Native Vegetation Clearance

Radford Property “Bondville”, Short

Data Report

Clearance under Section 28 of the Native Vegetation Act 1991

January 2023

Prepared by Peter Tucker

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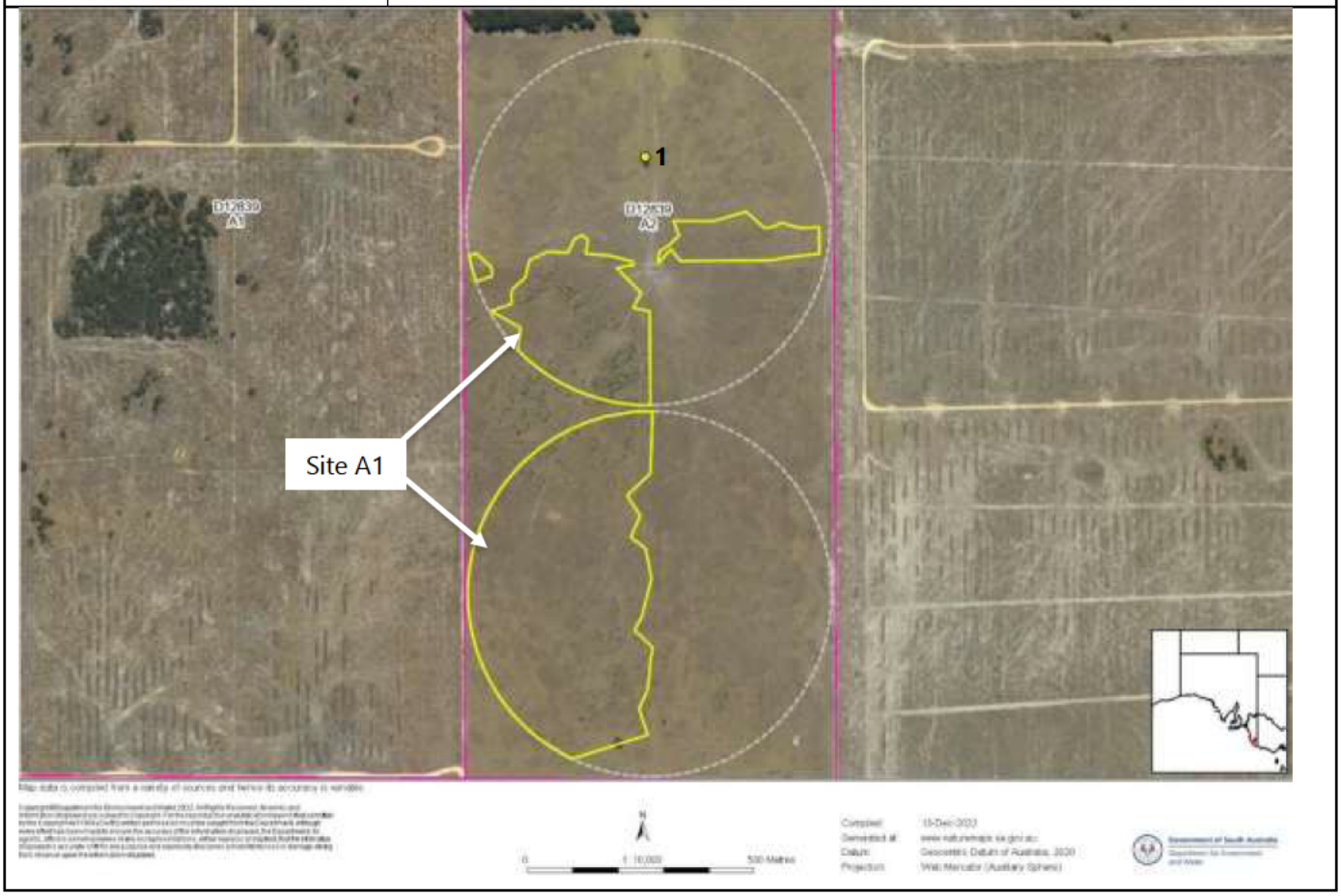
1. Application information

Application Details

Applicant:	[redacted]		
Key contact:	[redacted]		
Landowner:	Applicant		
Site Address:	253 Nelsons Rd, Short		
Local Government Area:	Wattle Range Council	Hundred:	Short
Title ID:	CT/5472/177	Parcel ID	A2 D12839

Summary of proposed clearance

Purpose of clearance	Clearance is required for the installation of two 32 hectare pivot irrigators to grow improved pasture for hay production.
Description of the vegetation under application	22.02 ha of Sand-heath Yacca (*Xanthorrhoea caespitosa*) Very Open Shrubland in very poor condition and 1 Pink Gum (*Eucalyptus fasciculosa*) tree in good condition.
Total proposed clearance - area (ha) and number of trees	22.02 ha and 1 scattered tree are proposed to be cleared.
Level of clearance	Level 4



Seriously at variance with the Principles of clearance?	Site A1 and Tree 1 – Seriously at Variance with Principle 1 (b).
Substantially intact	No sites are considered substantially intact.
Mitigation hierarchy	**Avoidance** – The owner is unable to locate pivot irrigators elsewhere on the property, due to small property size (129ha) and narrow property width. Other properties owned in the Limestone Coast are unsuitable due to too many trees present, unsuitable poorly draining soil or overhead powerlines. **Minimisation** – The proposed pivot irrigator location is the only location available on the property. It is not possible to minimise vegetation clearance further. **Rehabilitation or restoration** – There will be no ability to rehabilitate or restore the area after vegetation clearance. **Offset** – It is proposed to offset the vegetation clearance with a 32.880ha on ground SEB of State Vulnerable Rough-barked Manna Gum Woodland located on a nearby property.
SEB Offset proposal	**32.880** ha on-ground

2. Purpose of clearance

2.1 Description

Vegetation clearance is required for the installation of two 32 hectare pivot irrigator to grow improved pasture for hay production.

2.2 Background

The property was purchased on 4 December 2020. Prior to purchase it was used for set stock grazing of cattle and sheep over several decades. The property also contained 25 hectares of flood irrigation. The owner wishes to incorporate this property in the farm business which utilises a rotational cattle grazing regime and this property will be used to grow hay under irrigation for use across the business.

The area of flood irrigation area is being returned to conventional dryland pasture. The water licence from the flood irrigation has been combined with another to provide sufficient water to operate two pivot irrigators, each 32 hectares in size.

Until recently, the property was surrounded on all sides by Tasmanian Blue Gum (*Eucalyptus globulus*) plantations. Most of these have since been harvested leaving on plantation to the north. The felled areas are undergoing transition to dryland and irrigated pasture. These adjoin the western, southern and eastern boundaries of this property.

No further vegetation clearance or irrigation is envisioned for this property.

Surrounding land use is dominated by forestry plus a mixture of dryland pasture, irrigation, native vegetation and wetlands. Baker Range Main Drain occurs 2.5km to the west. Calectasia Conservation Park is located 2.7km to the south west and Penola Conservation Park is 9.5km to the east. Heritage Agreement HA1195 is 3.2km to the south west. Penola township is 23km to the east.

2.3 General location map

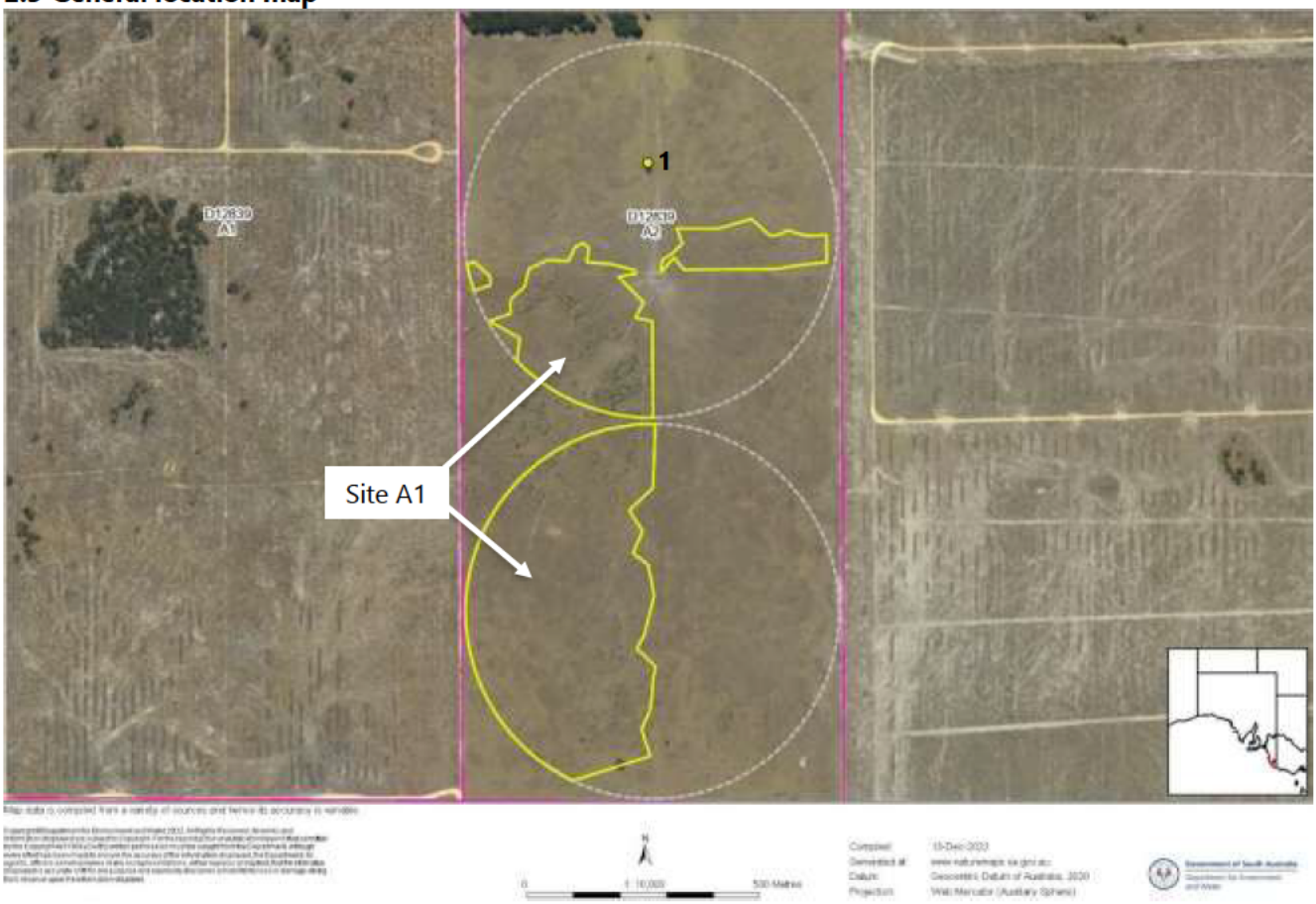


Figure 1. Site map of vegetation included in this application, Site A1 and Tree 1.

Figure 2. Location map of surrounding landscape. Yellow polygons define proposed vegetation clearance.

2.4 Details of the proposal

In recent years, the owner has observed clearance of Sand-heath Yacca (*Xanthorrhoea caespitosa*) paddocks in the district and was confident a vegetation clearance process had not been followed. Consequently, the owner didn't realise all native plants come under the protection of the Native Vegetation Act. After discussions with an Accredited Consultant in July 2022 on a separate matter, the owner became aware vegetation clearance approval would be required for the Bondville property. A pivot irrigator had already been purchased and installed, but had not been operated because the property was in the process of undergoing remediation for excessively acidic soil by heavy application of gypsum. The property had also been completely destocked, remaining so until soil pH returns to a desired level for pasture production, particularly Clovers (*Trifolium* sp.).

The owner planned to install two 32 hectare pivot irrigators, but at the time of the first vegetation assessment had a water licence to operate one pivot irrigator. Subsequently, a second water license has been added to the property enabling a second pivot irrigator to operate.

While one pivot irrigator is installed it has not operated. The owner is keen to go through the correct process for vegetation clearance. Consequently, the owner has not and will not undertake measures to operate the pivot irrigator until the vegetation clearance application has gone through the appropriate processes.

The property 'Bondville' is one of three properties operated by the owner in the Limestone Coast and will be used for hay production to be use across all properties. When required, the pivot irrigators will be included in the business's overall rotational grazing system. The pivot irrigators are required to improve the long term financial stability of the business and provide an economic buffer through drier years.

Bondville is relatively small with a total area of 129ha. The two pivot irrigators will span the width of the property, limiting where they can be placed. Reducing the size of the pivot irrigators will have limited impact on reducing vegetation clearance due to most of the Site A1 area containing very sparse Sand-heath Yacca, but would reduce the viability of the property.

An on ground SEB located 5.4km to the south west is proposed to meet SEB obligations and is comprised of 32.880 ha of Rough-barked Manna Gum Woodland, listed as a Vulnerable community in the DEH Provisional List of Threatened Ecosystems. The proposed SEB provides 271.88 SEB points with this clearance application needing 50.61 SEB points to meet clearance obligations.

Subject to this vegetation clearance application and approval of the on ground SEB, a second vegetation clearance application may be applied for on a nearby property, Woolaway, which has a similar occurrence of Sand-heath Yacca. This area has not been assessed. Woolaway is the same property where the proposed on ground SEB this located.

2.5 Approvals <u>required</u> *or* <u>obtained</u>

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.

A second nearby property may be considered for a similar vegetation clearance application for Sand-heath Yacca Very Open Shrubland. It is envisioned part of the surplus SEB points achieved with the proposed on ground SEB for this application will be used for the second application.

Water Resources Act 1997

Water license No. 12423 is applicable to this property and held in the names of Nicholas Gary Radford and The Nicholas Gary Radford Family Trust.

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.

3. Method

3.1 Flora assessment

Prior to 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 over two days 21 September 2022 (pivot 1) and 21 October 2022 (pivot 2) using the methods outlined in the Native Vegetation Council Scattered Tree Assessment Manual (July 2020). The survey required 2.5 hrs to complete.

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 site was used for the desktop searches. In addition, a search of birds likely to use vegetation within the Callendale 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 21 September 2022 and 21 October 2022, which included walking the site searching for the presence of potential threatened species or evidence of their recent presence, such as scats and tracks. The survey was conducted concurrently with the flora survey.

All fauna captured in the desktop fauna assessments that could potentially use the site for habitat have been included in the NVC Scattered Tree Scoresheet (attached). Fauna species unlikely to use vegetation for habitat were excluded as per agreement with the Native Vegetation Management Branch (email 21/01/2023).

4. Assessment Outcomes

4.1 Vegetation Assessment

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

The site is located within a flat landscape and contains a sandy soil over clay. The property, until recently, was surrounded by Tasmanian Blue Gum (*Eucalyptus globulus*) plantations on all sides. Most of these have since been felled with some being converted back to pasture.

Vegetation proposed to be cleared contains 22.02ha of degraded Very Open Shrubland in very poor condition and one paddock tree in good condition;

- 22.02ha Sand-heath Yacca (*Xanthorrhoea caespitosa*) Very Open Shrubland; and
- 1 Pink Gum (*Eucalyptus fasciculosa*).

Vegetation occurs in the Callendale IBRA Association, which has 14% remaining native vegetation. There is 10% remnancy within a 5km radius of the proposed vegetation clearance. Calectasia Conservation Park is located 2.8km to the south west and Heritage Agreement HA1195 is 3km to the south west. Baker Range Main Drain is located 2.5km to the west.

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

Vegetation Association A1	Sand-heath Yacca (*Xanthorrhoea caespitosa*) Very Open Shrubland over Onion-grass (**Romulea* sp.), Sorrel (**Rumex acetosella*) and Hare's Tail Grass (**Lagurus ovatus*).

Figure 3 Site A1 looking eastward from within the area of the southern pivot irrigator, GPS 462451 5867817.

Figure 4. Site A1 looking southward from the northern pivot irrigator location to the southern pivot location, GPS 462582 5868179, where Sand-heath Yacca is most dense.

General description	The dominant native species is Sand-heath Yacca which is sparse across the site. Density is most frequently 1 – 5%, but approaches 10 – 15% cover in one patch at the southern end of the proposed northern pivot irrigator. Two other native species were recorded for the site; Pale Rush (*Juncus pallidus*) and Finger Rush (*Juncus subsecundus*). These rushes were sparsely scattered across the site. The ground layer was dominated by pasture weeds with pasture species present, but less common. Commonly occurring exotic species included Onion-grass, Sorrel, Hare's Tail Grass, Smooth Cat's Ear (*Hypochaeris glabra*), Great Brome (*Bromus diandrus*), Phalaris (*Phalaris aquatica*) and White Clover (*Trifolium repens*). Overall vegetation condition is very poor. Disturbance was not observed as the property has been rested with no stock since purchase. However, kangaroos and wallabies and/or deer are likely to graze the area considering Phalaris plants were low.				
Threatened species or community	No threatened vegetation community, flora nor fauna (EPBC Act 1999, NPW Act 1972) were observed during the assessment.				
Landscape context score	1.11	Vegetation Condition Score	1.68	Conservation significance score	1.06
Unit biodiversity Score	1.97	Area (ha)	22.02	Total biodiversity Score	43.45

Tree ID – Tree 1 *Eucalyptus fasciculosa* Height (m) – 10.0 Hollows – zero Diameter (cm) – 74.2 Canopy dieback (%) – 15% Total Biodiversity Score – 4.75	 *Figure 5. Tree 1 looking to the south west, GPS 462717 5868467.*
Tree 1 is a small tree in good condition with no hollows present. Tree 1 may provide habitat for threatened species listed in Section 4.2.	

Site map showing areas of proposed impact

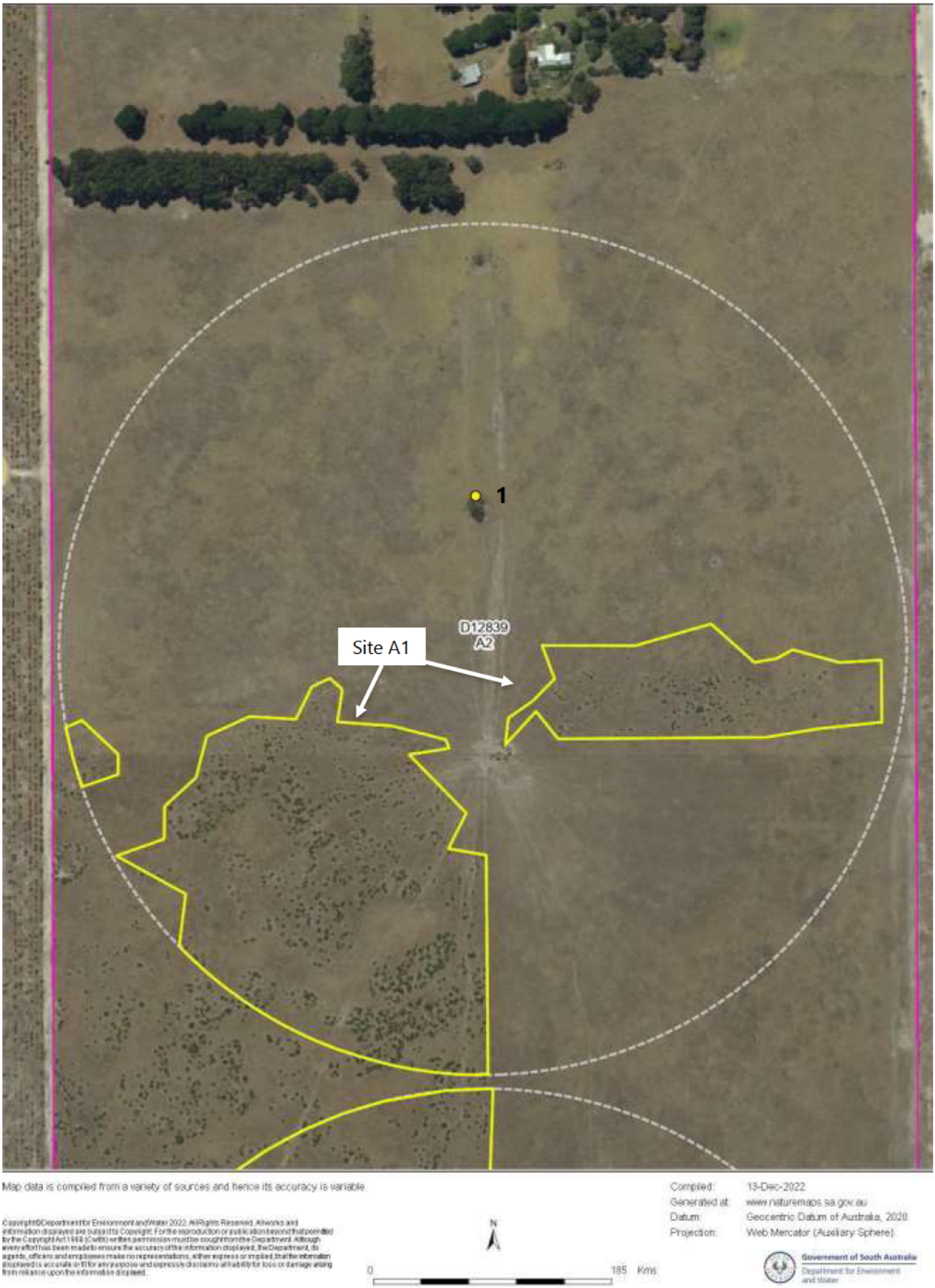


Figure 6. Site Impact Map A highlighting Tree 1 and vegetation contained within the area of the proposed northern pivot irrigator.

Figure 7. Site Impact Map B vegetation contained within the area of the proposed southern pivot irrigator. Tree at the southern edge of Site A1 was not present at the time of vegetation assessment.

4.2 Threatened Species assessment

Species observed on site, or recorded within 5km 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
Blue-winged Parrot (*Neophema chrysostoma*)	V		6		Coastal, sub-coastal and inland areas, favouring grassy habitats. And altered environments such as airfields, golf-courses and paddocks.	Possible – no recent records. Suitable habitat present.
Flame Robin (*Petroica phoenicea*)	V		2, 3	2010	Eucalypt woodland, preferring open habitat.	Likely – suitable habitat present.
Scarlet Robin (*Petroica boodang*)	R		2	2006	Forests and woodlands with open understorey, can be found in grassland, farmland and urban areas.	Likely – suitable habitat 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 provides 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 Presence of Substantially Intact Vegetation

If the vegetation is considered to represent a substantially intact stratum, the NVC cannot approve clearance, unless for the purpose of harvesting native vegetation (section 27(3)).

Provide information on whether the native vegetation constitutes a continuous intact stratum.
The shrub layer of Site A1 does not meet the continuous intact stratum criteria for the following reasons;

- It covers less than 5% of the assessed area, which is less than the expected density for a similar pre-European community in the area;
- It contains only one species, Sand-heath Yacca. Pre-European vegetation would have included several shrubs species including Wattles (*Acacia* sp.), Tea-trees (*Melaleuca* sp.), Hakea (*Hakea* sp.) and Macklin's Sheoak (*Allocasuarina mackliniana*); and
- It occurs within an area that has been grazed for several decades and is not contiguous with any other native vegetation.

There are no introduced perennial species in the shrub layer.

The tree layer is missing, except for Tree 1, and the ground layer is comprised of exotic species, except for two sedges which are very sparse.

Provide information on whether the native vegetation has been subject to degradation within the past 20 years.

Site A1 and Tree 1 have been subject to degradation through on going grazing by domestic stock. While no stock have been on the property since December 2020 it is expected feral deer regularly graze the area in combination with kangaroos and wallabies. In line with agricultural practices, soil remediation has been undertaken with heavy application of gypsum to ameliorate acidic soils.

Provide a key finding on whether any or all of the area of impact could be considered as substantially intact.

It is unlikely the area could be considered substantially intact due to reduced species diversity, reduced density of the stratum and ongoing agricultural practices including grazing by domestic stock and changed abiotic factors by application of agricultural products such as gypsum.

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

If the clearance is seriously at variance with one or more of the principles, the NVC cannot approve clearance, however, the Act provides the NVC with a degree of discretion in certain situations

Principle of Clearance	Considerations
Principle 1a - it comprises a high level of diversity of plant species	Relevant information The number of plant species recorded for each vegetation association Native Species Introduced Species Site A1 3 14 Bushland Plant Diversity Score Site A1 – 2
	Assessment against the principles Site A1 - Not at Variance Tree 1 – Not Applicable
	Moderating factors that may be considered by the NVC Not Applicable
Principle 1b - significance as	Relevant information Three threatened species were identified by the fauna assessment including; • Blue-winged Parrot (State V);

a habitat for wildlife	• Flame Robin (State V); and • Scarlet Robin (State R). No threatened fauna were observed during the site assessment. Overall, Site A1 consisted of sparsely scattered native plants, total three species. Trees 1 contained no hollows. It is unlikely the vegetation would support a high diversity of wildlife. It is unlikely the vegetation would provide a corridor or refuge for wildlife. Adjoining properties consisted of recently felled Tasmanian Blue Gum plantations, which are being returned to pasture. Fauna Habitat Score: Site A1 0.06; Tree 1 1.4 Biodiversity Score: Site A1 1.97; Tree 1 4.75
	<u>Assessment against the principles</u> **Seriously at Variance** Site A1 – Sand-heath Yacca Very Open Shrubland; and Tree 1.
	<u>Moderating factors that may be considered by the NVC</u> The removal of Site A1 and Tree 1 are unlikely to cause a *Significant Impact* on the nominated threatened species. The proposed vegetation is considered to be *Non-essential Habitat* for the listed threatened species.
Principle 1c - plants of a rare, vulnerable or endangered species	<u>Relevant information</u> Tree 1 is a threatened species, being; • Pink Gum (*Eucalyptus fasciculosa*) (SA: R). No threatened flora were recorded on Site A1. Threatened plants that may be present on Site A1, but undetectable include; • Elegant Spider Orchid (*Caladenia formosa*) (AUS VU, State V); and • Late Spider Orchid (*Caladenia necrophylla*) (State V)*;* Primarily, the property consists of pasture and has been grazed for several decades and therefore unlikely these plants would be present. Threatened Flora Score Site A1 – 0.00 Tree 1 – 0.3
	<u>Assessment against the principles</u> **At Variance**
	<u>Moderating factors that may be considered by the NVC</u> The removal of one Pink Gum tree (Tree 1) is unlikely to cause a *Significant Impact* on the species. A proposed *Significant Benefit* is comprised a provisional State listed (Vulnerable) vegetation community located 5.8km to the south west of Tree 1 and provides more than five times the required SEB points nominated for the proposed vegetation clearance in this data report.

***Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered*:**	Relevant information No EPBC listed or State threatened ecosystems occur on Site A1. Threatened Community Score Site A1 – 1.0
	Assessment against the principles Not at Variance
	Moderating factors that may be considered by the NVC Not Applicable
Principle 1e - it is significant as a remnant of vegetation in an area which has been extensively cleared.	Relevant information Remnancy; IBRA Association (Callendale) – 14% IBRA Subregion (Lucindale) – 13% Total Biodiversity Score Tree 1 and Site A1 inclusive – 48.20
	Assessment against the principles **At Variance**
	Moderating factors that may be considered by the NVC
Principle 1f - it is growing in, or in association with, a wetland environment.	Relevant information The proposed clearance area is not associated with a wetland environment. The closest recorded wetland is Springdale Wetland (S0110176), which occurs 1.7km to the south west. NatureMaps has no data for the Environmental Value Assessment of this wetland.
	Assessment against the principles Not at Variance
	Moderating factors that may be considered by the NVC Not Applicable
Principle 1g - it contributes significantly to the amenity of the area in which it is growing or is situated.	Relevant information The proposed clearance is located off Nelsons Rd, Short. It is an unsealed no through road used by local traffic only, primarily to access Tasmanian Blue Gum plantations. Nelsons Road is not near a recognised tourist route and vegetation is not visible from Nelsons Road.
	N/A
	Moderating factors that may be considered by the NVC

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.

4.5 Address the Mitigation Hierarchy

The Native Vegetation Council will consider if the applicant has avoided and minimized the clearance of native vegetation as much as practically possible.

a) Avoidance

It is not possible to avoid vegetation clearance on this property. The property is relatively small at 129ha with no other area suitable to locate pivot irrigators due to the property's narrow width. Other properties owned in the area are unsuitable for pivot irrigators due to too many trees present, unsuitable poorly draining soil, overhead powerlines, already contain a pivot irrigator, or have a pivot irrigator under vegetation clearance consideration (NVCCA02688).

b) Minimization

The proposed pivot irrigator location is the only one available on the property. It is not possible to minimise vegetation clearance further.

c) Rehabilitation or restoration

There will be no ability to rehabilitate or restore the area after vegetation clearance.

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.

It is proposed to offset the vegetation clearance with a 32.880ha on ground SEB of State Vulnerable Rough-barked Manna Gum Woodland located on a nearby property. The SEB has been assessed and generates 274 SEB points.

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.

4.6 Risk Assessment

Determine the level of risk associated with the application

Total clearance	No. of trees	1
	Area (ha)	20.02
	Total biodiversity Score	48.20
Seriously at variance with principle 1(b), 1(c) or 1 (d)		1 b)
Risk assessment outcome		Level 4

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	2	1	0	0.06	2.05	22.02	43.45	1			45.62	$38, 562.78	$2,120.95
						Total	**22.02**	**43.45**				**45.62**	**$38, 562.78**	**$2,120.95**

Scattered trees Summary table

Tree or Cluster ID	Number of trees	Fauna Habitat score	Threatened flora score	Biodiversity score	Loss factor	SEB Points required	SEB Payment	Admin Fee
1	1	1.4	0.3	4.75	1	4.99	$4,215.74	$231.87
Total	**0**			**4.75**		**4.99**	**$4,215.74**	**$231.87**

Totals summary table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	48.20	50.61	$42, 778.51	$2, 352.82	$45, 131.33

Economies of Scale Factor	0.5
Rainfall (mm)	632

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:	[redacted]		
Site Address:	Lot 3 Clay Wells Rd, Short		
Local Government Area:	Wattle Range Council	Hundred:	Short
Title ID:	CT/5873/589	Parcel ID	D57595 A4

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

The proposed SEB is 5.5km south east of proposed vegetation clearance discussed in this Data Report. It is located within a flat landscape of sandy soil.

The SEB contains one vegetation community;

1. Rough-barked Manna Gum (*Eucalyptus viminalis* ssp. *cygnetensis*) Open Forest.

The SEB assessment site contained 23 native plant species providing a score of 18 in the NVC Bushland Scoresheet. An additional 12 herbaceous annual species were recorded, which provide a total of 30 native plant species in the site. The site is considered to contain excellent species diversity according to the benchmark community. Much of the plant diversity is found in the ground layer with few shrub species present. The site is relatively homogeneous throughout, except for the edges where there is a higher component of exotic plants, typically weeds of pasture. Overall, vegetation condition is moderate to good.

The surrounding landscape is a mixture of dryland pasture, forestry and native vegetation. Some of the forestry areas are undergoing a transition from Tasmanian Blue Gum (*Eucalyptus globulus*) plantation to pasture. The SEB site is located within a series paddocks containing dryland pasture and a moderate number of paddock trees. The northern boundary abuts a Tasmanian Blue Gum plantation. Calectasia Conservation Park is located 3km to the east and Heritage Agreement HA1195 is 3.4km to the east.

The owner proposes to include the entire area of bushland (32.880ha) toward the SEB requirement. The proposed SEB will provide 271.88 SEB points. Vegetation clearance requires 50.61 SEB points to meet obligations, leaving a credit of 223.64 SEB points.

Information relating to the relevant land

The property was purchased on 18 February 2022 and is used for grazing cattle. The property is undergoing transition from set stock grazing to cell grazing.

Prior to purchase the property was used for grazing domestic stock. The SEB site has been fenced for an unknown period of time. Pasture weeds occur on the outer edges of the site indicating stock have grazed the site in the past.

Petroleum Exploration Licence PEL494 is active in the greater area until 25 March 2025.

Gas Storage Exploration Licence GSEL654 is active in the greater area until 26 October 2025

No Heritage Agreements, easements or other contractual arrangements exist on the property.

General location map

Figure 8. Map of proposed SEB (yellow polygon).

Figure 9. Map of landscape surrounding the proposed SEB (yellow polygon). Arrow identifies area of proposed vegetation clearance.

Description of the vegetation

Vegetation Association Site A1	Rough-barked Manna Gum (*Eucalyptus viminalis* ssp. *cygnetensis*) Open Forest over Sand-heath Yacca (*Xanthorrhoea caespitosa*)

Figure 10. Site A1 looking to the north west, GPS 456976 5866316. Coastal Wattle is located to the left of image centre

Figure 11. Example of Coastal Wattle observed scattered through Site A1.

Figure 12. Example of a small hollow (arrow) observed in Site A1.

General description	The dominant native species Rough-barked Manna Gum and Sand-heath Yacca. Blackwood (*Acacia melanoxylon*) was scattered through the site. The ground layer included a diverse mix of native herbs, grasses including several orchid species. Invasive Coastal Wattle (*Acacia longifolia* ssp. *sophorae*) occurred sporadically throughout the site at a relatively low density compared to similar vegetation nearby. Exotic species were most abundant within 20m of the edges, particularly Yorkshire Fog (*Holcus lanatus*), Hare's Tail Grass (*Lagurus ovatus*), Hop Clover (*Trifolium campestre*) and Lesser Hawkbit (*Leontodon saxatilis*). Several small exotic plants occurred throughout the centre of the site, but combined had relatively low cover. Overall vegetation condition is moderate to good. Disturbance is limited to deer and kangaroo/wallaby grazing.				
Threatened species or community	Site A1 is a vegetation community listed as Vulnerable under the Provisional List of Threatened Ecosystems (DEH). No threatened flora nor flora (NP&W Act or EPBC Act) were observed during the assessment.				
Landscape context score	1.15	Vegetation Condition Score	38.25	Conservation significance score	1.28
Gain Score	8.27	Area (ha)	32.880	SEB Points of Gain	271.88

Site map showing areas of the proposed SEB

Figure 13. Site Map of proposed SEB (yellow line).

Fauna and Flora assessment

Species observed on site, or recorded within 5km 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
Barking owl (*Ninox connivens connivens*)	R		2, 3	2016	Woodland and Open Forest, including remnants in farmland.	Highly likely – suitable habitat present, recently recorded.
Blue-winged Parrot (*Neophema chrysostoma*)	V		6		Coastal, sub-coastal and inland areas, favouring grassy habitats. And altered environments such as airfields, golf-courses and paddocks.	Possible – suitable habitat, but no recent records.
Common Brushtail Possum (*Trichosurus vulpecula*)	R		6		Open dry eucalypt forest, woodlands, heath and urban areas.	Possible - suitable habitat, but no recent records.
Crested Shriketit (*Falcunculus frontatus frontatus*)	R		6		Eucalypt forests and woodlands and sometimes seen in parks and gardens, on farms with scattered trees, and in pine plantations.	Possible – suitable habitat, but no recent records.
Jacky Lizard (*Amphibolurus muricatus*)	R		6		Sclerophyll forests, coastal woodlands, usually in areas with some native vegetation	Possible – suitable habitat, but no recent records.
Scarlet Robin (*Petroica boodang*)	R		6		Forests and woodlands with open understorey, can be found in grassland, farmland and urban areas.	Possible – suitable habitat, but no recent records.
Sugar Glider (*Petaurus breviceps*)	R		3	2003	Arboreal species. Open woodlands and forests.	Likely – suitable habitat present and recorded within 20years.
White-bellied Cuckooshrike (*Coracina papuensis*)	R		6		Mostly forests and woodlands, also grasslands.	Possible – suitable habitat, but no recent records.
Yellow-tailed Black Cockatoo (*Zanda (Calyptorhynchus) funerea whiteae*)	V		6		Eucalypt woodlands and pine plantations.	Possible – suitable habitat, but no recent records. Frequently observed throughout the South East.
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 provides 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

The proposed SEB wholly contains a State provisional threatened ecosystem (Vulnerable): Rough-barked Manna Gum Open Forest occurring on alluvial sandy soil. The area was fenced from stock by a previous owner, but not managed. Establishing an SEB will formally protect the threatened ecosystem and improve vegetation condition by following actions in the SEB Management Plan.

Coastal Wattle is significant environmental problem in the South East where it changes the overall structure of native vegetation, once open vegetation becomes thick and closed inhibiting a range of fauna. The proposed SEB has a low level, initial invasion of Coastal Wattle which can be easily eradicated and maintained to prevent the otherwise likely degradation of the area without control actions.

Summary Table

Block	Site	Vegetation Association	UBS	Gain Score	Area (ha)	SEB Point of Gain
A	**1**	**Rough-barked Manna Gum Open Forest**	**56.30**	**8.27**	**32.880**	**271.88**
				Total	**32.880**	**271.88**

SEB Management Plan

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

7. Appendices

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

Appendix 2. SEB Management Plan