Native Vegetation Clearance

Proposal – Talia Caves Eco Park

Data Report

Clearance under the *Native Vegetation Regulations 2017*

14 April 2021 (updated 8 January 2026)

Prepared by Matt Launer from BlackOak Environmental Pty Ltd

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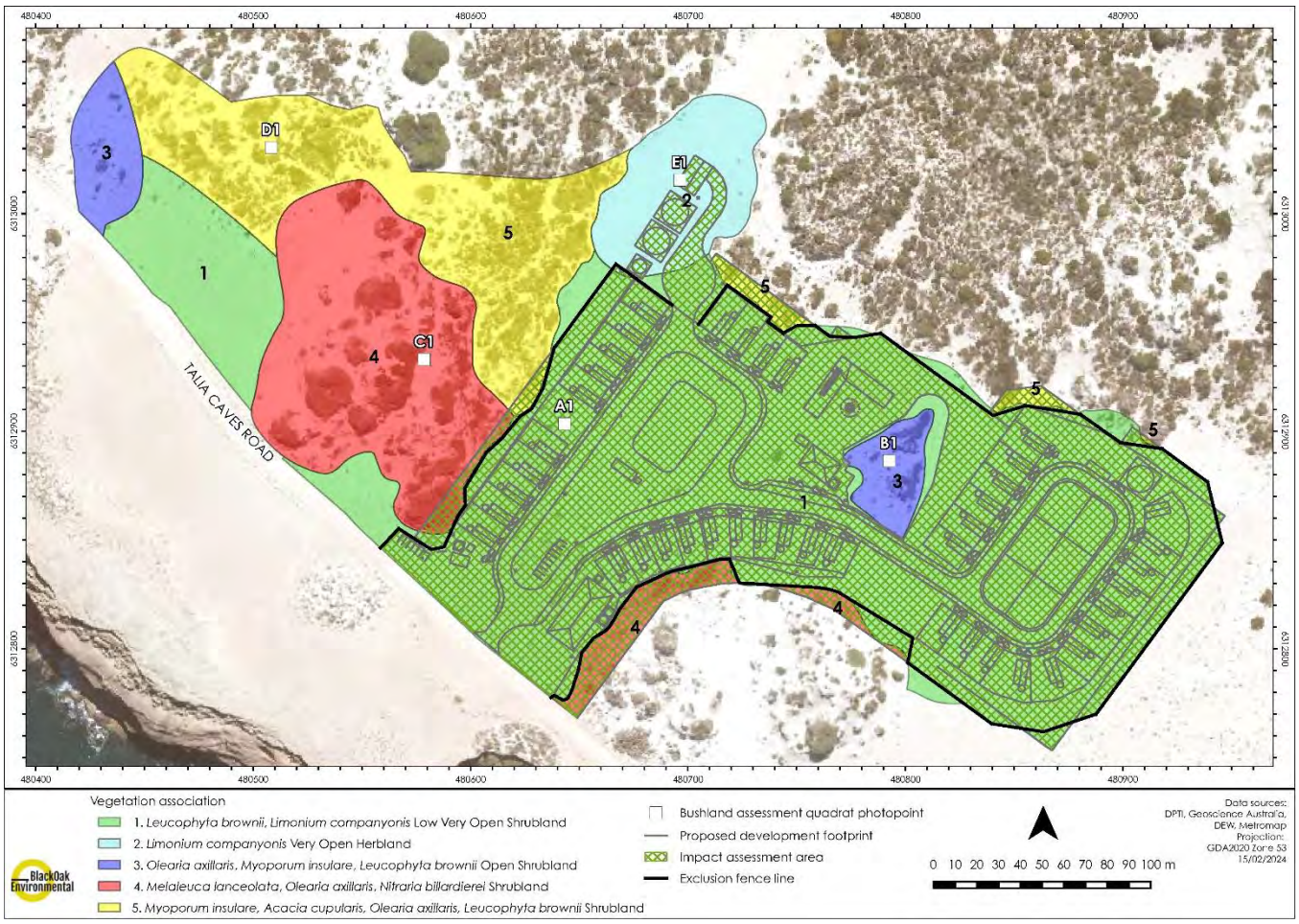
1. Application information

Application Details

Applicant:	[redacted]		
Key contact:	[redacted]		
Landowner:	[redacted]		
Site Address:	Lot 273 Flinders Highway, Talia		
Local Government Area:	District Council of Elliston	Hundred:	Downer
Title ID:	CT/6001/877	Parcel ID	H650700 S273

Summary of proposed clearance

Purpose of clearance	The proposed "Talia Caves Eco Park" development will provide significant visitor infrastructure and amenities at the iconic Talia Caves site on Eyre Peninsula's west coast, enabling longer visitor stays and contributing to the regional visitor economy. It will offer high-quality tourist accommodation, enhancing the overall visitor experience through comfortable, eco-sensitive facilities. The Eco Park intends to achieve ECO Certification through Ecotourism Australia and will be operated in accordance with its sustainable practices standards. The development will cater to diverse preferences with two accommodation options: transportable cabins (permanently connected to an onsite sewage system) for guests seeking everyday comforts, and designated camping areas for those wishing to immerse themselves in the natural environment. Guests will be supported by shared facilities including amenities blocks, laundry, camp kitchen, barbecue areas, children's playground, and a caretaker's residence/convenience store in a managed setting. Interpretive signage will be installed to educate visitors on the site's unique geological and ecological features, fostering greater appreciation of the natural environment. Native vegetation clearance is required for the construction of 42 family cabins, camping ground areas, common facilities, convenience store/caretaker's residence, and ancillary structures including rainwater tanks, permeable roads, workshop, onsite sanitation facilities, and wastewater management systems. The design prioritises low environmental impact, with clearance restricted to lower-condition vegetation as detailed in subsequent sections.
Native Vegetation Regulation	The factsheet '*Clearing native vegetation for Tourism Accommodation*' (NVC 2021) and discussions with the NVB suggest that the proposed development may be considered under the following legislative pathway: Regulation 12 Schedule 1, Clause 33 –New Dwelling or Building of the Native *Vegetation Regulations 2017*.
Description of the vegetation under application	The area under application totals 4.58 ha. This includes a proposed clearance footprint area of 3.77 ha and a total buffer area of 0.81 ha. The applicant is proposing not to clear the vegetation within buffer footprint area; however, the 0.81 ha of vegetation has been accounted for in the SEB clearance calculations. The vegetation under application includes: 4.30 ha of *Leucophyta brownii, Limonium companyonis* Low Very Open Shrubland in poor to moderate condition, 0.19 ha *Melaleuca lanceolata*, *Olearia axillaris*, *Nitraria billardierei*

	Shrubland in good condition and 0.09 ha *Myoporum insulare*, *Acacia cupularis*, *Olearia axillaris*, *Leucophyta brownii* Shrubland in good condition.
Total proposed clearance - area (ha) and number of trees	The proposed clearance area totals 4.58 ha (This includes a proposed clearance footprint area of 3.77 ha and a total buffer area of 0.81 ha).
Level of clearance	Level 4.
Overlay (Planning and Design Code)	Native Vegetation (O4202) and the State Significant Native Vegetation (O5706) Overlay (The South Australian Property and Planning Atlas 2024).
Map of proposed clearance area	
Mitigation hierarchy	The initial ecological survey was undertaken in April 2021. The footprint of the development has been significantly reduced since the initial survey; three main revisions have occurred. The main adjustment to the design was removing all proposed development from the coastal dune system. All clearance will be restricted to *Leucophyta brownii*, **Limonium companyonis* Low Very Open Shrubland (3.77 ha) and **Limonium companyonis* Very Open Herbland (0.11 ha) which occur on a coastal cliff. *Limonium companyonis* is an introduced species; it is not protected under the *Native Vegetation Act 1991*. A relatively small coastal dune supporting 0.14 ha of *Olearia axillaris*, *Myoporum insulare*, *Leucophyta brownii* Open Shrubland occurs within the development area. The cabins and infrastructure have been located around the coastal dune so that the vegetation can remain. To ensure ongoing avoidance of indirect impacts, an exclusion 'fence' constructed from timber posts and marine rope will be installed on the perimeter of the development area to deter guests from entering the sensitive coastal dune

	system. Interpretive signs will also be installed to educate visitors and prevent trampling or disturbance. Indirect impacts that may occur as a result of the development have been identified and controls will be implemented. The following actions will be undertaken during construction to prevent indirect impacts to vegetation: • Placing and storing equipment, vehicles and machinery away from vegetated areas; • Placing soil and rock stockpiles away from vegetated areas; • Clearly marking on ground areas that are to be avoided at all times to prevent unintended impacts or accidental clearance; and • Suppressing dust to prevent indirect impacts. The area under application totals 4.58 ha. This includes a proposed clearance footprint area of 3.77 ha and a total buffer area of 0.81 ha. The applicant is proposing not to clear the vegetation within the buffer footprint area (thereby retaining this vegetation and minimising overall impacts; it has been conservatively included in SEB calculations). The clearance of 3.77 ha for the development of Talia Caves Eco Park is considered permanent, with no feasible on-site restoration of cleared areas due to the built infrastructure. To enhance site amenity and biodiversity values, the landscape and amenity planting for the development will consist of indigenous flora. A planting list has been developed and provided to the applicant by BlackOak Environmental.
SEB Offset proposal	The owner is proposing to pay into the Native Vegetation Fund. The total payment required is $155,702.62 which includes an SEB payment of $147,585.42 and an administration fee of $8,117.20.

2. Purpose of clearance

2.1 Description

The proposed "Talia Caves Eco Park" development will deliver significant visitor amenities and infrastructure, encouraging extended stays in the region and contributing positively to the local visitor economy. It will offer high-quality tourist accommodation options, enhancing the overall visitor experience.

Talia Caves Eco Park is committed to undergoing the ECO Certification program through Ecotourism Australia, ensuring operations meet recognised standards for sustainable, nature-based tourism.

The development will provide two types of accommodation: transportable cabins (permanently connected to a sewage treatment system for everyday comforts) and designated camping areas (for a more immersive, traditional environmental experience). Guests will access shared facilities including amenities blocks, laundry, camp kitchen, barbecue areas, children's playground, and a convenience store/caretaker's residence in a managed setting. Interpretive signage will be installed to educate visitors about the local environment, cultural heritage, and conservation values through engaging narratives and illustrations.

To minimise environmental impacts, the development has been designed to avoid and reduce native vegetation clearance wherever possible, concentrating infrastructure in already degraded or lower-value areas. However, some clearance of native vegetation is unavoidable for the construction of family cabins, camping grounds, common facilities, convenience store/caretaker’s residence, and ancillary structures (including rainwater tanks, permeable roads, workshop, onsite sanitation facilities, and wastewater management systems).

2.2 Background

The project area is located on private property approximately 180 km north-west of Port Lincoln, within the District Council of Elliston (Figure 1). It lies within the Eyre Yorke Block Bioregion and the Talia Subregion (EYB04). The whole property encompasses 369.49 ha and supports areas of remnant native vegetation.

The project area adjoins Talia Caves Road and is located, on average, 0.13 km inland (south-west) from the cliff top overlooking the Southern Ocean (Figure 2). This coastal setting highlights the need for careful design to protect visual amenity and prevent erosion.

The site is situated approximately 1.10 km north-west of Lake Newland Conservation Park (approximately 8,880 ha), a significant wetland supporting diverse waterfowl and wading birds, and approximately 1.50 km south-east of Heritage Agreement HA1103 (197.90 ha) (Figure 2). These proximities emphasise the project's location within a regionally important biodiversity corridor, where impacts on native vegetation will be minimised through targeted siting and best-practice management.

2.3 General location map

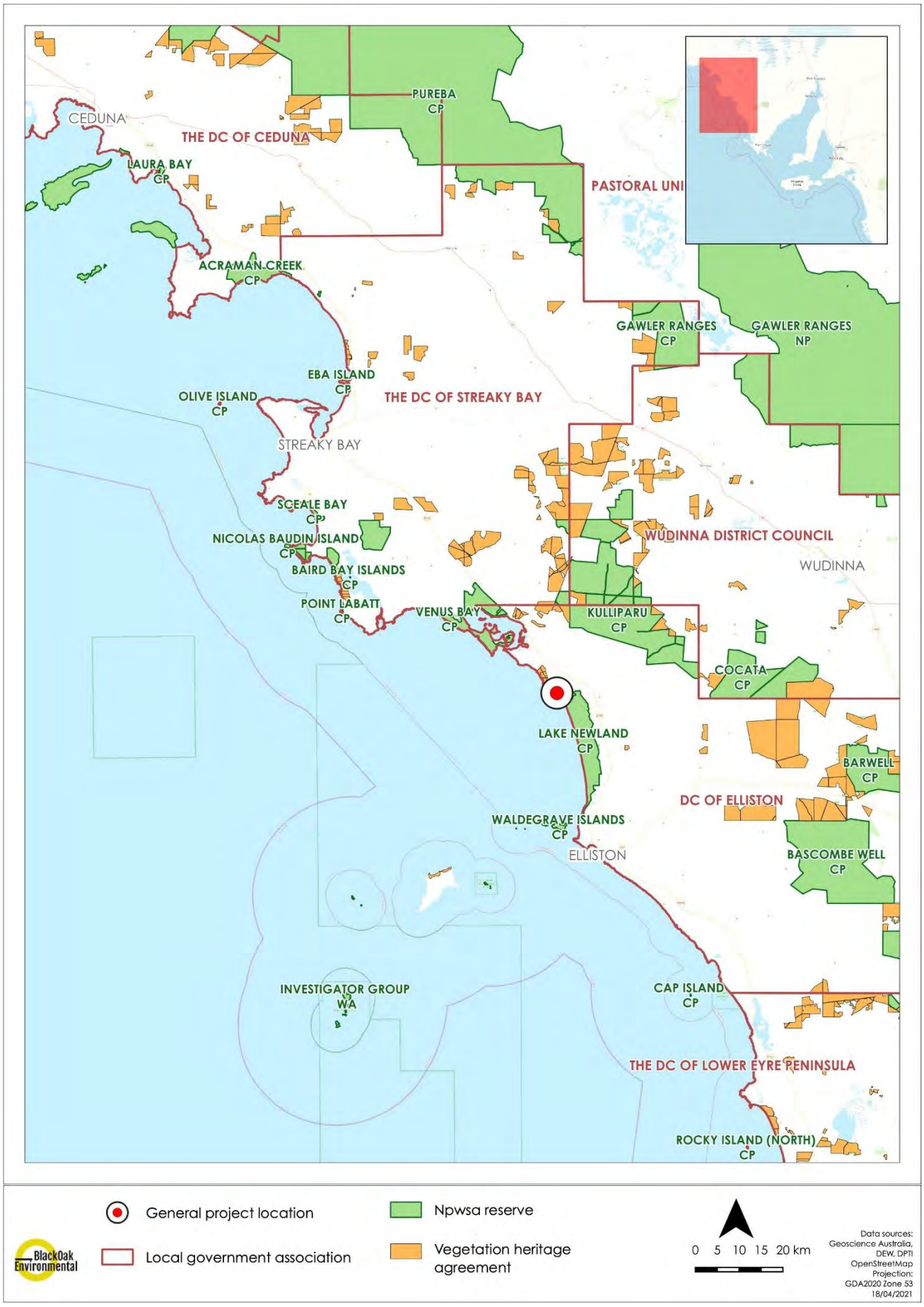


Figure 1. General location of the project area.

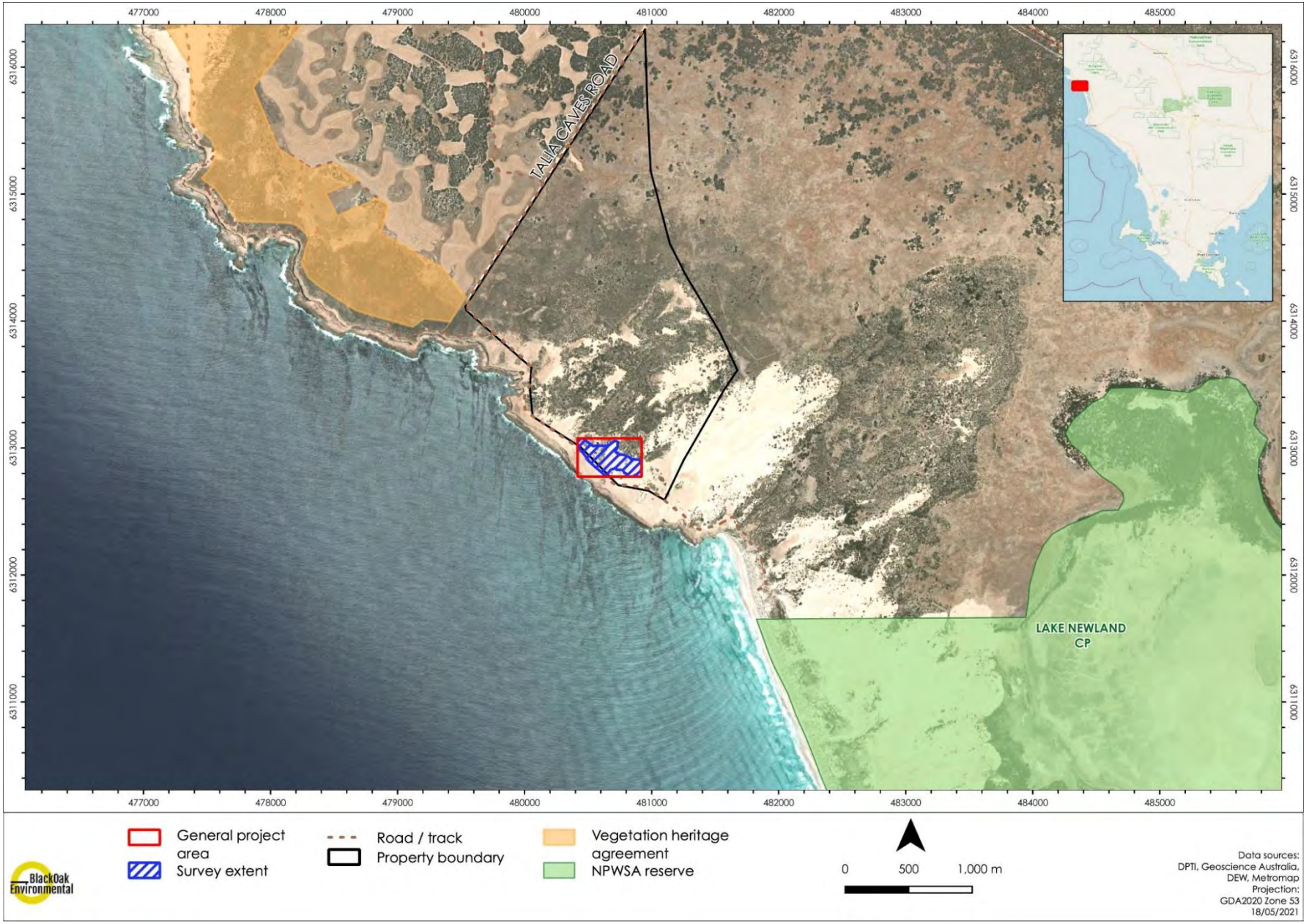


Figure 2. Location of the project area.

2.4 Details of the proposal

The project layout has been carefully designed to minimise native vegetation clearance, incorporating buffer zones around dwellings (20 m) and other buildings (10 m) in accordance with fire safety provisions under the Native Vegetation Regulations 2017 (refer Figure 3). Despite these measures, some clearance of native vegetation is unavoidable for the construction of the following infrastructure:

- 42 transportable cabins;
- Laundry facility;
- Camp kitchen;
- Caretaker's residence/convenience store;
- Workshop;
- Rainwater tanks;
- Barbecue areas;
- Children's playground;
- Onsite sanitation facilities and wastewater management system; and
- Permeable roads and pathways.

GIS shapefiles delineating the proposed development footprint and clearance areas will be provided with the Native Vegetation Clearance Proposal submission.

Servicing

Water supply will primarily rely on harvested rainwater, supplemented by bore or scheme water as required. Rainwater will be supplied to each cabin for showering (heated by individual Rheem gas instantaneous hot water systems) and to the camp kitchen. Potable water for cabins will be provided via rainwater where suitable or bottled water delivered in cooler-style units (e.g., similar to Neverfail Springs), with daily monitoring and replenishment. The caretaker's residence/convenience store will utilise a combination of rainwater, scheme, or bore water.

Renewable energy sources (e.g., solar) will provide the primary power supply to the site.

All cabins and the caretaker's residence/convenience store will be permanently connected to an onsite sewage treatment and wastewater management system.

Site roads will be constructed as permeable surfaces to facilitate all-weather access, including for South Australian Country Fire Service (CFS) vehicles, while minimising runoff and erosion.

Visitor car parking will be centrally located at the park entry to reduce vehicle movements within the site. A network of dedicated pedestrian footpaths will separate foot traffic from roads.

Dedicated firefighting water storage tanks (minimum 22,000 litres each) will be installed: one screened behind the front barbecue area for visual amenity, and another at the rear alongside the main park water supply tank. The development will comply with relevant bushfire protection requirements under the Planning and Design Code and Ministerial Building Standard MBS 008 – Additional Requirements in Designated Bushfire Prone Areas.

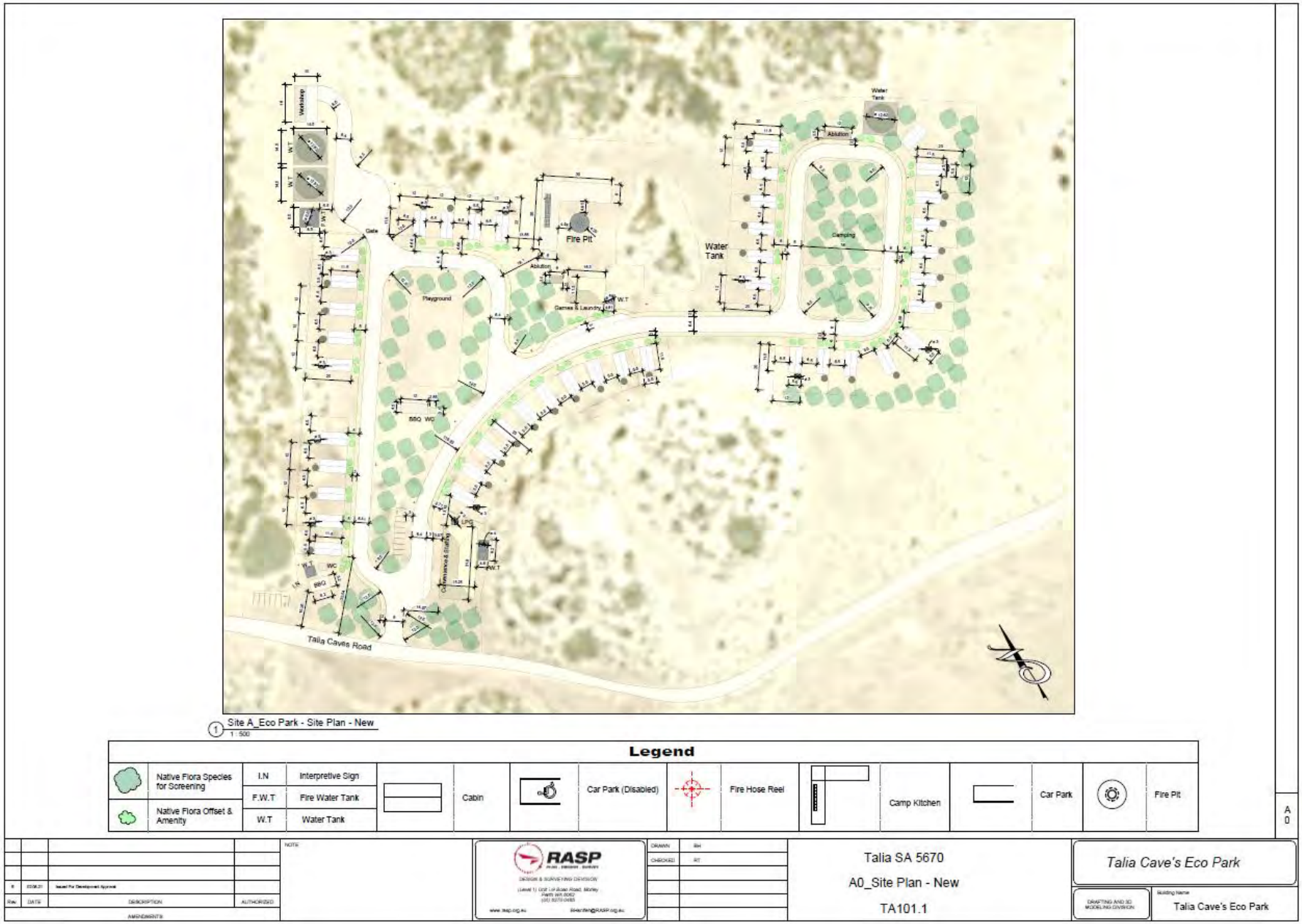


Figure 3. Talia Caves Eco Park Site Plan (Revision C: Final).

2.5 Approvals required *or* obtained

Native Vegetation Act 1991

The *Native Vegetation Act 1991* (NV Act) provides protection for native vegetation in South Australia and sets out a process for applying to clear vegetation. The Act ensures that areas of high conservation value are protected, and that clearances are subject to a thorough assessment process. The Native Vegetation Council (NVC) is responsible for providing advice and making decisions about the removal and re-establishment of native vegetation in line with the Act. Clearance under the NV Act is the subject of this assessment and proposal. There have not been any past clearance applications or approvals for the subject land.

Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) applies to any action which is likely to have a significant impact on a Matter of National Environmental Significance (MNES). There are nine MNES that act as "triggers" for the Commonwealth assessment and approval process. A Protected Matters Search Tool (PMST) report was generated on 9 April 2021 for a 5 km buffer around the project area to identify potential MNES. An updated PMST report was generated on 7 January 2026 to incorporate any changes to listings or databases since that time.

All MNES applicable to the project area have been considered in this assessment and proposal.

National Parks and Wildlife Act 1972

The *National Parks and Wildlife Act 1972* (NPW Act) provides for the establishment and management of reserves for public benefit and enjoyment; to provide for the conservation of wildlife in a natural environment; and for other purposes. Impacts to flora and fauna species listed under National Parks Schedules have been considered in this assessment and proposal. The NPWSA reserve, Lake Newland Conservation Park is located approximately 1.00 km north-west of the Project area.

Planning, Development and Infrastructure Act 2016

The Planning, Development and Infrastructure Act 2016 provides for matters that are relevant to the use, development and management of land and buildings, including by providing a planning system to regulate development within the State, rules with respect to the design, construction and use of buildings, and other initiatives to facilitate the development of infrastructure, facilities and environments that will benefit the community.

Development application number 933/025/20 was lodged to the to the Elliston Council proposing Tourist Accommodation including 42 cabins, campground and associated facilities.

The development application was assessed by the Eyre Peninsula Regional Assessment Panel and Development Plan Consent has been granted under Section 126(1) of the *Planning, Development and Infrastructure Act 2016*.

2.6 Native Vegetation Regulation

It is considered that native vegetation clearance required for this project falls under the provisions of Division 5 of the Native Vegetation Regulations 2017 which provide for the clearance of native vegetation under Part 6—Other activities (regulation 12), Clause 33—New dwelling or building.

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

2.7 Development Application information (if applicable)

Development application number 933/025/20 was lodged to the to the Elliston Council proposing Tourist Accommodation including 42 cabins, campground and associated facilities.

The development application was assessed by the Eyre Peninsula Regional Assessment Panel and Development Plan Consent has been granted under Section 126(1) of the *Planning, Development and Infrastructure Act 2016*.

The Project area is within the Native Vegetation (O4202) and the State Significant Native Vegetation (O5706) Overlay (The South Australian Property and Planning Atlas 2024). The subject land is located The Project area is located within the Conservation (Z0904) and Rural (Z5404) Zone and the Visitor Experience (S6601) Sub Zone. The site is also

located in the Talia Caves Camping Area Precinct 5. This is a small precinct that applies on the subject land only. Within the Talia Caves Camping Precinct 5, tourist accommodation is exempt from being non-complying. It is therefore assessed as merit development (URPS 2020).

3. Method

3.1 Flora assessment

A desktop assessment was conducted to assess the potential for any threatened flora species (both Commonwealth and State listed) to occur within the project area. This was achieved by undertaking database searches of a 5 km buffer of the project area, as specified in the Bushland Assessment Method (BAM) manual (NVC 2017).

A PMR (Protected Matters Report) report was generated on 9 April 2021 to identify MNES (Matters of National Environmental Significance) under the EPBC Act (DoEE 2019). An updated PMST report was generated on 7 January 2026 to incorporate any changes to listings or databases since that time. The PMR is maintained by DoEE and was used to identify flora and or ecological communities of national environmental significance that may occur or have suitable habitat within the project area.

Flora species listed under South Australia's NPW Act were assessed using the NatureMaps Supertable, obtained through the general query tool on NatureMaps. The dataset was obtained on 9 April 2021 and was used to identify threatened species that have been recorded within the 5 km buffer of the project area (DEW 2020). Known records of threatened species listed under the EPBC Act were also identified within this search.

The original flora surveys were conducted on 12 April 2021 and 12 May 2021 by NVC-accredited consultant Matt Launer (BlackOak Environmental). The flora assessment was performed in accordance with the Bushland Assessment Manual (Native Vegetation Council 2017)

A follow-up site visit was undertaken on 11 September 2025 by Matt Launer verify whether the condition and composition of the vegetation on site had changed since the 2021 surveys.

The Native Vegetation Council (NVC) BAM is suitable for assessing vegetation that is located within the agricultural region of South Australia. The BAM uses biodiversity 'surrogates' or 'indicators' to measure biodiversity value against benchmark communities. Each area to be assessed is termed an application area ('block'), within which different vegetation associations ('sites') are identified and compared to the Nature Conservation Society of South Australia's 'benchmark' vegetation communities.

A representative 1 ha quadrat was surveyed within each of the sections of the Project area. Three components of the biodiversity value of the site are measured and scored. These are: vegetation condition, conservation value and landscape context. The three component scores are combined to provide Unit Biodiversity Score (per ha) and then multiplied by the size (ha) of the site to provide a 'Total Biodiversity Score' for the site. This is used to calculate a Significant Environmental Benefit (SEB) area and value for payment into the Native Vegetation Fund derived from the clearance of native vegetation (NVC 2017).

The project area was traversed on foot and a complete flora species list recorded. This was carried out in addition to the BAM quadrat. This also included targeted searches for species listed under the NPW Act 1972 and the EPBC Act 1999.

3.2 Fauna assessment

A desktop assessment was conducted to assess the potential for any threatened fauna species (both Commonwealth and State listed) to occur within the project area. This was achieved by undertaking database searches of a 5 km buffer of the project area, as specified in the Bushland Assessment Method (BAM) manual (NVC 2017).

A PMR (Protected Matters Report) report was generated on 9 April 2021 to identify MNES (Matters of National Environmental Significance) under the EPBC Act (DoEE 2019). The PMR is maintained by DoEE and was used to identify fauna species of national environmental significance that may occur or have suitable habitat within the project area. An updated PMST report was generated on 7 January 2026 to incorporate any changes to listings or databases since that time.

Fauna species listed under South Australia's NPW Act were assessed using the NatureMaps Supertable, obtained through the general query tool on NatureMaps. The dataset was obtained on 9 April 2021 and was used to identify threatened species that have been recorded within the 5 km buffer of the project area (DEW 2020). Known records of threatened species listed under the EPBC Act were also identified within this search.

The project area was traversed on foot. All vertebrate fauna species, signs of species (scats, tracks etc.) and potential habitat for fauna was recorded. The value of habitat for the threatened fauna species identified in the desktop assessment was also determined when surveying the project area.

4. Assessment Outcomes

4.1 Vegetation Assessment

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

The project area is located on private property approximately 180 km north-west of Port Lincoln, within the District Council of Elliston (Figure 1). It is situated, on average, 0.13 km inland (south-west) from the cliff top overlooking the Southern Ocean.

The site encompasses two distinct landforms: coastal cliffs and coastal cliff dunes. The cliff areas feature low sand build-ups and coastal sands layered with fine gravels, while the dune areas consist primarily of coastal sands

Five main vegetation associations are present within the project area:

- *Leucophyta brownii, Limonium companyonis* Low Very Open Shrubland (coastal cliff);
- *Limonium companyonis* Very Open Herbland (coastal cliff);
- *Olearia axillaris, Myoporum insulare, Leucophyta brownii* Open Shrubland (coastal cliff dunes);
- *Melaleuca lanceolata*, *Olearia axillaris*, *Nitraria billardierei* Shrubland (coastal cliff dunes); and
- *Myoporum insulare*, *Acacia cupularis*, *Olearia axillaris*, *Leucophyta brownii* Shrubland (coastal cliff dunes).

The species composition and structure across all associations are dominated by salt- and wind-tolerant shrubs, reflecting the site's exposure to marine influences from the nearby Southern Ocean. The original flora surveys were conducted on 12 April 2021 and 12 May 2021 by NVC-accredited consultant Matt Launer (BlackOak Environmental). A follow-up site visit was undertaken on 11 September 2025 by Matt Launer verify whether the condition and composition of the vegetation on site had changed since the 2021 surveys. No significant changes in vegetation associations, condition, or species composition were observed.

The area under application totals 4.58 ha, comprising a proposed direct clearance footprint of 3.77 ha and a buffer area of 0.81 ha. Vegetation within the buffer areas will be retained; however, this 0.81 ha has been conservatively included in the Significant Environmental Benefit (SEB) calculations.

The project area is located approximately 1 km north-west of Lake Newland Conservation Park (approximately 8,880 ha) (Figure 1). Approximately 62% native vegetation cover remains within a 5 km radius of the site (NatureMaps 2021). The site lies within the Eyre Yorke Block (EYB) Bioregion and Talia Subregion (EYB04). It is also within the local "Newland" Environmental Association, which covers 11,143 ha, of which 5,847 ha (52%) supports native vegetation. Approximately 77% of this vegetation is protected (DEW 2023).

No threatened ecological communities or species listed under the *National Parks and Wildlife Act 1972 (*SA) or EPBC Act were recorded during site surveys. *Limonium companyonis* (Sea-lavender) was the only introduced flora species recorded within the project area. *Limonium companyonis* is a low perennial herb which invades saline swamps and coastal areas in all agricultural districts of South Australia.

Vegetation clearance calculations.

Vegetation association	BAM photopoint	Vegetation association	Development footprint	Buffer area	Total	Comment
VA1	A1	*Leucophyta brownii*, **Limonium companyonis* Low Very Open Shrubland	3.77	0.53	4.30	
VA2		**Limonium companyonis* Very Open Herbland	*0.10	*0.00	*0.11	*No native flora species occur within this Vegetation Association (Area not included in clearance data)
VA3		*Olearia axillaris*, *Myoporum insulare*, *Leucophyta brownii* Open Shrubland	*0.14		*0.14	*Area will not be disturbed (Area not included in clearance data)
VA4	C1	*Melaleuca lanceolata*, *Olearia axillaris*, *Nitraria billardierei* Shrubland		0.19	0.19	
VA5	D1	*Myoporum insulare*, *Acacia cupularis*, *Olearia axillaris*, *Leucophyta brownii* Shrubland		0.09	0.09	
Totals			**3.77**	**0.81**	**4.59**	

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

Vegetation Association	Vegetation Association 1; *Leucophyta brownii, *Limonium companyonis* Low Very Open Shrubland.

General description	Vegetation Association 1 was recorded in one section of the project area, with one Bushland Assessment Quadrat (A1) surveyed. A total of 19 flora species were recorded within the *Leucophyta brownii*, **Limonium companyonis* Low Very Open Shrubland, which included 18 native species and one introduced species, *Limonium companyonis* (Sea-lavender) (Appendix 3). The landform is a coastal cliff with low sand build-ups. Coastal sands layered with fine gravels dominate the substrate, and limestone rock is sparsely distributed on the soil surface in sections supporting this association. The dominant species were the introduced ground cover species *Limonium companyonis* (Sea-lavender) and native low shrub *Leucophyta brownii* (Coast Cushion Bush). Other vegetation was sparsely distributed, predominantly occurring as small clumps on low sand build-ups. Commonly recorded species included *Rhagodia candolleana ssp. candolleana* (Sea-berry Saltbush), *Olearia axillaris* (Coast Daisy-bush), *Ficinia nodosa* (Knobby Club-rush), *Frankenia pauciflora var.* (Southern Sea-heath), *Acacia cupularis* (Cup Wattle), *Samolus repens* (Creeping Brookweed), and *Exocarpos syrticola* (Coast Cherry). The proposed development will result in the clearance of 3.77 ha of *Leucophyta brownii*, **Limonium companyonis* Low Very Open Shrubland. An additional 0.53 ha occurs within the buffer area. The applicant proposes not to clear vegetation within the buffer area; however, this 0.53 ha has been conservatively accounted for in the Significant Environmental Benefit (SEB) clearance calculations. The vegetation was considered to be in poor to moderate condition (Vegetation condition score = 38.71).

Threatened species or community	No threatened ecological communities listed under the EPBC Act 1999, and no threatened flora or fauna species listed under the *National Parks and Wildlife Act 1972* (SA) or EPBC Act 1999, were recorded within the *Leucophyta brownii*, **Limonium companyonis* Low Very Open Shrubland during site surveys				
Landscape context score	1.10	Vegetation Condition Score	38.71	Conservation significance score	1.04
Unit biodiversity Score	44.28	Area (ha)	4.30	Total biodiversity Score	190.54

Vegetation Association	Vegetation Association 2; **Limonium companyonis* Very Open Herbland

Vegetation Association 2 (foreground).

General description	Vegetation Association 2 was recorded in one section of the Project area. One Bushland Assessment Quadrat was surveyed. Vegetation association 2 contained one flora species. This was the introduced species, *Limonium companyonis* (Sea-lavender). No native flora species occur within this Vegetation Association. The landform is a coastal cliff which contains low sand build-ups. Coastal sands layered with fine gravels dominate the area. The *Limonium companyonis* plants are located in relatively small clusters. Large areas of this section are devoid of any vegetation. *Limonium companyonis* is a low perennial herb which invades saline swamps and coastal areas in all agricultural districts of South Australia. The proposed development will result in the clearance of 0.11 ha of *Limonium companyonis* Very Open Herbland. As *Limonium companyonis* is an introduced species it is not protected under *Native Vegetation Act 1991*.
Threatened species or community	There were no threatened ecological communities or conservation rated flora or fauna species listed under the NP&W Act or EPBC Act recorded within the *Limonium companyonis* Very Open Herbland.

Landscape context score	N/A	Vegetation Condition Score	N/A	Conservation significance score	N/A
Unit biodiversity Score	N/A	Area (ha)	0.11	Total biodiversity Score	N/A

Vegetation Association	Vegetation Association 3; *Olearia axillaris*, *Myoporum insulare*, *Leucophyta brownii* Open Shrubland.

General description	Vegetation Association 3 was recorded in one section of the Project area One Bushland Assessment Quadrat (B1) was surveyed. A total of 16 flora species were recorded within the *Olearia axillaris*, *Myoporum insulare*, *Leucophyta brownii* Open Shrubland which included 15 native species and one introduced species, *Limonium companyonis* (Sea-lavender) (Appendix 3). The landform is a coastal cliff low dune which contains coastal sands. Approximately 50% of the area contains vegetation cover. No clearance of vegetation will be required as a result of the proposed development. An exclusion fence will be installed on the boundary of the *Olearia axillaris*, *Myoporum insulare*, *Leucophyta brownii* Open Shrubland to conserve the dune and vegetation (Refer to Figure 4).
Threatened species or community	There were no threatened ecological communities or conservation rated flora or fauna species listed under the NP&W Act or EPBC Act recorded within the *Olearia axillaris*, *Myoporum insulare*, *Leucophyta brownii* Open Shrubland.

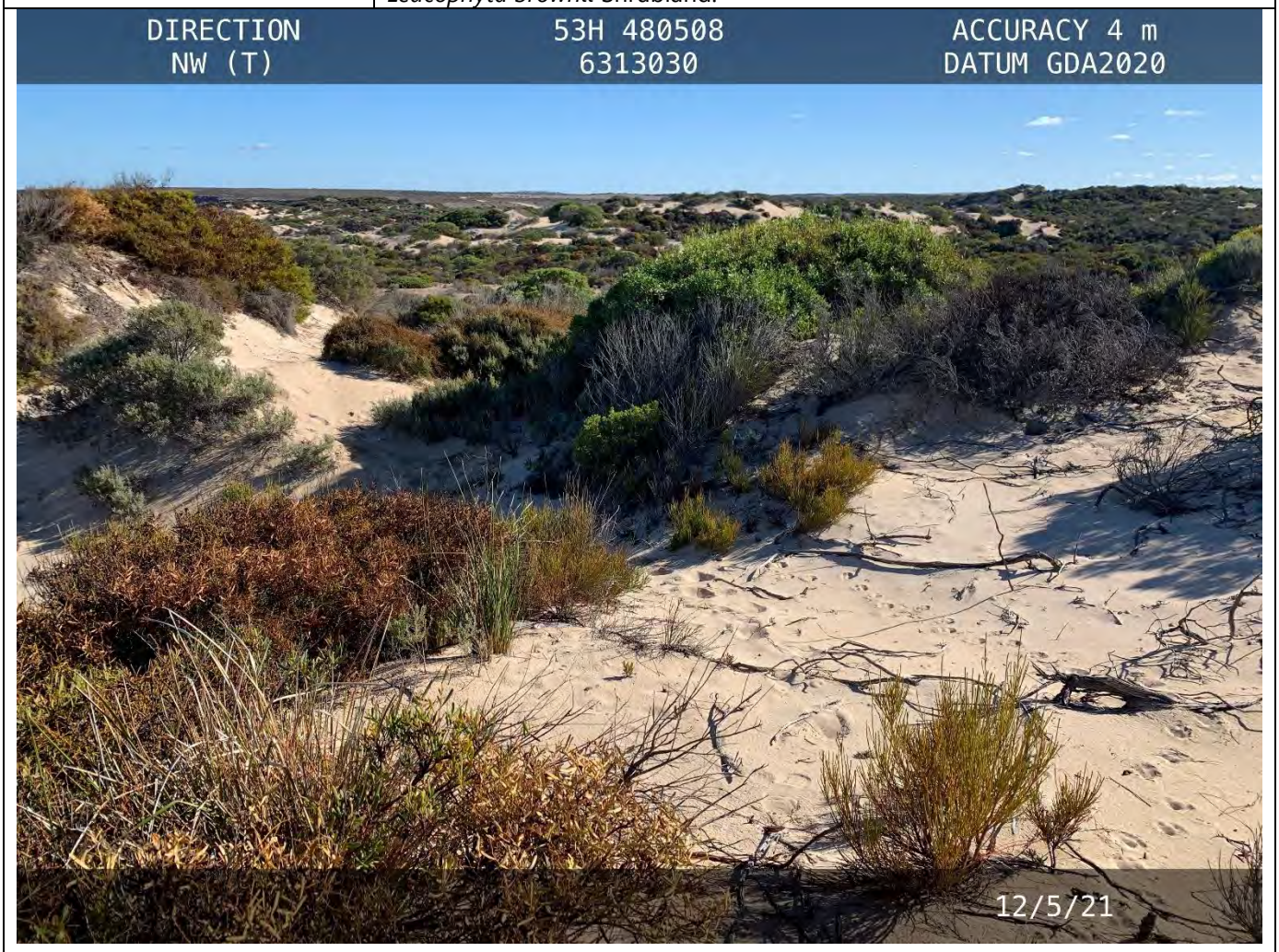
Landscape context score	N/A	Vegetation Condition Score	N/A	Conservation significance score	N/A
Unit biodiversity Score	N/A	Area (ha)	0.14	Total biodiversity Score	N/A

Vegetation Association	Vegetation Association 4; *Melaleuca lanceolata, Olearia axillaris, Nitraria billardierei* Shrubland.

General description	Vegetation Association 4 was recorded in two sections of the project area, with one Bushland Assessment Quadrat (C1) surveyed. A total of 17 native flora species were recorded within the *Melaleuca lanceolata*, *Olearia axillaris*, *Nitraria billardierei* Shrubland (Appendix 3). The landform is a coastal cliff dune comprising coastal sands, with approximately 40% vegetation cover. The entire 0.19 ha extent of this association occurs within the buffer area. The applicant proposes to retain all vegetation within the buffer area; however, this 0.19 ha has been conservatively accounted for in the Significant Environmental Benefit (SEB) clearance calculations. The vegetation was considered to be in good condition (Vegetation condition score = 47.73).
Threatened species or community	No threatened ecological communities (EPBC Act 1999) or threatened flora or fauna species (National Parks and Wildlife Act 1972 (SA) or EPBC Act 1999) were recorded within the *Melaleuca lanceolata*, *Olearia axillaris*, *Nitraria billardierei* Shrubland during site surveys.

Landscape context score	1.10	Vegetation Condition Score	47.73	Conservation significance score	1.04
Unit biodiversity Score	54.60	Area (ha)	0.19	Total biodiversity Score	10.59

Vegetation Association	Vegetation Association 5; *Myoporum insulare, Acacia cupularis, Olearia axillaris, Leucophyta brownii* Shrubland.



General description	Vegetation Association 5 was recorded in three sections of the project area, with one Bushland Assessment Quadrat (D1) surveyed. A total of 18 flora species were recorded within the *Myoporum insulare*, *Acacia cupularis*, *Olearia axillaris*, *Leucophyta brownii* Shrubland, comprising 17 native species and one introduced species, *Limonium companyonis* (Sea Lavender) (Appendix 3). The landform is a coastal cliff dune comprising coastal sands, with approximately 50% vegetation cover. The entire 0.08 ha extent of this association occurs within the buffer area. The applicant proposes to retain all vegetation within the buffer area; however, this 0.08 ha has been conservatively accounted for in the Significant Environmental Benefit (SEB) clearance calculations. The vegetation was considered to be in good condition (Vegetation condition score = 47.73).
Threatened species or community	No threatened ecological communities (EPBC Act 1999) or threatened flora or fauna species (National Parks and Wildlife Act 1972 (SA) or EPBC Act 1999) were recorded within the *Myoporum insulare, Acacia cupularis, Olearia axillaris, Leucophyta brownii* Shrubland during site surveys.

Landscape context score	1.10	Vegetation Condition Score	47.73	Conservation significance score	1.04

Unit biodiversity Score	54.60	Area (ha)	0.08	Total biodiversity Score	4.80

Site map showing areas of proposed impact

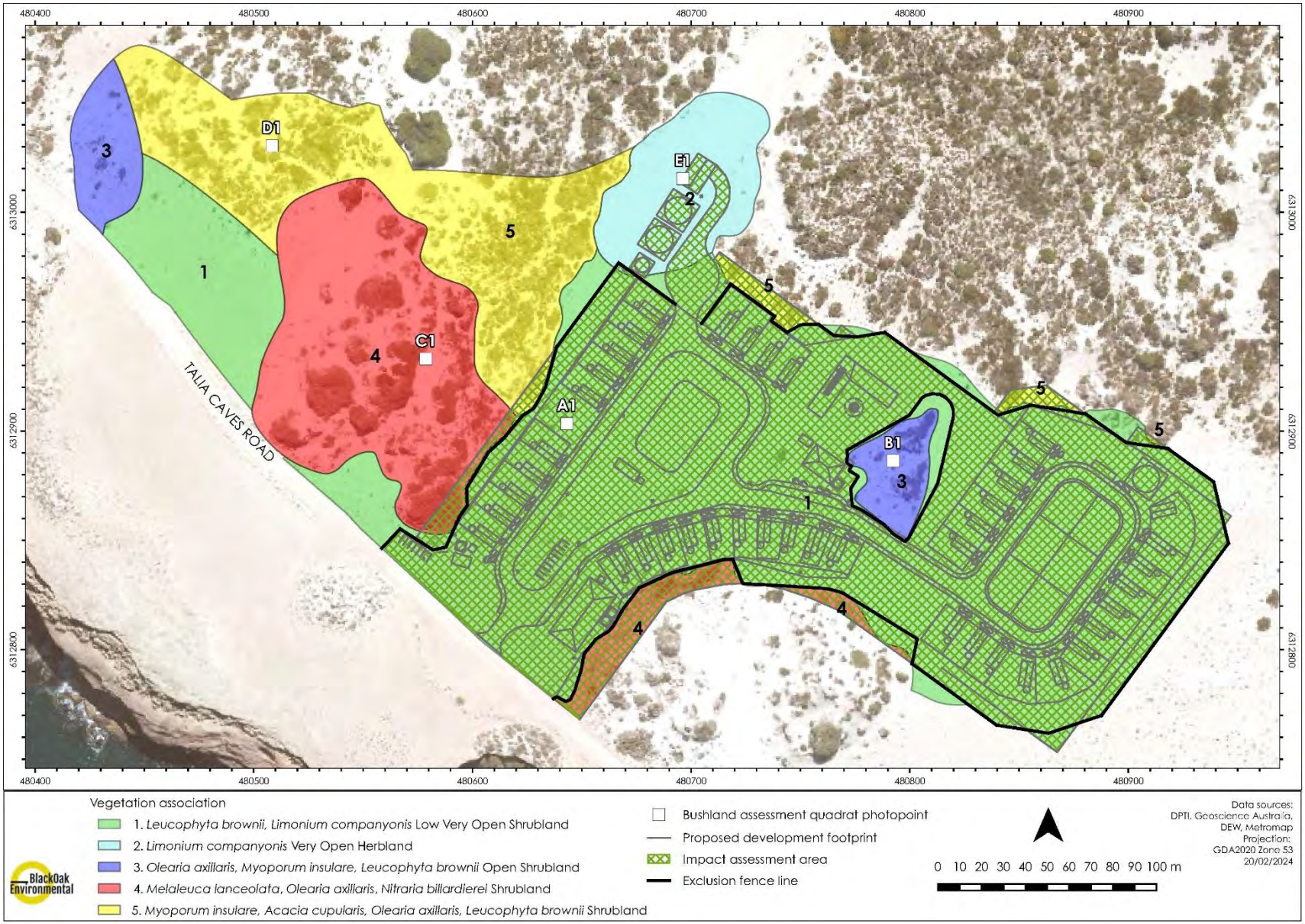


Figure 4. Vegetation association mapping and BAQ photopoint locations within the project area.

4.2 Threatened Species assessment

Threatened Ecological Communities

Two threatened ecological communities (TEC) were identified in the PMR as potentially occurring within 5 km of the project area. This was the Subtropical and Temperate Coastal Saltmarsh (Vulnerable) and the Drooping sheoak grassy woodland on calcrete of the Eyre Yorke Block Bioregion (Critically Endangered). No TEC's were recorded within the project area during the field survey.

Provisional List of Threatened Ecosystems of SA

None of the five vegetation associations or ecosystems recorded within the project area are listed under the Provisional List of Threatened Ecosystems of SA.

Nationally threatened flora

Four nationally threatened flora species were identified in the PMR as potentially occurring within 5 km of the project area. One of these species, *Prostanthera calycina* (West Coast Mintbush) (EPBC Act: Vulnerable, NPW Act: Vulnerable) was listed as 'Species or species habitat known to occur in the area'. *Prostanthera calycina* was identified in the NatureMaps search as being recorded within 5 km of the project area since 1995 (Figure 3). No nationally threatened flora species were recorded during the field survey.

State threatened flora

There were no flora species listed under the NPW Act identified in the NatureMaps search as being previously recorded within 5 km of the project area since 1995. No threatened flora species listed under the NPW Act were recorded during the field survey.

Nationally threatened fauna

Forty nationally threatened fauna species (29 birds, three marine mammals, one terrestrial mammal, three marine reptiles, two fish and two sharks) were identified in the PMR as potentially occurring within 5 km of the project area. Ten of these species were listed as 'Species or species habitat known to occur in the area' (refer to Table below).

The Malleefowl (*Leipoa ocellata*) (EPBC Act: Vulnerable, NPW Act: Vulnerable), Hooded Plover (*Thinornis cucullatus cucullatus*) (EPBC Act: Vulnerable, NPW Act: Vulnerable) and Australian Sea Lion (*Neophoca cinerea*) (EPBC Act: Endangered, NPW Act: Vulnerable) identified in the NatureMaps search as being recorded within 5 km of the project area since 1995. No nationally threatened fauna species were recorded during the field survey.

State threatened fauna

Four state threatened fauna species listed under the NPW Act were identified in the BDBSA search as being previously recorded within 5 km of the project area since 1995. This included four birds and one reptile. The Restless Flycatcher (*Myiagra inquieta*) (NPW Act: Rare) and Beach Slider (*Lerista arenicola*) (NPW Act: Rare) are considered likely to occur within the project area based on available habitat and proximity of historical records. No threatened fauna species listed under the NPW Act were recorded during the field survey.

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
Flora						
Prostanthera calycina (West Coast Mintbush)	V	VU	3, 5	1999	West Coast Mintbush is known only from Eyre Peninsula in South Australia, with one outlier population west of the peninsula at Coorabie. Populations are mostly on the western half of the peninsula, scattered from Buckleboo to Port Lincoln, but with a concentration in the Streaky Bay area.	Unlikely: A targeted search was conducted during the field survey. No *Prostanthera calycina* was recorded. No suitable habitat exists within the project area.
Birds						
Calidris acuminata (Sharp-tailed Sandpiper)		VU	5		Prefers the grassy edges of shallow inland freshwater wetlands. It is also found around sewage farms, flooded fields, mudflats, mangroves, rocky shores and beaches. Its breeding habitat in Siberia is the peat-hummock and lichen tundra of the high Arctic.	Unlikely: The project area does not contain any suitable habitat.
Calidris alba alba (Sanderling)	R		3	2008	Sanderlings are found very widely along Australian coastlines and are regular visitors to New Zealand. The species could be considered cosmopolitan,	Unlikely: Oceanic species. The project area does not contain any 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
					being found along the coastline in many other countries. They breed from north America to north Russia and islands in the Arctic Ocean. Sanderlings are found on open sandy beaches at the edge of the waves, on sandbars and spits. They roost on bare sand in the dunes or behind piles of kelp.	
Calidris canutus (Red Knot, Knot)		EN	5	No records	Common in all the main suitable habitats around the coast of Australia. It is occasionally recorded inland in all regions. In Australasia the Red Knot mainly inhabit intertidal mudflats, sandflats and sandy beaches of sheltered coasts, in estuaries, bays, inlets, lagoons and harbours.	Unlikely: No previous records within 5 km and no suitable habitat occurs within the project area.
Calidris ferruginea (Curlew Sandpiper)	E	CR	5	No records	In South Australia, Curlew Sandpipers occur in widespread coastal and subcoastal areas east of Streaky Bay. Important sites include the former saltfields at Bolivar now	Unlikely: No previous records within 5 km and no suitable habitat occurs within the project area.

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
					part of the Adelaide International Bird Sanctuary, and The Coorong. Occurs on intertidal mudflats in sheltered coastal areas, such as estuaries, bays, inlets and lagoons, and also around non-tidal swamps, lakes and lagoons near the coast, and ponds in saltworks and sewage farms.	
Haematopus fuliginosus fuliginosus (Sooty Oystercatcher)	R		3	2008	The Sooty Oystercatcher is widespread in coastal eastern, southern and western Australia. The Sooty Oystercatcher is strictly coastal, usually within 50 m of the ocean. It prefers rocky shores, but will be seen on coral reefs or sandy beaches near mudflats. It breeds on offshore islands and isolated rocky headlands.	Unlikely: Oceanic species. The project area does not contain any suitable habitat.
Haematopus longirostris (Pied Oystercatcher)	R		3	2014	The Pied Oystercatcher is found in coastal areas throughout the Australian continent except for areas of unbroken sea cliffs. They prefer	Unlikely: Oceanic species. The project area does not contain any 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
					mudflats, sandbanks and sandy ocean beaches and is less common along rocky or shingle coastlines.	
Leipoa ocellata (Malleefowl)	V	VU	3, 5	2006	The Malleefowl is found in semi-arid to arid shrublands and low woodlands, especially those dominated by mallee and/or acacias. A sandy substrate and abundance of leaf litter are required for breeding.	Unlikely: No suitable habitat occurs within the project area.
Myiagra inquieta (Restless Flycatcher)	R		3	2015	The Restless Flycatcher is found throughout northern and eastern mainland Australia, as well as in south-western Australia. Found in open forests and woodlands and frequently seen in farmland.	Likely: One existing record within 5 km of the project area. Suitable habitat exists within the project area.
Sternula nereis nereis (Australian Fairy Tern)	E	VU	5	No records	Within Australia, the Fairy Tern occurs along the coasts of Victoria, Tasmania, South Australia and Western Australia; occurring as far north as the Dampier Archipelago near Karratha. The Fairy Tern nests on sheltered sandy beaches, spits and banks above the	Unlikely: No suitable habitat occurs within the project area.

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
					high tide line and below vegetation.	
Thalassarche steadi (White-capped Albatross)		VU	5	No records	The White-capped Albatross is probably common off the coast of south-east Australia throughout the year.	Unlikely: Pelagic feeding, occasional vagrant.
Thinornis cucullatus cucullatus (Hooded Plover)	V	VU	3, 5	2008	The Hooded Plover is a small Australian beach nesting bird. It mainly occurs on wide beaches backed by dunes with large amounts of seaweed and jetsam, creek mouths and inlet entrances. Nests are found above the high-water mark on flat beaches, on stony terraces, or on sparsely vegetated dunes.	Unlikely: No suitable habitat occurs within the project area.
Mammals						
Eubalaena australis (Southern Right Whale)	V	EN	5	No records	Principally found around the southern coastline off southern Western Australia and far west South Australia, the southern right whale more commonly occurs between Sydney and Perth, including off Tasmania.	Unlikely: Marine species.
Neophoca cinerea (Australian Sea Lion)	V	VU	3, 5	2007	The breeding range extends from Houtman	Unlikely: Marine species.

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
					Abrolhos, Western Australia to The Pages Island, east of Kangaroo Island, South Australia. Breeding colonies occur on islands or remote sections of coastline. Lone or small numbers of animals will regularly visit known haul-out sites and occasionally visit other locations.	
Reptiles						
Lerista arenicola (Beach Slider)	R		3	2006	Arid and semi-arid coast of the Great Australian Bight from about Twilight Cove, WA, to Fowlers Bay, SA. Prefers coastal heaths and low shrublands. Shelters in leaf litter on pale coastal sands.	Likely: Three existing records within 5 km of the project area. Suitable habitat exists within most of the project area.
Sharks						
Carcharodon carcharias (White Shark, Great White Shark)		VU	5	No records	Great White Sharks are widely, but not evenly, distributed in Australian waters. Areas where observations are more frequent include waters in and around some Fur Seal and Sea Lion colonies such as the Neptune Islands (South Australia); areas of	Unlikely: Marine species.

Species (common name)	NP&W Act	EPBC Act	Data source	Date of last record	Species known habitat preferences	Likelihood of use for habitat – Comments
					the Great Australian Bight as well as the Recherche Archipelago and the islands off the lower west coast of Western Australia. Great White Sharks can be found from close inshore around rocky reefs, surf beaches and shallow coastal bays to outer continental shelf and slope areas. They also make open ocean excursions and can cross ocean basins. Great White Sharks are often found in regions with high prey density, such as pinniped colonies.	
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, CD = Conservation Dependent						

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

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

Likelihood	Criteria
	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.

Figure 5. Threatened flora species identified within 5 km of the project area since 1995.

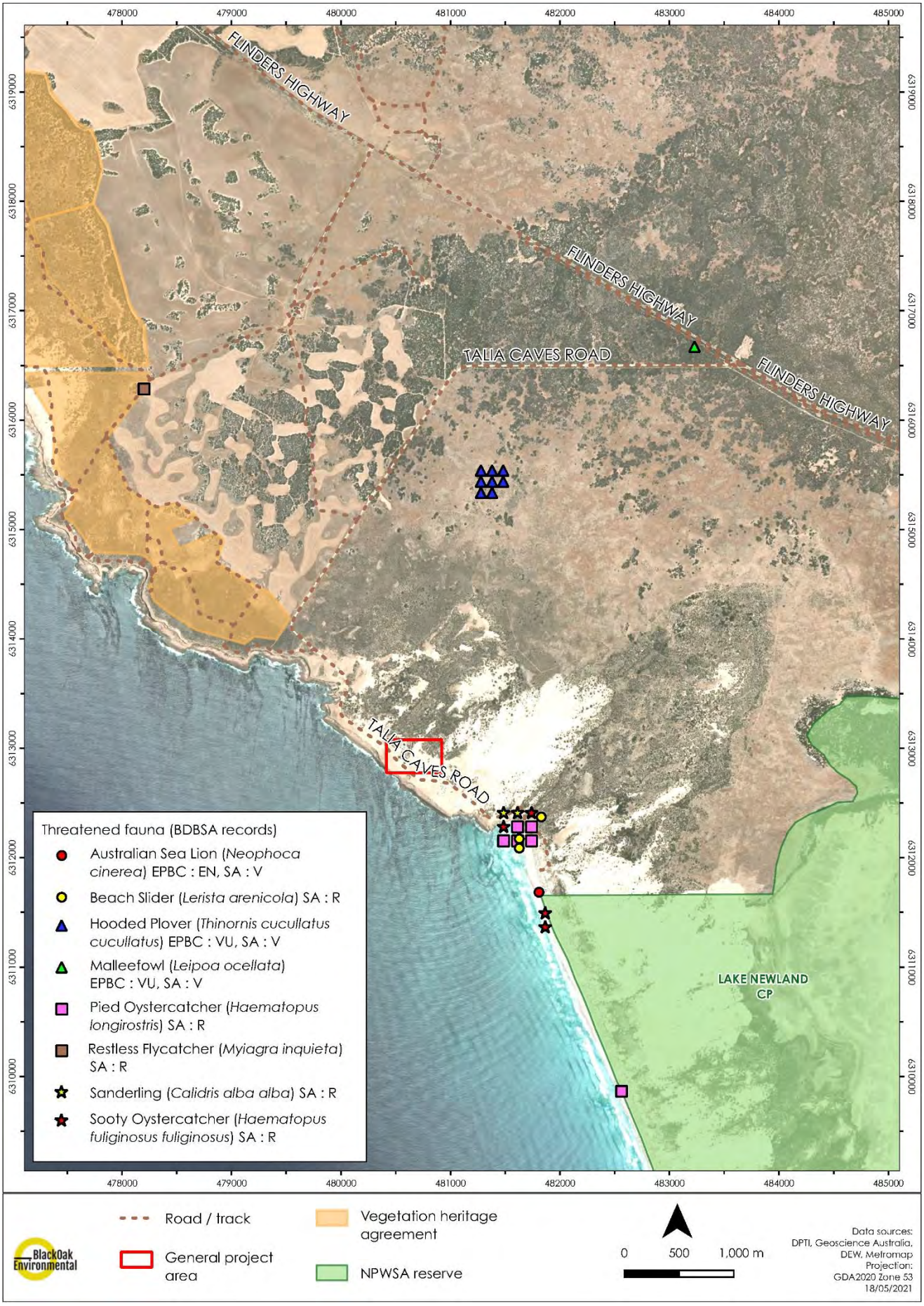


Figure 6. Threatened fauna species identified within 5 km of the project area since 1995.

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.

The purpose of the clearance is for the construction of the following:

- Cabins (42).
- Laundry.
- Camp Kitchen.
- Caretakers' residence/convenience store.
- Workshop.
- Rainwater tanks.
- BBQ areas.
- Children's playground.
- Onsite sanitation facilities and waste water management.
- Permeable roads.

The applicant has taken into consideration all impacts including the 'buffer' areas for any dwelling (20 m) or building (10 m) (Refer to Figure 3). These buffer distances are consistent with NVC guidelines. The area under application totals 4.58 ha. This includes a proposed clearance footprint area of 3.77 ha and a total buffer area of 0.81 ha. The applicant is proposing not to clear the vegetation within buffer footprint area.

The site is located in a landscape with approximately 62% native vegetation cover remaining within a 5 km radius of the site (NatureMaps 2021). Given this relatively high level of remnant cover and the small scale of the proposed clearance (3.77 ha, representing less than 0.1% of the vegetation within the 5 km radius), the proposal is not expected to contribute significantly to cumulative vegetation loss, fragmentation, or biodiversity decline in the local area.

Indirect impacts that may occur as a result of the development have been identified and controls will be implemented. The following actions will be undertaken during construction to prevent indirect impacts to vegetation:

- Placing and storing equipment, vehicles and machinery away from vegetated areas;
- Placing soil and rock stockpiles away from vegetated areas;
- Clearly marking on ground areas that are to be avoided at all times to prevent unintended impacts or accidental clearance; and
- Suppressing dust to prevent indirect impacts.

Ongoing operational indirect impacts (e.g., potential weed spread, visitor disturbance, or pest attraction from increased human activity) will be minimised through implementation of a Weed and Pest Management Plan, visitor education signage, and requirements for guests to remain on designated paths and facilities.

The applicant cannot foresee the need for any associated development or future stages of development. The site layout has been designed to accommodate all projected tourism demand within the approved footprint without requiring additional clearance. All matters listed in the 'Guide for clearance applications' have been considered.

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 initial ecological survey was undertaken in April 2021. The footprint of the development has been significantly reduced since the initial survey; three main revisions have occurred (refer to Appendices 4-6). The main adjustment to the design was removing all proposed development from the coastal dune system. All clearance will be restricted to *Leucophyta brownii*, **Limonium companyonis* Low Very Open Shrubland (3.77 ha) and **Limonium companyonis* Very Open Herbland (0.11 ha) which occur on a coastal cliff. *Limonium companyonis* is an introduced species; it is not protected under the *Native Vegetation Act 1991*.

A relatively small coastal dune supporting 0.14 ha of *Olearia axillaris*, *Myoporum insulare*, *Leucophyta brownii* Open Shrubland occurs within the development area. The cabins and infrastructure have been located around the coastal dune so that the vegetation can remain (Figure 4). To ensure ongoing avoidance of indirect impacts, an exclusion 'fence' constructed from timber posts and marine rope will be installed on the perimeter of the development area to deter guests from entering the sensitive coastal dune system (Figure 4). Interpretive signs will also be installed to educate visitors and prevent trampling or disturbance.

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).

Clearance has been minimised by targeting lower-condition and introduced-species dominated vegetation on coastal cliffs, avoiding higher-value dune shrubland. The *Leucophyta brownii*, **Limonium companyonis* Low Very Open Shrubland is in poor to moderate condition and the **Limonium companyonis* Very Open Herbland is in very poor condition as it does not contain any native flora species.

The following documents have been developed for the Talia Caves Eco Park project to further mitigate any potential impacts:

- Talia Caves Eco Park Ecological Assessment (BlackOak Environmental 2021).
- Talia Caves Eco Park Sand Drift Management (Damara WA Pty Ltd 2024) – which includes measures to prevent erosion and sand drift impacts on retained vegetation.
- Talia Caves Eco Park Environmental Management Plan (BlackOak Environmental, in progress) – which will outline construction and operational controls.

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 area under application totals 4.58 ha. This includes a proposed clearance footprint area of 3.77 ha and a total buffer area of 0.81 ha. The applicant is proposing not to clear the vegetation within the buffer footprint area (thereby retaining this vegetation and minimising overall impacts; it has been conservatively included in SEB calculations). The clearance of 3.77 ha for the development of Talia Caves Eco Park is considered permanent, with no feasible on-site restoration of cleared areas due to the built infrastructure.

To enhance site amenity and biodiversity values, the landscape and amenity planting for the development will consist of indigenous flora. A planting list has been developed and provided to the applicant by BlackOak Environmental.

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 owner is proposing to pay into the Native Vegetation Fund. The total payment required is $155,702.62, which includes an SEB payment of $147,585.42 and an administration fee of $8,117.20.

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.

4.5 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*.

<table>
<tr><th>Principle of clearance</th><th>Considerations</th></tr>
<tr><td rowspan="3">Principle 1a - it comprises a high level of diversity of plant species</td><td>Relevant information
Block A: (A1) Leucophyta brownii, *Limonium companyonis Low Very Open Shrubland.

A total of 19 flora species were recorded within the Leucophyta brownii, *Limonium companyonis Low Very Open Shrubland which included 18 native species and one introduced species, Limonium companyonis (Sea-lavender). The landform is a coastal cliff which contains low sand build-ups. Coastal sands layered with fine gravels dominate the area.

Block A: (C1) Melaleuca lanceolata, Olearia axillaris, Nitraria billardierei Shrubland.

A total of 17 native flora species were recorded within the Melaleuca lanceolata, Olearia axillaris, Nitraria billardierei Shrubland. The landform is a coastal cliff dune which contains coastal sands. Approximately 40% of the area contains vegetation cover.

Block A: (D1) Myoporum insulare, Acacia cupularis, Olearia axillaris, Leucophyta brownii Shrubland.

A total of 18 flora species were recorded within the Myoporum insulare, Acacia cupularis, Olearia axillaris, Leucophyta brownii Shrubland which included 17 native species and one introduced species, Limonium companyonis (Sea-lavender). The landform is a coastal cliff dune which contains coastal sands. Approximately 50% of the area contains vegetation cover.

Patches;
Bushland Plant Diversity Score – A1 = 18, C1 = 17, D1 = 17.</td></tr>
<tr><td>Assessment against the principles
Seriously at Variance
Not applicable

At Variance –
Block A: (A1) Leucophyta brownii, Limonium companyonis Low Very Open Shrubland.
Block A: (C1) Melaleuca lanceolata, Olearia axillaris, Nitraria billardierei Shrubland.
Block A: (D1) Myoporum insulare, Acacia cupularis, Olearia axillaris, Leucophyta brownii Shrubland.</td></tr>
<tr><td>Moderating factors that may be considered by the NVC
Variance with the principles will be considered in accordance with the table below This information is derived from the Bushland assessment method and is an indication of the species diversity of a site relative to what would be expected in a site of good condition of the same vegetation community.

<table>
<tr><th>Native plant species diversity score</th><th>Remnant area</th></tr>
<tr><td><10</td><td>Not at variance</td></tr>
<tr><td>10 - 20</td><td>At variance</td></tr>
<tr><td>>20</td><td>Seriously at variance</td></tr>
</table>
</td></tr>
</table>

Amount of clearance related to area of remnant.
Only a very small area of vegetation will be impacted relative to the amount of vegetation within the local vicinity (less than 0.25% of the native vegetation within a 5 km radius to be impacted), this may reduce the impact from 'Seriously at variance' to 'At variance', or 'At variance' to 'Not at variance'.

Less than 0.25% of the native vegetation within a 5 km radius is to be impacted at sites A1, C1 and D1 (refer to the Table below). Principle 1a may be reduced from or 'At variance' to 'Not at variance'.

Site name	Remnant vegetation within 5 km radius of the site (%)	Remnant vegetation within 5 km radius of the site (ha)	0.25% ha of remnant vegetation within 5 km radius of the site	Total vegetation clearance proposed per site (ha)
A1	62	4869.48	12.17	4.30
C1	62	4869.48	12.17	0.19
D1	62	4869.48	12.17	0.09

Vegetation remnancy data: NatureMaps 2023.

Principle 1b - significance as a habitat for wildlife

Relevant information

Forty nationally threatened fauna species (29 birds, three marine mammals, one terrestrial mammal, three marine reptiles, two fish and two sharks) were identified in the PMR as potentially occurring within 5 km of the project area. Twelve of these species were listed as 'Species or species habitat known to occur in the area'.

The Malleefowl (*Leipoa ocellata*) (EPBC Act: Vulnerable, NPW Act: Vulnerable), Hooded Plover (*Thinornis cucullatus cucullatus*) (EPBC Act: Vulnerable, NPW Act: Vulnerable) and Australian Sea Lion (*Neophoca cinerea*) (EPBC Act: Endangered, NPW Act: Vulnerable) were identified in the BDBSA search as being recorded within 5 km of the project area since 1995. No nationally threatened fauna species were recorded during the field survey.

Four state threatened fauna species listed under the NPW Act were identified in the BDBSA search as being previously recorded within 5 km of the project area since 1995. This included four birds and one reptile. The Restless Flycatcher (*Myiagra inquieta*) (NPW Act: Rare) and Beach Slider (*Lerista arenicola*) (NPW Act: Rare) are considered likely to occur within the project area based on available habitat and close proximity of historical records. No threatened fauna species listed under the NPW Act were recorded during the field survey.

Two bird species and three mammal species were detected within the Project area during the survey (Refer to table below). Two of the mammal species detected are listed as declared animals under the *Landscape South Australia Act 2019*, these were: Fox (Red Fox) (*Vulpes vulpes*), Rabbit (European Rabbit) (*Oryctolagus cuniculus*). None of the fauna species recorded are listed as threatened under the EPBC Act or NPW Act.

Patches;
Threatened Fauna Score - Block A: (A1) = 0.04, Block A: (C1) = 0.04, Block A: (D1) = 0.04.
Unit biodiversity Score - Block A: (A1) = 44.28, Block A: (C1) = 54.60, Block A: (D1) = 54.60.

	Assessment against the principles Seriously at Variance Block A: (C1) *Melaleuca lanceolata, Olearia axillaris, Nitraria billardierei* Shrubland. Block A: (D1) *Myoporum insulare, Acacia cupularis, Olearia axillaris, Leucophyta brownii* Shrubland. At Variance – Block A: (A1) *Leucophyta brownii, *Limonium companyonis* Low Very Open Shrubland.
	Moderating factors that may be considered by the NVC Impact Significance The following criteria are used to determine whether an action will have a significant impact on listed threatened fauna species and therefore clearance will be raised to 'Seriously at variance'. A clearance action will have or is likely to have a significant impact on a threatened species if it may: • lead to a long-term decrease in the size of a population, or • reduce the area of occupancy of the species, or • fragment an existing population into two or more populations, or • adversely affect habitat critical to the survival of a species, or • modify, destroy, remove, isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline, or • result in invasive species that are harmful to a threatened species becoming established in the threatened species habitat, or • interfere with the recovery of the species. If the NVC are of the opinion that the clearance will not have a significant impact on fauna habitat, the clearance may be reduced to 'At variance'. Significant benefit If the SEB provides a benefit to the threatened species that is well over and above what is required in the SEB Policy and Guide, it may be reduced to 'At variance'. Common species If the vegetation provides habitat for native species that are relatively common, and the area of clearance is not considered essential habitat to maintain the local population, it may be reduced to 'At variance'. Non-essential habitat If the clearance is of non-essential habitat for threatened species and the clearance will have a negligible impact on that species local population over the long term (i.e., next 20 to 50 years), it may be reduced to 'At variance'. The proposed clearance of vegetation within Block A is unlikely to have a significant impact on any EPBC Act or NPW Act listed threatened fauna species. This is based on the results of the desktop assessment and field surveys. Principle 1b may be reduced from 'Seriously at variance' to 'At variance' if the NVC are of the opinion that the clearance will not have a significant impact on fauna habitat.
Principle 1c - plants of a rare, vulnerable or	Relevant information *Not applicable.*

endangered species	Assessment against the principles Seriously at Variance *Not applicable.* At Variance – *Not applicable.*
	Moderating factors that may be considered by the NVC *Not applicable.*
***Principle 1d - the vegetation comprises the whole or part of a plant community that is Rare, Vulnerable or endangered*:**	Relevant information *Not applicable.*
	Assessment against the principles Seriously at Variance *Not applicable.*
	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 The Project area is situated within the Eyre Yorke Block (EYB) IBRA bioregion of SA, the Talia (EYB04) subregion and the Newland IBRA association. The Newland IBRA association covers 11,143 ha, of which 5,847 ha or 52% contains native vegetation. Approximately 77% of the vegetation within the Newland IBRA association is protected (DEW 2023). Total Biodiversity Score – 198.11.
	Assessment against the principles Seriously at Variance *Not applicable.* At Variance Block A: (A1) *Leucophyta brownii, Limonium companyonis* Low Very Open Shrubland. Block A: (C1) *Melaleuca lanceolata, Olearia axillaris, Nitraria billardierei* Shrubland. Block A: (D1) *Myoporum insulare, Acacia cupularis, Olearia axillaris, Leucophyta brownii* Shrubland.
	Moderating factors that may be considered by the NVC The following criteria are used to determine whether a clearance proposal will have a significant impact on a remnant in a highly cleared landscape and therefore clearance will be raised to 'Seriously at variance' with this principle. An action has, will have, or is likely to have a significant impact on a remnant in a highly cleared landscape if it does, will, or is likely to: • Impact on a tree species or vegetation community that has been selectively removed within the IBRA Association or IBRA Subregion and are therefore underrepresented in the vegetation that remains. • Impact on a remnant in relatively good condition, particularly if the vegetation within the IBRA Association or IBRA Subregion where vegetation has largely been degraded. *Quality of remnant* If the vegetation is in poor to very poor condition, is continuing to degrade and its long term (next 20 to 50 years) persistence is unlikely, then it may be reduced to 'At variance'.

4.30 ha or 93.88% of the clearance occurs in vegetation considered to in poor to moderate condition (A1), 0.19 ha or 4.14% of the clearance occurs in vegetation considered to be in good condition (C1) and 0.09 ha or 1.96% occurs in vegetation considered to be in good condition (D1).

The clearance proposal or action is considered unlikely to have a significant impact on a remnant in a highly cleared landscape or an underrepresented vegetation community within an IBRA Association or IBRA Subregion. The level of clearance is considered to be low in comparison to the remnancy figures provided in the tables below.

None of the three vegetation associations requiring clearance are listed as Threatened Ecological Communities under the EBPC Act, or under the Provisional List of Threatened Ecosystems of SA.

Talia IBRA subregion vegetation remnancy.

Site name	Talia IBRA subregion vegetation remnancy (ha)	Total vegetation clearance proposed per site (ha)	Percentage of clearance in comparison to vegetation remnancy of Talia IBRA subregion
A1	607704	4.30	0.000
C1	607704	0.19	0.000
D1	607704	0.09	0.000

Newland IBRA association vegetation remnancy.

Site name	Newland IBRA association vegetation remnancy (ha)	Total vegetation clearance proposed per site (ha)	Percentage of clearance in comparison to vegetation remnancy of Newland IBRA association
A1	5847	4.30	0.07
C1	5847	0.19	0.003
D1	5847	0.09	0.001

Principle 1f - it is growing in, or in association with, a wetland environment.

Relevant information
Not applicable.

Assessment against the principles
Seriously at Variance
Not applicable.

At Variance –
Not applicable.

Moderating factors that may be considered by the NVC

Principle 1g - it contributes significantly

Relevant information
Not applicable.

N/A

to the amenity of the area in which it is growing or is situated.	Moderating factors that may be considered by the NVC *Not applicable.*

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	Not applicable.
	Area (ha)	4.58
	Total biodiversity Score	205.93
Seriously at variance with principle 1(b), 1(c) or 1 (d)		C1 and D1 are seriously at variance with principle 1(b).
Risk assessment outcome		Level 4.

5. Clearance summary

Clearance Area(s) Summary table

Block	Site	Native 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	VA1	18	1	0	0.04	44.28	4.303	190.54	1.0			209.59	$136,554.95	$7,510.52
A	VA4	17	1	0	0.04	54.6	0.194	10.59	1.0			11.65	$7,590.37	$417.47
A	VA5	17	1	0	0.04	54.6	0.088	4.80	1.0			5.28	$3,440.10	$189.21
						Total	**4.585**	**205.93**				**226.52**	**$147,585.42**	**$8,117.20**

Totals summary table

	Total Biodiversity score	Total SEB points required	SEB Payment	Admin Fee	Total Payment
Application	205.93	226.52	$147,585.42	$8,117.20	$155,702.62

IBRA Association percent vegetation remnancy (%)	52
IBRA Subregion percent vegetation remnancy (%)	56
Is the vegetation associated with a Wetland	No
Economies of Scale Factor	0.5
Rainfall (mm)	359

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. Provide information below.

☐ 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. Provide details below

PAYMENT SEB

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

The owner is proposing to pay into the Native Vegetation Fund. The total payment required is **$155,702.62** which includes an SEB payment of **$147,585.42** and an administration fee of **$8,117.20**.

7. Appendices

Appendix 1. Fauna Species List

Fauna assessment

Fauna surveys conducted concurrently with the flora assessments in April and May 2021 recorded limited species diversity within the project area, consistent with the exposed coastal cliff and low shrubland/herbland habitats. Two bird species and three mammal species were detected (refer to Table below). Two of the mammal species detected are introduced pests listed as declared animals under the *Landscape South Australia Act 2019*: European Red Fox (*Vulpes vulpes*) and European Rabbit (*Oryctolagus cuniculus*).

None of the fauna species recorded during surveys are listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) or the National Parks and Wildlife Act 1972 (SA) (NPW Act).

Additional targeted surveys within the project area would likely result in records of regionally common birds, mammals, and reptiles. Two species listed as Rare under the NPW Act are considered likely to occur based on available habitat and proximity of historical records:

- Restless Flycatcher (*Myiagra inquieta*) (NPW Act: Rare) – potential foraging in shrubland areas.
- Beach Slider (*Lerista arenicola*) (NPW Act: Rare) – potential burrowing habitat in sandy coastal areas.

A site visit in September 2025 confirmed no significant changes in habitat condition that would alter this assessment.

Class name	**Species name**	**Common name**	**Quantity observed/comment**
AVES	*Hirundo neoxena*	Welcome Swallow	Common
AVES	*Phylidonyris novaehollandiae*	New Holland Honeyeater	5
MAMMALIA	*Macropus fuliginosus*	Western Grey Kangaroo	Scats and tracks
MAMMALIA	**Oryctolagus cuniculus*	Rabbit (European Rabbit)	Diggings, scats and tracks
MAMMALIA	**Vulpes vulpes*	Fox (Red Fox)	Scats and tracks

* = Introduced species.

Appendix 2. Bushland Assessment Scoresheets associated with the proposed clearance and SEB Area (to be submitted in Excel format)

Bushland Assessment Scoresheet A1.

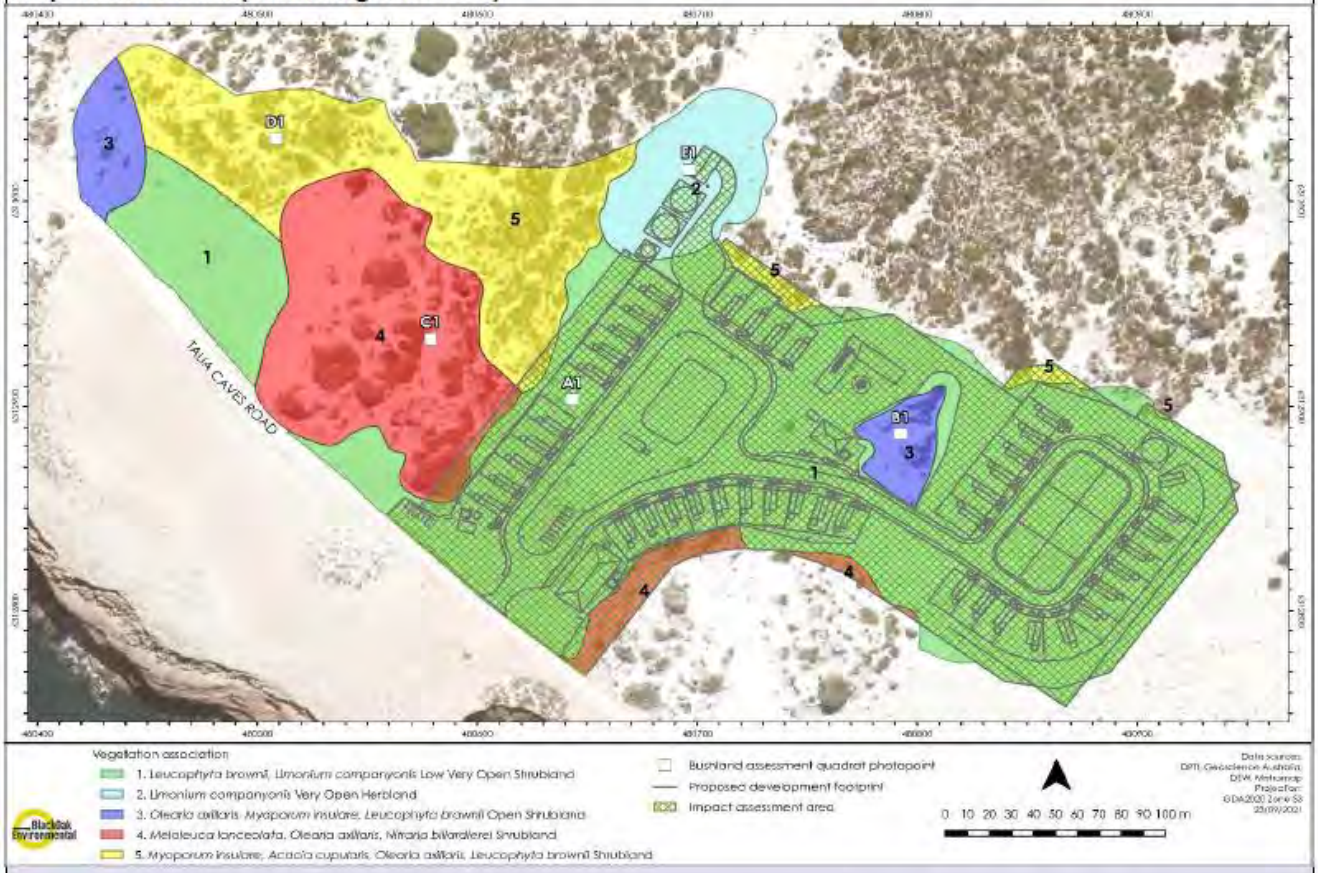
Bushland Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block	A1
Size of Block (Ha)	4.6
Landscapes Region	Eyre Peninsula
BCM Region	Eyre Peninsula
IBRA Association	Newland
IBRA Subregion	Talia

ASSESSOR(S) (Insert Full Name/s)	Matt Launer
DATE OF ASSESSMENT	12/04/2021

Map of the Block (Including the Sites)



Landscape Context Scores

% native veg. remaining in IBRA Assoc.	52
% native veg. remaining in IBRA subregion	56
0 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; > 60 = 0 pts — **Score**	0.04

Score received for both IBRA assoc. and subregion then summed

Percent Vegetation Cover (5km radius) (%)	62
0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts — **Score**	0.03

% native veg. protected IBRA Assoc.	77
0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 — **Score**	0

Block Shape Cleared perimeter:Area (km/km2)	
Cleared Perimeter (m) =	100
Cleared Perimeter to area ratio	2.17
<6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt — **Score**	0.03

Wetland or Riparian Habitat present	
Riparian zone present (Yes/No) = 0.02 pt	No
Swamp/wetland present (Yes/No) = 0.03 pts	No
(Swamp/wetland may be +/- riparian zone) — **Score**	0

Note; Blocks will score a minimum Landscape Context Score of 1

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.1**

Plant Species Recorded (Native and Introduced)		Listed Species			Natives only		
Species	Common Name	EPBC	SA	Not in quadrat	Regen	Annual Herbs Spring survey	Introduced Species
Leucophyta brownii	Coast Cushion Bush				Yes		
Samolus repens	Creeping Brookweed				Yes		
Olearia axillaris	Coast Daisy-bush						
Rhagodia candolleana ssp. candolleana	Sea-berry Saltbush				Yes		
Threlkeldia diffusa	Coast Bonefruit				Yes		
Frankenia pauciflora var.	Southern Sea-heath						
Frankenia sessilis	Small-leaf Sea-heath						
Acacia cupularis	Cup Wattle				Yes		
Nitraria billardierei	Nitre-bush						
Leucopogon parviflorus	Coast Beard-heath						
Exocarpos syrticola	Coast Cherry						
Senecio pinnatifolius var. maritimus	Coast Groundsel						
Ficinia nodosa	Knobby Club-rush						
Maireana oppositifolia	Salt Bluebush						
Acacia longifolia ssp. sophorae	Coastal Wattle						
Dianella brevicaulis	Short-stem Flax-lily						
Melaleuca lanceolata	Dryland Tea-tree						
Carpobrotus rossii	Native Pigface						
Limonium companyonis	Sea-lavender						*

Threatened or Introduced Fauna Species Recorded or Observed (Native and Introduced)		Threatened Species				
Species	Common Name	EPBC	SA	Past Record	Observed	Introduced Species
Vulpes vulpes	Fox (Red Fox)				Yes	*
Macropus fuliginosus	Western Grey Kangaroo				Yes	
Oryctolagus cuniculus	Rabbit (European Rabbit)				Yes	*
Acanthagenys rufogularis	Spiny-cheeked Honeyeater				Yes	
Hirundo neoxena neoxena	Welcome Swallow				Yes	
Myiagra inquieta	Restless Flycatcher		R	Yes		
Lerista arenicola	Beach Slider		R	Yes		

Vegetation Condition Scores

SITE:	A1 - VA1
BCM COMMUNITY	EP 12.1 Coastal Tussock Grasslands & Low Open Shrubland of Dunes & Cliffs
VEGETATION ASSOCIATION DESCRIPTION	*Leucophyta brownii , Limonium companyonis* Low Very Open Shrubland
SIZE OF SITE (Ha)	4.303

Benchmarked attributes
(Scores determined by comparing to a Benchmark community)

Number of Native Species (Minus herbaceous annuals for spring Surveys)	18
Native Plant Species Diversity Score (max 30) from benchmark score *weighted by a factor of 2*	30.0
Number of regenerating native species	5
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	**SNB**

Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I
Limonium sp.	5	2	10
			0
			0
			0
			0
	Cover x Threat		10
Weed Score (max 15) from benchmark community			**11**

Native Plant Life Forms	**Cover rating**
Trees > 15m	
Trees 5 - 15 m	
Trees < 5m	
Mallee > 5m	
Mallee < 5m	
Shrubs > 2m	2
Shrubs 0.5 - 2m	2
Shrubs <0.5m	1
Forbs	1
Mat Plants	1
Grasses > 0.2m	
Grasses < 0.2m	
Sedges > 1m	
Sedges < 1m	1
Hummock grasses	
Vines, scramblers	
Mistletoe	
Ferns	
Grass-tree	
Total	8

Native Plant Life Forms (max 20) from benchmark score *weighted by a factor of 2* **14.0**

Non-Benchmarked Attributes
(Scores determined from direct field observations)

Native:exotic Understorey biomass Score (max 5)	1

Is the community naturally treeless?	☑
Tree attributes not scored for treeless communities or communities with only emergent trees	

Vegetation Condition Score calculation

Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees

- *If the community Score is Not Benchmarked (SNB) for regeneration this score is multiplied 1.24*
- *If the community is naturally treeless this score is multiplied by 1.29*

	70.38
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - (Biomass score x 2))exp2/2)	36.00
VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80))	38.71

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) **Rare** community (0.1 pt)	☐
State (Provisional List of Threatened Ecosystems of SA) **Vulnerable** community (0.2 pts)	☐
State (Provisional List of Threatened Ecosystems of SA) **Endangered** community (0.3 pts)	☐
Nationally (EPBC Act) **Vulnerable** community (0.35 pts)	☐
Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 — **Threatened Community Score**	1

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

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

CONSERVATION SIGNIFICANCE SCORE	1.04

Total Scores for the Site

	Score
LANDSCAPE CONTEXT SCORE	1.10
VEGETATION CONDITION SCORE	38.71
CONSERVATION SIGNIFICANCE SCORE	1.04

Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE	44.28
Total Biodiversity Score (Biodiversity Score x hectares)	190.54

Photo Point and Vegetation Survey Location

Direction of the Photo	
South	
GPS Reference	
Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	480642
Northing (7 digits)	6312900
Description	
A total of 18 flora species were recorded within the Leucophyta brownii, Limonium companyonis Low Very Open Shrubland which included 17 native species and one introduced species, Limonium companyonis (Sea-lavender). The	

Bushland Assessment Scoresheet C1.

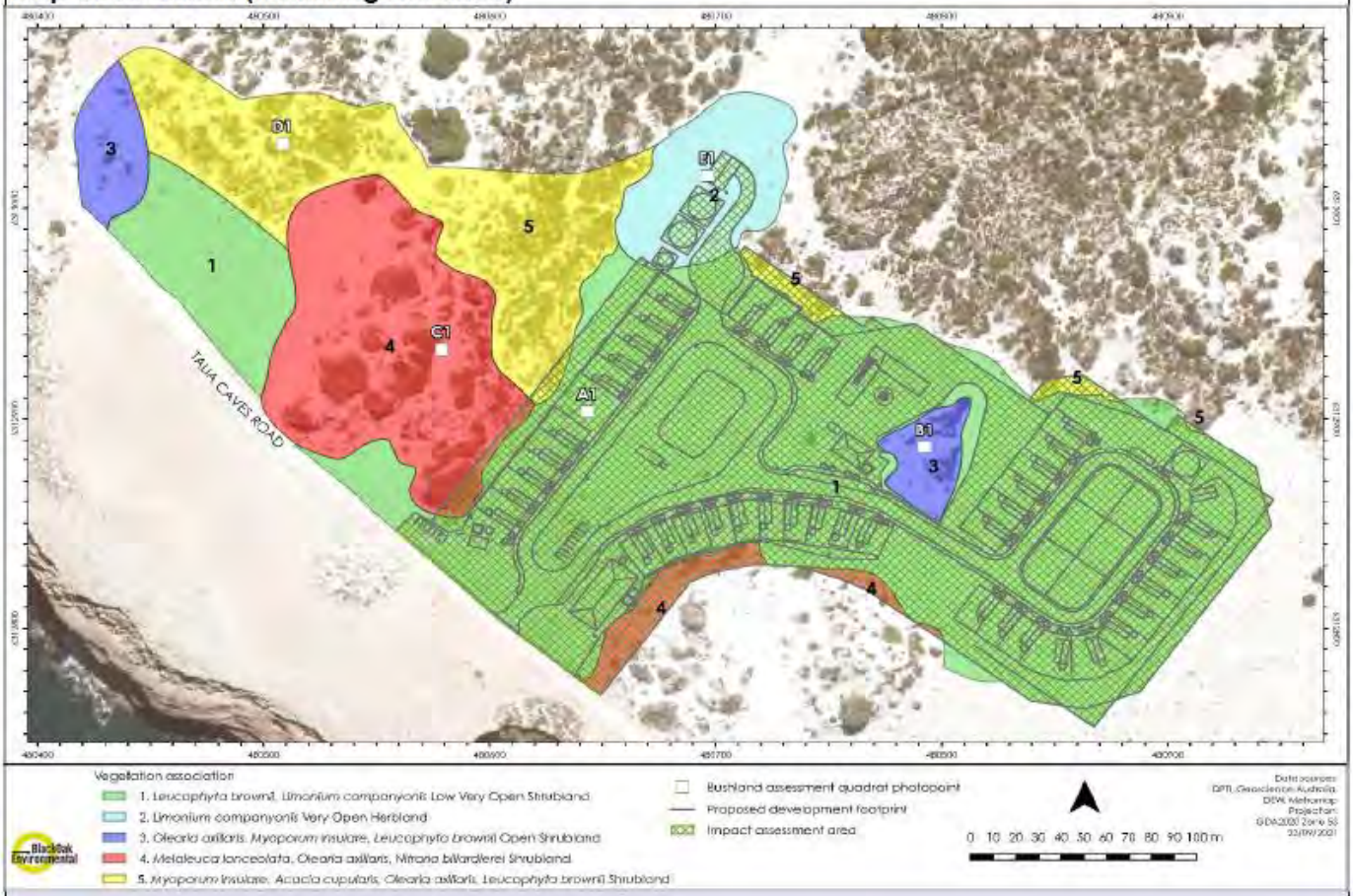
Bushland Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block	A1
Size of Block (Ha)	4.6
Landscapes Region	Eyre Peninsula
BCM Region	Eyre Peninsula
IBRA Association	Newland
IBRA Subregion	Talia

ASSESSOR(S) (Insert Full Name/s)	Matt Launer
DATE OF ASSESSMENT	12/04/2021

Map of the Block (Including the Sites)



Landscape Context Scores

% native veg. remaining in IBRA Assoc.	52
% native veg. remaining in IBRA subregion	56
0 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; > 60 = 0 pts — **Score**	0.04

Score received for both IBRA assoc. and subregion then summed

Percent Vegetation Cover (5km radius) (%)	62
0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts — **Score**	0.03

% native veg. protected IBRA Assoc.	77
0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 — **Score**	0

Block Shape Cleared perimeter:Area (km/km2)	
Cleared Perimeter (m) =	100
Cleared Perimeter to area ratio	2.17
<6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt — **Score**	0.03

Wetland or Riparian Habitat present	
Riparian zone present (Yes/No) = 0.02 pt	No
Swamp/wetland present (Yes/No) = 0.03 pts	No
(Swamp/wetland may be +/- riparian zone) — **Score**	0

Note; Blocks will score a minimum Landscape Context Score of 1

LANDSCAPE CONTEXT SCORE (max 1.25)	1.1

Plant Species Recorded (Native and Introduced)		Listed Species			Natives only		
Species	Common Name	EPBC	SA	Not in quadrat	Regen	Annual Herbs Spring survey	Introduced Species
Melaleuca lanceolata	Dryland Tea-tree						
Olearia axillaris	Coast Daisy-bush						
Ficinia nodosa	Knobby Club-rush				Yes		
Maireana oppositifolia	Salt Bluebush						
Nitraria billardierei	Nitre-bush						
Tetragonia implexicoma	Bower Spinach				Yes		
Rhagodia candolleana ssp.	Sea-berry Saltbush				Yes		
Threlkeldia diffusa	Coast Bonefruit				Yes		
Leucophyta brownii	Coast Cushion Bush				Yes		
Senecio pinnatifolius var. maritimus	Coast Groundsel						
Cassytha peninsularis	Peninsula Dodder-laurel						
Exocarpos syrticola	Coast Cherry						
Acacia longifolia ssp. sophorae	Coastal Wattle						
Dianella brevicaulis	Short-stem Flax-lily						
Enchylaena tomentosa var.	Ruby Saltbush				Yes		
Myoporum insulare	Common Boobialla						

Threatened or Introduced Fauna Species Recorded or Observed (Native and Introduced)		Threatened Species				Introduced Species
Species	**Common Name**	**EPBC**	**SA**	Past Record	Observed	
Vulpes vulpes	Fox (Red Fox)				Yes	*
Macropus fuliginosus	Western Grey Kangaroo				Yes	
Oryctolagus cuniculus	Rabbit (European Rabbit)				Yes	*
Acanthagenys rufogularis	Spiny-cheeked Honeyeater				Yes	
Hirundo neoxena neoxena	Welcome Swallow				Yes	
Myiagra inquieta	Restless Flycatcher		R	Yes		
Lerista arenicola	Beach Slider		R	Yes		

Vegetation Condition Scores

SITE:	C1 - VA4
BCM COMMUNITY	EP 12.2 Coastal Shrublands of Stable Dunes & Cliff top Dunes
VEGETATION ASSOCIATION DESCRIPTION	Melaleuca lanceolata, Olearia axillaris, Nitraria billardierei Shrubland
SIZE OF SITE (Ha)	0.194

Benchmarked attributes
(Scores determined by comparing to a Benchmark community)

Number of Native Species (Minus herbaceous annuals for spring Surveys)	16
Native Plant Species Diversity Score (max 30) from benchmark score *weighted by a factor of 2*	20.0
Number of regenerating native species	6
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	9

Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I
			0
			0
			0
			0
			0
	Cover x Threat		0
Weed Score (max 15) from benchmark community			15

Native Plant Life Forms	**Cover rating**
Trees > 15m	
Trees 5 - 15 m	
Trees < 5m	
Mallee > 5m	
Mallee < 5m	
Shrubs > 2m	
Shrubs 0.5 - 2m	3
Shrubs <0.5m	2
Forbs	1
Mat Plants	1
Grasses > 0.2m	
Grasses < 0.2m	
Sedges > 1m	
Sedges < 1m	
Hummock grasses	
Vines, scramblers	1
Mistletoe	
Ferns	
Grass-tree	
Total	8

Native Plant Life Forms (max 20) from benchmark score *weighted by a factor of 2*	8.0

Non-Benchmarked Attributes
(Scores determined from direct field observations)

Native:exotic Understorey biomass Score (max 5)	5

Is the community naturally treeless?	☑
Tree attributes not scored for treeless communities or communities with only emergent trees	

Vegetation Condition Score calculation

Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees

- *If the community Score is Not Benchmarked (SNB) for regeneration this score is multiplied 1.24*
- *If the community is naturally treeless this score is multiplied by 1.29*

	47.73
Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - (Biomass score x 2))exp2/2)	0.00
VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80))	47.73

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) **Rare** community (0.1 pt)	☐
State (Provisional List of Threatened Ecosystems of SA) **Vulnerable** community (0.2 pts)	☐
State (Provisional List of Threatened Ecosystems of SA) **Endangered** community (0.3 pts)	☐
Nationally (EPBC Act) **Vulnerable** community (0.35 pts)	☐
Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 **Threatened Community Score**	1

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

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

CONSERVATION SIGNIFICANCE SCORE	1.04

Total Scores for the Site

	Score
LANDSCAPE CONTEXT SCORE	1.10
VEGETATION CONDITION SCORE	47.73
CONSERVATION SIGNIFICANCE SCORE	1.04

Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE	54.60
Total Biodiversity Score (Biodiversity Score x hectares)	10.59

Photo Point and Vegetation Survey Location

Direction of the Photo	
North	
GPS Reference	
Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	480563
Northing (7 digits)	6312928
Description	
A total of 17 native flora species were recorded within the Melaleuca lanceolata, Olearia axillaris, Nitraria billardierei Shrubland. The landform is a coastal cliff dune which contains coastal sands. Approximately 50% of the area contains vegetation cover	

Bushland Assessment Scoresheet D1.

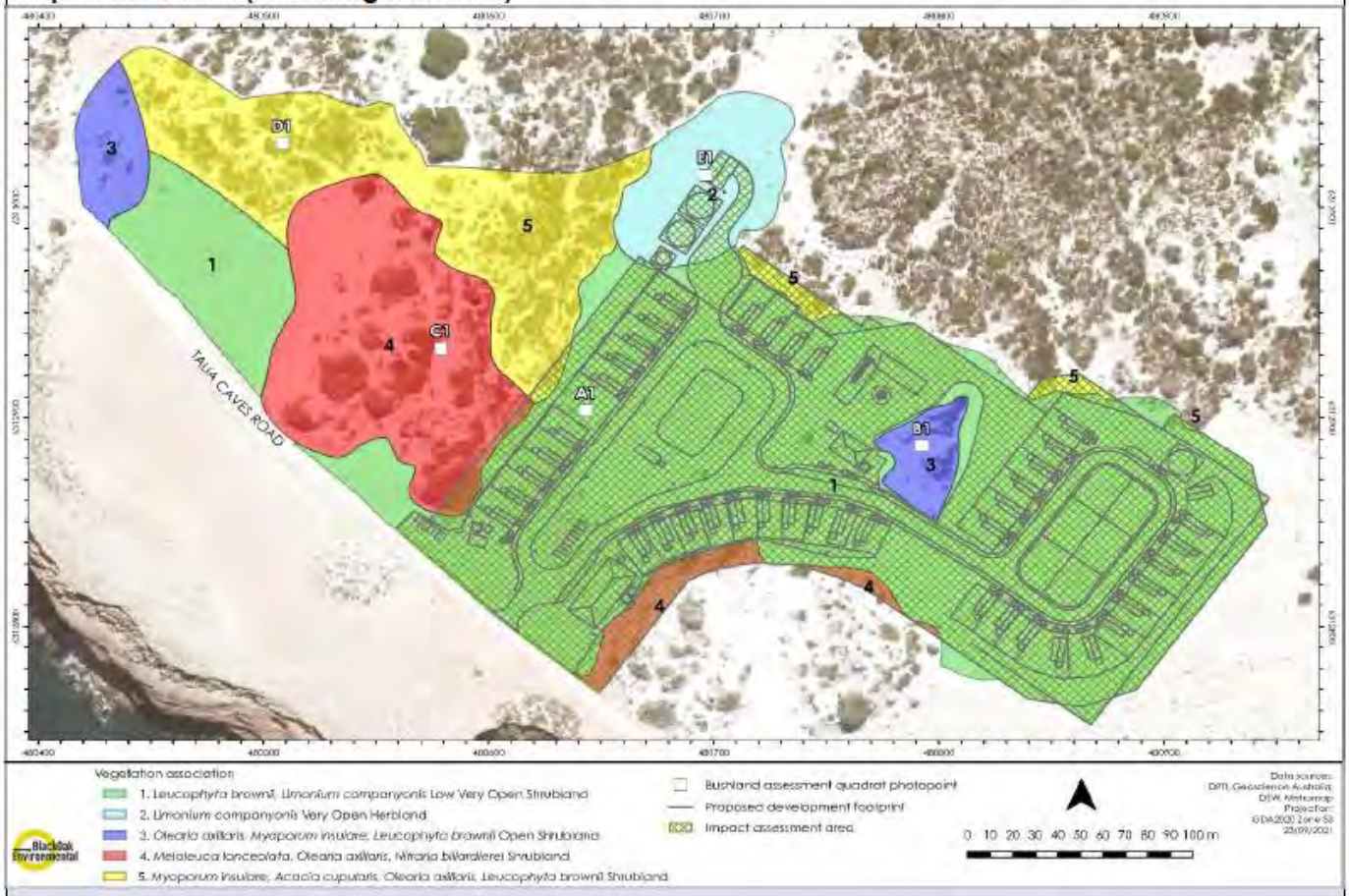
Bushland Assessment Scoresheet

(SEB Policy 1 Sept 2024; Scoresheet updated 9 Sept 2025)

Block	A1
Size of Block (Ha)	4.6
Landscapes Region	Eyre Peninsula
BCM Region	Eyre Peninsula
IBRA Association	Newland
IBRA Subregion	Talia

ASSESSOR(S) (Insert Full Name/s)	Matt Launer
DATE OF ASSESSMENT	12/04/2021

Map of the Block (Including the Sites)



Landscape Context Scores

% native veg. remaining in IBRA Assoc.	52
% native veg. remaining in IBRA subregion	56
0 - 10% = 0.05 pts; >10-20% = 0.04 pts; >20-30% = 0.03 pts; >30-60% = 0.02 pts; > 60 = 0 pts — **Score**	0.04

Score received for both IBRA assoc. and subregion then summed

Percent Vegetation Cover (5km radius) (%)	62
0-5% = 0 pts; >5-10% = 0.02 pts; >10-25% = 0.04 pts; >25-50% = 0.06 pts; >50-75% = 0.03 pt; >75-100% = 0 pts — **Score**	0.03

% native veg. protected IBRA Assoc.	77
0-10% = 0.03 pts; >10-20% = 0.02 pts; >20-40% = 0.01 pt; >40% = 0 — **Score**	0

Block Shape Cleared perimeter:Area (km/km2)	
Cleared Perimeter (m) =	100
Cleared Perimeter to area ratio	2.17
<6 = 0.03 pts; 6 to <12 = 0.02 pts; 12 to <18 = 0.01 pt — **Score**	0.03

Wetland or Riparian Habitat present	
Riparian zone present (Yes/No) = 0.02 pt	No
Swamp/wetland present (Yes/No) = 0.03 pts	No
(Swamp/wetland may be +/- riparian zone) — **Score**	0

Note; Blocks will score a minimum Landscape Context Score of 1

LANDSCAPE CONTEXT SCORE (max 1.25)	**1.1**

Plant Species Recorded (Native and Introduced)		Listed Species			Natives only		
Species	Common Name	EPBC	SA	Not in quadrat	Regen	Annual Herbs Spring survey	Introduced Species
Frankenia sessilis	Small-leaf Sea-heath						
Olearia axillaris	Coast Daisy-bush						
Ficinia nodosa	Knobby Club-rush				Yes		
Maireana oppositifolia	Salt Bluebush						
Acacia cupularis	Cup Wattle						
Tetragonia implexicoma	Bower Spinach				Yes		
Rhagodia candolleana ssp.	Sea-berry Saltbush				Yes		
Threlkeldia diffusa	Coast Bonefruit				Yes		
Carpobrotus rossii	Native Pigface						
Leucophyta brownii	Coast Cushion Bush				Yes		
Senecio pinnatifolius var. maritimus	Coast Groundsel						
Cassytha peninsularis	Peninsula Dodder-laurel						
Exocarpos syrticola	Coast Cherry						
Acacia longifolia ssp. sophorae	Coastal Wattle						
Dianella brevicaulis	Short-stem Flax-lily						
Enchylaena tomentosa var.	Ruby Saltbush				Yes		
Myoporum insulare	Common Boobialla						
Limonium companyonis	Sea-lavender						*

Threatened or Introduced Fauna Species Recorded or Observed (Native and Introduced)		Threatened Species				Introduced Species
Species	**Common Name**	**EPBC**	**SA**	**Past Record**	**Observed**	
Vulpes vulpes	Fox (Red Fox)				Yes	*
Macropus fuliginosus	Western Grey Kangaroo				Yes	
Oryctolagus cuniculus	Rabbit (European Rabbit)				Yes	*
Acanthagenys rufogularis	Spiny-cheeked Honeyeater				Yes	
Hirundo neoxena neoxena	Welcome Swallow				Yes	
Myiagra inquieta	Restless Flycatcher		R	Yes		
Lerista arenicola	Beach Slider		R	Yes		

Vegetation Condition Scores

SITE:	D1 - VA5
BCM COMMUNITY	EP 12.2 Coastal Shrublands of Stable Dunes & Cliff top Dunes
VEGETATION ASSOCIATION DESCRIPTION	*Myoporum insulare , Acacia cupularis , Olearia axillaris , Leucophyta bro*
SIZE OF SITE (Ha)	0.088

Benchmarked attributes
(Scores determined by comparing to a Benchmark community)

Number of Native Species (Minus herbaceous annuals for spring Surveys)	17
Native Plant Species Diversity Score (max 30) from benchmark score *weighted by a factor of 2*	**20.0**
Number of regenerating native species	6
Regeneration Score (max 12) from benchmark community weighted by a factor of 1.5	9

Weed species (Top 5 Cover x Invasiveness)	Cover (max 6)	Weed Threat Rating (max 5)	C x I
Limonium sp.	1	2	2
			0
			0
			0
			0
	Cover x Threat		2
Weed Score (max 15) from benchmark community			**15**

Native Plant Life Forms	**Cover rating**
Trees > 15m	
Trees 5 - 15 m	
Trees < 5m	
Mallee > 5m	
Mallee < 5m	
Shrubs > 2m	
Shrubs 0.5 - 2m	3
Shrubs <0.5m	2
Forbs	1
Mat Plants	1
Grasses > 0.2m	
Grasses < 0.2m	
Sedges > 1m	
Sedges < 1m	
Hummock grasses	
Vines, scramblers	1
Mistletoe	
Ferns	
Grass-tree	
Total	8

Native Plant Life Forms (max 20) from benchmark score *weighted by a factor of 2* **8.0**

Non-Benchmarked Attributes
(Scores determined from direct field observations)

Native:exotic Understorey biomass Score (max 5)	5

Is the community naturally treeless?	☑
Tree attributes not scored for treeless communities or communities with only emergent trees	

Vegetation Condition Score calculation

Positive Vegetation Attributes Score = Native species diversity + Regeneration + Native Plant Life Forms Fallen timber/debris + Hollow-bearing trees

- *If the community Score is Not Benchmarked (SNB) for regeneration this score is multiplied 1.24*
- *If the community is naturally treeless this score is multiplied by 1.29*

47.73

Negative Vegetation Attributes Score = (15 - Weeds) + ((10 - (Biomass score x 2))exp2/2) 0.00

VEGETATION CONDITION SCORE (Positive veg attributes x ((80 - Negative vegetation attributes) / 80)) **47.73**

Conservation Significance Score

Is the vegetation association considered a Threatened Ecological community or Ecosystem?	Yes/No
State (Provisional List of Threatened Ecosystems of SA) **Rare** community (0.1 pt)	☐
State (Provisional List of Threatened Ecosystems of SA) **Vulnerable** community (0.2 pts)	☐
State (Provisional List of Threatened Ecosystems of SA) **Endangered** community (0.3 pts)	☐
Nationally (EPBC Act) **Vulnerable** community (0.35 pts)	☐
Nationally (EPBC Act) **Endangered** or **Critically Endangered** community (0.4 pts)	☐
Note; all sites will score a minimum Conservation Significance Score of 1 — **Threatened Community Score**	1

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

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

CONSERVATION SIGNIFICANCE SCORE	1.04

Total Scores for the Site

	Score
LANDSCAPE CONTEXT SCORE	1.10
VEGETATION CONDITION SCORE	47.73
CONSERVATION SIGNIFICANCE SCORE	1.04

Vegetation Condition x Landscape Context x Conservation Significance = UNIT BIODIVERSITY SCORE	54.60
Total Biodiversity Score (Biodiversity Score x hectares)	4.80

Photo Point and Vegetation Survey Location

Direction of the Photo

North

GPS Reference

Datum	GDA20
Zone (52, 53 or 54)	53
Easting (6 digits)	480563
Northing (7 digits)	6312928

Description

A total of 16 flora species were recorded within the Myoporum insulare, Acacia cupularis, Olearia axillaris, Leucophyta brownii Shrubland which included 15 native species and one introduced species, Limonium companyonis (Sea-

Appendix 3. Flora Species List.

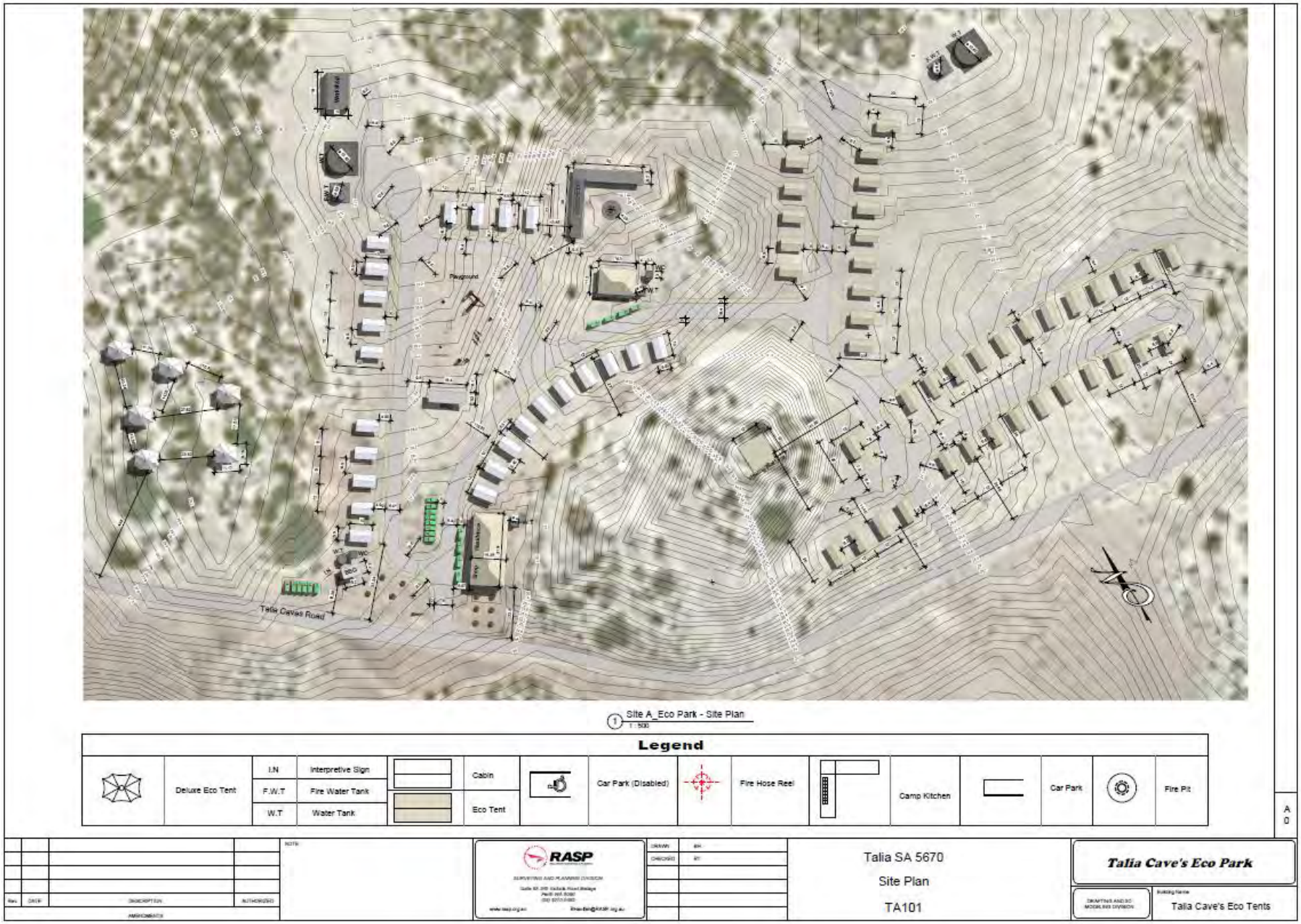
Family name	Species name	Common name	Vegetation association				
			1	2	3	4	5
AIZOACEAE	*Carpobrotus rossii*	Native Pigface	X		X	X	X
AIZOACEAE	*Disphyma crassifolium ssp. clavellatum*	Round-leaf Pigface					
AIZOACEAE	*Tetragonia implexicoma*	Bower Spinach				X	X
CHENOPODIACEAE	*Enchylaena tomentosa var.*	Ruby Saltbush				X	
CHENOPODIACEAE	*Maireana oppositifolia*	Salt Bluebush	X		X	X	X
CHENOPODIACEAE	*Rhagodia candolleana ssp.*	Sea-berry Saltbush	X			X	X
CHENOPODIACEAE	*Threlkeldia diffusa*	Coast Bonefruit	X		X	X	
COMPOSITAE	*Leucophyta brownii*	Coast Cushion Bush	X		X	X	X
COMPOSITAE	*Olearia axillaris*	Coast Daisy-bush	X		X	X	X
COMPOSITAE	*Senecio pinnatifolius var. maritimus*	Coast Groundsel	X			X	X
CYPERACEAE	*Ficinia nodosa*	Knobby Club-rush	X		X	X	X
EPACRIDACEAE	*Leucopogon parviflorus*	Coast Beard-heath	X		X		
FRANKENIACEAE	*Frankenia pauciflora var.*	Southern Sea-heath	X				X
FRANKENIACEAE	*Frankenia sessilis*	Small-leaf Sea-heath	X		X		
GRAMINEAE	*Spinifex hirsutus*	Rolling Spinifex					
GRAMINEAE	*Triodia sp.*	Spinifex			X		
LAURACEAE	*Cassytha peninsularis*	Peninsula Dodder-laurel			X	X	X
LEGUMINOSAE	*Acacia anceps*	Angled Wattle					
LEGUMINOSAE	*Acacia cupularis*	Cup Wattle	X		X		X
LEGUMINOSAE	*Acacia longifolia ssp. sophorae*	Coastal Wattle	X		X	X	X
LILIACEAE	*Dianella brevicaulis*	Short-stem Flax-lily	X		X	X	X
LIMONIACEAE	**Limonium companyonis*	Sea-lavender	X	X	X		X
MYOPORACEAE	*Myoporum insulare*	Common Boobialla				X	X
MYRTACEAE	*Melaleuca lanceolata*	Dryland Tea-tree	X			X	
PRIMULACEAE	*Samolus repens*	Creeping Brookweed			X		
SANTALACEAE	*Exocarpos syrticola*	Coast Cherry	X		X	X	X
ZYGOPHYLLACEAE	*Nitraria billardierei*	Nitre-bush	X			X	

Vegetation association

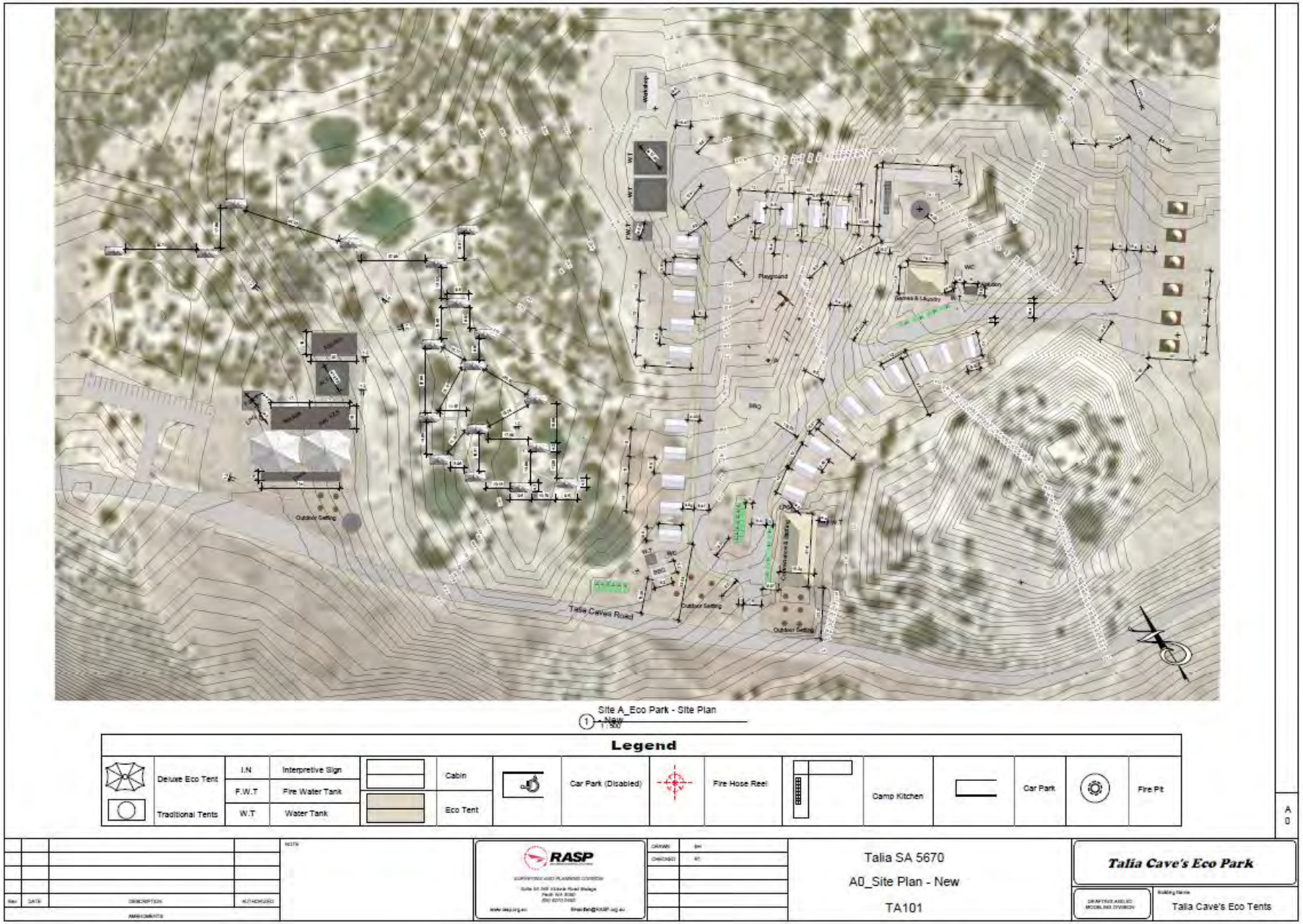
1. *Leucophyta brownii*, **Limonium companyonis* Low Very Open Shrubland.
2. **Limonium companyonis* Very Open Herbland.
3. *Olearia axillaris*, *Myoporum insulare*, *Leucophyta brownii* Open Shrubland.
4. *Melaleuca lanceolata*, *Olearia axillaris*, *Nitraria billardierei* Shrubland.
5. *Myoporum insulare*, *Acacia cupularis*, *Olearia axillaris*, *Leucophyta brownii* Shrubland.

* = Introduced species.

Appendix 4. Site layout – Talia Caves Eco Park Site Plan (Revision A).



Appendix 5. Site layout – Talia Caves Eco Park Site Plan (Revision B).



Appendix 6. Site layout – Talia Caves Eco Park Site Plan (Site B: Glamping).

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