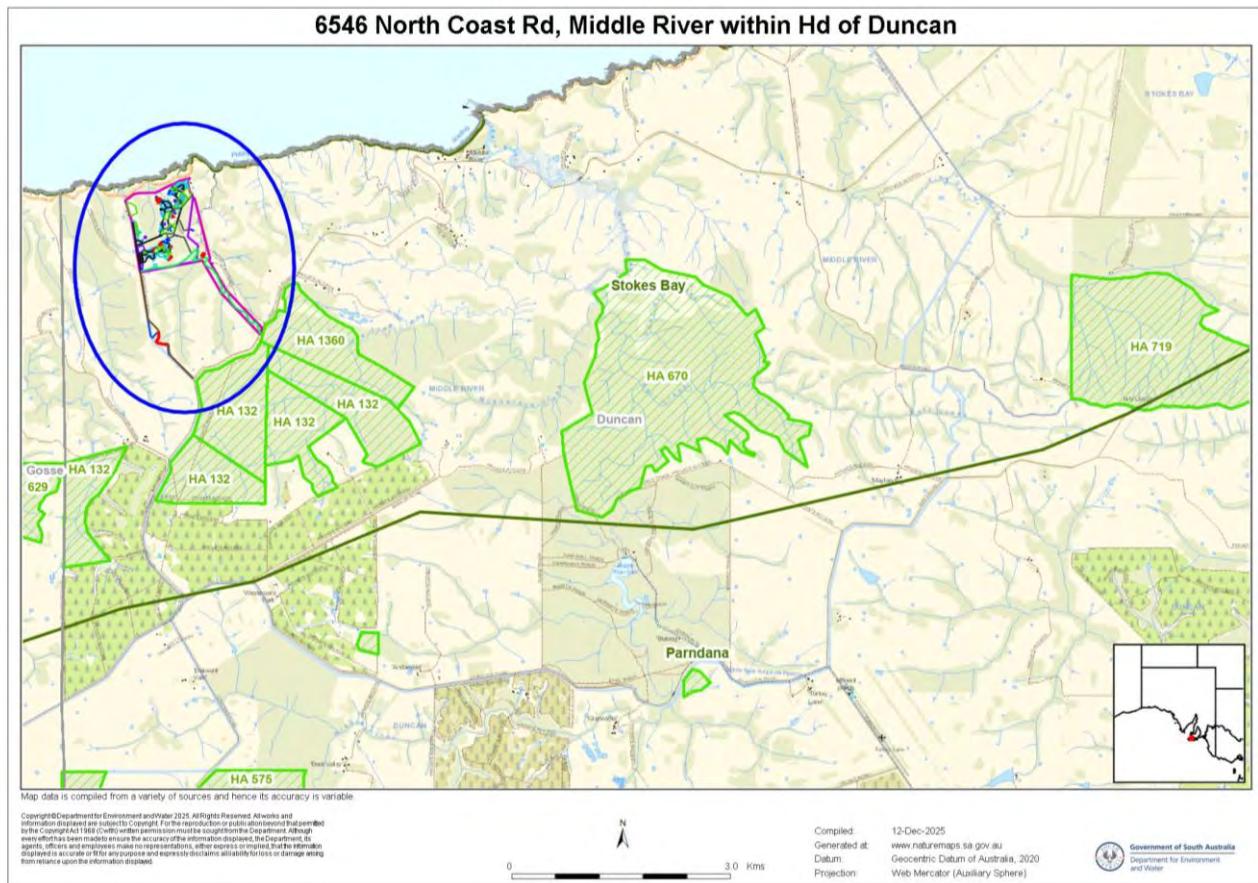


Figure 2. Location of 6546 North Coast Road, Middle River within the Hundred of Duncan. (Scale 1:72,224)

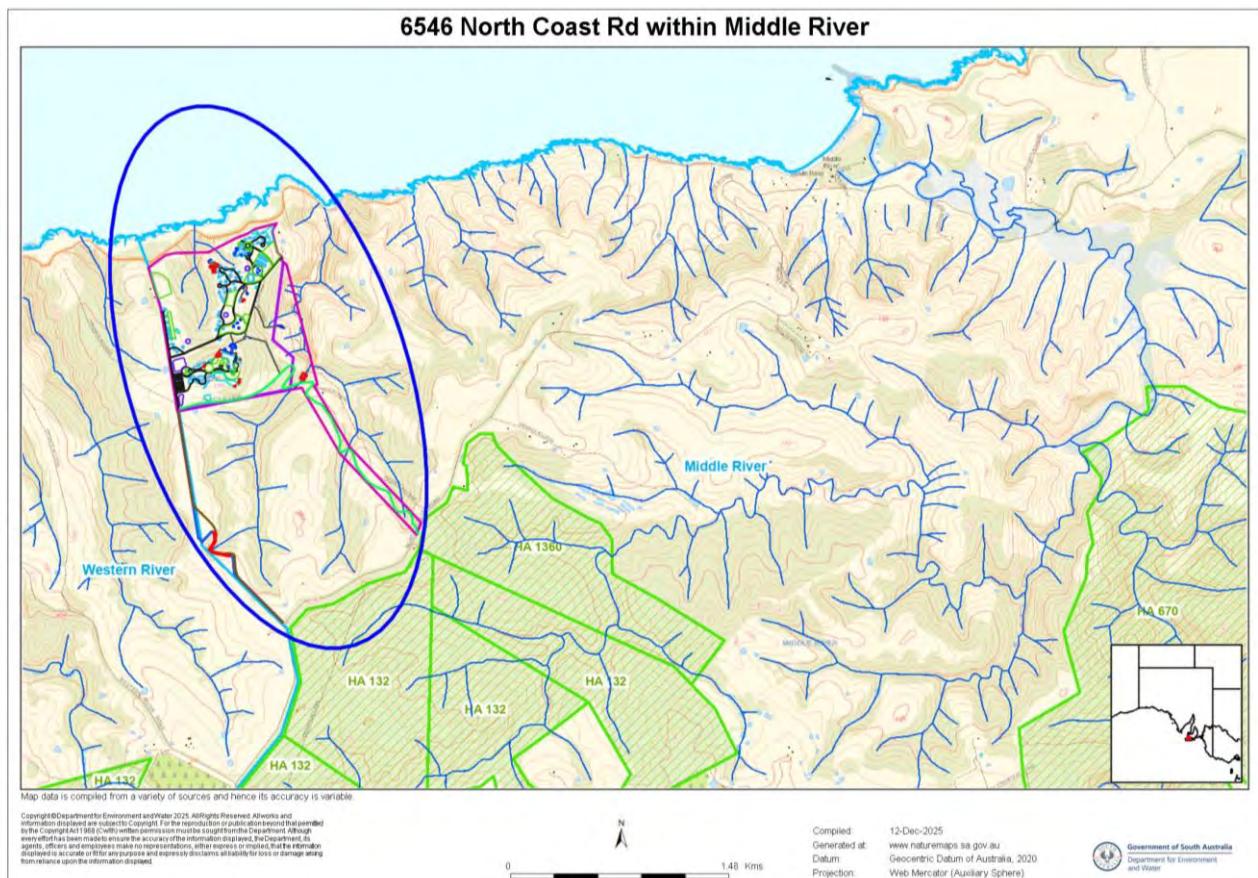


Figure 3. Location of 6546 North Coast Road within the locality of Middle River (Scale 1:36,112)



Figure 4. Clearance required to realign easement track on 6546 North Coast Rd, Middle River (Scale 1:18,056).

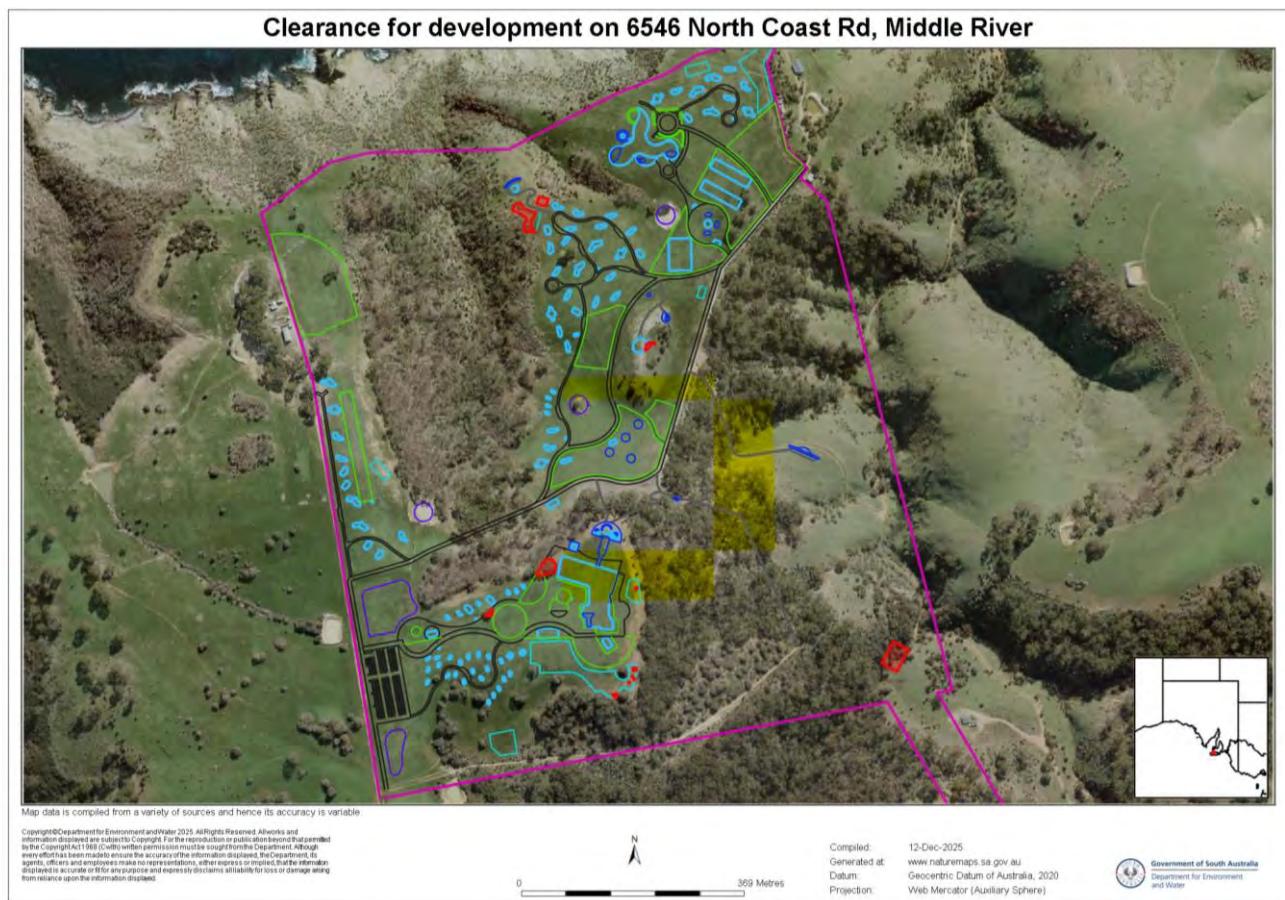


Figure 5. Clearance areas (red polygons) for tourist facility on 6546 North Coast Rd, Middle River (Scale 1:9,028)

2.4 Details of the proposal

The landholder is proposing to construct an eco-regenerative tourist facility that comprises 60 Accommodation modules, 33 Geothermal bathing pools, Restaurant, Day Spa, Overnight Guest Reception, Day-visitor Reception, Movement Centre, Service buildings, 26 Staff accommodation pods and associated infrastructure including rainwater tanks and access and walking tracks (Figure 6). Katharsis – Kangaroo Island by Junctions90 has been designed to sit lightly within the landscape with minimal disturbance to the environment during the construction phase and beyond. The facility will enable guests and day visitors to immerse themselves in the natural environment and world class regenerative farming practises.

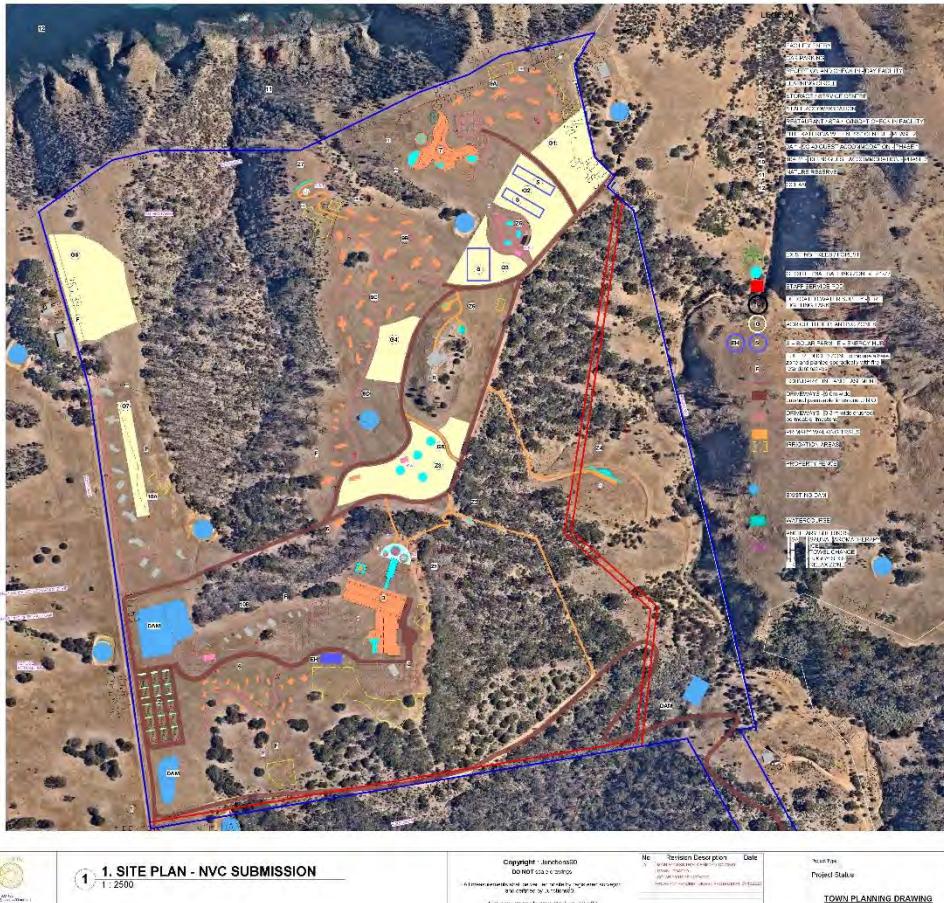


Figure 6 Design drawing for the tourism facility on 6546 North Coast Rd, Middle River

6546 North Coast Road is steeply undulating and contains a mixture of open pasture and remnant vegetation. In keeping with the minimal disturbance ethos, the tourist accommodation modules and staff accommodation pods will be delivered pre-fabricated and mounted on screw-piles to minimise soil disturbance on-site. The Reception buildings and Movement Centre have been carefully positioned within relatively flat areas that are mostly vegetated with exotic pasture grasses to minimise excavation and clearance requirements. These buildings will be delivered to site as "flat packs" and then assembled in-situ to reduce disturbance to the surrounding environment.

Several historic vehicle tracks criss-cross the property. Where possible, these have been incorporated into the design and will either be maintained for vehicular use or converted into walking tracks for the movement of guests and staff around the facility. All tracks will be upgraded with crushed limestone to ensure that they are traversable all year round. All additional tracks have been carefully positioned to avoid the clearance of any of the remnant vegetation on the property.

A Solar Farm will be constructed within the pastured area to the northeast of the Katarina Wellness Centre that will supply power for the development. A new overhead mains power line will be brought in from North Coast Road to supply backup power during times of high demand. Several rainwater tanks will be installed for domestic and firefighter use. It is also proposed to construct two new dams within the south-western corner and a weir to enable water to be harvested from the creek that runs across the south-eastern corner of the property.

Wastewater from cabins and the various facilities will be treated and then dispersed across 8 different irrigation zones that have been carefully positioned to avoid any possible runoff into or contamination of creeks/drainage lines or agricultural areas.

Some of the existing grazing land has been designated to become agricultural planting zones to produce food for use in the facility. An emphasis will be placed upon native "bush tucker" food production within these areas.

Relaxation/restoration via bathing is a key component of the facility with pools of varying sizes and aspects plus two spas have been included in the development. A geothermal bore will be sunk on the property to provide the water for the thermal pools (Appendix 4).

As 6546 North Coast Rd, Middle River is located within a High Bushfire Risk area, several measures will be put in place to ensure guest and visitor safety. CFS have indicated that they would be satisfied with the alignment of the existing easement provided the full 10m width is upgraded to an all-weather track. All internal vehicle tracks culminate in either "T"-shaped turn around areas or rings to enable the safe ingress and egress of firefighting vehicles. A dedicated firefighting tank will be installed and a refuge area near the main carpark will be established. CFS have also indicated that they do not require Asset Protection Zones to be established around the accommodation modules/pods and Receptions/Wellness Centre as the sparse nature of the remnant vegetation already complies with their requirements. This vegetation will be managed into the future to maintain it at the current density to ensure that there is no requirement to clear it. A Condition of Development Authorisation will be sought from both the State Commission Assessment Panel and the Native Vegetation Branch which positively prohibits clearance within the APZ for perpetuity (Appendix 5).

Connection to the natural environment is a key outcome of the facility. To this end, landscaping with local provenance plants will occur post construction (Appendix 6). These plantings will focus on creating habitat for fauna species as well as incorporating threatened flora species where possible. It is anticipated that there will be no net loss of threatened species as a result of this development, but instead a gain through direct planting and habitat creation.

Due to the complex nature of this development, it is proposed to undertake it in stages. Phase 1 will include all essential components inclusive of internal tracks and pathways, 41 accommodation pods and the Day and Overnight Receptions. Phase two will see the addition of a further 19 accommodation pods, the Katerina Wellness Centre and Learning Centre. All required clearance for both Phases 1 and 2 is covered in this Data Report. No further developments that require the removal of native vegetation are proposed for the property.

2.5 Approvals required or obtained

Native Vegetation Act 1991

Clearance Approval has been granted for a 5m wide access track from North Coast Road to the far south-western corner of the property (2025_3076).

Planning, Development and Infrastructure Act 2016

Development Approval will be sought from the State Commission Assessment Panel

Water Resources Act 1997

Well Permit Application Permit Number: PA-735501

Landscapes SA Act 2019

A Water Affecting Activity Permit will be sought from the Kangaroo Island Landscape Board for the construction of the Weir and dams.

2.6 Native Vegetation Regulation

This proposal falls under Regulation 12(33) as it is for the construction of a new dwelling, shed, carport and associated infrastructure.

Regulation 12(33) – New dwelling or building

To allow clearance of vegetation for a new dwelling or building approved under the Development Act 1993. This also includes clearance for associated structures (that have development approval).

2.7 Development Application information (if applicable)

6546 North Coast Road, Middle River is Zoned Rural (Subzoned Kangaroo Island) and Conservation (Subzoned Visitor Experience). The Native Vegetation and High Bushfire Risk Overlays apply to this development.

3. Method

3.1 Flora assessment

The Native Vegetation proposed to be cleared for the construction of a new tourism facility and associated infrastructure at 6546 North Coast Road, Middle River, Hundred of Duncan was assessed on 8 July and 11 November 2025. The flora was assessed using standard assessment techniques consisting of-

- Four native vegetation community was identified;
- Bushland Assessment Sites were established in each vegetation community;
- A complete species list of all native and introduced plant species was produced for the identified vegetation communities;
- Nationally Threatened, State Listed or Regionally Significant plant species populations were identified and their location recorded with a hand-held GPS to an accuracy of <5m;
- Proclaimed introduced plant species populations were identified and their location recorded with a hand-held GPS to an accuracy of <5m; and
- Survey data relating to records of Nationally Threatened, State Listed or Regionally Significant plant species was recorded, following BDBSA Minimum Data Standards, and provided to BDBSA for uploading.

[Appendix 3](#) contains the flora list for the site.

3.2 Fauna assessment

The potential fauna to occur on 6546 North Coast Road, Middle River, Hundred of Duncan was determined utilising the following-

- Fauna recorded within 5km of the site;
- Observations of fauna including, tracks and traces, while undertaking the flora assessment.

The comprehensive list from above was then added to the Bushland Assessment Spreadsheet, [Appendix 1](#).

"Chewings" from Glossy Black-Cockatoos were observed under some of the *Allocasuarina verticillata* trees within Site 7. One of these trees was located within the outer perimeter of the Asset Protection Zone, whilst the remaining trees were beyond the disturbance area.

A Short-beaked Echidna was observed foraging within Site 8. As no clearance is proposed to occur within this area, the staff accommodation is highly unlikely to detrimentally impact this highly mobile species.

A pair of Crimson Rosella and a single Glossy Black-cockatoo were observed near Site 4.

The remnant vegetation on the property is unlikely to provide habitat for the remaining EPBC Act threatened species that have been recorded within the area. The various elements of the development have been carefully positioned to minimise the impact of the facility on the surrounding environment. As the clearance area for the facility is small and largely contained within historically cleared agricultural land, it was felt that a targeted fauna survey was not required.

Following consultation with the Native Vegetation Branch (Gillam 24/11/2025) several of the threatened species that have been recorded within 5km of the clearance area were removed from the assessment as the area does not provide habitat for them.

4. Assessment Outcomes

4.1 Vegetation Assessment

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

The Snelling Land System runs from Cape Forbin in the west to Stokes Bay Road in the east and encapsulates the Snelling Escarpment. It is dominated by moderate to steep sided slopes that are dissected by many creeks that flow out into Investigator Strait. 6546 North Coast Road is located within the central portion of this system and, as with the rest of the system, it contains few flat areas.

The soils within the property are dominated by a mosaic of gradational acidic sandy loams and acidic loams over rock. Many Cambrian age Phyllite rocks are exposed within the steeper more vegetated gullies on the property. These soils are regarded as being some of the most fertile soils on KI, however the steep and rocky nature of the land makes them largely non arable.

Two un-named creek systems dissect the property. Several tributaries of the creek that flows out to sea at Pebbley Beach drains the eastern side whilst a minor system is completely contained within the north-western side of the allotment. The gullies that these creeks are contained within are largely vegetated as the topography was too steep and rocky to warrant clearance for agriculture.

Eucalyptus cladocalyx ssp. *crassa* woodland is the characteristic vegetation community of the Snelling Land System. Many unprotected remnants have become degraded due to the long history of grazing in the area. This is now compounded by the over abundant number of native herbivores. There are, however, several large Heritage Agreement areas that are protecting moderate to good quality stands of this community. Small pockets of *Allocasuarina verticillata* woodland (KI 1902) are dotted along the coast. This combination of vegetation communities makes this Land System important to the Glossy Black-Cockatoo as it provides both feeding and nesting habitat.

The vegetation contained within 6546 North Coast Road is mostly comprised of *Eucalyptus cladocalyx* ssp. *crassa* woodland that ranges from poor to good quality. There is a noticeable lack of understory species present within the remnant patches contained within the "axe-handle". Vegetation quality improves markedly within the south-eastern corner of the allotment before once again becoming less diverse within the central portion. A small patch of *Allocasuarina verticillata* woodland is growing within the north-western corner of the allotment.

There are two recorded fires for the property. A small portion was burnt within the middle of the "axe-handle" in 2016. The 19/20 KI Complex Bushfire burnt across the north-western half of the property and a small section at the bottom of the "axe-handle" where it connects to North Coast Road. The regeneration from this latest burn has been mixed, with areas that have had a long grazing history responding the worst.

A diverse range of understory shrubs are regenerating within the remnant vegetation growing on the easement, however the overabundant native herbivores are heavily grazing on these. The only plants that are able to flower and set seed are growing amongst the large dead and/or dying prickly shrubs in the area (Photo 1). Past historic clearance combined with this overgrazing has resulted in the area being largely devoid of understory vegetation and only containing a scattering of mid and overstory plants. The northern side of the patch has also become infested with exotic pasture grasses. Several rings of cyclone wire have been placed throughout the area presumably to protect orchids, however none were observed within them (Photo 2). Several Donkey and Sun orchid species were found hidden amongst dead vegetation.



Photo 14 *Hibbertia radians* within dead shrub



Photo 15 Cyclone wire protection ring.

The regeneration within the more recently burnt remnant vegetation on the north and north-western side of the property is mostly sparse and dominated by the coloniser species *Acacia paradoxa* and *Allocasuarina verticillata*. As with the easement, the high number of kangaroos are heavily grazing on the understory shrubs, with *Hibbertia exutiacies* being a favourite (Photo 3).



Photo 16. Heavily grazed *Hibbertia exutiacies* beyond the disturbance area in Site 7.

The vegetation contained within the clearance areas is mostly in poor condition with little understory present and a general lack of structural diversity due to historic clearance events, introduction of exotic pasture grasses and livestock grazing.

Details of the vegetation associates proposed to be impacted - Site 4, 8 (APZ only) and 12

Vegetation Association	KI 0507 <i>Eucalyptus cladocalyx</i> , <i>Allocasuarina verticillata</i> , <i>Eucalyptus cosmophylla</i> , <i>Eucalyptus fasciculosa</i> , +/- <i>Eucalyptus leucoxylon</i> ssp. <i>leucoxylon</i> mid open woodland over <i>Acacia paradoxa</i> , <i>Bursaria spinosa</i> ssp. <i>spinosa</i> , <i>Allocasuarina striata</i> shrubs over <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> , <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> , <i>Pteridium esculentum</i>
	

Direction: 196° **Latitude:** 35° 41' 28.09" S **Longitude:** 137° 1' 35.10" E. **Photo 9** Typical habitat

General description	<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> woodland over <i>Eucalyptus cosmophylla</i> , <i>Allocasuarina verticillata</i> trees, <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> , <i>Acacia paradoxa</i> and <i>Lissanthe strigosa</i> ssp. <i>subulata</i> shrubs and <i>Rytidosperma</i> sp. grasses in poor condition				
Threatened species or community	<p>No Threatened Ecological Communities were observed during the site assessment. A Glossy Black-cockatoo, Crimson Rosellas and a KI Short-beaked Echidna was observed during the site assessment.</p> <p>There are records of White-bellied Whiibird, SA Bassian Thrush, Southern Brown Bandicoot (EPBC Act Endangered) and Heath Goanna (NPW SA Act Vulnerable) within 5km of the clearance area.</p> <p><i>Eucalyptus fasciculosa</i>, <i>Rhytidosporum procumbens</i> and <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> (NPW SA Act Rare) were observed during the site assessment.</p> <p>There are records of <i>Hibbertia obtusibracteata</i> (NPW SA Act Vulnerable), <i>Acacia dodonaeifolia</i>, and <i>Xanthosia tasmanica</i> (NPW SA Act Rare) within 1km of the clearance area.</p>				
Landscape context score	S8 – 1.10; S4 - 1.15; S12 - 1.15	Vegetation Condition Score	S4 – 22.80 S8 - 4.65; S12 – 36.45;	Conservation significance score	S4 – 1.14 S8 - 1.10 S12 – 1.18
Unit biodiversity Score	S4 – 29.89 S8 - 5.63 S12 – 49.46	Area (ha)	0.436	Total biodiversity Score	13.25

Details of the vegetation associates proposed to be impacted Sites - Site 6 (inclusive of APZ)

Vegetation Association	KI 0504 <i>Eucalyptus cladocalyx</i> , <i>Eucalyptus fasciculosa</i> mid woodland over <i>Allocasuarina verticillata</i> over <i>Acacia paradoxa</i> shrubs over <i>Prostanthera spinosa</i> shrubs
	

Direction: 40° **Latitude:** 35° 40' 47.76" S **Longitude:** 137° 1' 35.67" E. **Photo 10** Typical habitat

General description	<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> woodland over <i>Eucalyptus obliqua</i> , <i>Allocasuarina verticillata</i> trees, <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> shrubs and <i>Rytidosperma</i> sp. grasses in poor degraded condition
Threatened species or community	No Threatened Ecological Communities were observed during the site assessment. No threatened fauna was observed during the site assessment. There are records of Glossy Black-cockatoo, White-bellied Whistler, SA Bassian Thrush, KI Short-beaked Echidna (EPBC Act Endangered), Crimson Rosella (EPBC Act Vulnerable) and Heath Goanna (NPW SA Act Vulnerable) within 5km of the clearance area. <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> (NPW SA Act Rare) was observed during the site assessment. There are records of <i>Hibbertia obtusibracteata</i> (NPW SA Act Vulnerable), <i>Acacia dodonaeifolia</i> , <i>Eucalyptus fasciculosa</i> , <i>Rhytidosporum procumbens</i> and <i>Xanthosia tasmanica</i> (NPW SA Act Rare) within 1km of the clearance area.
Landscape context score	1.10
Unit biodiversity Score	21.95
Vegetation Condition Score	17.50
Conservation significance score	1.14
Total biodiversity Score	2.63

Details of the vegetation associates proposed to be impacted Sites - Site 7 (inclusive of APZ)

Vegetation Association	KI 1902 <i>Allocasuarina verticillata</i> low woodland over <i>Gramineae sp.</i> tussock grasses
	

Direction: 12° **Latitude:** 35° 40' 35.98" S **Longitude:** 137° 1' 42.52" E. **Photo 11** Typical habitat

General description	<i>Allocasuarina verticillata</i> woodland over <i>Lissanthe strigosa</i> ssp. <i>subulata</i> shrubs and <i>Rytidosperma sp.</i> grasses in very poor degraded and weedy condition				
Threatened species or community	<p>No Threatened Ecological Communities were observed during the site assessment. Glossy Black-cockatoo "chewings" were observed during the site assessment.</p> <p>There are records of White-bellied Whistler, SA Bassian Thrush, KI Short-beaked Echidna (EPBC Act Endangered), Crimson Rosella (EPBC Act Vulnerable) and Heath Goanna (NPW SA Act Vulnerable) within 5km of the clearance area.</p> <p>No threatened flora species were observed during the site assessment.</p> <p>There are records of <i>Hibbertia obtusibracteata</i> (NPW SA Act Vulnerable), <i>Acacia dodonaeifolia</i>, <i>Eucalyptus fasciculosa</i>, <i>Rhytidosporum procumbens</i> and <i>Xanthosia tasmanica</i> (NPW SA Act Rare) within 1km of the clearance area.</p>				
Landscape context score	1.12	Vegetation Condition Score	10.69	Conservation significance score	1.10
Unit biodiversity Score	13.17	Area (ha)	0.89	Total biodiversity Score	1.29

Details of the vegetation associates proposed to be impacted Sites - Sites 9 (APZ) and 10 (inclusive of APZ)

Vegetation Association	KI 0504 <i>Eucalyptus cladocalyx</i> , <i>Eucalyptus fasciculosa</i> mid woodland over <i>Allocasuarina verticillata</i> over <i>Acacia paradoxa</i> shrubs over <i>Prostanthera spinosa</i> shrubs
	

Direction: 19° **Latitude:** 35° 40' 37.20" S **Longitude:** 137° 1' 35.26" E. **Photo 12** Typical habitat

General description	<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> woodland over <i>Allocasuarina verticillata</i> trees, <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> , <i>Acacia paradoxa</i> and <i>Lissanthe strigosa</i> ssp. <i>subulata</i> shrubs and <i>Rytidosperma</i> sp. grasses in moderate condition				
Threatened species or community	<p>No Threatened Ecological Communities were observed during the site assessment.</p> <p>No threatened fauna species were observed during the site assessment.</p> <p>There are records of Glossy Black-cockatoo, White-bellied Whistler, SA Bassian Thrush, KI Short-beaked Echidna (EPBC Act Endangered), Crimson Rosella (EPBC Act Vulnerable) and Heath Goanna (NPW SA Act Vulnerable) within 5km of the clearance area.</p> <p><i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> (NPW SA Act Rare) was observed during the site assessment.</p> <p>There are records of <i>Hibbertia obtusibracteata</i> (NPW SA Act Vulnerable), <i>Acacia dodonaeifolia</i>, <i>Eucalyptus fasciculosa</i>, <i>Rhytidosporum procumbens</i> and <i>Xanthosia tasmanica</i> (NPW SA Act Rare) within 1km of the clearance area.</p>				
Landscape context score	S9 - 1.11 S10 - 1.10	Vegetation Condition Score	S9 - 25.55 S10 - 22.26	Conservation significance score	1.14
Unit biodiversity Score	S9 - 32.33 S10 - 27.91	Area (ha)	0.276	Total biodiversity Score	7.97

Details of the vegetation associates proposed to be impacted Sites - Site 11 (APZ)

Vegetation Association	KI 3101 emergent <i>Eucalyptus cladocalyx</i> trees over <i>Acacia paradoxa</i> , <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> mid open shrubland over <i>Pteridium esculentum</i> ferns
	

Direction: Eastward **Latitude:** 35° 40' 25.76" S **Longitude:** 137° 1' 33.67" E. **Photo 13** Typical habitat

General description	Emergent <i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> trees over <i>Acacia paradoxa</i> shrubland with emergent <i>Allocasuarina verticillata</i> trees and <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> shrubs and <i>Rytidosperma</i> sp. grasses in poor weedy condition				
Threatened species or community	No Threatened Ecological Communities were observed during the site assessment. No threatened fauna species were observed during the site assessment. There are records of Glossy Black-cockatoo, White-bellied Whistler, SA Bassian Thrush, KI Short-beaked Echidna (EPBC Act Endangered), Crimson Rosella (EPBC Act Vulnerable) and Heath Goanna (NPW SA Act Vulnerable) within 5km of the clearance area. <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> (NPW SA Act Rare) was observed during the site assessment. There are records of <i>Hibbertia obtusibracteata</i> (NPW SA Act Vulnerable), <i>Acacia dodonaeifolia</i> , <i>Eucalyptus fasciculosa</i> , <i>Rhytidosporum procumbens</i> and <i>Xanthosia tasmanica</i> (NPW SA Act Rare) within 1km of the clearance area.				
Landscape context score	1.12	Vegetation Condition Score	14.90	Conservation significance score	1.14
Unit biodiversity Score	19.02	Area (ha)	0.029	Total biodiversity Score	0.55

Site map showing areas of proposed impact

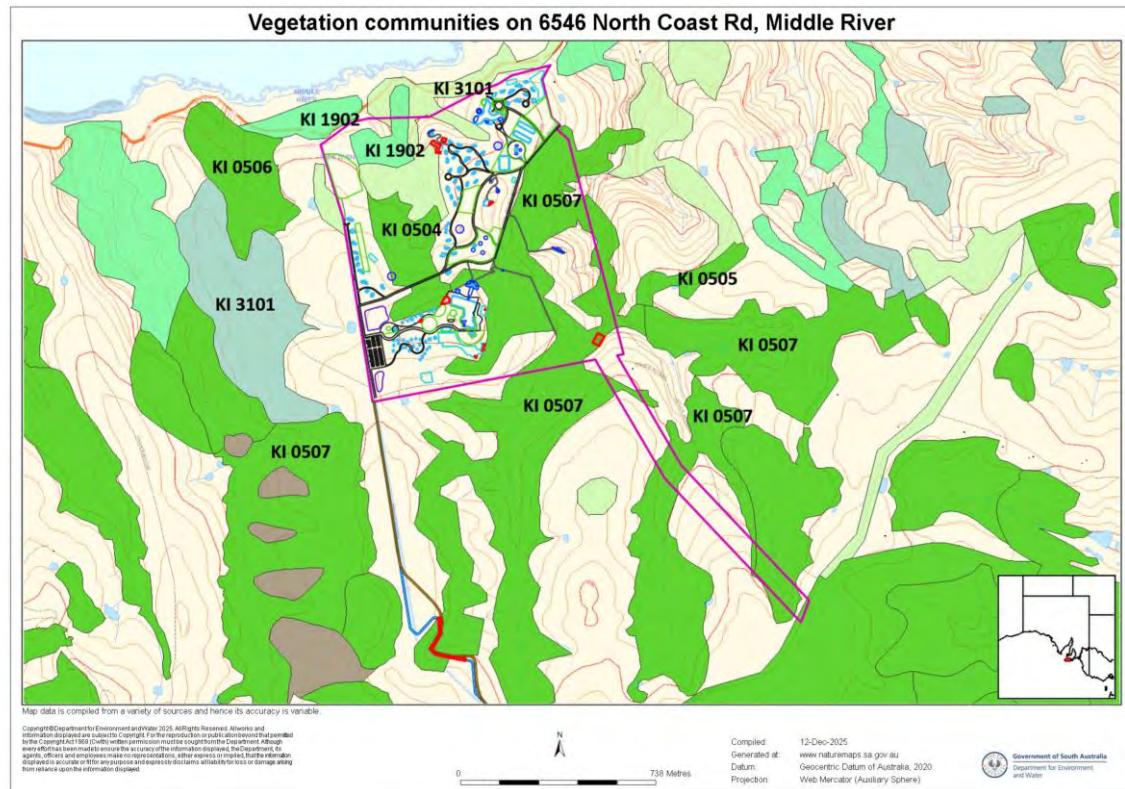


Figure 7. Vegetation communities on and around 6546 North Coast Road, Middle River (Scale 1:18,056)

Photo log



Photo 1. **Direction:** 280° **Latitude:** 35° 41' 31.14" S **Longitude:** 137° 1' 38.95" E. Realigned easement access track - southern end - Site 12



Photo 2. **Direction:** 280° **Latitude:** 35° 41' 26.45" S **Longitude:** 137° 1' 35.65" E. Realigned easement access track - northern end - Site 12



Photo 3. **Direction:** 342° **Latitude:** 35° 40' 44.73" S **Longitude:** 137° 1' 39.87" E. Under tree canopy paths - Site 6



Photo 4. **Direction:** 143° **Latitude:** 35° 40' 53.30" S **Longitude:** 137° 1' 30.18" E. Asset Protection Zone - Site 8



Photo 5. **Direction:** 152° **Latitude:** 35° 40' 31.02" S **Longitude:** 137° 1' 34.82" E. Asset Protection Zone - Site 10



Photo 6. **Direction:** 130° **Latitude:** 35° 40' 28.13" S **Longitude:** 137° 1' 34.64" E. Wastewater irrigation area - Site 10



Photo 7. Southward over development area - Left - Site 7; Right - Site 9; Centre at back - Site 6



Photo 8. **Direction:** 209° **Latitude:** 35° 40' 51.99" S **Longitude:** 137° 1' 59.14" E. Weir Dam - Site 4

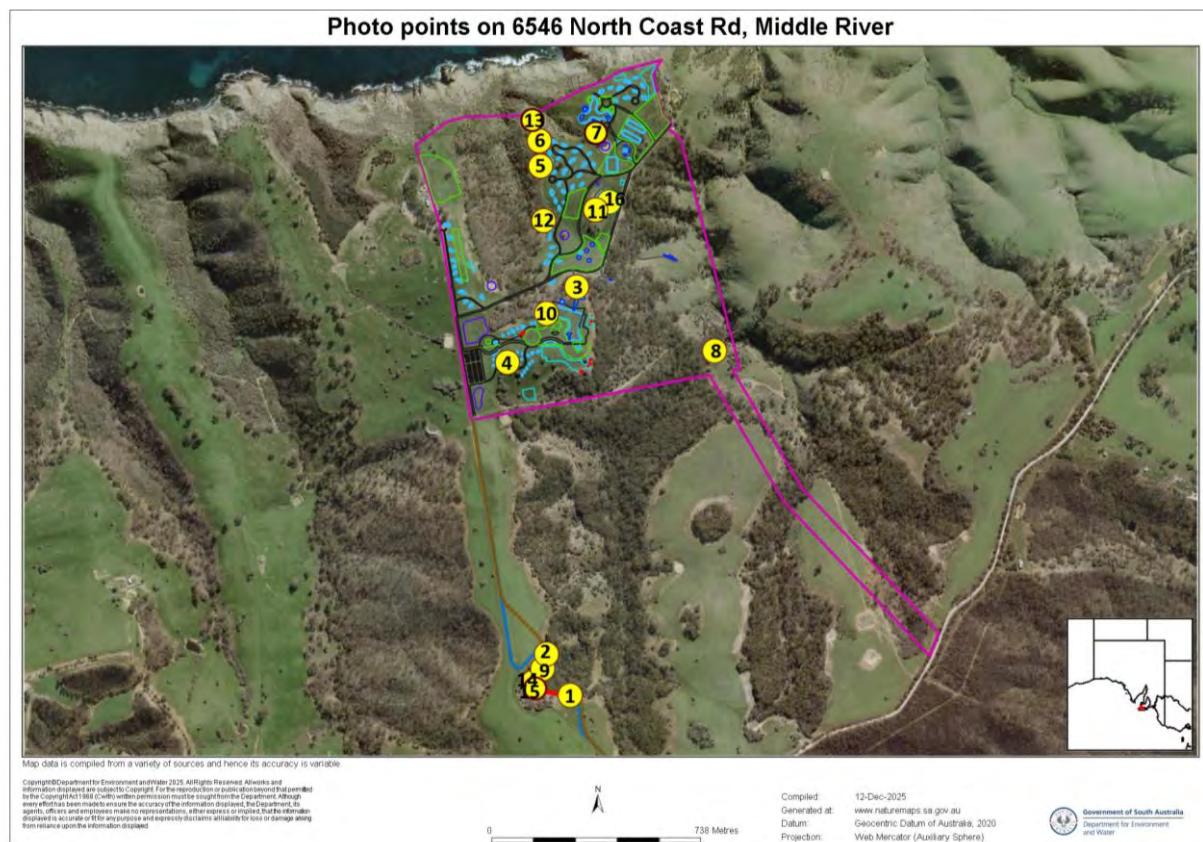


Figure 8. Locations of photo points on 6546 North Coast Road, Middle River (Scale 1:18,056)

4.2 Threatened Species assessment

Species observed on site, or recorded within 5 km (50 km in the arid zone) of the application area since 1995, or the vegetation is considered to provide suitable habitat

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
<i>Burhinus grallarius</i> (Bush Stonecurlew)	R		3	2021	Remnant mallee open grassland mosaic	Likely – suitable habitat present
<i>Calyptorhynchus lathami halmaturinus</i> (Glossy Black-cockatoo)	E	EN	4	2025	Sugar Gum forest; Sheoak Woodland	Known - "chewings" observed in Site 7
<i>Petroica boodang boodang</i> (Scarlet Robin)	R		3	2022	Open Woodland; wooded farmland	Likely - suitable habitat present
<i>Platycercus elegans melanopterus</i> (Crimson Rosella)		VU	3	2018	Forest; Woodland; Mallee; Coastal heathland	Known - observed near Site 4
<i>Psophodes leucogaster lashmari</i> (White-bellied Whippbird)	R	EN	3	2022	Dense coastal mallee; dense mallee/banksia woodland	Unlikely - removed from assessment by NVB
<i>Zoothera lunulata halmaturina</i> (SA Bassian Thrush)		EN	3	2022	Dense damp forest; Dense coastal mallee scrub	Unlikely - removed from assessment by NVB
<i>Tachyglossus aculeatus multiaculeatus</i> (KI Short-beaked Echidna)	E	EN	4	2025	Forest; Woodland; Mallee	Known - observed foraging in Site 8
<i>Trichosurus vulpecula</i> (Common Brushtail Possum)	R		3	2022	Forest; Woodland; Mallee	Likely - suitable habitat present
<i>Varanus rosenbergi</i> (Heath Goanna)	V		3	2022	Forest; Woodland; Mallee	Likely - suitable habitat present
<i>Xanthosia tasmanica</i> (Southern Xanthosia)	R		3	2020	Woodland and Mallee on acidic loam	Likely - suitable habitat present
<i>Hibbertia obtusibracteata</i> (Prickly Guinea-flower)	V		3	2020	Woodland on ironstone gravel soil	Unlikely - no suitable habitat present
<i>Acacia dodonaeifolia</i> (Hop-bush Wattle)	R		3	2017	Coastal woodland on acidic loam	Possible - some suitable habitat present
<i>Eucalyptus fasciculosa</i> (Pink Gum)	R		4	2025	Forest; Woodland on acidic loam	Known - observed in Site 12
<i>Pultenaea villosa</i> ssp. <i>glabrescens</i> (Splendid Bush-pea)	V	VU	4	2025	Forest on acidic loam	Known - observed in "axe handle"

<i>Rhytidosporum procumbens</i> (White Rhytidosporum)	R		3	2025	Damp woodland on acidic sand or loam	Known - observed in Site 12
<i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> (Tate's Grass-tree)	R		4	2025	Forest, Woodland, Mallee on most soil types	Known - widespread across property

Source; 1- BDBSA, 2 - AoLA, 3 – NatueMaps 4 – Observed/recorded in the field, 5 - Protected matters search tool, 6 – others NP&W Act; E= Endangered, V = Vulnerable, R= Rare
EPBC Act; Ex = Extinct, CR = Critically endangered, EN = Endangered; VU = Vulnerable

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

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

Clearance is required for the construction of a tourist facility and associated infrastructure including access road, wastewater treatment and weir dam. No further clearance will be undertaken post construction to create Asset Protection Zones around the cabins and buildings within the development. This clearance will be undertaken in a careful manner so as not to disturb the root zones of the surrounding vegetation. All clearance areas will be clearly demarcated to ensure that no vegetation beyond the approved clearance areas is impacted by clearance and/or construction activities. All contractors will be instructed to always remain within the approved construction zone and/or on formed tracks to ensure that the surrounding vegetation is not damaged during the construction phase.

Where possible, services will be laid in common trenches through the open pasture to minimise the risk of damage to the rootzones of any surrounding vegetation. The resultant spoil will be stockpiled within the construction zone to ensure that the surrounding vegetation is not smothered by it and/or damaged during its retrieval. Some cut and fill will be required to construct the access track and to create flat pads on which to construct some of the structures within the development. Any leftover fill will either be used for landscaping or removed from the property and deposited in an approved dumping site. Most of the structures within this development will be secured on screw-piles, which eliminates excavation requirements for their footings.

Every attempt will be made to minimise the required earthworks and ensuing construction activities during the nesting season of *EPBC Act 1999* listed species such as the Glossy Black-cockatoo and Crimson Rosella. The accommodation modules will be constructed off site and many of the other structures will be brought to site as "flat packs". Both measures will greatly reduce construction activities on site.

The required earthworks are likely to generate low to moderate levels of dust. The surrounding vegetation can withstand such levels. If dust creation is deemed to be excessive, mitigating actions such as suppression with water will be employed to reduce dust to acceptable levels.

As the topography is steep in some area, the required earthworks are likely to cause erosion. Mitigating actions such as the installation of drains, use of jute matting and/or coir logs will be implemented to ensure that erosion is kept to a minimum.

Aside from the access track within the easement which includes several steep gully/creek crossings, minimal earthworks are required for this development. The access track will be designed by an appropriately qualified civil engineer to ensure that its construction does not obstruct the flow of water into or down the various creeks on the property. Due to this and the minimal earthworks that are required for the various structures within the development, the hydrology of the area should remain unaffected.

It is proposed to sink a bore to provide geothermally heated water for the many pools that have been included in the development. All appropriate permits have been obtained and water levels will be carefully monitored to ensure that groundwater levels are not affected by the taking of this resource.

Landscaping with local provenance plants will occur post construction to aid in soil stabilisation, to increase species diversity within the area and to improve the aesthetics of the development. No further developments that require the removal of native vegetation are proposed for the property.

4.4 Address the Mitigation Hierarchy

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

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

Avoidance is not possible as both access options contain native vegetation. The landholder has therefore chosen the option that avoids the clearance of intact vegetation. All structures within the development have been carefully positioned within historically cleared land to avoid the clearance of any intact vegetation. The landholder wishes for the Planning Authorities to impose a Condition of Development Authorisation that positively prohibits vegetation removal within the various Asset Protection Zones to ensure that this vegetation cannot be cleared for perpetuity.

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

Existing access and vehicle tracks have been incorporated into the design to minimise the clearance of native vegetation. Following site visits and discussions with the Native Vegetation Consultant all bathing pools were repositioned out of the remnant vegetation and into historically clear areas to minimise the clearance required for this development.

The easement which runs from North Coast Road and through the neighbour's property to the south currently provides the only access to the property. The historic track which was subsequently created is not entirely contained within this easement and does not satisfy CFS requirements. The realignment of this track with the easement will result in some vegetation clearance. Incorporating retaining walls and, where possible, the existing track into the design greatly reduces vegetation removal.

Where possible, all buildings have been positioned within the agricultural grazing land on the property. Except for the new access track, only minor clearance is required to construct this tourist and day visitor facility.

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

Landscaping with local provenance plants will occur post construction to aid in soil stabilisation, increase species diversity within the area and to improve the aesthetics of the development. The landholder intends to commence regenerative farming practises within the historical grazing land with an emphasis on native foods. This will improve biodiversity both above and below ground and increase the carbon sequestration potential on the property.

Revegetation works will be undertaken across the property to increase habitat niches for a wider variety of fauna species and to increase the area of occupancy of local threatened flora species such as *Pultenaea villosa* ssp. *glabrescens*.

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

The Significant Environmental Benefit Offset will be met via payment into the SEB Fund.

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

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

Principle of clearance	Considerations
Principle 1a - it comprises a high level of diversity of plant species	<p><u>Relevant information</u></p> <p><u>KI 0507</u> <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs</p> <p>Native: Site 4 - 17; Site 8 - 6; Site 12 - 40 Introduced: Site 4 - 13; Site 8 - 5; Site 12 - 11</p> <p><u>KI 0504</u> <i>Eucalyptus cladocalyx</i> mid woodland over <i>Allocasuarina verticillata</i> trees and <i>Acacia paradoxa</i> shrubs and <i>Prostanthera spinosa</i> shrubs</p> <p>Native: Site 6 - 6; Site 9 - 8; Site 10 - 9; Introduced: Site 6 - 5; Site 9 - 5; Site 10 - 5</p> <p><u>KI 1902</u> <i>Allocasuarina verticillata</i> low woodland over <i>Gramineae</i> sp. tussock grasses</p> <p>Native: Site 7 - 6; Introduced: Site 7 - 5</p> <p><u>KI 3101</u> emergent <i>Eucalyptus cladocalyx</i> trees over <i>Acacia paradoxa</i> mid open shrubland and <i>Pteridium esculentum</i> ferns</p> <p>Native: Site 11 - 6; Introduced: 4</p> <p>Bushland Plant Diversity Score: 12 (Site 4); 4 (Site 6); 8 (Site 7); 4 (Site 8); 6 (Site 9); 8 (Site 10); 4 (Site 11); 24 (Site 12)</p>
	<p><u>Assessment against the principles</u></p> <p>Seriously at Variance</p> <ul style="list-style-type: none"> - <u>KI 0507</u> <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs - Site 4 and 12 <p>Not at Variance</p> <ul style="list-style-type: none"> - <u>KI 0507</u> <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs - Site 4, Site 8 - <u>KI 0504</u> <i>Eucalyptus cladocalyx</i> mid woodland over <i>Allocasuarina verticillata</i> trees and <i>Acacia paradoxa</i> shrubs and <i>Prostanthera spinosa</i> shrubs - Site 6, 9 and 10 - <u>KI 1902</u> <i>Allocasuarina verticillata</i> low woodland over <i>Gramineae</i> sp. tussock grasses - Site 7 - <u>KI 3101</u> emergent <i>Eucalyptus cladocalyx</i> trees over <i>Acacia paradoxa</i> mid open shrubland and <i>Pteridium esculentum</i> ferns - Site 11

	<p><u>Moderating factors that may be considered by the NVC</u></p> <p>The cumulative clearance area is <0.25% (0.05%) of the remnant vegetation within 5km radius of the site.</p>
Principle 1b - significance as a habitat for wildlife	<p><u>Relevant information</u></p> <p>Glossy Black-cockatoo "chewings" and a KI Short-beaked Echidna was observed during the site assessment.</p> <p>The property contains feeding and potential nesting habitat for the Glossy Black-cockatoo. Whilst the feeding areas are currently relatively minor, this will increase as seedlings mature. Many of the mature Sugar Gums on the property have potential to provide suitable hollows for nesting.</p> <p>There are records of Glossy Black-cockatoo, KI Short-beaked Echidna (EPBC Act Endangered), Heath Goanna (NPW SA Act Vulnerable), Scarlet Robin and Common Brushtail Possum (NPW SA Act Rare) within 5km of the clearance area.</p> <p>The vegetation within the property ranges from very poor to moderate in condition. The better-quality vegetation would support a wide range of fauna species, however the poor-quality vegetation would only support a limited range due to its lack of species and structural diversity. Some of the patches of remnant vegetation are semi-isolated within the landscape, however most patches are contiguous with neighbouring properties. It is likely that these remnants would be utilised as corridors for movement across the landscape. All patches are likely to be used as a daytime refugia for nocturnal species.</p> <p>Threatened Fauna Score: 0.1 (Sites 4, 6 - 12) Unit biodiversity Score: 29.89 (Site 4); 21.95 (Site 6); 13.17 (Site 7); 5.63 (Site 8); 32.33 (Site 9); 27.91 (Site 10); 19.02 (Site 11); 49.46 (Site 12)</p>
	<p><u>Assessment against the principles</u></p> <p>Seriously at Variance</p> <ul style="list-style-type: none"> - <u>KI 0507</u> <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs - Sites 4, 8 and 12 - <u>KI 0504</u> <i>Eucalyptus cladocalyx</i> mid woodland over <i>Allocasuarina verticillata</i> trees and <i>Acacia paradoxa</i> shrubs and <i>Prostanthera spinosa</i> shrubs - Site 6, 9 and 10 - <u>KI 1902</u> <i>Allocasuarina verticillata</i> low woodland over <i>Gramineae</i> sp. tussock grasses - Site 7 - <u>KI 3101</u> emergent <i>Eucalyptus cladocalyx</i> trees over <i>Acacia paradoxa</i> mid open shrubland and <i>Pteridium esculentum</i> ferns - Site 11
	<p><u>Moderating factors that may be considered by the NVC</u></p> <p>The clearance areas do not contain critical habitat for any fauna species. The clearance required to realign the easement access track and the minor clearance required for structures within the development is highly unlikely to have a negative impact on the long-term survival or health of any fauna species.</p>

Principle 1c - plants of a rare, vulnerable or endangered species	<p><u>Relevant information</u></p> <p><i>Eucalyptus fasciculosa</i>, <i>Rhytidosporum procumbens</i> and <i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i> (NPW SA Act Rare) was observed during the site assessment.</p> <p>It is likely that full clearance of <i>E. fasciculosa</i> can be avoided as they are growing on the downslope of the existing access track. One <i>R. procumbens</i> was observed on the edge of the existing track. Being a small herb, it would be possible to translocate this plant beyond the construction zone. Some <i>X. semiplana</i> ssp. <i>tateana</i> plants are growing within the clearance area for the access track, however the clearance of these plants will not have a negative impact on the local population of this species.</p> <p>There are records of <i>Acacia dodonaeifolia</i> and <i>Xanthosia tasmanica</i> (NPW SA Act Rare) within 1km of the clearance area. It is possible that <i>X. tasmanica</i> went undetected within Site 4 as it is a small herb, however as <i>A. dodonaeifolia</i> is a large shrub it would have been detected if present.</p> <p>Threatened Flora Score(s): 0.08 (Site 12); 0.04 (Site 4, 6, 9, 10 and 11); 0 (Site 7 and 8)</p>
	<p><u>Assessment against the principles</u></p> <p>Seriously at Variance</p> <ul style="list-style-type: none"> - <u>KI 0507</u> <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs - Sites 12 <p>At Variance</p> <ul style="list-style-type: none"> - <u>KI 0507</u> <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs - Sites 4 - <u>KI 0504</u> <i>Eucalyptus cladocalyx</i> mid woodland over <i>Allocasuarina verticillata</i> trees and <i>Acacia paradoxa</i> shrubs and <i>Prostanthera spinosa</i> shrubs - Site 6, 9 and 10 - <u>KI 3101</u> emergent <i>Eucalyptus cladocalyx</i> trees over <i>Acacia paradoxa</i> mid open shrubland and <i>Pteridium esculentum</i> ferns - Site 11 <p>Not at Variance</p> <ul style="list-style-type: none"> - <u>KI 1902</u> <i>Allocasuarina verticillata</i> low woodland over <i>Gramineae</i> sp. tussock grasses - Site 7 - <u>KI 0507</u> <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs - Site 8
Principle 1d - the vegetation	<p><u>Moderating factors that may be considered by the NVC</u></p> <p>Less than 10% of the local population of <i>X. semiplana</i> ssp. <i>tateana</i> will be cleared. This species, along with <i>E. fasciculosa</i>, is not considered Regionally Rare. The clearance of these plants is highly unlikely to have a negative impact on the long-term survival or health of the local populations of these species. It is unlikely that the population of <i>R. procumbens</i> will be self-sustaining into the future given the very small number of plants at that particular locality.</p>

<p>comprises the whole or part of a plant community that is Rare, Vulnerable or endangered:</p>	<p>Threatened Community Score: 1 (Sites 4, 6 - 12)</p> <p><u>Assessment against the principles</u></p> <p>Not at Variance</p> <ul style="list-style-type: none"> - <u>KI 0507</u> <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs - Sites 4, 8 and 12 - <u>KI 0504</u> <i>Eucalyptus cladocalyx</i> mid woodland over <i>Allocasuarina verticillata</i> trees and <i>Acacia paradoxa</i> shrubs and <i>Prostanthera spinosa</i> shrubs - Site 6, 9, and 10 - <u>KI 1902</u> <i>Allocasuarina verticillata</i> low woodland over <i>Gramineae</i> sp. tussock grasses - Site 7 - <u>KI 3101</u> emergent <i>Eucalyptus cladocalyx</i> trees over <i>Acacia paradoxa</i> mid open shrubland and <i>Pteridium esculentum</i> ferns - Site 11 <p><u>Moderating factors that may be considered by the NVC</u></p>
<p>Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.</p>	<p><u>Relevant information</u></p> <p>IBRA association – Stokes Bay; 54% IBRA subregion – Kangaroo Island; 52%</p> <p>Many of the remnant patches of vegetation within the association are protected by Heritage Agreements or are part of the State Reserve System. Due to this protection and the relatively large size of many of the remnants, they are largely in good to excellent condition. The area contains a mosaic of agricultural land and remnant vegetation with good connectivity across the landscape. It is likely that most of the larger remnants will remain in good health for many years to come.</p> <p>Total Biodiversity Score: 3.47 (Site 4); 2.63 (Site 6); 1.29 (Site 7); 0.78 (Site 8); 1.97 (Site 9); 6 (Site 10); 0.55 (Site 11); 9 (Site 12)</p> <p><u>Assessment against the principles</u></p> <p>Not at Variance</p> <ul style="list-style-type: none"> - <u>KI 0507</u> <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs - Sites 4, 8 and 12 - <u>KI 0504</u> <i>Eucalyptus cladocalyx</i> mid woodland over <i>Allocasuarina verticillata</i> trees and <i>Acacia paradoxa</i> shrubs and <i>Prostanthera spinosa</i> shrubs - Site 6, 9 and 10 - <u>KI 1902</u> <i>Allocasuarina verticillata</i> low woodland over <i>Gramineae</i> sp. tussock grasses - Site 7 - <u>KI 3101</u> emergent <i>Eucalyptus cladocalyx</i> trees over <i>Acacia paradoxa</i> mid open shrubland and <i>Pteridium esculentum</i> ferns - Site 11 <p><u>Moderating factors that may be considered by the NVC</u></p>

<p>Principle 1f - it is growing in, or in association with, a wetland environment.</p>	<p><u>Relevant information</u> The vegetation within the clearance area is not growing within or in association with a wetland.</p> <p><u>Assessment against the principles</u></p> <p>Not at Variance</p> <ul style="list-style-type: none"> - KI 0507 <i>Eucalyptus cladocalyx</i> mid open woodland over <i>Acacia paradoxa</i> shrubs and <i>Allocasuarina muelleriana</i> ssp. <i>notocolpica</i> shrubs - Sites 4, 8 and 12 - KI 0504 <i>Eucalyptus cladocalyx</i> mid woodland over <i>Allocasuarina verticillata</i> trees and <i>Acacia paradoxa</i> shrubs and <i>Prostanthera spinosa</i> shrubs - Site 6, 9 and 10 - KI 1902 <i>Allocasuarina verticillata</i> low woodland over <i>Gramineae</i> sp. tussock grasses - Site 7 - KI 3101 emergent <i>Eucalyptus cladocalyx</i> trees over <i>Acacia paradoxa</i> mid open shrubland and <i>Pteridium esculentum</i> ferns - Site 11 <p><u>Moderating factors that may be considered by the NVC</u></p>
<p>Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.</p>	<p><u>Relevant information</u> The clearance area for the access track will not be visible from North Coast Road. It will, however, be visible from neighbouring properties. As the clearance for this track is within a Rural Zone, it is not out of character for the area. Most of the development is within the Conservation Zone (Visitor Experience Subzone), so not out of character for the Development Zoning. There are no developments of this scale along the north coast of Kangaroo Island, so it is likely that this proposal will lead to a change in landscape character in the area. There are no Cultural or Heritage values attached to the allotment.</p> <p>N/A</p> <p><u>Moderating factors that may be considered by the NVC</u></p>

[Principles of Clearance](#) (h-m) will be considered by comments provided by the local NRM Board or relevant Minister. The Data Report should contain information on these principles where relevant and where sufficient information or expertise is available.

4.6 Risk Assessment

Determine the level of risk associated with the application

Total clearance	No. of trees	several
	Area (ha)	0.474
	Total biodiversity Score	16.81
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1(b), 1(c)
Risk assessment outcome		Level 3

4.7 NVC Guidelines

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

Kangaroo Island Landscape Board Review

After a careful review of the KI Landscape Board report, it was felt that some of the points raised required clarification. Only feedback that is relevant to the current application is discussed below.

Principle b (significance as a habitat for wildlife)

As indicated by KI Landscape Board (KILB) staff, Glossy Black-cockatoos have been feeding on *Allocasuarina verticillata* seeds within Site 7. One *A. verticillata* tree growing within the far eastern extent of the Asset Protection Zone around the Katarina Wellness Centre had "chewings" under it (Figure 9). Chewings were observed under a further six *A. verticillata* trees to the south and east of the Cumulative Impact Zone. None of these trees would be disturbed during the construction phase given their location outside of the construction zone and the topography of the site. As the trees are greater than 10m from the Katarina Wellness Centre, are considered to be moderately fire resistant and have little understory vegetation around them CFS have indicated that their removal is not required to create an Asset Protection Zone around the structure. It is therefore likely that Glossy Black-cockatoos and other fauna species would continue to utilise these trees for food and habitat into the future.

Only a small percentage (< 1%) of the juvenile and adult *Allocasuarina verticillata* trees that are growing on the property will be impacted by this development. As per the Native Vegetation Act Guidelines, this does not represent a significant impact on threatened fauna habitat as it will not adversely affect habitat critical to the survival of a species, lead to the long-term decrease in the size of a population or interfere with the recovery of a species.

The property contains thousands of juvenile *A. verticillata* plants that will begin to produce cones within the next 2-5 years which will vastly increase the food supply for the Middle River and Western River Glossy Black-cockatoo flocks and other fauna species.

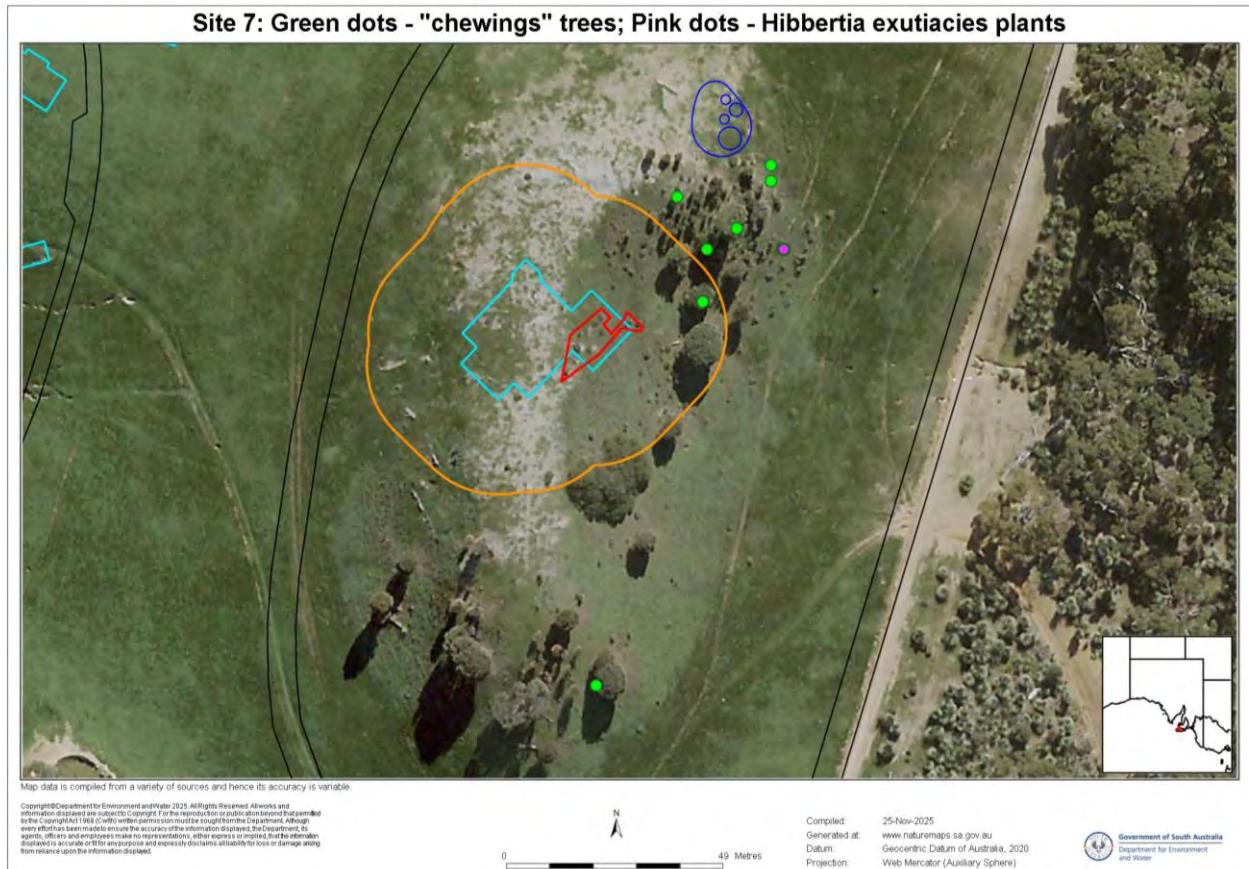


Figure 9. Site 7 flora and fauna observations. Green dots - *A. verticillata* trees that had "chewings under them; Pink dot - *Hibbertia exutiacies* plant. (Scale 1:1,128)

Principle c (includes plants of a rare, vulnerable or endangered species)

The KILB officers reported that they found *Hibbertia obtusibracteata* within Sites 4, 7, 10 and 11. A thorough search was undertaken within these sites on 11th November, 2025 to ascertain their presence. Potential plants were found on the northern embankment of the Weir Dam at Site 4, to the northeast of the Cumulative Impact Zone at Site 7, within and beyond the northern side of the Cumulative Impact Zone at Site 10 and to the southwest of the Cumulative Impact Zone at Site 11. All plants were severely grazed making identification difficult. Close examination revealed these plants to be *Hibbertia exutiacies* not the NPW SA Act Vulnerable species *Hibbertia obtusibracteata*. *H. exutiacies* is distinguished by its sessile flower and green coloured foliage (Photo 17) as opposed to *H. obtusibracteata* pedunculate flower and blue green foliage (Photo 18).



Photo 17 *Hibbertia exutiacies* Site 10



Photo 18 *Hibbertia obtusibracteata* (Credit Dean Overton)

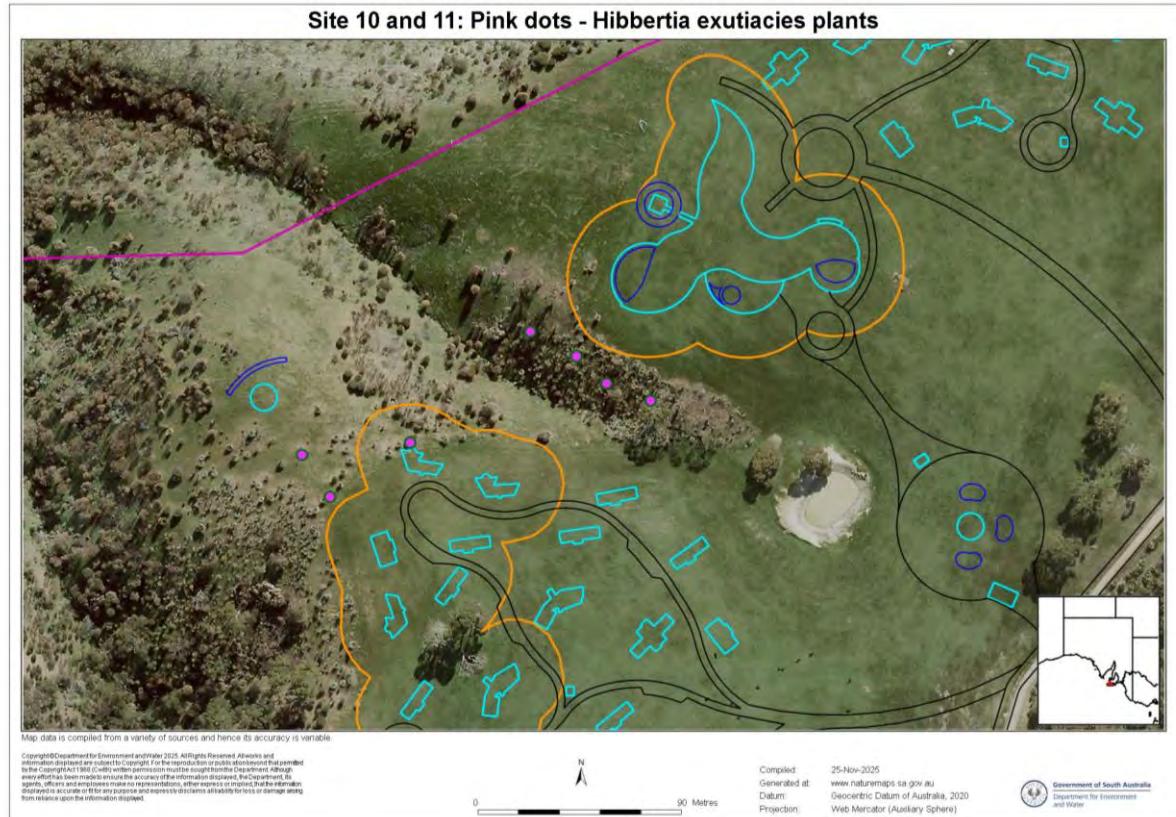


Figure 10. *Hibbertia exutiacies* observations within Sites 10 and 11 (Pink dots). (Scale 2,257)

Hibbertia exutiacies was also observed in Sites 12. *H. exutiacies* has had a checkered history of being recorded as occurring on Kangaroo Island as taxonomic work has more accurately classified the numerous *Hibbertia* species that grow here. This species was detected during the original survey of the property, but uncertainty over it being officially recorded for the island meant it was temporarily not recorded in Scoresheets. This application is complex in nature and the records were regrettably omitted from the final version.

Hibbertia exutiacies has been observed in other locations along the north coast of Kangaroo Island where it has been found growing in association with *Eucalyptus cladocalyx* ssp. *crassa* woodland on acidic orange to brown loam over clay on rock. Most of the gullies on 6545 North Coast Road are comprised of this soil type.

Caesia calliantha was not detected during the original survey in July 2025 as at this time of year the leaf is difficult to detect amongst the many exotic pasture grasses that are growing within Site 4. Spring is the optimal time of the year for detecting this species. A small population was observed growing near the proposed Weir Dam site during the November 2025 survey.

Every effort has been made during the planning phase and will continue to be made during the construction phase of this development to avoid the clearance of rare flora species. Appropriate rare plant species will be included in landscaping and revegetation areas to ensure that there is no net loss of these species on the property.

Data Report Concerns

No EPBC Act or NPW SA Act threatened species were omitted from Bushland Assessment Scoresheets, therefore the resultant Clearance Summary and Significant Environmental Benefit payment would be accurate.

Accredited Consultants do not have access to ENVMaps. The public platform, NatureMaps, does not have records for the additional fauna species cited within 5km of 6545 North Coast Road, Middle River. The EPBC Protected Matters search is indicative only, so not a reliable source of accurate information.

5. Clearance summary

Clearance Area(s) Summary table

Block	Site	Species diversity score	Threatened Ecological community Score	Threatened Plant score	Threatened fauna score	UBS	Area (ha)	Total Biodiversity score	Loss factor	Loadings	Reductions	SEB Points required	SEB payment	Admin Fee
A	4	12	1	.04	0.1	29.9	.12	3.47	1	0	0	3.82	\$3,134.99	\$172.42
A	6	4	1	.04	0.1	22.0	.07	1.60	1	0	0	1.76	\$1,455.57	\$80.06
A	7	8	1	0.0	0.1	13.2	.01	0.12	1	0	0	0.13	\$107.51	\$5.91
A	10	8	1	.04	0.1	27.9	.09	2.62	1	0	0	2.88	\$2,224.52	\$122.35
A	12	24	1	.08	0.1	49.5	.18	9	1	0	0	9.90	\$8,577.49	\$471.76
						Total	.47	16.81				18.49	\$15,500.08	\$852.50

Totals summary table

Economies of Scale Factor	0.35	SEB Uplift Factor	1.10
Rainfall (mm) Factor	655		
SEB Points of Gain/ha Factor	7.0	Management Cost (\$/ha)	\$25,408.00

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	16.81	18.49	\$15,500.08	\$852.50	\$16,352.58

6. Significant Environmental Benefit

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

ACHIEVING A SEB

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

- Establish a new SEB Area on land owned by the proponent.
- Use SEB Credit that the proponent has established. Provide the SEB Credit Ref. No. _____
- Apply to have SEB Credit assigned from another person or body. The [application form](#) needs to be submitted with this Data Report.
- Apply to have a SEB to be delivered by a Third Party. The [application form](#) needs to be submitted with this Data Report.
- Pay into the Native Vegetation Fund.

PAYMENT SEB

The SEB Policy states that if a SEB is required as a result of an approved activity undertaken under the Regulations, the applicant has a choice of either providing an on-ground SEB or a Payment SEB. However, if a proposed clearance will have an offset obligation of greater than 150 SEB Points Required, the NVC will first request that a reasonable attempt be made to identify an on-ground SEB before a payment will be accepted.

18.49 points (approx. 2.64Ha) are required to offset the clearance under application. The landholder is not able to undertake an on-ground Offset. There are no available third-party credits available within the association.

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 of \$16,352.58 is required (including admin. fee)
- Full payment will be made prior to any clearance being undertaken

7. Appendices

Appendix 1. Fauna Species List (desktop)

OFFICIAL

Vegetation Condition Scores																																													
SITE:	Site 4 - weir dam																																												
BCM COMMUNITY	KI 2 Open forests and woodlands with an open sclerophyll shrub understorey																																												
VEGETATION ASSOCIATION DESCRIPTION	<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> open woodland over <i>Acacia paradoxa</i>																																												
SIZE OF SITE (Ha)	0.116																																												
Benchmarked attributes (Scores determined by comparing to a Benchmark community)																																													
Number of Native Species (Minus herbaceous annuals for spring Surveys)	15																																												
Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2	12.0																																												
Number of regenerating native species	0																																												
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	0																																												
Weed species (Top 5 Cover x Invasiveness)	Cover (max 6) Weed Threat Rating (max 5) C x I																																												
<i>Senecio pterophorus</i>	2 3 6																																												
<i>Holcus lanatus</i>	2 2 4																																												
<i>Avena barbata</i>	3 2 6																																												
<i>Ehrharta longiflora</i>	2 2 4																																												
<i>Vulpia</i> sp.	3 2 6																																												
	Cover x Threat 26																																												
Weed Score (max 15) from benchmark community	7																																												
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2	14.0																																												
Non-Benchmarked Attributes (Scores determined from direct field observations)																																													
Native:exotic Understorey biomass Score (max 5)	4																																												
<i>Is the community naturally treeless?</i>	<input type="checkbox"/>																																												
Fallen Timber/Debris (max 5)	0.5																																												
Hollow-bearing trees Score (max 5)	0																																												
Mature Tree Score (max 8)	2																																												
Tree Canopy Cover Score (max 5)	2																																												
Vegetation Condition Score calculation																																													
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees																																													
- If the community Score is Not Benchmark (SNB) for regeneration this score is multiplied 1.24																																													
- If the community is naturally treeless this score is multiplied by 1.29																																													
Negative Vegetation Attributes Score = $(15 - \text{Weeds}) + ((10 - \text{Biomass score} - \text{Tree Canopy Cover Score}) \exp(2/2))$																																													
VEGETATION CONDITION SCORE (Positive veg attributes x $((80 - \text{Negative vegetation attributes}) / 80)$)																																													
<table border="1"> <thead> <tr> <th></th> <th>Low</th> <th>Medium</th> <th>High</th> </tr> </thead> <tbody> <tr> <td>Native Plant Species Diversity</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weed Score</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Native Plant Life Forms</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Regeneration</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Native:exotic Understorey Biomass</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Mature Trees</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Tree Canopy Cover</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Tree Hollows</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fallen timber</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Vegetation Condition Score</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Low	Medium	High	Native Plant Species Diversity				Weed Score				Native Plant Life Forms				Regeneration				Native:exotic Understorey Biomass				Mature Trees				Tree Canopy Cover				Tree Hollows				Fallen timber				Vegetation Condition Score			
	Low	Medium	High																																										
Native Plant Species Diversity																																													
Weed Score																																													
Native Plant Life Forms																																													
Regeneration																																													
Native:exotic Understorey Biomass																																													
Mature Trees																																													
Tree Canopy Cover																																													
Tree Hollows																																													
Fallen timber																																													
Vegetation Condition Score																																													

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No																		
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)		<input type="checkbox"/>																		
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 type="checkbox"/>																		
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>																		
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>																		
Note, all sites will score a minimum Conservation Significance Score of 1		Threatened Community Score 1																		
Number of Threatened Flora Species recorded for the site (within the site)		Number																		
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.																				
State Rare species recorded (1 pt each)		1																		
State Vulnerable species recorded (2.5 pt each)		0																		
State Endangered recorded (5 pts each)		0																		
Nationally Vulnerable species recorded (10 pts each)		0																		
Nationally Endangered or Critically endangered species recorded (20 pts each)		0																		
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		1																		
Threatened Flora Score		0.04																		
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number																		
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.																				
State Rare species observed or locally recorded (1 pt each)		3																		
State Vulnerable species observed or locally recorded (2.5 pt each)		1																		
State Endangered species observed or locally recorded (5 pt each)		0																		
Nationally Vulnerable species observed or locally recorded (10 pts each)		1																		
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)		2																		
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08 pts; 20 or > = 0.1 pts		55.5																		
Threatened Fauna Score		0.1																		
CONSERVATION SIGNIFICANCE SCORE		1.14																		
Total Scores for the Site		Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE 29.89																		
LANDSCAPE CONTEXT SCORE 1.15		Total Biodiversity Score (Biodiversity Score x hectares) 3.47																		
VEGETATION CONDITION SCORE 22.80																				
CONSERVATION SIGNIFICANCE SCORE 1.14																				
Photo Point and Vegetation Survey Location		<table border="1"> <tr> <td colspan="2">Direction of the Photo</td> </tr> <tr> <td colspan="2">209°</td> </tr> <tr> <td colspan="2">GPS Reference</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>683985</td> </tr> <tr> <td>Northing (7 digits)</td> <td>6049516</td> </tr> <tr> <td colspan="2">Description</td> </tr> <tr> <td colspan="2">Allocasuarina verticillata trees over Lissanthe strigosa ssp. subulata shrubs Gahnia trifida sedges and Cheilanthes austrotenuifolia ferns in poor degraded and weedy condition</td> </tr> </table>	Direction of the Photo		209°		GPS Reference		Datum	WGS84	Zone (52, 53 or 54)	53	Easting (6 digits)	683985	Northing (7 digits)	6049516	Description		Allocasuarina verticillata trees over Lissanthe strigosa ssp. subulata shrubs Gahnia trifida sedges and Cheilanthes austrotenuifolia ferns in poor degraded and weedy condition	
Direction of the Photo																				
209°																				
GPS Reference																				
Datum	WGS84																			
Zone (52, 53 or 54)	53																			
Easting (6 digits)	683985																			
Northing (7 digits)	6049516																			
Description																				
Allocasuarina verticillata trees over Lissanthe strigosa ssp. subulata shrubs Gahnia trifida sedges and Cheilanthes austrotenuifolia ferns in poor degraded and weedy condition																				
																				

Vegetation Condition Scores

SITE:	Site 6
BCM COMMUNITY	KI 1.1 Woodlands, low woodlands and mallee with dense sclerophyll shrub understorey
VEGETATION ASSOCIATION DESCRIPTION	<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> open woodland over <i>Acacia paradoxa</i>
SIZE OF SITE (Ha)	0.073

Benchmarked attributes

(Scores determined by comparing to a Benchmark community)

Number of Native Species (Minus herbaceous annuals for spring Surveys)	6
---	---

Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2	4.0
---	-----

Number of regenerating native species	0
--	---

Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	0
---	---

Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I
<i>Romulea rosea</i> var. <i>australis</i>	2	2	4
<i>Ehrharta longiflora</i>	3	2	6
<i>Trifolium</i> sp.	3	2	6
<i>Hypochoeris glabra</i>	2	2	4
<i>Arctotheca calendula</i>	3	1	3
	Cover x Threat		23
Weed Score (max 15) from benchmark community			7

Native Plant Life Forms	Cover rating
Trees > 15m	
Trees 5 - 15 m	2
Trees < 5m	4
Mallee > 5m	
Mallee < 5m	
Shrubs > 2m	
Shrubs 0.5 - 2m	
Shrubs < 0.5m	2
Forbs	
Mat Plants	
Grasses > 0.2m	
Grasses < 0.2m	2
Sedges > 1m	
Sedges < 1m	
Hummock grasses	
Vines, scramblers	
Mistletoe	
Ferns	
Grass-tree	2
Total	12

Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2	10.0
--	------

Non-Benchmarked Attributes (Scores determined from direct field observations)	<i>Is the community naturally treeless?</i> <input type="checkbox"/>
Native:exotic Understorey biomass Score (max 5)	0
Fallen Timber/Debris (max 5)	0
Hollow-bearing trees Score (max 5)	0
Mature Tree Score (max 8)	6
Tree Canopy Cover Score (max 5)	4

Vegetation Condition Score calculation

Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms

Fallen timber/debris + Hollow-bearing trees

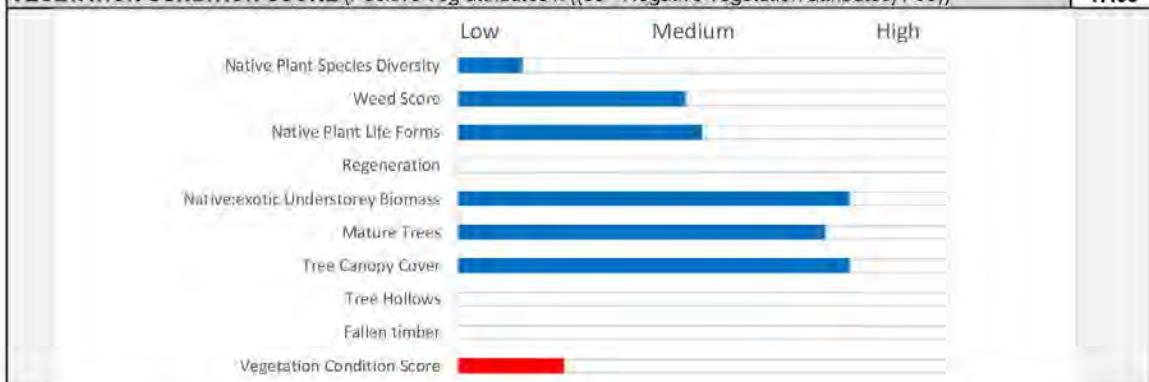
- If the community Score is Not Benchmarked (SNB) for regeneration this score is multiplied 1.24

- If the community is naturally treeless this score is multiplied by 1.29

20.00

Negative Vegetation Attributes Score = $(15 - \text{Weeds}) + ((10 - \text{Biomass score} - \text{Tree Canopy Cover Score}) \exp 2 / 2)$ 10.00

VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80)) 17.50



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)		<input type="checkbox"/>
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 type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>
<i>Note, all sites will score a minimum Conservation Significance Score of 1</i>		Threatened Community Score 1
Number of Threatened Flora Species recorded for the site (within the site)		Number
<i>*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>		
State Rare species recorded (1 pt each)		1
State Vulnerable species recorded (2.5 pt each)		0
State Endangered recorded (5 pts each)		0
Nationally Vulnerable species recorded (10 pts each)		0
Nationally Endangered or Critically endangered species recorded (20 pts each)		0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		1
Threatened Flora Score		0.04
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number
<i>*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.</i>		
State Rare species observed or locally recorded (1 pt each)		3
State Vulnerable species observed or locally recorded (2.5 pt each)		1
State Endangered species observed or locally recorded (5 pt each)		0
Nationally Vulnerable species observed or locally recorded (10 pts each)		1
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)		2
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts		55.5
Threatened Fauna Score		0.1
CONSERVATION SIGNIFICANCE SCORE		1.14
Total Scores for the Site		Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE 21.95 Total Biodiversity Score (Biodiversity Score x hectares) 1.60
LANDSCAPE CONTEXT SCORE	Score 1.10	
VEGETATION CONDITION SCORE	17.50	
CONSERVATION SIGNIFICANCE SCORE	1.14	
Photo Point and Vegetation Survey Location		Direction of the Photo
		40° GPS Reference Datum WGS84 Zone (52, 53 or 54) 53 Easting (6 digits) 683398 Northing (7 digits) 6049658 Description Eucalyptus cladocalyx ssp. crassa open woodland over Xanthorrhoea semiplana ssp. tateana shrubs in poor condition

Vegetation Condition Scores

SITE:	Site 6 - APZ Cabin 10b & Day Facility
BCM COMMUNITY	KI 1.1 Woodlands, low woodlands and mallee with dense sclerophyll shrub understorey
VEGETATION ASSOCIATION DESCRIPTION	<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> open woodland over <i>Acacia paradoxa</i>
SIZE OF SITE (Ha)	0.047

Benchmarked attributes

(Scores determined by comparing to a Benchmark community)

Number of Native Species (Minus herbaceous annuals for spring Surveys)	6
---	---

Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2	4.0
---	-----

Number of regenerating native species	0
--	---

Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	0
---	---

Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I
<i>Romulea rosea</i> var. <i>australis</i>	2	2	4
<i>Ehrharta longiflora</i>	3	2	6
<i>Trifolium</i> sp.	3	2	6
<i>Hypochoeris glabra</i>	2	2	4
<i>Arctotheca calendula</i>	3	1	3
	Cover x Threat		23
Weed Score (max 15) from benchmark community			7

Native Plant Life Forms	Cover rating
Trees > 15m	
Trees 5 - 15 m	2
Trees < 5m	4
Mallee > 5m	
Mallee < 5m	
Shrubs > 2m	
Shrubs 0.5 - 2m	
Shrubs < 0.5m	2
Forbs	
Mat Plants	
Grasses > 0.2m	
Grasses < 0.2m	2
Sedges > 1m	
Sedges < 1m	
Hummock grasses	
Vines, scramblers	
Mistletoe	
Ferns	
Grass-tree	2
Total	12

Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2	10.0
--	------

Non-Benchmarked Attributes

(Scores determined from direct field observations)

Native:exotic Understorey biomass Score (max 5)	4
--	---

Is the community naturally treeless?

Fallen Timber/Debris (max 5) 0

Hollow-bearing trees Score (max 5) 0

Mature Tree Score (max 8) 6

Tree Canopy Cover Score (max 5) 4

Vegetation Condition Score calculation

Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms

Fallen timber/debris + Hollow-bearing trees

- If the community Score is Not Benchmarked (SNB) for regeneration this score is multiplied 1.24

- If the community is naturally treeless this score is multiplied by 1.29

20.00

Negative Vegetation Attributes Score = $(15 - \text{Weeds}) + ((10 - \text{Biomass score} - \text{Tree Canopy Cover Score}) \exp(2/2))$ 10.00

VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80)) 17.50



Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)		<input type="checkbox"/>
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 type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>
Note: all sites will score a minimum Conservation Significance Score of 1		Threatened Community Score 1
Number of Threatened Flora Species recorded for the site (within the site)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species recorded (1 pt each)		1
State Vulnerable species recorded (2.5 pt each)		0
State Endangered recorded (5 pts each)		0
Nationally Vulnerable species recorded (10 pts each)		0
Nationally Endangered or Critically endangered species recorded (20 pts each)		0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		Threatened Flora Score 0.04
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species observed or locally recorded (1 pt each)		3
State Vulnerable species observed or locally recorded (2.5 pt each)		1
State Endangered species observed or locally recorded (5 pt each)		0
Nationally Vulnerable species observed or locally recorded (10 pts each)		1
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)		2
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08 pts; 20 or > = 0.1 pts		Threatened Fauna Score 0.1
CONSERVATION SIGNIFICANCE SCORE		1.14
Total Scores for the Site		Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE 21.95
LANDSCAPE CONTEXT SCORE	Score 1.10	Total Biodiversity Score (Biodiversity Score x hectares) 1.03
VEGETATION CONDITION SCORE	17.50	
CONSERVATION SIGNIFICANCE SCORE	1.14	
Photo Point and Vegetation Survey Location		Direction of the Photo 40°
		GPS Reference Datum WGS84 Zone (52, 53 or 54) 53 Easting (6 digits) 683398 Northing (7 digits) 6049658 Description Eucalyptus cladocalyx ssp. crassa open woodland over Xanthorrhoea semiplana ssp. tateana shrubs in poor condition

Vegetation Condition Scores

SITE:	Site 7																								
BCM COMMUNITY	KI 8.7 Coastal open forests and woodlands with an open shrub understorey																								
VEGETATION ASSOCIATION DESCRIPTION	<i>Allocasuarina verticillata</i> woodland over <i>Lissanthe strigosa</i> ssp. <i>subula</i>																								
SIZE OF SITE (Ha)	0.009																								
Benchmarked attributes (Scores determined by comparing to a Benchmark community)																									
Number of Native Species (Minus herbaceous annuals for spring Surveys)	6																								
Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2	8.0																								
Number of regenerating native species	0																								
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	0																								
Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I																						
<i>Romulea rosea</i> var. <i>australis</i>	3	2	6																						
<i>Bromus</i> sp.	3	1	3																						
<i>Trifolium</i> sp.	3	2	6																						
<i>Hypochoeris glabra</i>	2	2	4																						
<i>Arctotheca calendula</i>	3	1	3																						
	Cover x Threat		22																						
Weed Score (max 15) from benchmark community	7																								
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2	8.0																								
Non-Benchmarked Attributes (Scores determined from direct field observations)	<input type="checkbox"/> Is the community naturally treeless? Fallen Timber/Debris (max 5) Hollow-bearing trees Score (max 5) Mature Tree Score (max 8) Tree Canopy Cover Score (max 5)																								
Native:exotic Understorey biomass Score (max 5)	2																								
	<input type="checkbox"/> Fallen Timber/Debris (max 5) Hollow-bearing trees Score (max 5) Mature Tree Score (max 8) Tree Canopy Cover Score (max 5)																								
	<input type="checkbox"/> Is the community naturally treeless? Fallen Timber/Debris (max 5) Hollow-bearing trees Score (max 5) Mature Tree Score (max 8) Tree Canopy Cover Score (max 5)																								
Vegetation Condition Score calculation																									
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees - If the community Score is Not Benchmarkd (SNB) for regeneration this score is multiplied 1.24 - If the community is naturally treeless this score is multiplied by 1.29																									
Negative Vegetation Attributes Score = $(15 - \text{Weeds}) + ((10 - \text{Biomass score} - \text{Tree Canopy Cover Score}) \exp(2/2))$																									
VEGETATION CONDITION SCORE (Positive veg attributes x $((80 - \text{Negative vegetation attributes}) / 80)$) 10.69																									
<table border="1"> <thead> <tr> <th>Attribute</th> <th>Score (approx.)</th> </tr> </thead> <tbody> <tr> <td>Native Plant Species Diversity</td> <td>4</td> </tr> <tr> <td>Weed Score</td> <td>5</td> </tr> <tr> <td>Native Plant Life Forms</td> <td>4</td> </tr> <tr> <td>Regeneration</td> <td>0</td> </tr> <tr> <td>Native:exotic Understorey Biomass</td> <td>4</td> </tr> <tr> <td>Mature Trees</td> <td>3</td> </tr> <tr> <td>Tree Canopy Cover</td> <td>2</td> </tr> <tr> <td>Tree Hollows</td> <td>0</td> </tr> <tr> <td>Fallen timber</td> <td>0</td> </tr> <tr> <td>Vegetation Condition Score</td> <td>10.69</td> </tr> </tbody> </table>				Attribute	Score (approx.)	Native Plant Species Diversity	4	Weed Score	5	Native Plant Life Forms	4	Regeneration	0	Native:exotic Understorey Biomass	4	Mature Trees	3	Tree Canopy Cover	2	Tree Hollows	0	Fallen timber	0	Vegetation Condition Score	10.69
Attribute	Score (approx.)																								
Native Plant Species Diversity	4																								
Weed Score	5																								
Native Plant Life Forms	4																								
Regeneration	0																								
Native:exotic Understorey Biomass	4																								
Mature Trees	3																								
Tree Canopy Cover	2																								
Tree Hollows	0																								
Fallen timber	0																								
Vegetation Condition Score	10.69																								

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)	<input type="checkbox"/>
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 type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)	<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)	<input type="checkbox"/>

Note: all sites will score a minimum Conservation Significance Score of 1 Threatened Community Score **1**

Number of Threatened Flora Species recorded for the site (within the site)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species recorded (1 pt each)	0
State Vulnerable species recorded (2.5 pt each)	0
State Endangered recorded (5 pts each)	0
Nationally Vulnerable species recorded (10 pts each)	0
Nationally Endangered or Critically endangered species recorded (20 pts each)	0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts	0
	Threatened Flora Score 0

Potential habitat for Threatened Fauna Species (number observed or previously recorded)	Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.	
State Rare species observed or locally recorded (1 pt each)	3
State Vulnerable species observed or locally recorded (2.5 pt each)	1
State Endangered species observed or locally recorded (5 pt each)	0
Nationally Vulnerable species observed or locally recorded (10 pts each)	1
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)	2
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08 pts; 20 or > = 0.1 pts	55.5
	Threatened Fauna Score 0.1

CONSERVATION SIGNIFICANCE SCORE	1.1
---------------------------------	------------

Total Scores for the Site	Score	Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE	13.17
LANDSCAPE CONTEXT SCORE	1.12		
VEGETATION CONDITION SCORE	10.69		
CONSERVATION SIGNIFICANCE SCORE	1.10	Total Biodiversity Score (Biodiversity Score x hectares)	0.12

Photo Point and Vegetation Survey Location	Direction of the Photo
	12°
	GPS Reference
	Datum WGS84
	Zone (52, 53 or 54) 53
	Easting (6 digits) 683578
	Northing (7 digits) 6050018
	Description
	Allocasuarina verticillata woodland over Lissanthe strigosa ssp. subulata shrubs and Pteridium esculentum ssp. esculentum ferns in poor degraded and weedy condition

Vegetation Condition Scores

SITE:	Site 7 - APZ		
BCM COMMUNITY	KI 8.7 Coastal open forests and woodlands with an open shrub understorey		
VEGETATION ASSOCIATION DESCRIPTION	Allocasuarina verticillata woodland over Lissanthe strigosa ssp. subula		
SIZE OF SITE (Ha)	0.088		
Benchmarked attributes (Scores determined by comparing to a Benchmark community)			
Number of Native Species (Minus herbaceous annuals for spring Surveys)		6	
Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2		8.0	
Number of regenerating native species		0	
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5		0	
Weed species (Top 5 Cover x Invasiveness)		Cover (max 6)	Weed Threat Rating (max 5)
<i>Romulea rosea</i> var. <i>australis</i>		3	2
<i>Bromus</i> sp.		3	1
<i>Trifolium</i> sp.		3	2
<i>Hypochoeris glabra</i>		2	2
<i>Arctotheca calendula</i>		3	1
		Cover x Threat	
Weed Score (max 15) from benchmark community		7	
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2			
		8.0	
Non-Benchmarked Attributes (Scores determined from direct field observations)		Is the community naturally treeless? <input type="checkbox"/> Fallen Timber/Debris (max 5) 0 Hollow-bearing trees Score (max 5) 0 Mature Tree Score (max 8) 2 Tree Canopy Cover Score (max 5) 1	
Vegetation Condition Score calculation			
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees - If the community Score is Not Benchmarkd (SNB) for regeneration this score is multiplied 1.24 - If the community is naturally treeless this score is multiplied by 1.29			
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - Biomass score - Tree Canopy Cover Score)exp2/2)		18.00	
VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80))		32.50	
10.69			

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)		<input type="checkbox"/>
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 type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>
Note: all sites will score a minimum Conservation Significance Score of 1		Threatened Community Score 1
Number of Threatened Flora Species recorded for the site (within the site)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species recorded (1 pt each)		0
State Vulnerable species recorded (2.5 pt each)		0
State Endangered recorded (5 pts each)		0
Nationally Vulnerable species recorded (10 pts each)		0
Nationally Endangered or Critically endangered species recorded (20 pts each)		0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		0
		Threatened Flora Score 0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species observed or locally recorded (1 pt each)		3
State Vulnerable species observed or locally recorded (2.5 pt each)		1
State Endangered species observed or locally recorded (5 pt each)		0
Nationally Vulnerable species observed or locally recorded (10 pts each)		1
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)		2
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08 pts; 20 or > = 0.1 pts		55.5
		Threatened Fauna Score 0.1
CONSERVATION SIGNIFICANCE SCORE		1.1
Total Scores for the Site		Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE 13.29
LANDSCAPE CONTEXT SCORE	Score 1.13	
VEGETATION CONDITION SCORE	Score 10.69	
CONSERVATION SIGNIFICANCE SCORE	Score 1.10	Total Biodiversity Score (Biodiversity Score x hectares) 1.17
Photo Point and Vegetation Survey Location		Direction of the Photo 12° GPS Reference Datum WGS84 Zone (52, 53 or 54) 53 Easting (6 digits) 683578 Northing (7 digits) 6050018 Description Allocasuarina verticillata woodland over Lissanthe strigosa ssp. subulata shrubs and Pteridium esculentum ssp. esculentum ferns in poor degraded and weedy condition
		

Vegetation Condition Scores

SITE:	APZ - staff accommodation - Site 8																																										
BCM COMMUNITY	K1.1: Woodlands, low woodlands and mallee with dense sclerophyll shrub understorey																																										
VEGETATION ASSOCIATION DESCRIPTION	<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> Woodland over <i>Lissanthe strigosa</i> ssp. <i>strigosa</i>																																										
SIZE OF SITE (Ha)	0.139																																										
Benchmarked attributes (Scores determined by comparing to a Benchmark community)																																											
Number of Native Species (Minus herbaceous annuals for spring surveys)	6																																										
Native Plant Species Diversity Score (max 30) from benchmark score Weighted by a factor of 2	4.0																																										
Number of regenerating native species	0																																										
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	0																																										
Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I																																								
<i>Romulea rosea</i> var. <i>australis</i>	3	2	5																																								
<i>Ehrharta longiflora</i>	3	2	5																																								
<i>Tritodium</i> sp.	3	2	5																																								
<i>Hypochaeris glabra</i>	2	2	4																																								
<i>Arctotheca calendula</i>	3	1	3																																								
	Cover x Threat		25																																								
Weed Score (max 15) from benchmark community	6																																										
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2	2.0																																										
Non-Benchmarked Attributes (Scores determined from direct field observations)	<input type="checkbox"/> <i>Is the community naturally treeless?</i> Fallen Timber/Debris (max 5) 0 Hollow-bearing trees Score (max 5) 0 Mature Tree Score (max 8) 2 Tree Canopy Cover Score (max 5) 1																																										
Vegetation Condition Score calculation																																											
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees - If the community Score is Not Benchmark (SNB) for regeneration this score is multiplied 1.24 - If the community is naturally treeless this score is multiplied by 1.29																																											
Negative Vegetation Attributes Score = $(15 - \text{Weeds}) + (10 - \text{Biomass score} - \text{Tree Canopy Cover Score}) \exp(2/2)$ 8.00 VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80)) 33.50																																											
<table border="1"> <thead> <tr> <th></th> <th>Low</th> <th>Medium</th> <th>High</th> </tr> </thead> <tbody> <tr> <td>Native Plant Species Diversity</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Weed Score</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Native Plant Life Forms</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Regeneration</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Native exotics/Invasive species</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Mature Trees</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Tree Canopy Cover</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Fallen Timber</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Vegetation Condition Score</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					Low	Medium	High	Native Plant Species Diversity				Weed Score				Native Plant Life Forms				Regeneration				Native exotics/Invasive species				Mature Trees				Tree Canopy Cover				Fallen Timber				Vegetation Condition Score			
	Low	Medium	High																																								
Native Plant Species Diversity																																											
Weed Score																																											
Native Plant Life Forms																																											
Regeneration																																											
Native exotics/Invasive species																																											
Mature Trees																																											
Tree Canopy Cover																																											
Fallen Timber																																											
Vegetation Condition Score																																											

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pts)		<input type="checkbox"/>
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 type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>
Note: all sites will score a minimum Conservation Significance Score of 1		Threatened Community Score 1
Number of Threatened Flora Species recorded for the site (within the site)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species recorded (1 pt each)		0
State Vulnerable species recorded (2.5 pt each)		0
State Endangered recorded (5 pts each)		0
Nationally Vulnerable species recorded (10 pts each)		0
Nationally Endangered or Critically Endangered species recorded (20 pts each)		0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		0
		Threatened Flora Score 0
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species observed or locally recorded (1 pt each)		3
State Vulnerable species observed or locally recorded (2.5 pt each)		1
State Endangered species observed or locally recorded (5 pt each)		0
Nationally Vulnerable species observed or locally recorded (10 pts each)		1
Nationally Endangered or Critically Endangered species observed or locally recorded (20 pts each)		4
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08 pts; 20 or > = 0.1 pts		95.5
		Threatened Fauna Score 0.1
CONSERVATION SIGNIFICANCE SCORE		1.1
Total Scores for the Site		Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE
LANDSCAPE CONTEXT SCORE	Score 1.10	5.63
VEGETATION CONDITION SCORE	4.65	
CONSERVATION SIGNIFICANCE SCORE	1.10	0.78
Photo Point and Vegetation Survey Location		Direction of the Photo 143°
		GPS Reference Datum WGS84 Zone (52, 53 or 54) 53 Easting (6 digits) 683256 Northing (7 digits) 6049490
		Description Eucalyptus cladocalyx ssp. crassa woodland over Lissanthe strobosa ssp. subulata shrubs in poor degraded and weedy condition

Vegetation Condition Scores

SITE:	Site 9 - APZ - Cabins 9d		
BCM COMMUNITY	KI 2 Open forests and woodlands with an open sclerophyll shrub understorey		
VEGETATION ASSOCIATION DESCRIPTION	<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> woodland over <i>Acacia paradoxa</i> shrubland		
SIZE OF SITE (Ha)	0.061		
Benchmarked attributes (Scores determined by comparing to a Benchmark community)			
Number of Native Species (Minus herbaceous annuals for spring Surveys)		8	
Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2		6.0	
Number of regenerating native species		0	
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5		0	
Weed species (Top 5 Cover x Invasiveness)		Cover (max 6)	Weed Threat Rating (max 5)
<i>Romulea rosea</i> var. <i>australis</i>		2	2
<i>Ehrharta longiflora</i>		2	2
<i>Trifolium</i> sp.		2	2
<i>Hypochaeris glabra</i>		2	2
<i>Arctotheca calendula</i>		2	1
		Cover x Threat	
Weed Score (max 15) from benchmark community		10	
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2			
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2			
Non-Benchmarked Attributes (Scores determined from direct field observations)			
Native:exotic Understorey biomass Score (max 5)		4	
Is the community naturally treeless? <input type="checkbox"/>			
Fallen Timber/Debris (max 5)		1	
Hollow-bearing trees Score (max 5)		1	
Mature Tree Score (max 8)		4	
Tree Canopy Cover Score (max 5)		4	
Vegetation Condition Score calculation			
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees - If the community Score is Not Benchmark (SNB) for regeneration this score is multiplied 1.24 - If the community is naturally treeless this score is multiplied by 1.29			
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - Biomass score - Tree Canopy Cover Score)exp2/2)		28.00	
VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80))		7.00	
VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80))		25.55	

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)		<input type="checkbox"/>
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 type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>
Note: all sites will score a minimum Conservation Significance Score of 1		Threatened Community Score 1
Number of Threatened Flora Species recorded for the site (within the site)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species recorded (1 pt each)		1
State Vulnerable species recorded (2.5 pt each)		0
State Endangered recorded (5 pts each)		0
Nationally Vulnerable species recorded (10 pts each)		0
Nationally Endangered or Critically endangered species recorded (20 pts each)		0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		1
		Threatened Flora Score 0.04
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species observed or locally recorded (1 pt each)		3
State Vulnerable species observed or locally recorded (2.5 pt each)		1
State Endangered species observed or locally recorded (5 pt each)		0
Nationally Vulnerable species observed or locally recorded (10 pts each)		1
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)		4
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08 pts; 20 or > = 0.1 pts		95.5
		Threatened Fauna Score 0.1
CONSERVATION SIGNIFICANCE SCORE		1.14
Total Scores for the Site		Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE 32.33
LANDSCAPE CONTEXT SCORE	Score 1.11	
VEGETATION CONDITION SCORE	25.55	Total Biodiversity Score (Biodiversity Score x hectares) 1.97
CONSERVATION SIGNIFICANCE SCORE	1.14	
Photo Point and Vegetation Survey Location		Direction of the Photo 279° GPS Reference Datum WGS84 Zone (52, 53 or 54) 53 Easting (6 digits) 683371 Northing (7 digits) 6049907 Description Eucalyptus cladocalyx ssp. crassa woodland over Allocasuarina verticillata trees and Acacia paradoxa shrubs over Rytidosperma sp grasses in moderate regenerative condition
		

Vegetation Condition Scores

SITE:	Wastewater - Cabins 9c - Site 10		
BCM COMMUNITY	KI 2 Open forests and woodlands with an open sclerophyll shrub understorey		
VEGETATION ASSOCIATION DESCRIPTION	Eucalyptus cladocalyx ssp. crassa woodland over Acacia paradoxa shrubland		
SIZE OF SITE (Ha)	0.094		
Benchmarked attributes (Scores determined by comparing to a Benchmark community)			
Number of Native Species (Minus herbaceous annuals for spring Surveys)		11	
Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2		8.0	
Number of regenerating native species		0	
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5		0	
Weed species (Top 5 Cover x Invasiveness)			
Romulea rosea var. australis Vulpia sp. Trifolium sp. Hypochaeris glabra Arctotheca calendula		Cover (max 6)	Weed Threat Rating (max 5)
		3	2
		2	2
		3	2
		2	2
		3	1
		Cover x Threat	
Weed Score (max 15) from benchmark community		8	
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2			
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2			
Non-Benchmarked Attributes (Scores determined from direct field observations)			
Native:exotic Understorey biomass Score (max 5)		3	
<input type="checkbox"/> Is the community naturally treeless?		<input type="checkbox"/>	
Fallen Timber/Debris (max 5)		1	
Hollow-bearing trees Score (max 5)		1	
Mature Tree Score (max 8)		2	
Tree Canopy Cover Score (max 5)		4	
Vegetation Condition Score calculation			
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees - If the community Score is Not Benchmarked (SNB) for regeneration this score is multiplied 1.24 - If the community is naturally treeless this score is multiplied by 1.29			
26.00		26.00	
11.50		11.50	
22.26		22.26	

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)		<input type="checkbox"/>
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 type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>
Note, all sites will score a minimum Conservation Significance Score of 1		Threatened Community Score
		1
Number of Threatened Flora Species recorded for the site (within the site)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species recorded (1 pt each)		1
State Vulnerable species recorded (2.5 pt each)		0
State Endangered recorded (5 pts each)		0
Nationally Vulnerable species recorded (10 pts each)		0
Nationally Endangered or Critically endangered species recorded (20 pts each)		0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		1
		Threatened Flora Score
		0.04
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species observed or locally recorded (1 pt each)		3
State Vulnerable species observed or locally recorded (2.5 pt each)		1
State Endangered species observed or locally recorded (5 pt each)		0
Nationally Vulnerable species observed or locally recorded (10 pts each)		1
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)		2
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08 pts; 20 or > = 0.1 pts		55.5
		Threatened Fauna Score
		0.1

CONSERVATION SIGNIFICANCE SCORE	1.14
--	-------------

Total Scores for the Site	Score	Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE	
LANDSCAPE CONTEXT SCORE	1.10		27.91
VEGETATION CONDITION SCORE	22.26	Total Biodiversity Score	
CONSERVATION SIGNIFICANCE SCORE	1.14	(Biodiversity Score x hectares)	2.62

Photo Point and Vegetation Survey Location	Direction of the Photo
	130°
	GPS Reference
	Datum WGS84
	Zone (52, 53 or 54) 53
	Easting (6 digits) 683385
	Northing (7 digits) 6050264
	Description
	Eucalyptus cladocalyx ssp. crassa woodland over Allocasuarina verticillata trees and Acacia paradoxa shrubs over Rytidosperma sp grasses in moderate regenerative condition

Vegetation Condition Scores

SITE:	APZ - Cabins 9c - Site 10		
BCM COMMUNITY	KI 2 Open forests and woodlands with an open sclerophyll shrub understorey		
VEGETATION ASSOCIATION DESCRIPTION	<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i> woodland over <i>Acacia paradoxa</i> shrubland		
SIZE OF SITE (Ha)	0.121		
Benchmarked attributes (Scores determined by comparing to a Benchmark community)			
Number of Native Species (Minus herbaceous annuals for spring Surveys)	11		
Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2	8.0		
Number of regenerating native species	0		
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	0		
Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I
<i>Romulea rosea</i> var. <i>australis</i>	3	2	6
<i>Vulpia</i> sp.	2	2	4
<i>Tritolium</i> sp.	3	2	6
<i>Hypochoeris glabra</i>	2	2	4
<i>Arctotheca calendula</i>	3	1	3
	Cover x Threat		23
Weed Score (max 15) from benchmark community	8		
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2	14.0		
Non-Benchmarked Attributes (Scores determined from direct field observations)			
Native:exotic Understorey biomass Score (max 5)	3		
Is the community naturally treeless?	<input type="checkbox"/>		
Fallen Timber/Debris (max 5)	1		
Hollow-bearing trees Score (max 5)	1		
Mature Tree Score (max 8)	2		
Tree Canopy Cover Score (max 5)	4		
Vegetation Condition Score calculation			
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees - If the community Score is Not Benchmark (SNB) for regeneration this score is multiplied 1.24 - If the community is naturally treeless this score is multiplied by 1.29			
Negative Vegetation Attributes Score = $(15 - \text{Weeds}) + ((10 - \text{Biomass score} - \text{Tree Canopy Cover Score}) \exp(2/2))$			
VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80)) 22.26			

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)		<input type="checkbox"/>
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 type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>
Note: all sites will score a minimum Conservation Significance Score of 1		Threatened Community Score 1
Number of Threatened Flora Species recorded for the site (within the site)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species recorded (1 pt each)		1
State Vulnerable species recorded (2.5 pt each)		0
State Endangered recorded (5 pts each)		0
Nationally Vulnerable species recorded (10 pts each)		0
Nationally Endangered or Critically endangered species recorded (20 pts each)		0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		1
		Threatened Flora Score 0.04
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species observed or locally recorded (1 pt each)		3
State Vulnerable species observed or locally recorded (2.5 pt each)		1
State Endangered species observed or locally recorded (5 pt each)		0
Nationally Vulnerable species observed or locally recorded (10 pts each)		1
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)		2
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08pts; 20 or > = 0.1 pts		55.5
		Threatened Fauna Score 0.1
CONSERVATION SIGNIFICANCE SCORE		1.14
Total Scores for the Site		Vegetation Condition x Landscape Context x Conservation Significance =
LANDSCAPE CONTEXT SCORE	1.10	UNIT BIODIVERSITY SCORE 27.91
VEGETATION CONDITION SCORE	22.26	Total Biodiversity Score
CONSERVATION SIGNIFICANCE SCORE	1.14	(Biodiversity Score x hectares) 3.38
Photo Point and Vegetation Survey Location		Direction of the Photo
		130°
		GPS Reference
		Datum WGS84
		Zone (52, 53 or 54) 53
		Easting (6 digits) 683385
		Northing (7 digits) 6050264
		Description
		Eucalyptus cladocalyx ssp. crassa woodland over Allocasuarina verticillata trees and Acacia paradoxa shrubs over Rytidosperma sp grasses in moderate regenerative condition

Vegetation Condition Scores

SITE:	AP2 - Overnight check in - Site 11		
BCM COMMUNITY	K1.2 Open forests and woodlands with an open sclerophyll shrub understorey		
VEGETATION ASSOCIATION DESCRIPTION	Acacia paradoxa shrubland over Xanthorrhoea semiplana ssp. tateana		
SIZE OF SITE (Ha)	0.029		
Benchmarked attributes (Scores determined by comparing to a Benchmark community)			
Number of Native Species (Minus herbaceous annuals for spring surveys)		6	
Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2		4.0	
Number of regenerating native species		0	
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5		0	
Weed species (Top 5 Cover x Invasiveness)			
Romulea rosea var. australis Bromus sp. Trifolium sp. Hypochaeris glabra Acalypha calendula		Cover (max 6)	Weed Threat Rating (max 5)
		3	2
		3	1
		3	2
		2	2
		3	1
		Cover x Threat	
		22	
Weed Score (max 15) from benchmark community		9	
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2			
		10.0	
Non-Benchmarked Attributes (Scores determined from direct field observations)			
Native:exotic Understorey biomass Score (max 5)		3	
Is the community naturally treeless?		<input checked="" type="checkbox"/>	
Tree attributes not scored for treeless communities or communities with only emergent trees		9	
		0	
		2	
		1	
Vegetation Condition Score calculation			
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms + Fallen timber/debris + Hollow-bearing trees			
- If the community Score is Not Benchmark (SNB) for regeneration this score is multiplied 1.24			
- If the community is naturally treeless this score is multiplied by 1.29			
Negative Vegetation Attributes Score = $(15 - \text{Weeds}) - ((10 - (\text{Biomass score} \times 2)) \exp(2/2))$			
VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80))			

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pts)		<input type="checkbox"/>
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 type="checkbox"/>
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>
Note: all sites will score a minimum Conservation Significance Score of 1		Threatened Community Score
		1
Number of Threatened Flora Species recorded for the site (within the site)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species recorded (1 pt each)		1
State Vulnerable species recorded (2.5 pt each)		0
State Endangered recorded (5 pts each)		0
Nationally Vulnerable species recorded (10 pts each)		0
Nationally Endangered or Critically Endangered species recorded (20 pts each)		0
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		1
		Threatened Flora Score
		0.04
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.		
State Rare species observed or locally recorded (1 pt each)		3
State Vulnerable species observed or locally recorded (2.5 pt each)		1
State Endangered species observed or locally recorded (5 pt each)		0
Nationally Vulnerable species observed or locally recorded (10 pts each)		1
Nationally Endangered or Critically Endangered species observed or locally recorded (20 pts each)		4
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08 pts; 20 or > = 0.1 pts		95.5
		Threatened Fauna Score
		0.1
CONSERVATION SIGNIFICANCE SCORE		1.14
Total Scores for the Site		
Score		Vegetation Condition x Landscape Context x
LANDSCAPE CONTEXT SCORE	1.12	Conservation Significance =
VEGETATION CONDITION SCORE	14.90	UNIT BIODIVERSITY SCORE
CONSERVATION SIGNIFICANCE SCORE	1.14	19.02
		Total Biodiversity Score
		(Biodiversity Score x hectares)
		0.55
Photo Point and Vegetation Survey Location		Direction of the Photo
		Drone footage
		GPS Reference
		Datum WGS84
		Zone (52, 53 or 54) 53
		Easting (6 digits)
		Northing (7 digits)
		Description
		Acacia paradoxa shrubland over emergent Eucalyptus cladocalyx ssp. crassa trees and Xanthorrhoea semiplana ssp. tateana shrubs in poor degraded condition.

Vegetation Condition Scores

SITE:	Site 12 - easement track		
BCM COMMUNITY	KI 2 Open forests and woodlands with an open sclerophyll shrub understorey		
VEGETATION ASSOCIATION DESCRIPTION	Eucalyptus cladocalyx ssp. crassa open woodland over Acacia parado...		
SIZE OF SITE (Ha)	0.182		
Benchmarked attributes (Scores determined by comparing to a Benchmark community)			
Number of Native Species (Minus herbaceous annuals for spring Surveys)	32		
Native Plant Species Diversity Score (max 30) from benchmark score weighted by a factor of 2	24.0		
Number of regenerating native species	0		
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	0		
Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I
Senecio pterophorus	2	3	6
Tritolium sp.	2	2	4
Romulea rosea var. australis	2	2	4
Carduus sp.	2	2	4
Vulpia sp.	2	2	4
	Cover x Threat		22
Weed Score (max 15) from benchmark community	9		
Native Plant Life Forms (max 20) from benchmark score weighted by a factor of 2	14.0		
Non-Benchmarked Attributes (Scores determined from direct field observations)	<input type="checkbox"/> Is the community naturally treeless? Fallen Timber/Debris (max 5) Hollow-bearing trees Score (max 5) Mature Tree Score (max 8) Tree Canopy Cover Score (max 5)		
Native:exotic Understorey biomass Score (max 5)	5		
	<input type="checkbox"/> Fallen Timber/Debris (max 5) Hollow-bearing trees Score (max 5) Mature Tree Score (max 8) Tree Canopy Cover Score (max 5)		
Vegetation Condition Score calculation			
Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees - If the community Score is Not Benchmark (SNB) for regeneration this score is multiplied 1.24 - If the community is naturally treeless this score is multiplied by 1.29			
Negative Vegetation Attributes Score = $(15 - \text{Weeds}) + ((10 - \text{Biomass score} - \text{Tree Canopy Cover Score}) \exp(2/2))$			
VEGETATION CONDITION SCORE (Positive veg attributes x $((80 - \text{Negative vegetation attributes}) / 80)$) 36.45			

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?		Yes/No								
State (Provisional List of Threatened Ecosystems of SA) Rare community (0.1 pt)		<input type="checkbox"/>								
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 type="checkbox"/>								
Nationally (EPBC Act) Vulnerable community (0.35 pts)		<input type="checkbox"/>								
Nationally (EPBC Act) Endangered or Critically Endangered community (0.4 pts)		<input type="checkbox"/>								
Note: all sites will score a minimum Conservation Significance Score of 1		Threatened Community Score 1								
Number of Threatened Flora Species recorded for the site (within the site)		Number								
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.										
State Rare species recorded (1 pt each)		3								
State Vulnerable species recorded (2.5 pt each)		0								
State Endangered recorded (5 pts each)		0								
Nationally Vulnerable species recorded (10 pts each)		0								
Nationally Endangered or Critically endangered species recorded (20 pts each)		0								
0 = 0 pts; <2 = 0.04 pts; 2 - <5 = 0.08 pts; 5 - <10 = 0.12 pts; 10 - <20 = 0.16 pts; 20 or > = 0.2 pts		3								
		Threatened Flora Score 0.08								
Potential habitat for Threatened Fauna Species (number observed or previously recorded)		Number								
*If a species has both a State (NP&W Act) and National (EPBC Act) rating, it's only recorded for its National rating.										
State Rare species observed or locally recorded (1 pt each)		3								
State Vulnerable species observed or locally recorded (2.5 pt each)		1								
State Endangered species observed or locally recorded (5 pt each)		0								
Nationally Vulnerable species observed or locally recorded (10 pts each)		1								
Nationally Endangered or Critically endangered species observed or locally recorded (20 pts each)		2								
0 = 0 pts; <2 = 0.02 pts; 2 - <5 = 0.04 pts; 5 - <10 = 0.06 pts; 10 - <20 = 0.08 pts; 20 or > = 0.1 pts		55.5								
		Threatened Fauna Score 0.1								
CONSERVATION SIGNIFICANCE SCORE		1.18								
Total Scores for the Site		Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE 49.46								
LANDSCAPE CONTEXT SCORE	Score 1.15									
VEGETATION CONDITION SCORE	36.45	Total Biodiversity Score (Biodiversity Score x hectares) 9.00								
CONSERVATION SIGNIFICANCE SCORE	1.18									
Photo Point and Vegetation Survey Location		Direction of the Photo								
		292° GPS Reference <table border="1"> <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>683362</td> </tr> <tr> <td>Northing (7 digits)</td> <td>6048334</td> </tr> </table> Description Eucalyptus cladocalyx ssp. crassa open woodland over Acacia paradoxa, Daviesia asperula ssp. asperula shrubs and Rytidosperma sp. grasses in very poor and degraded condition	Datum	WGS84	Zone (52, 53 or 54)	53	Easting (6 digits)	683362	Northing (7 digits)	6048334
Datum	WGS84									
Zone (52, 53 or 54)	53									
Easting (6 digits)	683362									
Northing (7 digits)	6048334									

Appendix 3. Flora Species List

Site 4 - Weir Dam

Site 6 - Cabins 10b and Day Facility

Site 7 - Katarina Wellness Centre

Site 8 - Staff accommodation

Site 9 - Cabins 9d

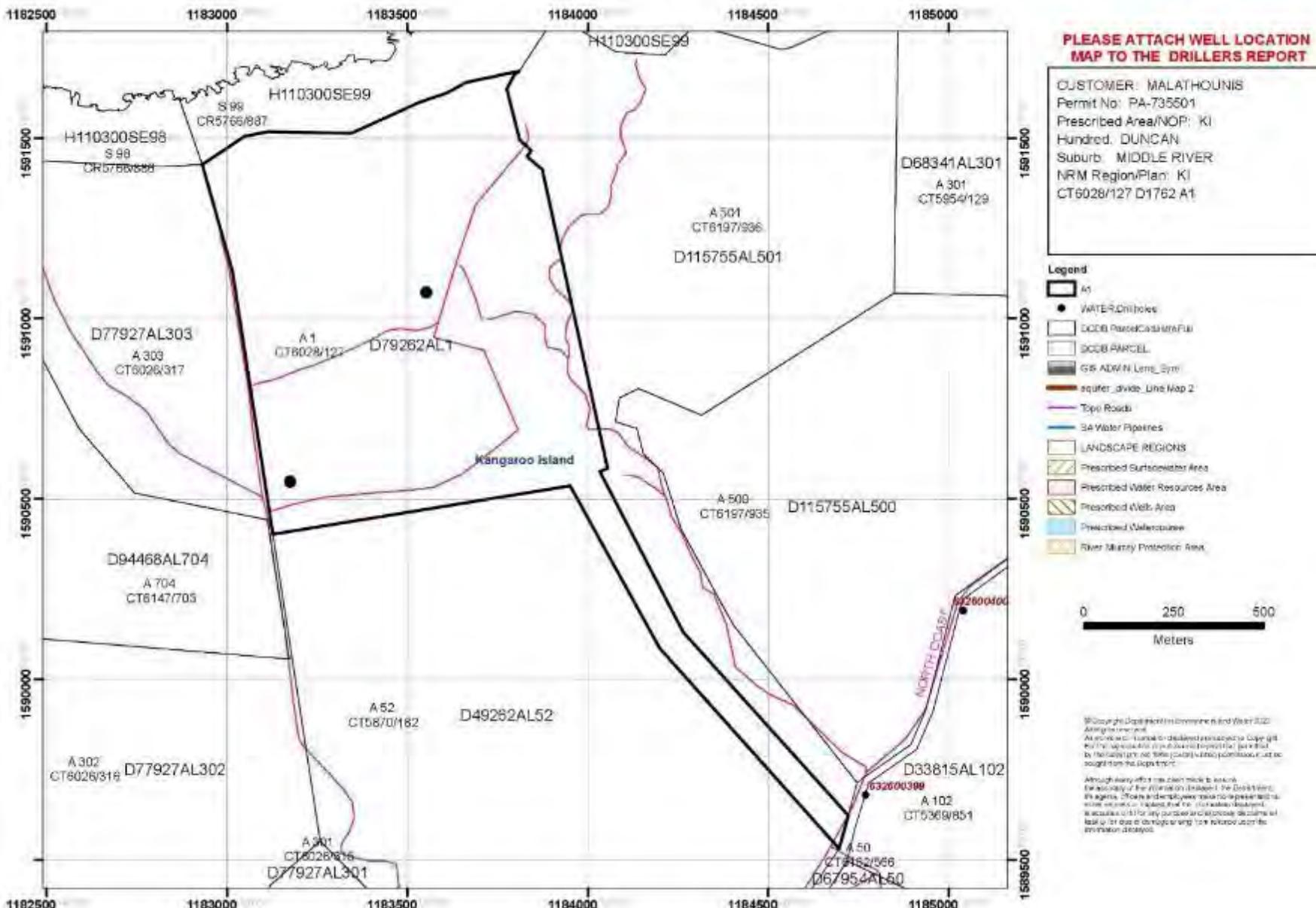
Site 10 - Cabins 9c

Site 11 - Night check in

Site 12 - Easement Access Track

Plant Species Recorded (Native and Introduced)		Listed Species			Natives only		Introduced Species
Species	Common Name	EPBC	SA	Not in quadrat	Regen	Annual Herbs Spring survey	
<i>Eucalyptus cosmophylla</i>	Cup Gum						
<i>Xanthorrhoea semiplana</i> ssp. <i>tateana</i>	Tate's Grass-tree		R				
<i>Allocasuarina verticillata</i>	Drooping Sheoak						
<i>Rytidosperma</i> sp.	Wallaby-grass						
<i>Acrotriche depressa</i>	Native Currant						
<i>Styphelia humifusa</i>	Cranberry Heath						
<i>Micranthemum demissum</i>	Dwarf Micranthemum						
<i>Daviesia asperula</i> ssp. <i>asperula</i>	Kangaroo Island Bitter-pea						
<i>Stenanthera conostephoides</i>	Flame Heath						
<i>Euryomyrtus ramosissima</i> ssp. <i>ramosissima</i>	Rosy Baeckea						
<i>Viola sieberiana</i>	Tiny Violet						
<i>Lomandra micrantha</i> ssp.	Small-flower Mat-rush						
<i>Hibbertia radians</i>	Scrambling Guinea-flower						
<i>Hibbertia exuttiacies</i>	Prickly Guinea-flower						
<i>Gompholobium ecostatum</i>	Dwarf Wedge-pea						
<i>Drosera macrantha</i> ssp. <i>planchonii</i>	Climbing Sundew				Yes		
<i>Lissanthe strigosa</i> ssp. <i>subulata</i>	Peach Heath						
<i>Thelymitra</i> sp.	Sun-orchid				Yes		
<i>Eucalyptus fasciculosa</i>	Pink Gum		R				
<i>Diuris orientis</i>	Wallflower Donkey-orchid				Yes		
<i>Petrophile multisecta</i>	Kangaroo Island Conesticks						
<i>Microtis</i> sp.	Onion-orchid				Yes		
<i>Drosera peltata</i>	Swamp Sundew				Yes		
<i>Hibbertia devitata</i>	Smooth Guinea-flower						
<i>Dillwynia sericea</i>	Showy Parrot-pea						
<i>Eucalyptus baxteri</i>	Brown Stringybark						
<i>Rhytidosporum procumbens</i>	White Rhytidosporum		R				
<i>Thelymitra</i> sp.	Sun-orchid				Yes		
<i>Opercularia varia</i>	Variable Stinkweed						
<i>Daucus glochidiatus</i>	Native Carrot				Yes		
<i>Caladenia</i> sp.	Spider-orchid				Yes		
<i>Acacia paradoxa</i>	Kangaroo Thorn						
<i>Leucopogon concurvus</i>	Scrambling Beard-heath						
<i>Epacris impressa</i>	Common Heath						
<i>Euchiton involucratus</i>	Star Cudweed						
<i>Choretrum glomeratum</i>	White Sour-bush						
<i>Eucalyptus obliqua</i>	Messmate Stringybark						
<i>Pteridium esculentum</i> ssp. <i>esculentum</i>	Bracken Fern						
<i>Stylium armeria</i> ssp. <i>armeria</i>	Grass Trigger-plant						
<i>Eucalyptus cladocalyx</i> ssp. <i>crassa</i>	Sugar Gum						
<i>Vulpia</i> sp.	Fescue					*	
<i>Bromus diandrus</i>	Great Brome					*	
<i>Romulea rosea</i> var. <i>australis</i>	Common Onion-grass					*	
<i>Arctotheca calendula</i>	Cape Weed					*	
<i>Lolium</i> sp.	Ryegrass					*	
<i>Hypochaeris glabra</i>	Smooth Cat's Ear					*	
<i>Trifolium</i> sp.	Clover					*	
<i>Carduus</i> sp.	Thistle					*	
<i>Senecio pterophorus</i>	African Daisy					*	
<i>Bromus hordeaceus</i> ssp. <i>hordeaceus</i>	Soft Brome					*	
<i>Aira</i> sp.	Hair-grass					*	

Appendix 4. Copies of associated approvals





5 December 2025

Your Ref:
Our Ref: PSP/ERS/29318-518014/

Aenigma Natives

Tourism Development – 6546 North Coast Road, Middle River

As you know, our firm is acting for Junctions 90 Pty Ltd, the Applicant in relation to DA 25024492.

Consequent upon the proposal plans being amended (ostensibly to shift access from the eastern side to the western side), you have been instructed to prepare an amended report under Schedule 8, Item 2(1)(g) of the *Planning, Development and Infrastructure (General) Regulations 2017*.

In preparing that report, on instructions from our mutual client, I would ask that you please consider and assess the extent of actual clearance proposed in the application which includes:

1. the proposed access track on the western side;
2. the footprint of buildings, internal access tracks and other infrastructure within the substantive site (including the relevant 'construction zone' around those buildings etc as indicated on the plans); and
3. any other vegetation that it is in fact proposed to be cleared.

As to the issue of potential cumulative clearance, r19(1)(f) of the *Native Vegetation Regulations 2017 (NV Regulations)* provides that in exercising a power or making a decision under Part 3 of the Regulations (Permitted clearance), the Council must consider "*the potential cumulative impact, both direct and indirect, that is reasonably likely to result from a proposed clearance activity.*"

With this in mind, I understand that common practice is to assume that once a building has been erected, the building owner will exercise their 'right' to clear an asset protection zone around the perimeter of the building. So, for example, it is assumed that the owner will clear vegetation growing within 10 metres of an existing building (per NV Regulations, Schedule 1, Part 1, Item 1) or within 20 metres of an existing dwelling (per NV Regulations, Schedule 1, Part 2, Item 17(1)).

While, in many cases, it may be reasonable to make that assumption, it is not a universal rule. Rather, the legislation imposes a 'reasonably likely' test, which invites consideration as to what

Norman Waterhouse Lawyers Pty Ltd ACN 621 909 395

Level 11, 431 King William Street, Adelaide SA 5000
GPO Box 639, Adelaide SA 5001
www.normans.com.au

T +61 8 8210 1200



is reasonably likely in a particular case.

Here, it is important to note that the Applicant has no intention of clearing vegetation around buildings beyond the relevant construction zone (as depicted on the plans), even though it may be legally entitled to do so. This is because the Applicant is seeking to create a 'nature-rich' visitor experience in which buildings are co-located with existing vegetation to the greatest extent possible. Further, I understand that given the low bushfire hazard rating for this property, additional clearance around buildings beyond the relevant construction zone is not required for asset protection.

For these reasons, the proposal which you are asked to assess does not propose, or seek approval, to clear any native vegetation beyond that described above.

As such, it is not reasonably likely that cumulative impact will occur beyond that which is actually proposed.

(As an aside, I also record that the proposed building are not 'dwellings' as defined, meaning that even if it was appropriate to include an asset protection zone, that zone would be 10m, not 20m).

To provide a legally robust mechanism of enforcing this aspect of the proposal in perpetuity, the Applicant will be inviting the planning authority, should it be minded to approve the development, to impose a condition of development authorisation which condition positively prohibits any clearance beyond that which is proposed.

In this way, even if the applicant may have a legal right under the NV Regulations to clear an asset protection zone around a building once constructed, the development condition will effectively cut across that right, making it an offence against the *Planning, Development and Infrastructure Act 2016* to do so (see section 127 as to the enforceability of development conditions in perpetuity, and section 215(4) for the relevant offence provision).

Further, if the Native Vegetation Council (NVC) wants to 'double-bag', regulation 16(2)(b) empowers it, when authorising clearance of native vegetation under Schedule 1 Part 6 of the NV Regulations, to impose '*such other conditions as the Council thinks fit*'. As such, in due course, upon an application being duly made under Schedule 1 Part 6, a mirror condition may be applied by the NVC thereby creating a parallel enforcement regime.

For these reasons, when considering the potential cumulative impact, you are asked to please disregard any potential clearance beyond that actually proposed (as depicted in the proposal plans).

Hopefully these instructions are sufficiently clear, but please let me know if you would like to discuss the matter further.

Yours faithfully
Norman Waterhouse

Principal
Direct Line: +61 8 8210 1297
Email: ppsaltis@normans.com.au

Cc Ms D Malathounis, Junction 90 Pty Ltd

Appendix 6. Landscape planting palette

INDICATIVE PLANTING PALETTE						BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	COMMENT
						Acacia acinacea	Round - leaf wattle	1.5 m	2.0 m	Small Shrub that attracts bees, seed eating birds, butterflies. Good in sandy, woodland areas
						Acacia paradoxa	Kangaroo Wattle	2.0 - 4.0m	2.0 - 5.0m	Bird, butterfly, insect attracting, coastal
						Acacia pycnantha	Golden Wattle	8.0 m	6.0 m	Small Tree that attracts bees, seed eating birds, butterflies
						Allocasuarina verticillata	Drooping Sheoak	4.0 - 10.0 m	5.0 m	Small Tree, Attracts Glossy Black Cockatoo
						Anigozanthos yellow Gem	Kangaroo Paw			Small Shrub
						Austrodanthonia spp.	Wallaby Grass	0.6 m	0.6 m	Grass - Attracts wildlife inc. butterflies
						Austrostipa spp.	Coast Spear-Grass	1.0 m	1.0 m	Attracts butterflies
						Beyeria lechenaultii	Pale Turpentine Bush	0.5 - 2.0 m	1.0 - 2.0 m	Small Shrub - bird attracting - good for erosion control - coastal foot slopes
						Caesia calliantha	Blue Grass - lily	0.5 m	0.5 m	
						Caprobrotus Rossi	Coastal Pig Face	0.2 m	1.0 - 2.0 m	Ground Cover for APZ
						Choretrum glomeratum	Common Sourbush	2.0 m	1.0 m	Small Shrub
						Correa calycintha	Hindmarsh Correa	3.0 m	2.0 m	Bird attracting
						Daviesia asperula ssp. asperula	Kangaroo Island Bitter Pea	2.0 m		
						Daviesia asperula	Leafless Bitter-Pea	1.0 m		Shrub
						Daviesia brevifolia	Leafless Bitter-Pea	1.0 m		
						Daviesia brevifolia	Black anther Flax-Lily	1.0 m	0.5 m - 1.0m	
						Dianella revoluta	Black anther Flax-Lily	0.5 - 1.0 m	1.0 m	Attracts native wildlife, fruits are edible
						Erichydraea tomentosa	Ruby Saltbush	0.5 - 1.0 m	1.0 m	Attracts birds, and improves air quality, plains and footslopes
						Eucalyptus Fasciculosa	Pink Gum	10.0 - 15.0 m	5.0m 12.0m	
						Eucalyptus Fasciculosa	Pink Gum	10.0 - 15.0 m	5.0m 12.0m	
						Eutaxia microphylla	Common Eutaxia	0.5 m	0.5 - 1.5 m	Small shrub - Attracts butterflies
						Ficinia nodosa	Knobby Club Rush	1.0 m	0.6 m	Tolerates wet zones - good around ponds Butterflies attracting
						Goodenia Amplexans	Clasping Goodenia	1.0 m	0.5 - 1.0 m	Coastal foot slopes, bee attracting
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
						Goodenia Amplexans	macrophyllus	1.0 m	0.5 - 1.0 m	
			<img alt="Eucaly							