

Native Vegetation Clearance

Proposed New Dwelling, Egan Property Nora Creina

Clearance under the *Native Vegetation Regulations 2017*

August 2021

Prepared by Peter Tucker



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1. Application information

Application Details

Applicant:	Thomas Francis Egan		
Key contact:	Thomas Egan		
Landowner:	Thomas Egan		
Site Address:	[REDACTED], Nora Creina		
Local Government Area:	District Council of Robe	Hundred:	Waterhouse
Title ID:	CT/5435/299	Parcel ID	D24257 A2

Summary of proposed clearance

Purpose of clearance	The owner seeks to clear native vegetation for the purpose of building a small caretaker's cottage with associated infrastructure.
Native Vegetation Regulation	Regulation 12, Schedule 1; clause 33, New Dwelling or Building
Description of the vegetation under application	0.1949 hectares of Coast Beard-heath (<i>Leucopogon parviflorus</i>) and Coast Daisy-bush (<i>Olearia axillaris</i>) Shrubland in moderate condition. 0.2529 hectares of Coast Beard-heath (<i>Leucopogon parviflorus</i>) +/- <i>Acacia longifolia</i> ssp. <i>sophorae</i> (Coastal Wattle) Shrubland in moderate condition. 0.4327 hectares of Coast Daisy-bush (<i>Olearia axillaris</i>) and Coast Bitter-bush (<i>Adriana quadripartita</i>) Low Very Open Shrubland in moderate condition.
Total proposed clearance - area (ha) and number of trees	0.8805 ha is proposed to be cleared.
Level of clearance	Level 4 (Level 3 if recommended moderations are accepted by NVC.)
Overlay (Planning and Design Code)	State Significant Native Vegetation Overlay and Native Vegetation Overlay

	<p>transfer plant will be located under the elevated cottage to further minimise the area of vegetation clearance. The building will utilise pier footings requiring less impact on the surrounding area than alternative methods. Construction will occur offsite, including plumbing and electrical requirements. The cottage will be installed on site resulting in minimal waste and debris production.</p> <p>The proposed site is located between two existing vehicle tracks on the property minimising the need to establish a new track to the cottage. During installation all vehicles and machinery will remain within the proposed clearance envelope. Vehicles and machinery will not be permitted to enter or impact any other areas of native vegetation</p> <p>Rehabilitation or restoration – The proposed vegetation clearance is the minimum required to build the caretaker's cottage and upgrade the access track to meet CFS requirements. After construction has been completed, rehabilitation of the buffer zones (20m around the cottage and 2m either side of the access track) will occur by encouraging the natural regeneration of low growing (less than 10cm in height) native species such as Muntries (<i>Kunzea pomifera</i>) and native herbs.</p> <p>If necessary, additional low growing local provenance species will be planted to hasten rehabilitation. The owner has already undertaken extensive revegetation (7580 plants) and weed control activities throughout the property and will continue to rehabilitate the track edges (2m each side of the track) encouraging native plants less than 10cm height in this zone. Much of the access track already contains low growing native plants dominated by Muntries (<i>Kunzea pomifera</i>), which meet CFS requirements.</p> <p>In addition, the current regular weed control program will be expanded to ensure weeds are removed and no new weeds become established.</p> <p>Offset – The owner proposes a 6.251 hectare on-ground SEB over part of the remaining native vegetation on the property.</p>
SEB Offset proposal	6.251 ha on-ground SEB

2. Purpose of clearance

2.1 Description

The purpose of the vegetation clearance to for the establishment of a small caretaker's cottage and associated infrastructure.

2.2 Background

The property is located at 2082 Nora Creina Road and was purchased by the current owner in 2014. Prior to the this, the property was used for agricultural pursuits for many years and later limited to grazing by various species of domesticated animals. A circular horse training track is still evident on current aerial imagery. Periodically, patches of native vegetation were damaged or removed by the previous owner's use of agricultural machinery, e.g., bulldozer. Over many years, a myriad of internal tracks were established throughout the property.

A Heritage Agreement (HA177) was established on part of the property in 1988.

The surrounding land use is a mixture of native vegetation, wetlands, beach, dryland pasture and housing. Nora Creina village is located approximately 700 metres to the south east. Heritage Agreement HA177 is located on the

same and adjoining properties. Little Dip Conservation Park is located four kilometres to the north and Lake St Clair Conservation Park is located 5.5km to the north east.

Rubbish Dumping

Historically, the property has been used to dump hard refuse, including vehicles, tractors, machinery, fishing equipment and building materials from demolished shacks, including asbestos sheeting. The main dump sites are located on the Heritage Agreement boundary and around shedding approximately 100m from Nora Creina Road. Additional, numerous small dumps sites containing hard household refuse are scattered throughout the property westward from Nora Creina Road to, and including, the Heritage Agreement. These small dump sites often contain broken pieces of asbestos sheeting. Figure 4 identifies the location of the main refuse dump sites, surrounding areas frequently contain small pieces of asbestos sheeting, with larger pieces in the main dump sites.

Off-road Motor Vehicles

For many years, prior to the current ownership, motorbikes and four-wheel drive vehicles would regularly traverse the property, including the adjoining Heritage Agreement area. Frequently this was to avoid Cape Rabelais which is impassable to vehicles. Cape Rabelais impedes vehicle traffic travelling along the beach between Robe and Beachport. An old internal property track is marked on topographic and CFS maps often resulting in 4WDs and motorbikes entering the property from the beach in an effort to find the track and exit onto Nora Creina Road, frequently causing significant damage to native vegetation. This situation is still a problem today with 20 – 30 motorbikes riding together often observed. However, when on site, the owner is able to intercept and stop vehicles, redirecting them back along the beach to Robe. If vegetation clearance is approved and the caretaker's cottage is established, the owner will be able to monitor the area 24 hours a day and prevent further damage.

Change of Ownership

The current owner purchased the property, because they were drawn to the property's ecological values. They had visions of restoring these values throughout the property, including the heavily degraded dump sites. Upon purchasing the property, they undertook a number of steps to cease or rectify the degradation, including;

- Closing the general public's access to the property;
 - From the beach; and
 - From Nora Creina Rd;
- Closing many of the internal tracks and allowing them to regenerate (an estimated 1.5km);
- Removed vast volumes of hard refuse from the property via eight semi-trailer loads, approximately 80 tonnes;
- Removal of African Boxthorn (*Lycium ferocissimum*), including mechanical removal of very large specimens where access was possible without damaging native vegetation;
- Removal of general rubbish along the beach and Cape Rabelais;
- Instigating an extensive and targeted (hand) weed control program on the property, extending on to the adjoining verge of Nora Creina Road totalling;
 - An estimated 300 labour days over four years; and
 - 100 cubic metres of weeds removed, consolidated near the property entrance and trucked off the property or burnt;
- An extensive revegetation program to restore degraded areas and former refuse sites, including planting of 7, 580 plants from locally collected material working with Southern Ground Revegetation Nursery (2016-2021); and
- Participated in an annual fox baiting program.

The owner was advised that all asbestos removal undertaken by contractors was done in accordance with regulations and licensing requirements where applicable. Numerous scattered household refuse sites often contained miscellaneous remnants of asbestos and were safely removed as small portions under the regulations.

Several of the measures undertaken to protect the biodiversity values on their property have been unpopular with some members of the community and on occasion led to unpleasant interactions. However, the current owner is resolute and determined to improve the ecological values of the area.

Threatened Orchid Discovery

During the process of improving the property's ecological values, the owner found a population of Little Dip Spider-orchid (*Caladenia richardsiorum*), listed as Endangered under the EPBC Act, growing on one of the many vehicle tracks on the property. The owner closed this track and continues to monitor the orchids and has observed an increase in flowering specimens since the track was closed. The orchid population occurs outside the Heritage Agreement and are remote from the proposed caretaker's cottage location.



Figure 2. Revegetation of past refuse dump site.



Figure 1. Extensive revegetation and weed control at the property's entrance. All larger plants in the foreground have been planted.



Figure 3. Weed removal along the verge of Nora Creina Road.

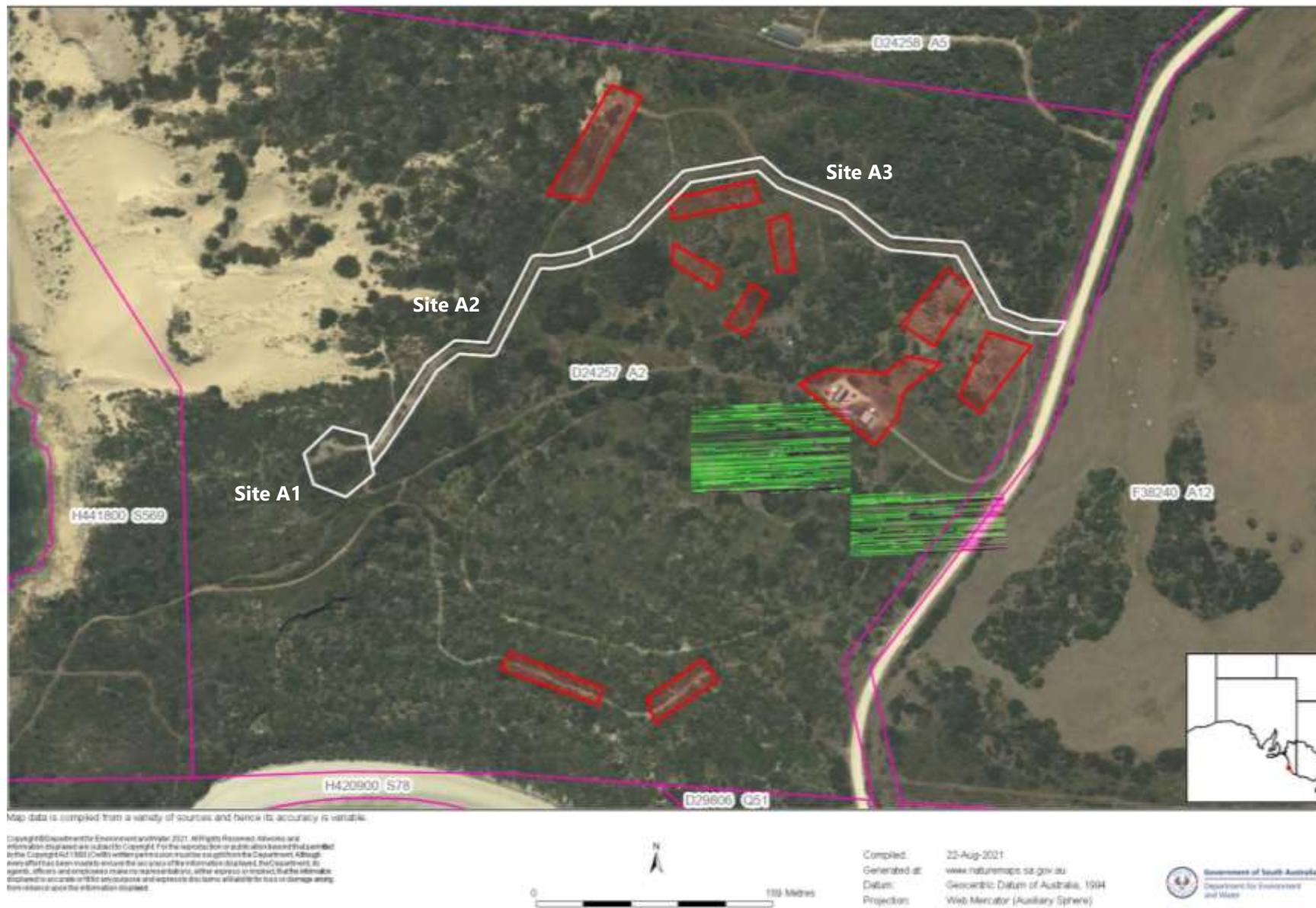


Figure 4. Location of dump sites (red polygons) where large volumes of refuse, including asbestos, have been extracted. Smaller pieces of refuse were also gathered from surrounding bushland and added to these dump sites for professional removal. Green striations are an anomaly generated by the NatureMaps program.

2.3 General location map

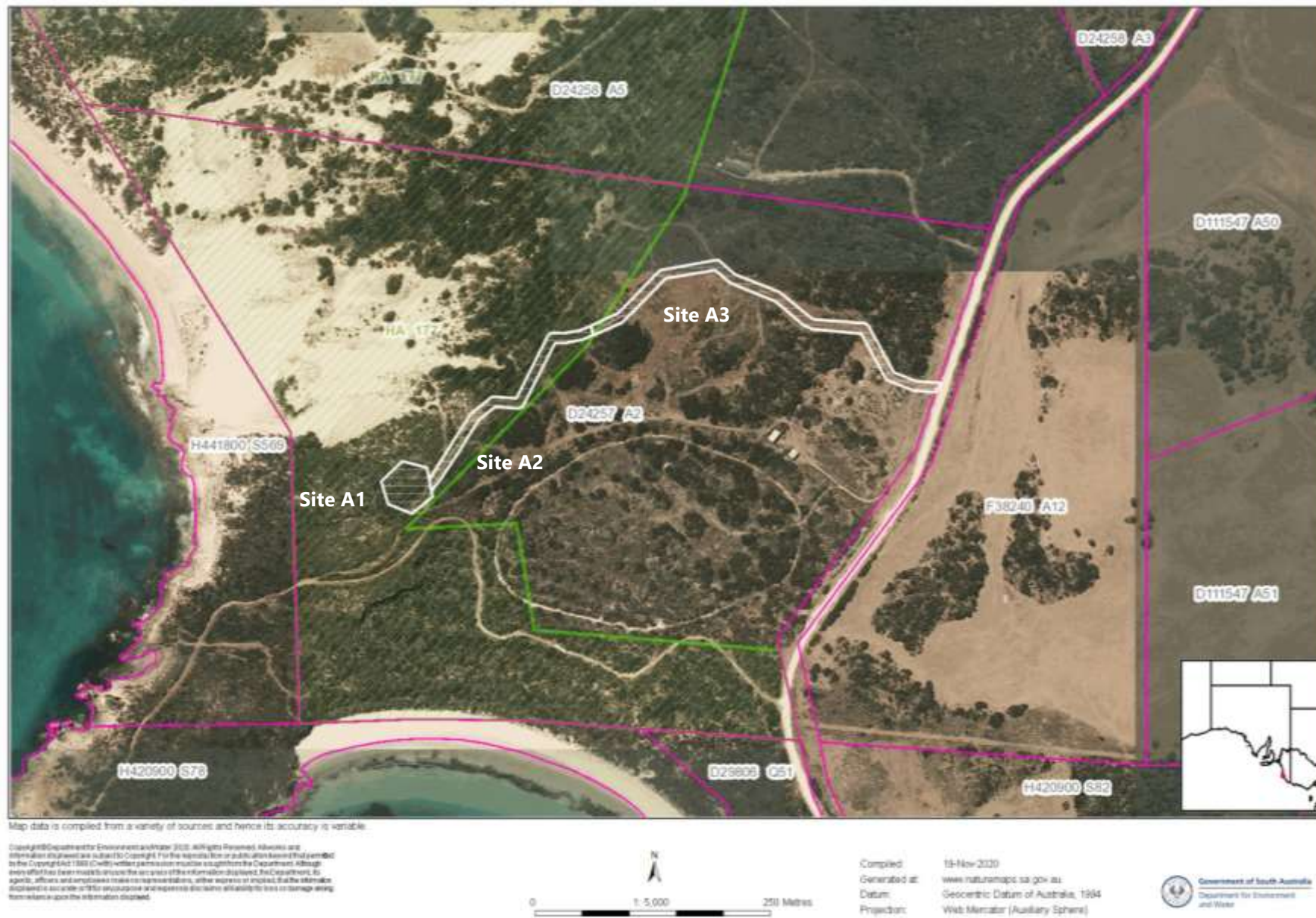


Figure 5. Vegetation included under this application, Sites A1 – A3. **Note:** A formal land survey (2019) has determined the Heritage Agreement boundary, as represented on NatureMaps (green hashed polygon) to be incorrect. The proposed caretaker's cottage lies outside the Heritage Agreement (Ref Figure 7).

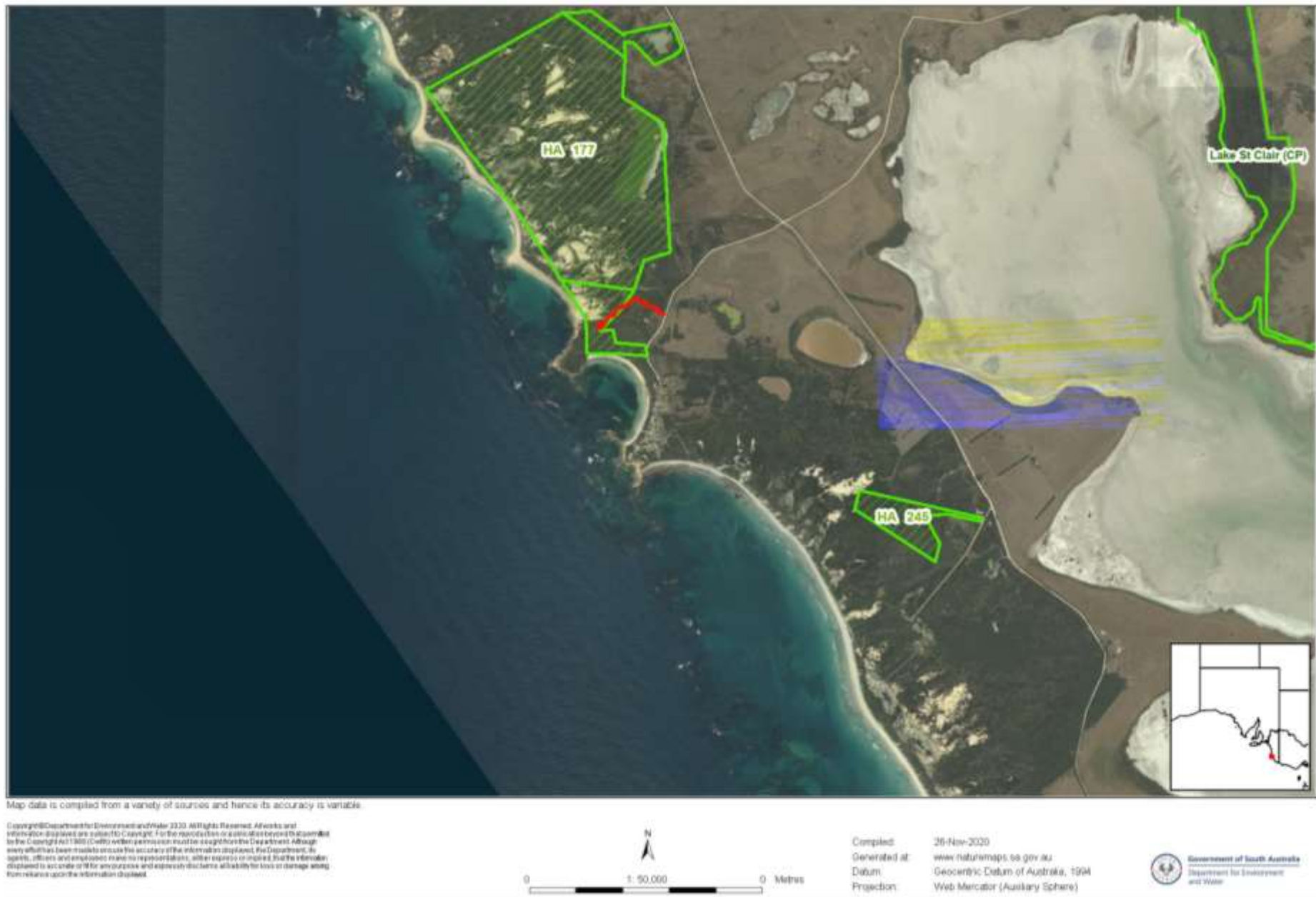


Figure 6. Location of property showing surround land use. Red line identifies the location of the proposed vegetation clearance. Green polygons identify Heritage Agreements.

2.4 Details of the proposal

This proposal is to clear 0.8805 hectares of native vegetation for the purpose of building a small caretaker's cottage (51m²), associated infrastructure and CFS requirements; clearance around the caretaker's cottage (20m) and access track to caretaker's cottage. The access track is ten metres wide, comprising a six metre wide formed all weather vehicle track, plus four metres (two metres each side) of vegetation to be kept below ten centimetres height.

Upon purchasing the property, approval was sought to build a small caretaker's cottage and planning approval granted by District Council of Robe. The first selected site was chosen based on an incorrect survey of the Heritage Agreement boundary and was in an area the previous owner had cleared vegetation (Coast Beard-heath (*Leucopogon parviflorus*) Shrubland). This original site was later deemed inappropriate by the current owners due to being situated on a sand dune with erosion potential. Building on this site would require further vegetation clearance and soil stabilisation works. To stabilise the area, the owner then revegetated it with 250 Coast Beard-heath and 200 Muntries.

A second site was identified in an area previously damaged by frequent motorbike access and is the subject of this vegetation clearance application. The riders would stop on this high point to survey the land while attempting to make their way to Nora Creina Road after their beach ride became impassable due to Cape Rabelais. The second site is located on rock requiring less works to place a caretaker's cottage, but was located near the Heritage Agreement boundary. The owner engaged Alexander Symonds, a surveyor from Mt Gambier, to determine the correct location of the Heritage Agreement's boundary (Figure 7). It was determined the Heritage Agreement's location as listed on NatureMaps to be incorrect. The proposed location of the caretaker's cottage, including a CFS 20m Vegetation Management Zone lies outside the Heritage Agreement.

A crane was used to place two caravans in the proposed cottage location, which had degraded by motorbikes. Surrounding native vegetation is in good condition, but will be impacted to meet CFS requirements if clearance approval is granted. The 20m CFS required Vegetation Management Zone falls outside the Heritage Agreement boundary. The total area for the caretaker's cottage and CFS requirements (Site A1) has been assessed based on the surrounding good quality vegetation. Vegetation along the vehicle track (Sites A2 and A3) was in moderate condition.

To minimise the construction footprint and onsite waste, the caretaker's cottage will comprise three pods joined together and will be constructed offsite. The minimum number of component parts will be used to ensure the fastest assemblage onsite. *Surefoot*, a concrete-free alternative to screw piles, are high strength, steel footings, that have less impact on the land than other options, will be used for the cottage's base. All electrical and plumbing connections will be pre-installed to ensure that when placed on site, all trades can complete connections on the day.

In 2020, unknown persons chain-sawed a two-metre-wide track through approximately 100m of cliff top vegetation with a second track created in 2021. These unauthorised tracks on crown land provide easy access to Rabelais Beach from Nora Creina. The owner currently has video surveillance installed on the property, but is patchy and requires a higher vantage point to gain greater NBN connectivity. If clearance for the caretaker's cottage is approved, the owner will establish 24-hr monitored video surveillance of the area and be able to intervene before such actions can be repeated. Sand dunes in the adjoining Heritage Agreement will also be open to video surveillance, enabling similar intervention when off-road vehicles venture there.



Figure 7. Land survey completed in December 2019 identifying accurate location of Heritage Agreement Boundary. Original PDF file is submitted as a separate document with this Data Report. Note: north eastern internal track along Heritage Agreement boundary has since been closed by the owner.

2.5 Approvals required or obtained

Native Vegetation Act 1991.

This application addresses the approval process required under the Native Vegetation Act 1991. There have been no previous clearance applications on this land parcel and no future clearance applications are envisaged to be made by the owner for land identified in this application.

Planning, Development and Infrastructure Act 2016.

District Council of Robe granted Development Plan Consent to Development Application 822/100/14 on 31 July 2015 and due to granted extensions is still current.

Environment Protection and Biodiversity Conservation Act 1999

The Environment Protection and Biodiversity Conservation Act 1999 is addressed in this application.

National Parks and Wildlife Act 1972

The National Parks and Wildlife Act 1972 is addressed in this application.

2.6 Native Vegetation Regulation

Vegetation clearance approval is sought under Regulation 12 (33) – New Dwelling or Building.

2.7 Development Application information (if applicable)

Overlay: State Significant Native Vegetation Area, and
Native vegetation
Zone: Coastal Conservation Zone

3. Method

3.1 Flora assessment

Prior to the site inspection a desktop search was conducted using NatureMaps, Atlas of Living Australia and an EPBC Protected Matters Search to determine possible presence of plant species listed under the EPBC Act 1999 or NP&W 1972 Act. A radius of five kilometres around the site was used for the desktop search.

The site was inspected on 5 June 2020 using the method outlined in the Native Vegetation Council Bushland Assessment Manual (July 2020). The survey required 2.5 hours to complete.

A second survey was undertaken on 6 October 2020 to search for the presence of the EPBC listed Little Dip Spider Orchid (*Caladenia richardsiorum*) within the proposed clearance envelope and surrounding area. This survey was undertaken to coincide with the orchid's flowering time. A population of this orchid occurs elsewhere on the property and was flowering at the time of survey. This survey comprised traversing the entire clearance envelope and immediate surrounds for 2 hours.

3.2 Fauna assessment

Prior to site inspection a desktop search was conducted on NatureMaps, Atlas of Living Australia and an EPBC Protected Matters Search to determine possible presence of fauna species listed under the EPBC Act 1999 or NP&W 1972 Act. A radius of five kilometres around the sites was used for the desktop searches. In addition, a search of birds likely to use coastal shrubland within the Beachport IBRA Environmental Association was undertaken (Source: G. Carpenter, Biodiversity Assessment Section, Department of Water, Land and Biodiversity Conservation).

The site was surveyed for fauna on 5 June 2020 and occurred concurrently with the vegetation assessment, including searching for the presence of potential threatened species or evidence of their recent presence, such as scats and tracks.

All fauna captured in the desktop fauna assessments that could potentially use the site for habitat have been included in the NVC Bushland Assessment Scoresheets (attached). Fauna species unsuited to the habitat were excluded as per agreement with the Native Vegetation Management Branch.

4. Assessment Outcomes

4.1 Vegetation Assessment

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

The site is located amongst vegetated rocky land and coastal sand dunes. Site A1 is located on the elevated area of Cape Rabelais, but distant from the highest point. Sites A2 and A3 descend the cape into sandy swales.

The vegetation comprised three associations;

1. Coast Beard-heath (*Leucopogon parviflorus*) and Coast Daisy-bush (*Olearia axillaris*) Shrubland in good condition;
2. Coast Beard-heath (*Leucopogon parviflorus*) and Coastal Wattle (*Acacia longifolia* ssp. *sophorae*) Shrubland in moderate condition; and
3. Coast Daisy-bush (*Olearia axillaris*) and Coast Bitter-bush (*Adriana quadripartita*) Low Very Open Shrubland in moderate condition.

The vegetation is generally consistent within each site, but becomes progressively more degraded into Site A3 as the site nears Nora Creina Road.

The vegetation occurs within a large belt of coastal vegetation, broken by the Nora Creina village. Heritage Agreement HA177 abuts site A1. Little Dip Conservation Park is located four kilometres to the north and Lake St Clair Conservation Park is 5.5 kilometres to the north east. Lake St Clair is 2.5 kilometres to the east. Remaining landscape comprises dryland pasture to the east and ocean to the west.

EPBC Act Assessment

No EPBC listed fauna were observed on the property.

No EPBC listed flora were observed within the proposed vegetation clearance area.

The Little Dip Spider Orchid (*Caladenia richardsiorum*), listed as Endangered under the EPBC Act, is known to occur elsewhere on the property. However, despite thorough searching during the peak flowering time, including the entire length of the access track, no evidence of this orchid was observed within the proposed vegetation clearance area. The known population of Little Dip Spider Orchid elsewhere on the property was flowering during the searching period.

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

Vegetation Association	Vegetation Association One: Site A1 - Coast Beard-heath (<i>Leucopogon parviflorus</i>) and Coast Daisy-bush (<i>Olearia axillaris</i>) Shrubland.
 <p>Figure 8. Representative photograph of Site A1, looking to the north west. GPS 397776 5869286.</p>  <p>Figure 9. Example of motorbike damage to vegetation. Photo dated August 2015.</p>	
General description	The dominant native species on Site A1 are Coast Beard-heath (<i>Leucopogon parviflorus</i>), Coast Daisy-bush (<i>Olearia axillaris</i>), Coast Sword-sedge (<i>Lepidosperma gladiatum</i>) and Muntries (<i>Kunzea pomifera</i>). Dominant exotic species included Hare's Tail Grass (<i>Lagurus ovatus</i>),

	<p>Pimpernel (<i>Lysimachia arvensis</i>) and Petty Spurge (<i>Euphorbia peplus</i>). Overall vegetation was in moderate condition.</p> <p>The area has been subject to long-term motorbike damage, which ceased with the current owner. A small gravel pad for two caravans has been created in the most disturbed area. Assessment is based on the surrounding vegetation, which is in better condition.</p>				
Threatened species or community	No threatened flora or fauna were observed in Site A1. However, the Little Dip Spider Orchid (EPBC listed Endangered) occurs elsewhere on the property.				
Landscape context score	1.15	Vegetation Condition Score	52.08	Conservation significance score	1.1
Unit biodiversity Score	65.88	Area (ha)	0.1949	Total biodiversity Score	12.84

Vegetation Association	Vegetation Association Two: Site A2 - Coast Beard-heath (<i>Leucopogon parviflorus</i>) and Coastal Wattle (<i>Acacia longifolia</i> ssp. <i>sophorae</i>) Shrubland.
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Figure 10. Representative photograph of Site A2, looking to the east. GPS 397842 5869240.

General description	The dominant native species on Site A1 are Coast Beard-heath (<i>Leucopogon parviflorus</i>), Coastal Wattle (<i>Acacia longifolia</i> ssp. <i>sophorae</i>), Coast Daisy-bush (<i>Olearia axillaris</i>), and Muntries (<i>Kunzea pomifera</i>). Dominant exotic species included Hare's Tail Grass (<i>Lagurus ovatus</i>), and Ribwort (<i>Plantago lanceolata</i>). Overall vegetation condition was moderate.
Threatened species or community	No threatened flora or fauna were observed on Site A2.

Landscape context score	1.15	Vegetation Condition Score	43.40	Conservation significance score	1.10
Unit biodiversity Score	54.90	Area (ha)	0.2529	Total biodiversity Score	13.88

Vegetation Association	Vegetation Association Three: Site A3 - Coast Daisy-bush (<i>Olearia axillaris</i>) and Coast Bitter-bush (<i>Adriana quadripartita</i>) Low Very Open Shrubland.				
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Figure 11. Representative photograph of Site A3, looking to the west. GPS 398057 5869381.

General description	The dominant native species on Site A3 are Muntries (<i>Kunzea pomifera</i>), Coast Daisy-bush (<i>Olearia axillaris</i>), Coast Bitter-bush (<i>Adriana quadripartita</i>), Coast Beard-heath (<i>Leucopogon parviflorus</i>) and Thyme Riceflower (<i>Pimelea serpyllifolia</i> ssp. <i>serpyllifolia</i>). Dominant exotic species included Ribwort (<i>Plantago lanceolata</i>) and Scabiosa (<i>Scabiosa atropurpurea</i>). Overall vegetation condition was moderate.				
Threatened species or community	No threatened flora or fauna were observed on Site A3.				
Landscape context score	1.15	Vegetation Condition Score	31.43	Conservation significance score	1.10
Unit biodiversity Score	39.76	Area (ha)	0.4327	Total biodiversity Score	17.21

Site map showing areas of proposed impact



Figure 12. Site Map delineating vegetation proposed for clearance. **Note:** A formal land survey has determined the Heritage Agreement boundary, as represented on NatureMaps, to be incorrect and the proposed caretaker's cottage lies outside the Heritage Agreement (Figure 7). The apparent open, less vegetated areas south of the Site A3 are where old dump sites were located and asbestos was removed and have since been revegetated (Figure 4). The NatureMaps image uses 2013 imagery giving the suggestion areas are more open than they are.

4.2 Threatened Species assessment

Species observed on site, or recorded within 5km (50km 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
Fauna						
<i>Neophema chrysogaster</i> (Orange-bellied Parrot)	CR	E	2, 3, 5	2002	Coastal and sub-coastal habitat, preferring saltmarshes, littoral heathlands and low scrubland and grassy areas.	possible – sites provide marginal habitat.
<i>Neophema chrysostoma</i> (Blue-winged Parrot)		V	2, 3	2005	Coastal, sub-coastal and inland areas,	Likely – recorded within 5km within

					favouring grassy habitats.	past 15 years. Site contains suitable habitat.
<i>Dasyornis broadbenti</i> <i>Broadbent</i> (Rufous Bristlebird)		R	2, 3, 6	2018	Dense shrubland usually with a high diversity of plant species.	Highly likely – recently recorded nearby and suitable habitat is present.
<i>Stagonopleura bella interposita</i> (Beautiful Firetail)		R	3, 6	2019	Swampy grass areas in coastal dry forest, shrubby heath, tea tree scrub close to water.	Likely – recently recorded nearby and suitable habitat is present.
Flora						
<i>Caladenia richardsiorum</i> (Little Dip Spider orchid)	EN	E	2, 3	2018	Coastal vegetation of the South East	Unlikely – found nearby on the property during assessment, but not found on sites despite targeted orchid survey during peak flowering period.
<i>Scaevola calendulacea</i> (Dune Fanflower)		V	3	1996	Coastal cliffs and dunes	Unlikely – suitable habitat and recorded within 5km, but not observed during surveys.
<i>Leptinella reptans</i> (Creeping Cotula)		R	3	1997	Moist to permanently wet soil of coastal areas. Tolerates saline to brackish conditions.	Unlikely. Recorded within 5km, but no suitable habitat present.
<i>Colobanthus apetalus</i> (Coast Colobanth)		V	2, 3	2011	Protected coastal dunes and swales.	Unlikely, recently recorded within 5km, but unsuitable habitat is present.
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	<p>Recorded within the previous 20 years, the area falls inside the known distribution of the species, but the area provides limited habitat or feeding resources for the species.</p> <p>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.</p>
Unlikely	<p>Recorded within the previous 20 years, but the area provides no habitat or feeding resources for the species, including perching, roosting or nesting opportunities, corridor for movement or shelter.</p> <p>Recorded within 20 -40 years; however, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the area.</p> <p>No records despite adequate survey effort.</p>

4.3 Cumulative impact

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

Direct Impacts

This clearance application is to permanently remove 0.8805 hectares of native vegetation;

- 0.1949 hectares of Coast Beard-heath (*Leucopogon parviflorus*) and Coast Daisy-bush (*Olearia axillaris*) Shrubland;
- 0.2529 hectares of Coast Beard-heath (*Leucopogon parviflorus*) +/- *Acacia longifolia* ssp. *sophorae* (Coastal Wattle) Shrubland; and
- 0.4327 hectares of Coast Daisy-bush (*Olearia axillaris*) and Coast Bitter-bush (*Adriana quadripartita*) Low Very Open Shrubland.

This includes clearance for the caretaker's cottage, clearance to meet CFS requirements, including vehicle access along an existing track. The track is required to be six metres wide and provide all weather access, plus two metres either side of the track where vegetation is required to be kept below ten centimetres height. Utilities and sewerage requirements will be contained within the 0.8805-hectare clearance. Outflow from a Biocycle unit will go into an area that has been extensively revegetated by the owner and covers part of an area previously bulldozed by the former owner.

Indirect Impacts

No additional indirect impacts are envisioned. The caretaker's cottage will be constructed offsite, including plumbing and electrical requirements. During installation all vehicle access will remain strictly within the proposed clearance envelope. Minimal waste will be created onsite due to offsite construction, but any waste created will be removed from the site upon completion of the installation.

Cumulative Impacts

Cumulative impacts are not expected to occur. Dust may increase during construction, but will cease once construction is finalised. Once construction is finalised, the clearance envelope will be planted with local native species wherever possible, ensuring CFS required plant densities and heights are maintained. No exotic garden plants will be introduced that could potentially escape into the surrounding vegetation and cause degradation of the habitat.

The proposed SEB includes 6.251 hectares of vegetation on the property. Weed control is an important component of the SEB Management Plan. Over time, vegetation condition is expected to improve in the surrounding SEB area.

4.4 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize impacts on

biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

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

The caretaker's cottage site was chosen to avoid vegetation clearance as much as possible. The owner has chosen a site previously damaged by years of motorbike access from the nearby beach, which had degraded the native vegetation and encouraged weed growth. The site avoids additional vegetation removal required for sand dune stabilisation works at a prior site. The proposed site is located over rock with a shallow sandy soil. The cottage has been designed to be built using piers to further avoid damage to native vegetation. (Design plans are included in the Appendices.)

An earlier preferred access track to the caretaker's cottage has been disregarded and closed because too much additional high quality native vegetation would need to be removed to meet CFS requirements. The current proposed access track uses an alternative, pre-existing vehicle track, where much of the native vegetation is already very low and dominated by Muntries (*Kunzea pomifera*).

Alternative sites were considered, but deemed inappropriate due to;

- High potential for asbestos occurring in the soil;
- Additional clearance required to stabilise an eroding sand dune; and/or
- Reduced ability to monitor and prevent future vegetation damage by inappropriate actions of third parties.

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

The owner has opted for a small modest, modular caretaker's cottage consisting of three elevated pods joined together (51m²) and with decking covering an area of 128m². Rainwater tanks and solar electricity transfer plant will be located under the elevated cottage to further minimise the area of vegetation clearance. The building will utilise pier footings requiring less impact on the surrounding area than alternative methods. Construction will occur offsite, including plumbing and electrical requirements. The cottage will be installed on site resulting in minimal waste and debris production.

The proposed site is located between two existing vehicle tracks on the property minimising the need to establish a new track to the cottage.

During installation all vehicles and machinery will remain within the proposed clearance envelope. Vehicles and machinery will not be permitted to enter or impact any other areas of native vegetation

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

The proposed vegetation clearance is the minimum required to build the caretaker's cottage and upgrade the access track to meet CFS requirements. After construction has been completed, rehabilitation of the buffer zones (20m around the cottage and 2m either side of the access track) will occur by encouraging the natural regeneration of low growing (less than 10cm in height) native species such as Muntries (*Kunzea pomifera*) and native herbs.

Additional low growing local provenance species will be planted to hasten rehabilitation and prevent establishment of weeds. The owner has already undertaken extensive revegetation (7580 plants) and weed control activities throughout the property and will continue to rehabilitate the track edges (2m each side of the track) encouraging native plants less than 10cm height in this zone. Much of the access track already contains low growing native plants dominated by Muntries (*Kunzea pomifera*), which meet CFS requirements.

In addition, the current regular weed control program will be expanded to ensure weeds are removed and no new weeds become established.

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

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

The owner proposes a 6.251 hectare on-ground SEB over part of the remaining native vegetation on the property.

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

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

Principle of clearance	Considerations												
Principle 1a - it comprises a high level of diversity of plant species	<u>Relevant information</u> Number of plants species recorded <table><thead><tr><th></th><th>Native Species</th><th>Introduced Species</th></tr></thead><tbody><tr><td>Site A1</td><td>21</td><td>4</td></tr><tr><td>Site A2</td><td>14</td><td>3</td></tr><tr><td>Site A3</td><td>9</td><td>3</td></tr></tbody></table> Bushland Plant Diversity Score Site A1 – 24 Site A2 – 21 Site A3 - 15		Native Species	Introduced Species	Site A1	21	4	Site A2	14	3	Site A3	9	3
		Native Species	Introduced Species										
	Site A1	21	4										
	Site A2	14	3										
Site A3	9	3											
<u>Assessment against the principles</u> Seriously at Variance Site A1 - Coast Beard-heath (<i>Leucopogon parviflorus</i>) and Coast Daisy-bush (<i>Olearia axillaris</i>) Shrubland. Site A2 - Coast Beard-heath (<i>Leucopogon parviflorus</i>) +/- <i>Acacia longifolia</i> ssp. <i>sophorae</i> (Coastal Wattle) Shrubland. At Variance Site A3 - Coast Daisy-bush (<i>Olearia axillaris</i>) and Coast Bitter-bush (<i>Adriana quadripartita</i>) Low Very Open Shrubland.													
<u>Moderating factors that may be considered by the NVC</u> The proposed vegetation clearance represents a very small area compared to the amount of native vegetation within a 5km radius. Native vegetation covers 26% of the surrounding area (5km radius), which equates to 2, 041ha. The proposed vegetation clearance of 0.8805ha, represents 0.043% of native vegetation within the local vicinity. Therefore, it is recommended to moderate Sites A1 and A2 to At Variance and Site A3 to Not at Variance .													
Principle 1b - significance	<u>Relevant information</u>												

as a habitat for wildlife	<p>No threatened species nor their signs were observed during the assessments. However, database searches identified six threatened species that could potentially use Sites A1, A2 and A3 for habitat, these are;</p> <ul style="list-style-type: none">• Orange- bellied Parrot (Aus CR, State E);• Blue-winged Parrot (State V);• Beautiful Firetail (State R);• Rufous Bristlebird (State R);• Brush Bronzewing (SE U); and• Striated Fieldwren (SE U). <table><tr><td></td><td>Threatened Fauna Score</td><td>Unit Biodiversity Score</td></tr><tr><td>Site A1</td><td>0.1</td><td>65.88</td></tr><tr><td>Site A2</td><td>0.1</td><td>54.90</td></tr><tr><td>Site A3</td><td>0.1</td><td>39.76</td></tr></table>		Threatened Fauna Score	Unit Biodiversity Score	Site A1	0.1	65.88	Site A2	0.1	54.90	Site A3	0.1	39.76
	Threatened Fauna Score	Unit Biodiversity Score											
Site A1	0.1	65.88											
Site A2	0.1	54.90											
Site A3	0.1	39.76											
	<p><u>Assessment against the principles</u> Seriously at Variance Site A1 - Coast Beard-heath (<i>Leucopogon parviflorus</i>) and Coast Daisy-bush (<i>Olearia axillaris</i>) Shrubland. Site A2 - Coast Beard-heath (<i>Leucopogon parviflorus</i>) +/- <i>Acacia longifolia</i> ssp. <i>sophorae</i> (Coastal Wattle) Shrubland. Site A3 - Coast Daisy-bush (<i>Olearia axillaris</i>) and Coast Bitter-bush (<i>Adriana quadripartita</i>) Low Very Open Shrubland.</p>												
	<p><u>Moderating factors that may be considered by the NVC</u> The proposed clearance area is 0.8805 hectares of native vegetation and occurs on a property which is regenerating after many years of grazing by domestic animals. Similarly, vegetation was regularly damaged by motorbikes and four-wheel drive vehicles accessing the property from the nearby beach. Hard refuse was dumped on the property for many years. Extensive revegetation, weed control and rubbish removal by the current owner has improved vegetation quality throughout the property. While the general area is known to provide habitat for the EPBC listed Orange-bellied parrot, the habitat available is marginal for this species. It is unlikely this species would be impacted by the proposed clearance of 0.8805 hectares of native vegetation. Similarly, the five other threatened species listed are also unlikely to be impacted. Restoration work throughout the property and future surveillance and intervention of errant off-road vehicles is likely to improve potential habitat quality for these species through the greater Cape Rabelais area. While the proposed onground SEB is sufficient to meet the required SEB points, the entire remaining area of the property will be managed to the same standard, effectively doubling the area under conservation management. Sites A1, A2 and A3 are considered to be non-essential habitat for the listed threatened species, therefore it is recommended to moderate the sites to At Variance.</p>												
Principle 1c - plants of a rare, vulnerable or endangered species	<p><u>Relevant information</u> No threatened flora were recorded for sites A1, A2 or A3. Database searches identified three threatened plants that may be present, but not detected;</p> <ul style="list-style-type: none">• Little Dip Spider-orchid (<i>Caladenia richardsiorum</i>) (Aus EN);• Coast Colobanth (<i>Colobanthus apetalus</i>) (State V); and• Dune Fanflower (<i>Scaevola calendulacea</i>) (State V). <p>A population of Little Dip Spider-orchid occurs elsewhere on the property and has increased in number since the owner closed the track where they occur. Even though the proposed clearance</p>												

	<p>area was searched thoroughly for Little Dip Spider-orchid during the peak flowering period, 6 October 2020, none were observed.</p> <p>Threatened Flora Score(s) Site A1 – 0.00 Site A2 – 0.00 Site A3 – 0.00</p> <p><u>Assessment against the principles</u></p> <p>Not at Variance</p> <p><u>Moderating factors that may be considered by the NVC</u> Not Applicable</p>
<p>Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered:</p>	<p><u>Relevant information</u> No EPBC listed or State threatened ecosystems occur on Sites A1, A2 nor A3.</p> <p>Threatened Community Score Site A1 – 1.0 Site A2 – 1.0 Site A3 – 1.0</p> <p><u>Assessment against the principles</u></p> <p>Not at Variance</p> <p><u>Moderating factors that may be considered by the NVC</u> Not Applicable</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> Sites A1 – A3 are in good to moderate condition. Site A1 is the location of past frequent motorbike damage and Sites A2 and A3 follow an existing old vehicle track through the property. All sites have been degraded over many years, but have recently improved in condition under the management of the current owner. An estimated 300 labour days have been dedicated to (hand) weed control and rubbish removal across the property. During the site assessment, regeneration was limited to three species.</p> <p>Remnancy; IBRA Association (Beachport) – 43% IBRA Subregion (Bridgewater) – 14% Within 5km radius – 26%</p> <p>Total Biodiversity Score Site A1 – 12.84 Site A2 – 13.88 Site A3 – 17.21 Total – 43.93</p> <p><u>Assessment against the principles</u></p> <p>At Variance</p>

	<p><u>Moderating factors that may be considered by the NVC</u></p> <p>The area of clearance is small at 0.8805ha and represents 0.043% of native vegetation within a 5km radius. Much of the proposed clearance is to meet CFS requirements and low growing native plants will be encouraged to regenerate. The proposed clearance is unlikely to have a significant impact on the remaining Coastal Dune Shrubland communities within the IBRA Association and Subregion.</p>
Principle 1f - it is growing in, or in association with, a wetland environment.	<p><u>Relevant information</u></p> <p>The proposed clearance area is not associated with a wetland environment. The closest wetland occurs approximately 430m east on the other side of Nora Creina Road.</p>
	<p><u>Assessment against the principles</u></p> <p>Not at Variance</p>
	<p><u>Moderating factors that may be considered by the NVC</u></p> <p>Not Applicable</p>
Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.	<p><u>Relevant information</u></p> <p>The property is being restored after many years of agricultural pursuits and being used as a general refuse dump. The current owner is committed to conservation values and has substantially improved the property's amenity values since taking ownership with extensive weed control (including roadside), revegetation and rubbish removal. Any cultural or historical values are unknown, other than that the property was used for agriculture for many years and later refuse dumping.</p> <p>The caretaker's cottage is small and will be located 420m from Nora Creina Road and obscured by vegetation and topography. The cottage will not be visible to walkers from Nora Creina Bay Council car park to Rabelais Beach due to landscape topography.</p> <p>It is believed the proposed clearance would have minimal impact on the landscape character.</p>
	N/A
	<p><u>Moderating factors that may be considered by the NVC</u></p> <p>The owner is committed to conservation values and has improved the amenity value of the property since taking ownership. Continuing this effort will likely see further improvements in future years.</p> <p>District Council of Robe granted Development Plan Consent to Development Application 822/100/14 on 31 July 2015 and due to granted extensions is still current.</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	
	Area (ha)	0.8805
	Total biodiversity Score	43.93
Seriously at variance with principle 1(b), 1(c) or 1 (d)		(b)

Risk assessment outcome	Level 4 (Level 3 if recommendations are accepted to moderate Principle 1(b) to At Variance.)
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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	1	24	1	0	0.1	65.88	0.1 949	12.84	1	0	0	13.48	\$11,825.76	\$650.42
A	2	21	1	0	0.1	54.9	0.2 529	13.88	0.8	0	0	11.66	\$10,229.98	\$562.65
A	3	15	1	0	0.1	39.76	0.4 327	17.21	0.8	0	0	14.45	\$12,677.18	\$697.25
						Total	0.8 805	43.93				39.59	\$34,732.92	\$1,910.32

Totals summary table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	43.93	39.59	\$34, 732.92	\$1, 910.32	\$36, 643.24

Economies of Scale Factor	0.5
Rainfall (mm)	665

6. Significant Environmental Benefit

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

ACHIEVING AN SEB

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

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

ON-GROUND SEB

Ownership:	Thomas Francis Egan		
Site Address:	[REDACTED], Nora Creina		
Local Government Area:	District Council of Robe	Hundred:	Waterhouse
Title ID:	CT/5435/299	Parcel ID	D24257 A2

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

The proposed SEB is located on the same property as the proposed native vegetation clearance and abuts an existing Heritage Agreement, HA177. The SEB occurs on a rising slope facing eastward. Soils vary from loam to sand. The SEB comprises one vegetation community; Coast Beard-heath (*Leucopogon parviflorus*) and Coastal Wattle (*Acacia longifolia* ssp. *sophorae*) Shrubland in moderate to good condition. The SEB fits the classification of a Shrubland, but there is variation in shrub height, based on historical disturbance, which resulted in much of the shrub layer being cleared. Shrubs have since regenerated across most of this area with a height of 1 – 1.25m. In less disturbed areas, shrubs generally reach two metres in height. The owner has also revegetated areas after large amounts of rubbish were removed.

The surrounding landscape is comprised of a mixture of native vegetation, wetlands, beach, dryland pasture and housing. Heritage Agreement HA177 adjoins the western boundary of the proposed SEB. Little Dip Conservation Park is located four kilometres to the north and Lake St Clair Conservation Park is located 5.5km to the north east. Nora Creina village is located approximately 700 metres to the south east.

Information relating to the relevant land

The property was purchased by the current owner in 2014. Prior to this, the property was used for agricultural pursuits for many years and later limited to grazing by various species of domesticated animals. Periodically, patches of native vegetation were damaged or removed by the previous owner's use of agricultural machinery, e.g., bulldozer. The previous owner established a Heritage Agreement (HA177) on the property in 1988. The proposed SEB and HA177 share a common border.

The previous owner allowed motorbikes and four-wheel drive vehicles frequent and regular access to the property, including the proposed SEB area. Hard refuse was dumped throughout the property in several locations.

The current owner has a strong conservation ethos and has revoked access to these vehicles, closed several tracks, removed large volumes of refuse and maintained an extensive weed control and revegetation program. The EPBC listed (Endangered) Little Dip Spider-orchid (*Caladenia richardsiorum*) occurs elsewhere on the property, but not currently in the proposed SEB area.

General location map:




Figure 13. Location of proposed SEB for vegetation clearance. **Note:** A formal land survey (2019) has determined the boundary of HA177, as represented on NatureMaps in this map, is incorrect (Figure 7). The proposed SEB adjoins the Heritage Agreement.



Figure 14. Location of the property showing surrounding land use.

Description of the vegetation

Vegetation Association	SEB Vegetation Association One: site A1 - Coast Beard-heath (<i>Leucopogon parviflorus</i>) and Coastal Wattle (<i>Acacia longifolia</i> ssp. <i>sophorae</i>) Shrubland				
					
Figure 15. Photo Log 1, Representative photograph of SEB Site A1, looking to the north east. GPS 398013 5869392.					
General description	The dominant native species on Site A1 are Coast Beard-heath (<i>Leucopogon parviflorus</i>), Coastal Wattle (<i>Acacia longifolia</i> ssp. <i>sophorae</i>), Bower Spinach (<i>Tetragonia implexicoma</i>) and Muntries (<i>Kunzea pomifera</i>). The dominant exotic species are Scabiosa (<i>Scabiosa atropurpurea</i>), Ribwort (<i>Plantago lanceolata</i> var. <i>lanceolata</i>) and Hare's tail Grass (<i>Lagurus ovatus</i>). Overall vegetation condition was moderate to good. Disturbance was limited to historical machinery activity. However, there are no signs of recent disturbance, except for kangaroo/wallaby grazing.				
Threatened species or community	No threatened flora or fauna were observed on the Site A1. A population of the EPBC listed (Endangered) Little Dip Spider-orchid (<i>Caladenia richardsiorum</i>) occurs approximately 300m to the south west of SEB Site A1.				
Landscape context score	1.15	Vegetation Condition Score	51.66	Conservation significance score	1.10
Gain Score	6.37	Area (ha)	6.251	SEB Points of Gain	39.81

Site map showing areas of the proposed SEB

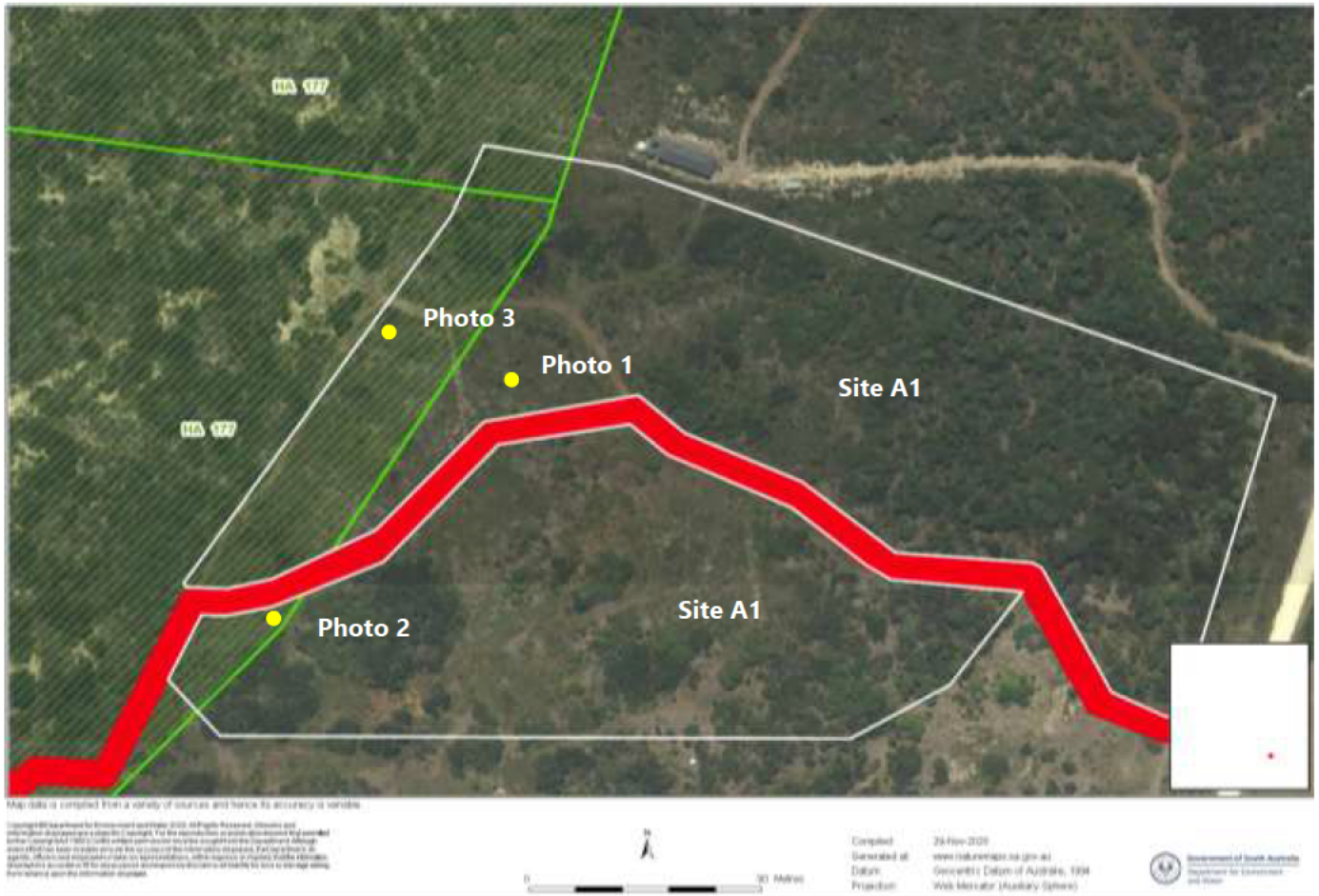


Figure 16. Site Map of SEB Site A1 with locations of photo logs. Red line is part of the vegetation clearance proposal for an access track to meet CFS requirements. **Note:** A formal land survey (2019) has determined the Heritage Agreement boundary, as represented on NatureMaps in this map, is incorrect. The proposed caretaker's cottage lies outside the Heritage Agreement (Figure 7).

Photo log



Figure 17. SEB Photo 2 regenerating Shrubland after historical machinery disturbance. GPS 397935 5869304 looking to the south west.



Figure 18. Photo Log 3 recently closed internal track, SEB Site A1 is to the left and Heritage Agreement HA177 is to the right of the track. GPS 397978 5869417 looking to the south west.

Fauna and Flora assessment

Species observed on site, or recorded within 5km (50km 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>Neophema chrysogaster</i> (Orange-bellied Parrot)	CR	E	2, 3, 5	2002	Coastal and sub-coastal habitat, preferring saltmarshes, littoral heathlands and low scrubland and grassy areas.	Possible – site provides marginal habitat, but population numbers are very low.
<i>Neophema chrysostoma</i> (Blue-winged Parrot)		V	2, 3	2005	Coastal, sub-coastal and inland areas, favouring grassy habitats.	Likely – recorded within 5km within past 15 years. Site contains suitable habitat.
<i>Dasyornis broadbenti broadbenti</i> (Rufous Bristlebird)		R	2, 3, 6	2018	Dense shrubland usually with a high diversity of plant species.	Highly likely – recently recorded nearby and suitable habitat is present.
<i>Stagonopleura bella interposita</i> (Beautiful Firetail)		R	3, 6	2019	Swampy grass areas in coastal dry forest, shrubby	Likely – recently recorded nearby

					heath, tea tree scrub close to water.	and suitable habitat is present.
Flora						
<i>Caladenia richardsiorum</i> (Little Dip Spider orchid)	EN	E	2, 3	2018	Coastal vegetation of the South East	Highly likely – found nearby on the property during assessment.
<i>Scaevola calendulacea</i> (Dune Fanflower)		V	3	1996	Coastal cliffs and dunes	Likely – suitable habitat present.
<i>Leptinella reptans</i> (Creeping Cotula)		R	3	1997	Moist to permanently wet soil of coastal areas. Tolerates saline to brackish conditions.	Possible. Recorded within 5km, but limited suitable habitat.
<i>Colobanthus apetalus</i> (Coast Colobanth)		V	2, 3	2011	Protected coastal dunes and swales.	Likely, recently recorded within 5km and suitable habitat is present.
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 provides 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.

Environmental Benefits

In the past six years, the proposed SEB area has started to naturally regenerate after many years of agricultural activity, including grazing by various domesticated animals, and periodic misuse of heavy machinery. The area will benefit from receiving formal protection via a Management Agreement and associated SEB Management Plan. Management of recent revegetation will further enhance the environmental benefits of the proposed SEB area.

The site is currently threatened by environmental weeds; African Boxthorn (*Lycium ferocissimum*), Scabiosa (*Scabiosa atropurpurea*), Ribwort (*Plantago lanceolata* var. *lanceolata*) and False Caper (*Euphorbia terracina*). Targeted weed

management will further improve regeneration and increase vegetation condition. Habitat for threatened species will be improved, building on existing habitat in the adjoining Heritage Agreement HA177.

Summary Table

Block	Site	Vegetation Association	UBS	Gain Score	Area (ha)	SEB Point of Gain
A	1	Coast Beard-heath (<i>Leucopogon parviflorus</i>) and Coastal Wattle (<i>Acacia longifolia</i> ssp. <i>sophorae</i>) Shrubland	65.36	6.37	6.251	39.81
Total					6.251	39.81

SEB Management Plan

The Management Plan for the proposed SEB area is attached as a separate PDF file.

7. Appendices

Appendix 1. Bushland Assessment Scoresheets associated with the proposed clearance and SEB Area (to be submitted in Excel format)

Appendix 2. SEB Management Plan (attached PDF file)

Appendix 3. Caretaker's Cottage design plans.

Appendix 4. Land Survey