

April 2026

Biodiversity Assessment, Tragowel Battery Energy Storage System, Tragowel, Victoria



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Version B

Prepared for:

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Cover Photograph

A photograph of vegetation within the study area taken during the current assessment.

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Executive Summary

Ecolink Consulting Pty Ltd was engaged by Green Switch Australia Pty Ltd and Potentia Energy Pty Ltd to undertake a Biodiversity Assessment for a proposed Tragowel Battery Energy Storage System (BESS) at Lot 1 TP601295, and two northern cable route options; one along the Loddon Valley Highway and one adjacent to the Piangil train line, Tragowel, Victoria (the study area). The Biodiversity Assessment was undertaken to determine the ecological constraints of the study area and to support a planning permit application for the proposed BESS development. This is the third iteration of the report dated April 2026. It has been updated based on the Concept Layout Plan, prepared by Cogency, dated 15 April 2026, which shows the 'nominated cable route' being alongside the Piangil train line and Old Echuca Road as well as revised development configuration.

The study area is zoned Farming Zone within the Gannawarra Planning Scheme. The study area is covered by an Environmental Significance Overlay– Schedule 2 (ESO2) and an Environmental Significance Overlay – Schedule 4 (ESO4). The ESO2 concerns the protection of highway environs and largely relates to the visual character and amenity of roads, keeping to the rural character of the area. The ESO4 identifies areas prone to inundation and guides appropriate development in these areas. No other ecologically relevant overlays, cover the study area.

Department of Energy, Environment and Climate Action (DEECA) mapping shows that the study area occurs within the Victorian Riverina bioregion of Victoria. DEECA modelling of the vegetation within the study area suggest it was historically covered by Ecological Vegetation Class (EVC) 97: Semi-arid Woodland and EVC 829: Chenopod Grassland. Thirteen patches of EVC 829: Chenopod Grassland were recorded during the current assessment, including one patch in the BESS site, one along the proposed transmission cable route, and the others in the road reserves associated with the Loddon Valley Highway, which will not be impacted by the BESS development (BESS inclusive of the transmission cables).

Sixty-five flora species were recorded during the site assessment (excluding the planted trees). This comprised 28 indigenous species, five Victorian native species that were not indigenous to the study area and 32 exotic species. Much of the BESS site area was sown with exotic pastures, and environmental weeds were prevalent throughout the study area. Some exotic trees, including Peppertree *Schinus molle*, were also present at the proposed BESS site. Where native trees were present, they occurred in straight rows, or were not characteristic of the underlying EVC in the landscape; these trees were deemed planted. Patches of native vegetation were recorded on the western side of the BESS site and within the powerline easements. Widespread species in these patches included Black Roly Poly *Sclerolaena muricata*, Nitre-bush *Nitraria billardierei* and Ruby Saltbush *Enchylaena tomentosa* var. *tomentosa*.

Six 'threatened' flora species (i.e. species listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) or the *Flora and Fauna Guarantee Act 1988* (Vic)) have been recorded within three kilometres of the study area on the Victorian Biodiversity Atlas (VBA). There is a historical record of one threatened flora species within the study area. Bush Minuria *Minuria cunninghamii* has previously been recorded in the northern portion of the study area, although it was not observed during the current assessment. Blackseed Glasswort *Tecticornia pergranulata* subsp. *divaricata*, Bush

Minuria and Spiny Lignum *Duma horrida* subsp. *horrida* all have records in the surrounding three kilometres. All of these species are likely to inhabit similar vegetation and be found in similar geology to that recorded within the study area. Similar species within the same genus (Glasswort *Tecticornia* sp. and Lignum *Duma* sp.) were recorded within the study area. A targeted survey for threatened flora species was recommended and commissioned to establish presence or absence of these species, however no protected or threatened flora species were recorded during that survey (Ecolink Consulting Pty Ltd 2024).

No threatened ecological communities were recorded during the current assessment. The proposed works are unlikely to impact any threatened ecological communities.

Thirteen fauna species were recorded within the study area during the site assessment. This comprised eleven birds (three introduced; eight native), one native reptile and one exotic mammal. Seventeen threatened fauna species have been recorded within three kilometres of the study area. There are no historical records of threatened fauna species within the study area, and none were observed within the study area, during the current assessment. The bulk of historic records consist of wetland bird species finding habitat in the nearby Tragowel Swamp Nature Conservation Reserve. There is little chance these species will visit the study area. One species, Samphire Skink *Morethia adalaidensis*, may occur within the native vegetation associated with the Loddon Valley Highway. Several records of this species occur from 1982, although there are likely to have been few surveys undertaken for the species in the local area. Samphire Skinks habitat includes Saltbush *Chenopod* shrubs, of which several species were identified within the study area during the current assessment. This species is listed as endangered under the *Flora and Fauna Guarantee Act 1988* (Vic) (FFG Act) and a survey was initially recommended to be undertaken in potentially suitable habitat within the Loddon Valley Highway road reserves. The proposed development now avoids the habitats for this species and surveys are no longer recommended. The BESS development is unlikely to significantly impact any other threatened fauna species.

In this context, and based on the relevant legislation and policies, the following recommendations are made:

- To obtain regulatory approval:
 - Ensure the development design avoids and minimises the impacts to native vegetation and biodiversity values in accordance with the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* where feasible. It is considered that this has been achieved with only unavoidable losses of Patch 1 and Patch 2 proposed;
- Post approval, subject to regulatory approvals:
 - Engage a zoologist or wildlife handler salvage any wildlife from planted trees prior to their removal;
 - Provide offsets for the unavoidable losses of native vegetation (Patches 1 and 2) through an accredited Offset Broker. This will include:
 - 0.090 General Habitat Units;
 - With a Minimum Strategic Biodiversity Score of 0.240;

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- Located within the North Central Catchment Management Authority (CMA) or within the Gannawarra Shire Council municipality;
- Prepare a Construction Environment Management Plan (or equivalent) which includes:
 - Protection of retained scattered trees within the study (if any); and
 - Using clean fill (if required);
 - Avoiding downstream and off-site impacts; and
 - Measures to minimise impacts associated with weed introduction and spread targeting noxious weeds such as:
 - African Box-thorn *Lycium ferocissimum*;
 - Horehound *Marrubium vulgare*;
 - Spear Thistle *Cirsium vulgare*; and,
 - Variegated Thistle *Silybum marianum*.

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Introduction

Ecolink Consulting Pty Ltd was engaged by Green Switch Australia Pty Ltd and Potentia Energy Pty Ltd to undertake a Biodiversity Assessment for a proposed Tragowel Battery Energy Storage System (BESS) at Lot 1 TP601295. The study area for the current assessment also included two additional cable routes extending north to the Kerang Terminal Station; one along the Loddon Valley Highway and one adjacent to the Piangil train line, Tragowel, Victoria. These areas are hereafter referred to as the study area. The Biodiversity Assessment was undertaken to determine the ecological constraints of the study area and to support a planning permit application for the proposed BESS development.

The assessment addresses the requirements of Clause 52.17 of the Gannawarra Planning Scheme. Clause 52.17 requires mapping and assessing the location, extent and quality of native vegetation in accordance with the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (Department of Environment Land Water and Planning 2017). The Biodiversity Assessment also identifies the likely ecological constraints of the study area and recommends mitigation measures and offset requirements based on other relevant legislation and policies, where appropriate.

Therefore, the purpose of the Biodiversity Assessment is to:

- Determine the ecological values of the study area;
- Evaluate the extent and quality of native vegetation within the study area, required under the *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (Department of Environment Land Water and Planning 2017);
- Evaluate any impacts that are likely to occur to any ecological values as a result of the proposed development at the study area; and,
- Make recommendations to avoid or mitigate impacts to identified ecological values, as appropriate.

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Methods

Desktop Assessment

In order to determine the ecological values that have previously been recorded within the study area, and its vicinity, the following databases and literature were consulted:

- The Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) Protected Matters Search Tool to determine Matters of National Environmental Significance (MNES), under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act), that are modelled to occur in the vicinity of the study area (Department of Climate Change Energy the Environment and Water 2025a);
- Planning Maps to identify the planning zones and overlays relating to environmental matters e.g. Vegetation Protection Overlays or Environmental Significance Overlays (Department of Transport and Planning 2025);
- The NatureKit webpage (Department of Environment Land Water and Planning 2023b) from the Department of Energy, Environment, and Climate Action (DEECA) to identify the historic and current Ecological Vegetation Classes (EVCs);
- The Victorian Biodiversity Atlas (Department of Energy Environment and Climate Action 2025e) for records of threatened¹ flora and fauna within three kilometres of the study area;
- Nearmap aerial photography to understand previous land use (Nearmap 2025);
- The Native Vegetation Information Management System (NVIM) to determine biodiversity offset requirements (Department of Energy Environment and Climate Action 2025c);
- The 'Weeds of National Significance' database (Department of Climate Change Energy the Environment and Water 2025b); and,
- Other relevant legislation and policies (as required).

Site Assessment

A site assessment was undertaken on 16 October 2024 by Principal Ecologist, Simon Scott and Consultant Ecologist Liam McCormack. Both are suitably qualified and experienced to undertake such assessments and both hold a current Vegetation Quality Assessments (Habitat Hectares) Accreditation with DEECA (Department of Energy Environment and Climate Action 2025d).

All flora species observed within the study area were recorded, with the exception of planted vegetation that was not considered a 'weed' (i.e. planted vegetation that was not spreading or reproducing). Where a species was not able to be confidently identified in the field, a sample was collected and later identified. Plants were identified to species level wherever possible, however, some plants that were planted, cultivars, hybrids, or plants that did not contain suitable fertile material used for identification were recorded to genus level.

¹ Threatened flora and fauna includes species listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (Cth), and the *Flora and Fauna Guarantee Act 1988* (Vic).

Vegetation communities such as EVCs and nationally significant vegetation communities were recorded (if observed) and compared with their corresponding benchmarks or thresholds to ensure that they were accurately assigned.

A list of all fauna species observed within, and immediately surrounding, the study area was produced. This list consists of species seen, heard, or identified by other evidence of their presence (e.g. feathers, scats). Leica 12 X 50 binoculars and call mimicry/playback were used to assist in the identification species.

The species, size (Diameter and Breast Height and Tree Protection Zone) and location of all 'scattered' indigenous trees was recorded using an iPad mini tablet that has an internal Global Positioning System (GPS) and the GIS Pro application (accuracy +/- 5 metres). The presence of hollows and birds' nests was also noted.

The presence of fauna habitat was noted, particularly in relation to potential habitats for threatened species. The greatest amount of time was spent surveying the highest quality fauna habitats (e.g. trees, water bodies, crevices or underground debris) during the assessment.

Guidelines for the Removal, Destruction or Lopping of Native Vegetation

The *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (the Guidelines) (Department of Environment Land Water and Planning 2017) are required to be addressed under Clause 52.17 of the Planning Scheme. The Guidelines require that information regarding the biodiversity values of the site were obtained through:

- Site-based information that was measured or observed at a site, including:
 - Extent of native vegetation patches;
 - Large trees;
 - Native vegetation condition assessed in accordance with the *Vegetation Quality Assessment Manual – Guidelines for Applying the Habitat Hectares Scoring Method* (Department of Sustainability and Environment 2004);
 - Ecological Vegetation Classes (EVC); and
 - Sensitive wetlands and coastal areas.
- Landscape scale information that cannot be measured or observed at the site and includes maps and models procured from DEECA.

The Guidelines require a Habitat Hectare assessment in instances where the impact is to be assessed under the Detailed Assessment Pathway. It was not possible to determine the risk-based pathway for the loss of native vegetation prior to the site assessment, and we therefore opted to complete the Habitat Hectare assessment in accordance with the methodology prescribed within the *Vegetation Quality Assessment Manual – Guidelines for Applying the Habitat Hectares Scoring Method* (Department of Sustainability and Environment 2004) where patches² of vegetation were observed.

² A 'patch' is defined as an area with at least 25% cover abundance of perennial native vegetation, or a group (i.e. three or more) trees forming a continuous canopy.

All indigenous vegetation was assessed, and then assigned a quality rating based on the Habitat Hectare score (Department of Sustainability and Environment 2004). In addition, the location and species of indigenous 'scattered trees'³, and any 'large trees'⁴ within patches were mapped.

Limitations and Qualifications

The following limitations and qualifications apply to this report:

- The results of the desktop assessment are reliant on data obtained from various databases and other reports. These databases all have internal vetting procedures, however the accuracy of these historical data and some of the results provided within these reports cannot be verified. The desktop assessment does, however, rely on the most accurate data available.
- As with all ecological assessments, a greater survey effort is likely to yield additional flora and fauna records. Where these additional flora and fauna records may alter the recommendations made within this report (e.g. where additional threatened species may utilise habitats within the study area, or where threatened species may be impacted by the proposed development), further assessment has been recommended within this report, depending on the implications of relevant policies and legislation.
- Some flora and fauna species may only be recorded during certain times or seasons (e.g. plants that only contain above-ground biomass and are only visible annually, nocturnal mammals and birds, migratory birds, or fauna identified through seasonal breeding calls such as some frog species). The Spring assessment is generally accepted as the preferred time to assess annual flora species.

On the basis of the above, the author has made an informed decision about the likely presence of threatened species that may be present, or that may utilise habitats within the study area, based on a desktop assessment, a review of the species' biology, and an understanding of the ecological values of the local area.

Despite the limitations to the assessment listed above, the results gained by both a desktop and a field-assessment are adequate to address the purposes of this report.

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³ Scattered trees are defined as a native canopy tree that does not form a patch

⁴ Large trees are defined as meeting the size threshold specified in the bioregional EVC Benchmark

Results

The Study Area

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Study Area Description and Land Use History

The study area is in Tragowel, approximately seven kilometres south of the Kerang town centre. The Kerang Terminal Station is located at the northern extent of the study area and is where the BESS will connect to the electricity grid. The Piangil trainline is adjacent to the eastern boundary of the study area. The Loddon River is located approximately 1.5 kilometres to the west. The land surrounding the study area includes the Kerang Solar Plant to the north of the study area, and agricultural land in all other directions.

The BESS is proposed in the northernmost paddock of Lot 1 TP601295, adjacent to the Loddon Valley Highway. The potential eastern transmission route runs adjacent to the Piangil train line and Old Echuca Road, whilst the potential western route may have included the road reserve on either side of the Loddon Valley Highway. The eastern transmission cable route has, since the site assessment, been selected as the nominated alignment for the BESS development (defined as the BESS inclusive of the transmission cables) (Figure 1).

The study area is mostly flat. A former, now disused, irrigation line extends along the western portion of the study area. An artificial dam is located along the drainage line and several berms, constructed for flood protection, were observed around the irrigation line. More berms were noted adjacent to the Piangil train line and Loddon Valley Highway. Discussions with the landowner of Lot TP601295 confirmed that the private area was sown with pasture grasses in March 2024 and was slashed in for hay in October 2024 (pers comm.). Aerial imagery shows that most parts of the study area had previously undergone slashing, since 2010, and that the study area, and wider area was flooded in 2011 (Nearmap 2025).

Local Planning Controls

The study area is zoned Farming Zone within the Gannawarra Planning Scheme. The study area is covered by an Environmental Significance Overlay – Schedule 2 (ESO2) and Environmental Significance Overlay – Schedule 4 (ESO4). The ESO2 relates to the protection of highway environs and the visual character and amenity of roads to preserve the rural character of the area. The ESO4 identifies areas prone to inundation and guides appropriate development in these areas. No other ecologically relevant overlays cover the study area (Department of Transport and Planning 2025).

Flora

Flora Communities

The study area is located within the Victorian Riverina bioregion of Victoria. DEECA modelling of the vegetation within the study area suggests it was historically covered by Ecological Vegetation Class (EVC) 97: Semi-arid Woodland and EVC 829: Chenopod Grassland (Department of Environment Land Water and Planning 2023b) as described below:

- EVC 97: Semi-arid Woodland is described as a '*Non-eucalypt woodland or open forest to 12 m tall, of low rainfall areas. Occurs in a range of somewhat elevated positions not subject to flooding or inundation. The surface soils are typically light textured loamy sands or sandy loams*' (Department of Energy Environment and Climate Action 2025a). EVC 97: Semi-arid Woodland is listed as Endangered within the bioregion.
- EVC 829: Chenopod Grassland is described as an '*Open to sparse shrubland with a more or less continuous tussock grass sward found on heavy somewhat sodic clay plains fringing the active floodplains of major watercourses such as the Loddon and Avoca Rivers*' (Department of Energy Environment and Climate Action 2025a). EVC 829: Chenopod Grassland is listed as Endangered within the bioregion.

Current vegetation modelling, by DEECA, suggests that some EVC 97: Semi-arid Woodland, but mostly EVC 829: Chenopod Grassland persists within the study area, however, the vegetation observed on site, shows a smaller extent than that which is modelled to remain.

Flora Species

Sixty-five flora species were recorded during the site assessment (excluding the planted trees). This comprised 28 indigenous species, five Victorian native species that were not indigenous to the study area and 32 exotic species.

BESS Site

The BESS site (exclusive of the transmission cable routes) consisted of pasture dominated by invasive grasses and environmental weeds. Dominant exotic grasses included species such as Sweet Vernal-grass *Anthoxanthum odoratum*, Barley-grass *Hordeum murinum*, Great Brome *Bromus diandrus*, Lesser Canary-grass *Phalaris minor*, Soft Brome *Bromus hordaceus*, Perennial Rye-grass *Lolium perenne* and Wild Oat *Avena fatua* (Plate 1). This vegetation also included environmental weeds, such as Cape Weed *Arctotheca calendula*, Horehound *Marrubium vulgare*, Rough Sow-thistle *Sonchus asper*, Spear Thistle *Cirsium vulgare*, Variegated Thistle *Silybum marianum*, and Buck's-horn Plantain *Plantago lanceolata* (Plate 2).

A tree windrow occurred along the southern boundary of the BESS site, largely consisting of Black Sheoak *Allocasuarina littoralis* and Yellow Gum *Eucalyptus leucoxylon* subsp. *leucoxylon* (Plate 3). Weed species such as Horehound and Sowbane *Chenopodium murale* were also observed. Peppertrees *Schinus molle* were present in the north-western boundary of the BESS site (Plate 4).

A patch of native vegetation was recorded between the western fenceline of the BESS site and the irrigation channel. It was largely comprised of Black Roly Poly *Sclerolaena muricata*, Spider Grass *Enteropogon acicularis*, Kidney Weed *Dichondra repens*, Ivy-leaf Violet *Viola hederacea*, Plains Sedge *Carex bichenoviana*, Sticky New Holland Daisy *Vittadinia australasica* and Flat Spurge *Euphorbia drummondii* amongst the above-mentioned pasture grasses (Plate 5).

Eastern Transmission Route (Nominated Route)

The proposed eastern transmission line was located between the Kerang Solar Farm and the Piangil train line including the southern side of Old Echuca Road. This area was largely dominated by the

above-mentioned pasture grasses. Isolated occurrences of indigenous species were also recorded such as Ruby Saltbush *Enchylaena tomentosa*, Beaded Glasswort *Salicornia quinqueflora*, Blackseed Glasswort *Tecticornia pergranulata* subsp. *pergranulata*, Berry Saltbush *Atriplex semibaccata*, Flat-top Saltbush *Atriplex lindleyi* subsp. *lindleyi*, Bristly Wallaby-grass *Rytidosperma setaceum* and Rigid Panic *Walwhalleya proluta*. In one location, the cover abundance of native vegetation qualified as a patch of native vegetation (Plate 6).

Western Transmission Route (Non-preferred Route)

The western transmission route, which is not being pursued as an option by the applicant, retained a higher diversity, and more complex structure of vegetation, than the BESS site and eastern transmission route. Some of the above-mentioned species were present here. Additionally, indigenous species formed a low midstorey, comprising Australian Boxthorn *Lycium australe*, Nitre Goosefoot *Chenopodium nitrariaceum*, Nitre-bush *Nitraria billardiarei*, Nodding Saltbush *Einadia nutans* and Tangled Lignum *Duma florulenta* (Plates 7-9).

A row of Black Box *Eucalyptus largiflorens* were observed along the roadside within Patch 7, these specimens were considered planted based on their linear alignment, regular spacing and similar age (Plate 10). In some locations, along farm frontages, horticultural trees were planted, including, in some instances, Black Sheoak.

As with the other two parts of the study area, populations of invasive pasture grasses and broadleaf weeds were also common.

Vegetation Quality Assessment

Many patches had low-moderate Habitat Hectare Scores of 19 (out of 100). Patches 1 and 7 scored slightly higher at 25 (out of 100), due to a higher diversity of native vegetation, and therefore higher 'Understorey' scores, when compared against the EVC Benchmark (Department of Energy Environment and Climate Action 2025a)(Table 1).

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Table 1. Habitat Hectare assessment results

Patch			1	2	3	4	5
Bioregion			Victorian Riverina	Victorian Riverina	Victorian Riverina	Victorian Riverina	Victorian Riverina
EVC name			Chenopod Grassland	Chenopod Grassland	Chenopod Grassland	Chenopod Grassland	Chenopod Grassland
EVC number			829	829	829	829	829
Conservation rating within bioregion			Vulnerable	Vulnerable	Vulnerable	Endangered	Endangered
Assessment Criteria		Maximum Score	Patch Score	Patch Score	Patch Score	Patch Score	Patch Score
Site Condition	a. Large old trees	10	NA	NA	NA	NA	NA
	b. Canopy cover	5	NA	NA	NA	NA	NA
	c. Understorey	25	10	5	5	5	5
	d. Lack of weeds	15	0	0	0	0	0
	e. Recruitment	10	3	3	3	3	3
	f. Organic litter	5	2	2	2	2	2
	g. Logs	5	NA	NA	NA	NA	NA
	h. Total (sum of a-g)	75	15	10	10	10	10
Standardised Score (x1.36)			20	14	14	14	14
Landscape Value	j. Patch size	10	1	1	1	1	1
	k. Neighbourhood	10	1	1	1	1	1
	l. Distance to core	5	3	3	3	3	3
m. Habitat Score (sum of h-l)		100	25	19	19	19	19
n. Habitat score out of 1 (m÷100)			0.25	0.19	0.19	0.19	0.19
Size (ha)			0.091	0.123	0.010	0.010	0.020
Large Old Trees (LOTs)*			0	0	0	0	0

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Table 1. Habitat Hectare assessment results (cont'd)

Patch			6	7	8	9	10
Bioregion			Victorian Riverina	Victorian Riverina	Victorian Riverina	Victorian Riverina	Victorian Riverina
EVC name			Chenopod Grassland	Chenopod Grassland	Chenopod Grassland	Chenopod Grassland	Chenopod Grassland
EVC number			829	829	829	829	829
Conservation rating within bioregion			Endangered	Endangered	Endangered	Endangered	Endangered
Assessment Criteria		Maximum Score	Patch Score	Patch Score	Patch Score	Patch Score	Patch Score
Site Condition	a. Large old trees	10	NA	NA	NA	NA	NA
	b. Canopy cover	5	NA	NA	NA	NA	NA
	c. Understorey	25	5	10	5	5	5
	d. Lack of weeds	15	0	0	0	0	0
	e. Recruitment	10	3	3	3	3	3
	f. Organic litter	5	2	2	2	2	2
	g. Logs	5	NA	NA	NA	NA	NA
	h. Total (sum of a-g)	75	10	15	10	10	10
Standardised Score (x1.36)			14	20	14	14	14
Landscape Value	j. Patch size	10	1	1	1	1	1
	k. Neighbourhood	10	1	1	1	1	1
	l. Distance to core	5	3	3	3	3	3
m. Habitat Score (sum of h-l)		19	19	25	19	19	19
n. Habitat score out of 1 (m÷100)			0.19	0.25	0.19	0.19	0.19
Size (ha)			0.017	1.855	0.051	0.108	0.066
Large Old Trees (LOTs)			0	0	0	0	0

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Table 1. Habitat Hectare assessment results (cont'd)

Patch			11	12	13
Bioregion			Victorian Riverina	Victorian Riverina	Victorian Riverina
EVC name			Chenopod Grassland	Chenopod Grassland	Chenopod Grassland
EVC number			829	829	829
Conservation rating within bioregion			Endangered	Endangered	Endangered
Assessment Criteria		Maximum Score	Patch Score	Patch Score	Patch Score
Site Condition	a. Large old trees	10	NA	NA	NA
	b. Canopy cover	5	NA	NA	NA
	c. Understorey	25	5	5	5
	d. Lack of weeds	15	0	0	0
	e. Recruitment	10	3	3	3
	f. Organic litter	5	2	2	2
	g. Logs	5	NA	NA	NA
	h. Total (sum of a-g)	75	10	10	10
Standardised Score (x1.36)			14	14	14
Landscape Value	j. Patch size	10	1	1	1
	k. Neighbourhood	10	1	1	1
	l. Distance to core	5	3	3	3
m. Habitat Score (sum of h-l)		100	19	19	19
n. Habitat score out of 1 (m÷100)			0.19	0.19	0.19
Size (ha)			0.336	0.101	0.030
Large Old Trees (LOTs)			0	0	0

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Tree Assessment

No scattered indigenous trees were recorded within the study area.

Threatened Flora Species and Ecological Communities

Six threatened flora species have previously been recorded within three kilometres of the study area in the Victorian biodiversity Atlas (VBA) (Department of Energy Environment and Climate Action 2025e). Potential habitats for other threatened flora species was also identified using the Protected Matters Search Tool (PMST) (Department of Climate Change Energy the Environment and Water 2025a). A consolidated list of these threatened flora species, as well as their conservation status under the EPBC Act, the *Flora and Fauna Guarantee Act 1988* (Vic) (FFG Act) Threatened List (Department of Energy Environment and Climate Action 2025b), their preferred habitats and the likelihood of occurrence for each species is provided in Table A3.

Bush Minuria *Minuria cunninghamii* was recorded within the study area, on its northern boundary, in 2018 (Department of Energy Environment and Climate Action 2025e). The species was not observed during the current assessment and this area has been recently modified by earthworks. Nevertheless, its presence would suggest that other portions of the study area may provide suitable habitat for this species.

Blackseed Glasswort *Tecticornia pergranulata* subsp. *divaricata* has been recorded within of the vicinity the study area in 1985 (Department of Energy Environment and Climate Action 2025e). This species is Endangered in Victoria (Department of Energy Environment and Climate Action 2025b). Specimens of Blackseed Glasswort *Tecticornia pergranulata* subsp. *pergranulata* (a non-threatened relative of the *divaricata* subspecies) were observed throughout both transmission routes. Both subspecies occur in similar habitats and therefore there is a moderate chance that Blackseed Glasswort *Tecticornia pergranulata* subsp. *divaricata* may occur within the study area.

Spiny Lignum *Duma horrida* subsp. *horrida* was recorded more than one kilometre south of the study area in 2024 (Department of Energy Environment and Climate Action 2025e). This species is Critically Endangered within Victoria (Department of Energy Environment and Climate Action 2025b). Tangled Lignum, a similar species, was noted occurring within patches of native vegetation in the western transmission corridor. Again, these two species are taxonomically related and prefer similar habitats, and it is therefore possible that Spiny Lignum may occur within the study area.

Two specimens of Fragrant Saltbush *Rhagodia parabolica* were recorded at the base of Black Box trees on the eastern side of the Loddon Valley Highway. Fragrant Saltbush is Vulnerable within Victoria (Department of Energy Environment and Climate Action 2025b). The study area is located well away from the known distribution of this species. It is widely planted as an ornamental plant, and it seems likely that the plants observed are from horticultural plantings.

The modelling used by the Protected Matters Search Tool suggests that up to five nationally significant vegetation community may also occur within the study area:

- Natural Grasslands of the Murray Valley Plains (Critically Endangered);

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- Plains mallee box woodlands of the Murray Darling Depression, Riverina and Naracoorte Coastal Plain Bioregions (Critically Endangered);
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (Critically Endangered);
- Buloke Woodlands of the Riverina and Murray-Darling Depression Bioregions (Endangered); and,
- Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia (Endangered).

The vegetation within the study area may have at some time, been a representative of the Natural Grasslands of the Murray Valley Plains community. In its current state, most of the patches fail to qualify as this community because of their size and native species diversity. All patches, except for Patch 7, fail to qualify on the basis that none of the character species of the community were observed within the study area. Patch 7 did contain a character species, however, it lacked sufficient diversity of indigenous vegetation to qualify as the community (Table 2).

Table 2. Condition thresholds for determining presence of Natural Grasslands of the Murray Valley Plains

Condition Threshold	Patches of Native Vegetation
1. Does the patch of grassland display the general diagnostic features of the ecological community (on pages 2–3)?	Yes
2. Are trees and large shrubs sparse, such that woody cover is no greater than 10% projective foliage cover?	Yes
3. Is there greater native plant cover than perennial exotic plant cover in ground layer?	No
4. Is the patch at least 0.04 ha (e.g. 20 x 20m)?	Yes: Patches 1, 2, 7, 8, 9, 10, 11, 12
5. Is there either? a. Are there at least 15 native plants in the ground layer, including 1 indicator species and a patch size of at least 0.04 hectare? b. Are there at least 10 native plants in the ground layer? And a patch size of at least one hectare?	a. No b. No
6. Is the patch considered Natural Grasslands of the Murray Valley Plains	No

Fauna

Fauna Species and Habitats

Thirteen fauna species were recorded within the study area during the current assessment. This comprised eleven birds (three introduced; eight native), one native reptile and one exotic mammal. All of these species are common to the area. It is likely that skinks and snakes would occur within the study area, amongst areas containing understorey vegetation and organic litter or debris. It is

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expected that a greater diversity of fauna species would be recorded with a greater amount of time on-site.

The open areas that comprise much of the study area are likely to provide habitat to generalist species, such as Australian Magpies *Gymnorhina tibicen*, Willy Wagtails *Rhipidura leucophrys* and Australian Ravens *Corvus coronoides*, which are widespread and common species in open paddocks throughout Victoria. This habitat has low ecological value as it is generally homogenous and lacks important components of structure, floral diversity and fauna resources that a diverse range of species might exploit. Smaller, less gregarious birds, such as Superb Fairy-wrens *Malurus cyaneus*, were observed utilising the treed areas for cover.

Within the tree row in the south of the BESS site, a family group of three Black-shouldered Kites *Elanus axillaris* were observed, likely comprising two parents and a juvenile (Plate 11). Several Black Kites *Milvus migrans* and Straw-necked Ibis *Threskiornis spinicollis* were observed flying over the study area.

One unidentified skink was noted on site, the individual evaded capture, but was noted to exhibit a white ventral line.

Threatened Fauna Species and Communities

THE VBA identifies seventeen threatened fauna species have previously been recorded within three kilometres of the study area (Department of Energy Environment and Climate Action 2025e) (Figure 2). A further 21 threatened fauna species are predicted to occur within the study area, based on the PMST (Department of Climate Change Energy the Environment and Water 2025a). A consolidated list of these threatened fauna species, as well as their conservation status under the EPBC Act and the FFG Act Threatened List (Department of Environment Land Water and Planning 2023a), their preferred habitats and the likelihood of occurrence for each species is provided in Table A4.

There are no historical records of threatened fauna species within the study area, and no threatened fauna species were recorded within the study area during the current assessment (Table A4, Figure 2). Many of the species modelled to occur by the Protected Matters Search Tool, and recorded within the three-kilometre buffer area, are species that are dependent on habitats that are not provided by the study area such as Trout Cod *Maccullochella macquariensis*. None of these species are likely to be impacted by the proposed development of the study area (Table A4).

The study area occurs near several wetlands. These areas provide important habitat to a range of threatened wetland bird species. Hundreds of records of waterfowl, including resident species such as Australian Shoveler *Spatula rhynchotis*, as well as migratory species, such as Sharp-tailed Sandpiper *Calidris acuminata* and Common Greenshank *Tringa nebularia* (amongst others), have been recorded within the three-kilometre search area. However, the study area itself does not contain waterbodies which would provide important resources to any of these species, and the development of the study area is unlikely to impact these species.

There are several records of Samphire Skink *Morethia adalaidensis* in 1982 (Department of Energy Environment and Climate Action 2025e). Despite the long period of time since these records, many parts of Victoria are rarely surveyed for reptiles, and the species has potentially suitable habitat within

the vegetation recorded on site. The presence of Samphire Skinks is primarily linked to the presence of Saltbush *Chenopod* shrubs (Wilson and Swan 2010), of which several species were identified within the study area in relatively high numbers. Samphire Skinks are listed as Endangered under the FFG Act. Habitats for this species are being avoided. On this basis, a survey for this species is no longer recommended to inform management and regulatory approvals.

No fauna communities listed under the Victorian FFG Act were recorded within the study area.

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Discussion

A detailed summary of the legislation that was considered when preparing this report is provided in Appendix 2. The discussion presented in this section of the report does not reiterate information provided in Appendix 2, but summarises the results and recommendations arising from the interpretation of this legislation.

Environment Protection and Biodiversity Conservation Act 1999 (Cth)

The desktop assessment (utilising the VBA and PMST) identified nine threatened flora and 27 threatened fauna species, as well as up to five threatened ecological communities, listed under the EPBC Act, which may occur within the study area (Tables A3 and A4).

However, as discussed, almost all of the EPBC Act-listed flora and fauna species that were identified during the desktop assessment, are, in fact, unlikely to occur due to the absence of suitable habitats or the degraded nature of habitats within the study area. There is a moderate likelihood that Sharp-tailed Sandpipers or Common Greenshanks fly over the study area, however the proposed development is unlikely to significantly impact either of these species, because neither of these species (or the many other wetland dependent species likely to occur in the landscape) are likely to rely on the habitat within the study area for important phases of their lifecycle.

The limited and degraded native vegetation within the study area does not meet thresholds to classify as any of the threatened ecological communities listed under the EPBC Act.

On this basis, a referral to the Commonwealth DCCEEW is not recommended for the BESS development.

Flora and Fauna Guarantee Act 1988 (Vic)

The desktop assessment (utilising the VBA and PMST) identified 15 flora species and 38 fauna species listed under the FFG Act that may occur within the study area (Tables A3 and A4). There is a moderate likelihood that some mobile animals, with large home ranges, may utilise or fly over the study area on occasion (Australian Shoveller, Sharp-tailed Sandpiper and Common Greenshank). However, the development of the study area is unlikely to significantly impact any of these, or any other, threatened species.

There was a moderate likelihood that the threatened subspecies of Blackseed Glasswort, Bush Minuria, Spiny Lignum and Samphire Skink occur within the study area, however, targeted flora surveys failed to locate the flora species within the study area, and they are now considered unlikely to occur. The nominated cable route avoids preferred habitats for Samphire Skink.

The FFG Act, which was amended in 2021, contains an obligation or duty on public authorities and ministers to consider potential biodiversity impacts when exercising their functions. The FFG Act requires ministers and public authorities (including Councils) reasonably consider the objectives of the Act where projects may impact upon biodiversity, so far as is consistent with the proper exercising of

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their functions. It is therefore anticipated that regulators (DEECA and Gannawarra Shire Council) will give due consideration to the FFG Act when considering the approval for the BESS development.

The FFG Act also lists species as 'protected flora' on public land. Protected flora includes whole families or genera, (as well as species), such as daisies, heaths, orchids, and most Acacias. These species and genera are not necessarily regarded as threatened but require an approved *Permit to Take Protected Flora* from DEECA prior to their removal when located on public land (including road reserves). The targeted survey also surveyed the road reserves, within the study area, for protected flora species. No protected flora plants were observed within the road reserves, and a *Permit to Take Protected Flora* will not be required (Ecolink Consulting Pty Ltd 2024).

Planning and Environment Act 1987 (Vic)

Due to the proposed removal of native vegetation within the study area, the proposed development would require a planning permit from the Gannawarra Shire Council under Clause 52.17 prior to the removal, destruction or lopping of native vegetation (Department of Environment Land Water and Planning 2025). The applicant is required to demonstrate how it applied the three-step approach to avoid, minimise and offset impacts to native vegetation (discussed below).

The ESO2 sets out to ensure that all existing trees and natural features which are within the overlay area are conserved within the limits of practicability and are not wantonly damaged, destroyed or removed. This is commensurate with the considerations of *The Guidelines*. The ESO4 seeks to regulate and mitigate flood waters in the locality and does not directly affect the ecological implications of the study area. The current development plan is consistent with the requirements of this planning ordinance.

Catchment and Land Protection Act 1994 (Vic)

Primary considerations of the *Catchment and Land Protection Act 1994* (Vic) relate to soil and water conservation, as well as the management of pest plants and animals. Four weed species that are listed as 'noxious' within the North Central Catchment Management Area were present within the study area (Table A1, Appendix 1). These weeds include:

- African Box-thorn *Lycium ferocissimum* and Horehound which are both listed as 'Regionally Controlled' within the catchment. The proponent is required to 'control the spread' of all 'regionally controlled' species from their property; and
- Spear Thistle and Variegated Thistle which are listed as 'Restricted'. There are restrictions on the 'trade' of these species.

African Boxthorn is also listed as 'Weeds of National Significance', although there are no additional legislative obligations to manage weeds under this listing.

The BESS development should aim to remove these plants when construction commences, and ensure they are removed during the future landscaping and maintenance of the study area. It is expected that weed management would form part of best practice land management and *Catchment and Land Protection Act 1994* (Vic). As a minimum, this should include:

- Controlling weeds prior to the commencement of works, during works and after works are complete; and
- Avoiding downstream and off-site impacts through erosion and sediment control measures.

Wildlife Act 1975 (Vic)

It is likely that some locally common species of fauna will be displaced by the proposed development. However, there remains a low likelihood that animals may be accidentally injured when disturbing soil and removing vegetation. All native vertebrate wildlife is protected under the *Wildlife Act 1975* (Vic), and therefore contractors must use due care when removing vegetation and fill from the study area. It is recommended that a zoologist or wildlife handler salvage any wildlife from trees prior to their removal (if required).

Guidelines for the Removal, Destruction or Lopping of Native Vegetation

The Three-step Approach

Applicants who wish to remove native vegetation must generally demonstrate how the application meets the three-step approach to:

1. Avoid the removal, destruction or lopping of native vegetation;
2. Minimise impacts from the removal, destruction or lopping of native vegetation that cannot be avoided; and
3. Provide an offset to compensate for the biodiversity impact from the removal, destruction or lopping of native vegetation (Department of Environment Land Water and Planning 2017).

Avoidance and Minimisation Statement

Avoidance is generally demonstrated through appropriate development design. The original iteration of the report (dated October 2024) recommended that, where practicable:

- Development design is considerate of the native vegetation recorded on site and that the development (including roads and infrastructure) be sited away from the highest quality native vegetation where possible. It is likely that the development of the BESS facility can occur without impacting native vegetation, and that the eastern powerline could be constructed to avoid impacts to the patch of native vegetation;
- All the trees on site are likely to be planted specimens and as such there is no obligation to avoid or offset them. However, it is recommended that the BESS development retain them where possible, to address the objectives of the ESO2.
- Any retained trees, inclusive of their Tree Protection Zone, be avoided wherever safe and practicable in accordance with the Tree Protection Zone as per the *Australian Standards for the Protection of Trees on Development Sites* (Standards Australia 2009); and
- Native vegetation, which is to be retained, is protected from construction activities, in accordance with a Construction Environment Management Plan.

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The previous iteration of the report recommended that the eastern cable route would best avoid and minimise impacts to local ecological values. The proponent had some feasibility concerns relating to the use of the eastern cable route (when compared with the west) including that:

- The western cable route needs to be underground due to its proximity to the Loddon Valley Highway. An overhead transmission line is not as feasible because of the highway's setback requirements; and,
- The western cable route is more efficient compared to the eastern route. The eastern route intersects several underground easements near the Kerang Terminal Station, which presents additional constraints.

On this basis, the most recent Concept Layout Plan, prepared by Cogency, dated 15 April 2026, shows that the eastern alignment has been selected as the nominated cable route. The BESS development now successfully avoids the most extensive patches of native vegetation associated with the road reserves in the Loddon Valley Highway (Patches 3-13). This native vegetation also provided the highest quality potential habitats for Samphire Skink.

Only Patches 1 and 2 are proposed to be removed to construct the eastern transmission route:

- Patch 1 will require removal from the western side of the BESS site to allow access to the property, the construction of security fencing and a visual planting screen to the facility.
- Patch 2 is located to the east of private property and west of the Piangil train line, and therefore cannot be further avoided.

These patches are relatively isolated within the landscape and are unlikely to provide habitat to Samphire Skink. The proposed loss of native vegetation is only 0.214 hectares in area, which is a small percentage of the total amount of native vegetation assessed. Trenching is the only viable option for a large transmission cable connection and overhead powerlines as well under-boring portions were found to be impractical. It is considered that no further opportunities exist to avoid impacts to native vegetation.

Offsets

Offsets were calculated by submitting the mapped extent of impacted native vegetation to the Vegetation Information Management System (Department of Energy Environment and Climate Action 2025c) and creating a Native Vegetation Removal report (Appendix 3). This offset calculation assumes the loss of all native vegetation and will need to be revised once the above recommendations and the requirements to avoid and minimise native vegetation under Clause 52.17 have been implemented.

This report uses the native vegetation points and polygons collected during the current assessment and modelled vegetation quality scores to determine offset requirements. The Native Vegetation Removal report includes the species specific offset test, which determines if the proposed vegetation removal will have a proportional impact on any Victorian rare or threatened species habitat above a specific offset threshold, which is set at 0.005 per cent of total habitat for each species. This test was applied to current proposal, and it was determined that species specific offsets would not be required (Table 3).

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Table 3. Offset requirements for removal of native vegetation within the study area.

Offset Parameter	Result
Location Category	Location 2
Assessment Pathway	Intermediate Assessment Pathway
Total Extent Removed	0.214 hectares
General Offset Requirements	0.090 General Habitat Units
Minimum Strategic Biodiversity Score	0.240
Offset Location	North Central Catchment Management Authority (CMA) or Gannawarra Shire Council
Tree Offset	Nil

It is expected that offsets would be achieved through a third-party offset, through a vegetation broker, as securing the offsets on site is not practicable. We have confirmed that these offsets are readily available at multiple sites, with multiple brokers the Native Vegetation Credit Register (Appendix 4). Based on recent trades with brokers, the cost to offset this vegetation will be in the order of approximately \$13,650.00⁵ (excluding GST) although offset trades are based on a market based system and the price may vary. Ecolink can assist further with securing this offset if required.

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⁵ We estimate an allowance of approximately \$135,000.00 per General Habitat Unit, plus \$1,000.00 per large tree, should be made to achieve these offsets, plus approximately \$1,500.00 in brokerage fees (plus GST for all values provided).

Key Findings

The key findings of the report are listed below:

- Thirteen Patches of EVC 829: Chenopod Grassland, with varying Habitat Hectare Scores, were observed during the site assessment;
- The desktop assessment identified six threatened flora species which have previously been recorded within the vicinity of the study area:
 - Of these six species, three (Spiny Lignum, Bush Minuria and Blackseed Glasswort), are considered to have a moderate likelihood of occurring within the study area;
 - A targeted survey was undertaken for these species, however they were not observed (Ecolink Consulting Pty Ltd 2024);
- The desktop assessment identified 17 threatened fauna species which have previously been recorded within the vicinity of the study area. Of these:
 - Samphire Skink is considered to have a moderate likelihood of occurring within the study area, and a target survey for this species is recommended if habitat for this species is impacted;
- No threatened ecological communities were observed on site;
- No fauna communities listed under the Victorian FFG Act were recorded within the study area;
- Four noxious weeds were recorded within the study area. One of these weeds, African Boxthorn, is also listed as a Weed of National Significance;
- Native vegetation removal will require a permit for removal from the Gannawarra Shire Council, under Clause 52.17 of the planning scheme, prior to the removal, destruction or lopping of native vegetation. A total of 0.214 hectares of native vegetation removal is required for the losses of Patches 1 and 2;
- An offset will be required for the unavoidable losses of native vegetation (Patches 1 and 2) through an accredited Offset Broker. This will include:
 - 0.090 General Habitat Units;
 - With a Minimum Strategic Biodiversity Score of 0.240;
 - Located within the North Central Catchment Management Authority (CMA) or within the Gannawarra Shire Council municipality;
- No protected flora species were observed during the targeted survey, and therefore a Permit to Take Protected Flora will not be required (Ecolink Consulting Pty Ltd 2024); and
- As no Matters of National Environmental Significance were recorded within the site, and there are unlikely to be any off-site or indirect impacts to any Matters of National Environmental Significance, a referral under the EPBC Act is not required.

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Plates



Plate 1. Much of the BESS site consisted of slashed paddocks (16 October 2024).



Plate 2. Broad leaved weeds were present across the entire study area (16 October 2024).

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Plate 3. The tree row to the south of the BESS site consisted of Black Sheoak and Yellow Gum (16 October 2024).



Plate 4. Peppertrees occurred in the northwestern corner of the BESS site (16 October 2024).

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Plate 5. Patch 1 occurred in the southwestern corner of the BESS site (16 October 2024).



Plate 6. Patch 2 supported populations of Blackseed Glasswort, occurring in the proposed eastern transmission route (16 October 2024).

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Plate 7. Patch 7 was the largest patch and occurred in the road reserve of the Loddon Valley Highway (16 October 2024).



Plate 8. Patch 11 was the second largest patch and occurred on the western side of the Loddon Valley Highway (16 October 2024).

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Plate 9. Spiny Lignum occurred occasionally throughout the study area (16 October 2024).



Plate 10. Planted specimens of Black Box were observed within Patch 7 (16 October 2024).

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Plate 11. A family of Black-shouldered Kites was observed along the southern tree row (16 October 2024).

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Figures

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For display purposes, not for construction

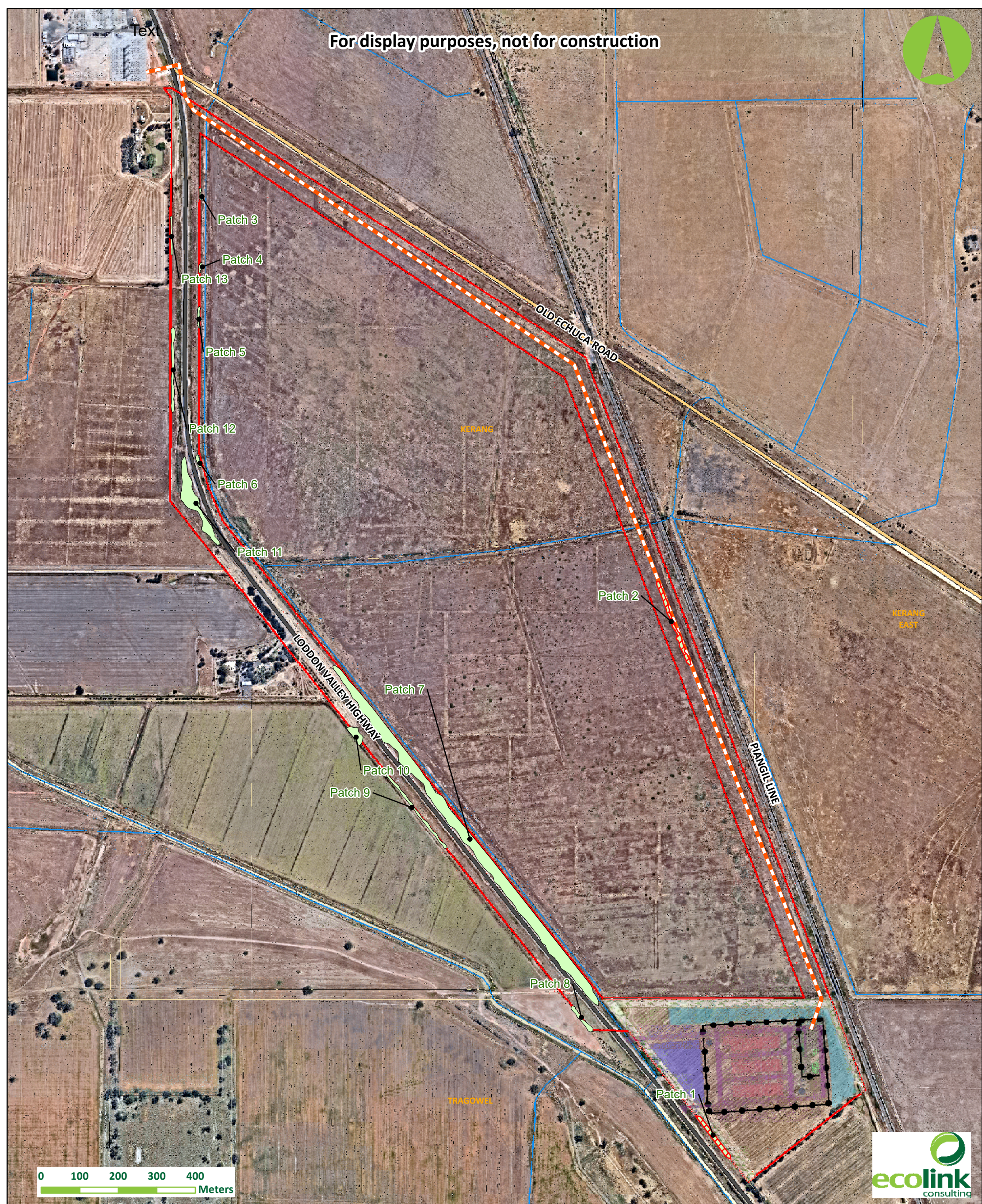


Figure 1: Results of the current assessment

Loddon Valley Highway, Tragowel, Victoria

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Legend

Study Area	O and M	Fence
Proposed Development	Power Control System	Nominated Cable Route
Battery and Conversion Systems	Internal Roads	Patches of Native Vegetation
Control Building	Temporary Laydown Area	Impacted Vegetation
Detention Basin	Vegetation Screening	
Harmonic Filter	Water Tanks	



Loddon Valley Highway, Tragowel,
Victoria

Legend

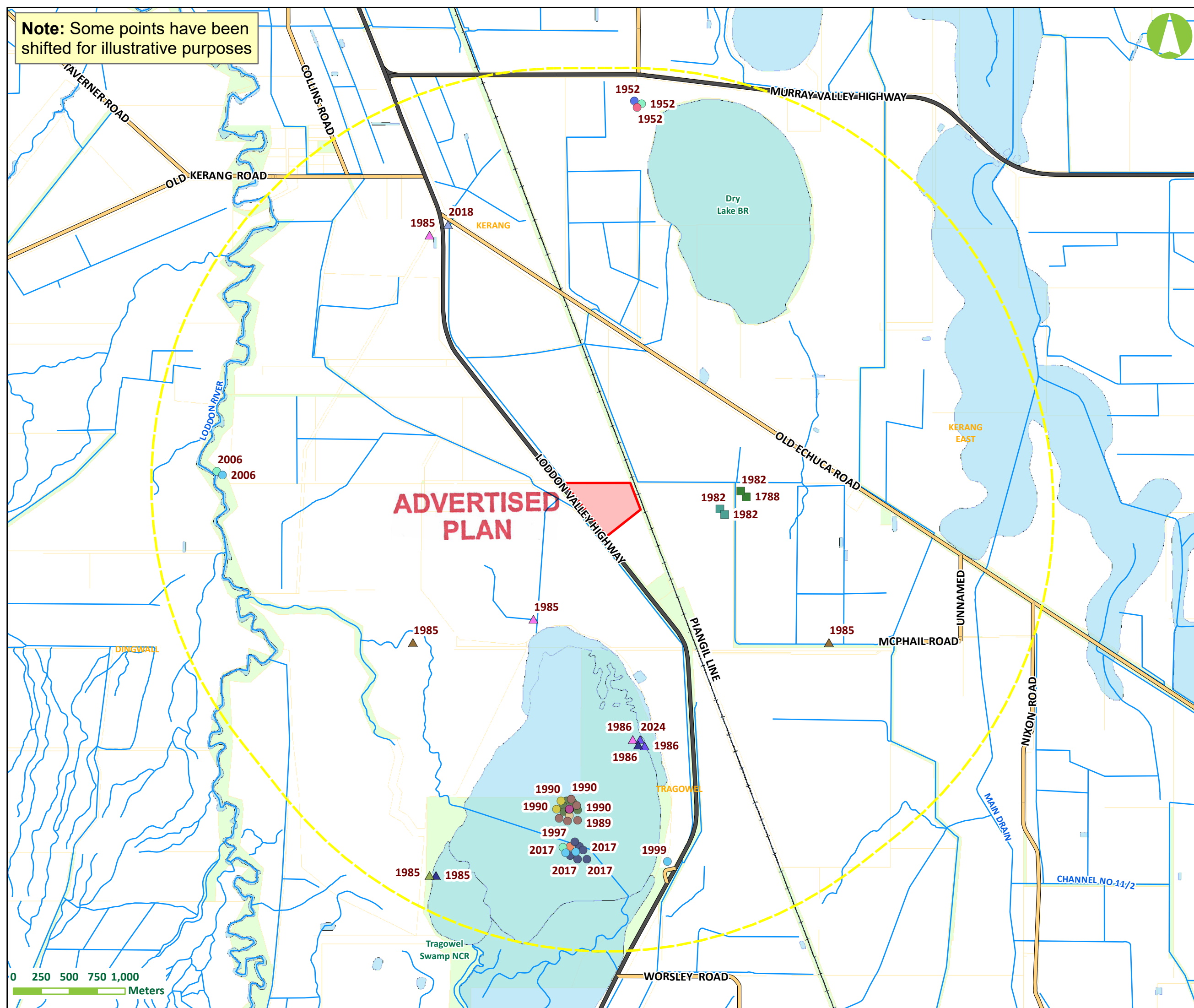
-  Study Area
-  3km Study Area Buffer

Common Name

-  Australasian Shoveler
-  Blue-billed Duck
-  Brolga
-  Brown Treecreeper
-  Common Greenshank
-  Curlew Sandpiper
-  Eastern Great Egret
-  Freckled Duck
-  Grey-crowned Babbler
-  Latham's Snipe
-  Little Eagle
-  Marsh Sandpiper
-  Musk Duck
-  Sharp-tailed Sandpiper
-  Southern Whiteface
-  Growling Grass Frog
-  Samphire Skink
-  Blackseed Glasswort
-  Bush Minuria
-  Riverina Bitter-cress
-  Spiny Lignum
-  Twin-leaf Bedstraw
-  Yakka Grass
-  Public Land



Note: Some points have been shifted for illustrative purposes



Appendices

Appendix 1. Flora and Fauna Tables

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Table A1. Flora species recorded within the study area

Origin	Common Name	Scientific Name	Weeds of National Significance	Noxious Weeds Classification
*	African Box-thorn	<i>Lycium ferocissimum</i>	Yes	Controlled
	Annual Cudweed	<i>Euchiton sphaericus</i>	-	-
*	Aster-weed	<i>Symphyotrichum subulatum</i>	-	-
	Australian Box-thorn	<i>Lycium australe</i>	-	-
	Australian Hollyhock	<i>Malva preissiana</i> s.l.	-	-
*	Barley-grass	<i>Hordeum murinum</i> s.l.	-	-
	Beaded Glasswort	<i>Salicornia quinqueflora</i>	-	-
	Berry Saltbush	<i>Atriplex semibaccata</i>	-	-
#	Black Box	<i>Eucalyptus largiflorens</i>	-	-
	Black Roly-poly	<i>Sclerolaena muricata</i>	-	-
#	Black Sheoak	<i>Allocasuarina littoralis</i>	-	-
	Blackseed Glasswort	<i>Tecticornia pergranulata</i> subsp. <i>pergranulata</i>	-	-
	Bristly Wallaby-grass	<i>Rytidosperma setaceum</i>		
*	Cape Weed	<i>Arctotheca calendula</i>	-	-
*	Cat's Ear	<i>Hypochaeris radicata</i>	-	-
*	Small Nettle	<i>Urtica urens</i>		
	Grassland Wood-sorrel	<i>Oxalis perennans</i>	-	-
*	Clustered Dock	<i>Rumex conglomeratus</i>	-	-
	Common Blown-grass	<i>Lachnagrostis filiformis</i> s.l.	-	-
*	Common Peppergrass	<i>Lepidium africanum</i>	-	-
*	Common Sow-thistle	<i>Sonchus oleraceus</i>	-	-
*	Common Vetch	<i>Vicia sativa</i>	-	-
	Cottony Spear-grass	<i>Austrostipa drummondii</i>	-	-
	Finger Rush	<i>Juncus subsecundus</i>	-	-
#	Flat Spurge	<i>Euphorbia drummondii</i> s.l.	-	-
	Flat-top Saltbush	<i>Atriplex lindleyi</i> subsp. <i>lindleyi</i>	-	-
#	Fragrant Saltbush	<i>Rhagodia parabolica</i>	-	-
*	Galenia	<i>Aizoon pubescens</i>	-	-
*	Great Brome	<i>Bromus diandrus</i>	-	-
	Hairy Willow-herb	<i>Epilobium hirtigerum</i>	-	-
*	Horehound	<i>Marrubium vulgare</i>	-	Controlled
	Ivy-leaf Violet	<i>Viola hederacea</i> sensu Entwisle (1996)	-	-
	Jersey Cudweed	<i>Laphangium luteoalbum</i>	-	-

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Origin	Common Name	Scientific Name	Weeds of National Significance	Noxious Weeds Classification
	Kidney Weed	<i>Dichondra repens</i>	-	-
*	Lesser Canary-grass	<i>Phalaris minor</i>	-	-
*	Lesser Chickweed	<i>Stellaria pallida</i>	-	-
	Nitre Goosefoot	<i>Chenopodium nitrariaceum</i>	-	-
	Nitre-bush	<i>Nitraria billardierei</i>	-	-
	Nodding Saltbush	<i>Einadia nutans</i>	-	-
*	Ox-tongue	<i>Helminthotheca echioides</i>	-	-
*	Paspalum	<i>Paspalum dilatatum</i>	-	-
	Plains Sedge	<i>Carex bichenoviana</i>	-	-
*	Prickly Lettuce	<i>Lactuca serriola</i>	-	-
*	Prostrate Knotweed	<i>Polygonum aviculare</i> s.l.	-	-
*	Red Brome	<i>Bromus rubens</i>	-	-
*	Ribwort	<i>Plantago lanceolata</i>	-	-
	Rigid Panic	<i>Walwhalleya proluta</i>	-	-
	Rough Raspwort	<i>Haloragis aspera</i>	-	-
*	Rough Sow-thistle	<i>Sonchus asper</i> s.l.	-	-
	Rounded Noon-flower	<i>Disphyma crassifolium</i> subsp. <i>clavellatum</i>	-	-
	Ruby Saltbush	<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	-	-
	Short-leaf Bluebush	<i>Maireana brevifolia</i>	-	-
*	Small Ice-plant	<i>Mesembryanthemum</i> <i>nodiflorum</i>	-	-
	Small Loosestrife	<i>Lythrum hyssopifolia</i>	-	-
*	Small-flower Mallow	<i>Malva parviflora</i>	-	-
*	Soft Brome	<i>Bromus hordaceus</i>	-	-
*	Sowbane	<i>Chenopodium murale</i>	-	-
*	Spear Thistle	<i>Cirsium vulgare</i>	-	Restricted
	Spider Grass	<i>Enteropogon acicularis</i>	-	-
*	Spiny Rush	<i>Juncus acutus</i> subsp. <i>acutus</i>	-	-
	Sticky New Holland Daisy	<i>Vittadinia australasica</i>	-	-
*	Strawberry Clover	<i>Trifolium fragiferum</i> var. <i>fragiferum</i>	-	-
*	Suckling Clover	<i>Trifolium dubium</i>	-	-
*	Sweet Melilot	<i>Melilotus indicus</i>	-	-
*	Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	-	-
	Tangled Lignum	<i>Duma florulenta</i>	-	-
*	Variegated Thistle	<i>Silybum marianum</i>	-	Restricted
*	White Clover	<i>Trifolium repens</i> var. <i>repens</i>	-	-
*	Wild Oat	<i>Avena fatua</i>	-	-

Origin	Common Name	Scientific Name	Weeds of National Significance	Noxious Weeds Classification
#	Yellow Gum	<i>Eucalyptus leucoxylon</i> subsp. <i>leucoxylon</i>	-	-

Table Notes:

* – Exotic # – naturalised

This table does not include ornamental plants, trees or shrubs that were not spreading or reproducing beyond where they were planted.

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Table A2. Fauna species recorded within the study area

Origin	Common Name	Species Name
Birds		
	Australian Magpie	<i>Cracticus tibicen</i>
	Black Kite	<i>Milvus migrans</i>
	Black-shouldered Kite	<i>Elanus axillaris</i>
	Little Raven	<i>Corvus mellori</i>
	Red Wattlebird	<i>Anthochaera carunculata</i>
	Superb Fairy-wren	<i>Malurus cyaneus</i>
	Straw-necked Ibis	<i>Threskiornis spinicollis</i>
	Willy Wagtail	<i>Rhipidura leucophrys</i>
*	Common Starling	<i>Sturnus vulgaris</i>
*	Eurasian Skylark	<i>Alauda arvensis</i>
*	Spotted Turtledove	<i>Spilopelia chinensis</i>
Reptiles		
	Unidentified Skink	<i>Scincidae</i> sp.
Mammals		
*	European Rabbit	<i>Oryctolagus cuniculus</i>

Definitions

* - Introduced species

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Table A3. Threatened flora species that have previously been recorded within, or within three kilometres of the study area (Department of Energy Environment and Climate Action 2025e), or that has habitat that may occur within the vicinity of the study area (Department of Climate Change Energy the Environment and Water 2025a).

Common Name	Species Name	National Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Blackseed Glasswort	<i>Tecticornia pergranulata</i> subsp. <i>divaricata</i>	-	Endangered	In Victoria apparently confined to margins of salt lakes and marshes in the Sea Lake, Swan Hill and Kerang regions. Usually occupying the outer zone of saltmarsh communities	1985 (2)	Yes	Moderate
Bush Minuria	<i>Minuria cunninghamii</i>	-	Vulnerable	Usually occurring on slightly to strongly saline ground in sand, clay or gypseous soils	2018 (1)	Yes	Moderate
Chariot Wheels	<i>Maireana cheelii</i>	Vulnerable	Endangered	Occurs on seasonally wet, heavy red loam or clay soils	NPR	No	Unlikely
Red Swainson-pea	<i>Swainsona plagiotropis</i>	Vulnerable	Endangered	Grassland on heavy red soils and is now almost confined to roadside remnants	NPR	No	Unlikely
Ridged Water-milfoil	<i>Myriophyllum porcatum</i>	Vulnerable	Critically Endangered	Temporary waterholes, lagoons, farm dams and rock holes, and on clay pans	NPR	No	Unlikely
River Swamp Wallaby-grass	<i>Amphibromus fluitans</i>	Vulnerable	-	Beside swamps in grassy low open forest, riparian scrub. Required moist soils, tolerates inundation	NPR	No	Unlikely
Riverina Bitter-cress	<i>Cardamine moirensis</i>	-	Endangered	Seasonally wet areas	1985 (1)	No	Unlikely

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Common Name	Species Name	National Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Slender Darling-pea	<i>Swainsona murrayana</i>	Vulnerable	Endangered	Usually found in seasonally inundated flats and around lakes	NPR	No	Unlikely
Spiny Lignum	<i>Duma horrida</i> subsp. <i>horrida</i>	-	Critically Endangered	Infrequent on silty soils and clays fringing shallow swamps and lakes in the northwest, and near the Murray River downstream from about Swan Hill	2024 (1)	Yes	Moderate
Spiny Peppercress	<i>Lepidium aschersonii</i>	Vulnerable	Endangered	Heavy clay soil near salt lakes on volcanic plain, but with outlying records from near Lake Omeo and the Grampians	NPR	No	Unlikely
Stiff Groundsel	<i>Senecio behrianus</i>	Endangered	Critically Endangered	Confined to heavy, winter-wet, clayey soils	NPR	No	Unlikely
Turnip Copperburr	<i>Sclerolaena napiformis</i>	Endangered	Critically Endangered	Remnant grassland on clay-loam soils in north-central Victoria in the Echuca-Nathalia area, and between Donald and Stawell in the west	NPR	No	Unlikely
Twin-leaf Bedstraw	<i>Asperula gemella</i>	-	Endangered	Rare in Victoria where known only from moist riparian sites along the Murray River downstream from Kerang, and with an isolated record from the upper Avoca River	1986 (3)	No	Unlikely
Winged Peppercress	<i>Lepidium monoplocoide</i> s	Endangered	Endangered	Uncommon in north-western quarter of State, mostly on heavy soils near lakes and watercourses	NPR	No	Unlikely

Common Name	Species Name	National Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Yakka Grass	<i>Sporobolus caroli</i>	-	Endangered	Apparently confined in Victoria to seasonally inundated areas along the Murray River floodplain downstream of about Echuca	1986 (2)	No	Unlikely

Table Notes:

NPR – Not previously recorded, modelled presence only under the EPBC Protected Matters Search results.

*** Likelihood of Presence Definitions:**

Unlikely – Site does not contain habitat and/or it is outside the species' known, current distribution.

Low – Site contains some marginal habitat, but the species was not observed and has not been recently recorded in previous surveys in the area.

Moderate – Site contains preferred habitat that may support a population of the species. However, other factors, such as fragmentation, disturbance or predators may be impacting any local population.

High - Site contains the preferred habitat which is likely to support the species.

Present – Preferred habitat is present on the site, and the species was observed on the site, or recently recorded at the site.

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Table A4. Threatened fauna species that have previously been recorded within, or within three kilometres of the study site (Department of Energy Environment and Climate Action 2025e), or that has habitat that may occur within the vicinity of the site (Department of Climate Change Energy the Environment and Water 2025a).

Common Name	Species Name	EPBC Act Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Birds							
Malleefowl	<i>Leipoa ocellata</i>	Vulnerable	Vulnerable	Mallee, acacia, paperbark and other scrubs as well as open eucalypt woodlands or coastal heaths on sandy or gravelly soils.	NPR	No	Unlikely
Freckled Duck	<i>Stictonetta naevosa</i>	-	Endangered	Large seasonal wetlands and well-vegetated dams, wet, grasslands	1989 (8)	No	Low
Australasian Shoveler	<i>Spatula rhynchotis</i>	-	Vulnerable	Heavily vegetated swamps and floodwaters.	1994 (2,212)	No	Low
Blue-billed Duck	<i>Oxyura australis</i>	-	Vulnerable	Well-vegetated freshwater swamps, large dams, lakes. More open waters in winter.	1987 (1)	No	Low
Musk Duck	<i>Biziura lobata</i>	-	Vulnerable	Permanent swamps with dense vegetation, more open waters in non-breeding season.	1988 (6)	No	Low
Brolga	<i>Antigone rubicunda</i>	-	Endangered	From northern Australia, southwards through north-east and east central areas, as well as central New South Wales to western Victoria. Inhabits large open wetlands, grassy plains, coastal mudflats and irrigated croplands and, less frequently, mangrove-studded creeks and	2017 (1)	No	Low

Common Name	Species Name	EPBC Act Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
				estuaries. It is less common in arid and semi-arid regions, but will occur close to water			
Australian Painted-snipe	<i>Rostratula australis</i>	Endangered	Critically Endangered	Uncommon summer migrant to Victoria. Lowlands on shallow freshwater swamps with emergent vegetation, and flooded salt marshes.	NPR	No	Unlikely
Plains-wanderer	<i>Pedionomus torquatus</i>	Critically Endangered	Critically Endangered	Sparse, treeless, lightly grazed native grasslands/herbfields with bare ground, old cereal crops, low shrubland.	NPR	No	Unlikely
Bar-tailed godwit	<i>Limosa lapponica baueri</i>	Endangered	-	Migratory shorebird.	NPR	No	Unlikely
Black-tailed Godwit	<i>Limosa limosa</i>	Endangered	Vulnerable	Estuaries, tidal mudflats, mangroves, shallow river margins	NPR	No	Unlikely
Curlew Sandpiper	<i>Calidris ferruginea</i>	Critically Endangered	Critically Endangered	Estuaries, tidal mudflats, mangroves, shallow river margins, coastal or inland	1990 (60)	No	Low
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>	Vulnerable	-	Not threatened	1997 (128)	No	Low
Latham's Snipe	<i>Gallinago hardwickii</i>	Vulnerable	-	Wet grasslands, open and wooded swamps.	1987 (2)	No	Low
Common Greenshank	<i>Tringa nebularia</i>	Endangered	Endangered	Estuaries, tidal mudflats, mangroves, shallow river margins, coastal or inland	1990 (100)	No	Low

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Common Name	Species Name	EPBC Act Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Marsh Sandpiper	<i>Tringa stagnatilis</i>	-	Endangered	Estuaries, tidal mudflats, mangroves, shallow river margins, coastal or inland	1990 (40)	No	Low
Australasian Bittern	<i>Botaurus poiciloptilus</i>	Endangered	Critically Endangered	Reed beds, dense vegetation of freshwater swamps and creeks.	NPR	No	Unlikely
Eastern Great Egret	<i>Ardea alba modesta</i>	-	Vulnerable	Floodwaters, rivers and shallows of wetlands, intertidal mud flats.	2017 (11)	No	Low
Little Eagle	<i>Hieraaetus morphnoides</i>	-	Vulnerable	Woodlands, Forests	1952 (1)	No	Unlikely
Grey Falcon	<i>Falco hypoleucos</i>	-	Vulnerable	Shrubland, grassland and wooded watercourses of arid and semi-arid regions, although it is occasionally found in open woodlands near the coast	NPR	No	Unlikely
Superb Parrot	<i>Polytelis swainsonii</i>	Vulnerable	Endangered	Woodlands near rivers, also gardens and pastures in core range of NSW Riverina.	NPR	No	Unlikely
Swift Parrot	<i>Lathamus discolor</i>	Critically Endangered	Critically Endangered	Winter migrant from Tasmania. Generally prefers Box-Ironbark forests and woodlands inland of the Great Dividing Range during winter.	NPR	No	Unlikely
Blue-winged Parrot	<i>Neophema chrysostoma</i>	Vulnerable	-	A range of habitats from coastal, sub-coastal and inland areas, right through to semi-arid zones	NPR	No	Unlikely
Brown Treecreeper	<i>Climacteris picumnus</i>	Vulnerable	-	Dry woodland; forest clearings, eucalypts along streams.	2017 (9)	No	Unlikely

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Common Name	Species Name	EPBC Act Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Painted Honeyeater	<i>Grantiella picta</i>	Vulnerable	Vulnerable	Open box-ironbark forests and woodlands, particularly where trees are infested with mistletoe.	NPR	No	Unlikely
Southern Whiteface	<i>Aphelocephala leucopsis</i>	Vulnerable	-	Dry open forests and woodland and inland scrubs of mallee, mulga and saltbush	1952 (1)	No	Unlikely
Grey-crowned Babbler	<i>Pomatostomus temporalis</i>	-	Vulnerable	Open forest, woodlands, scrublands.	2017 (4)	No	Unlikely
Hooded Robin	<i>Melanodryas cucullata</i>	Endangered	Vulnerable	Lightly timbered woodland, mainly dominated by acacia and/or eucalypts.	NPR	No	Unlikely
Diamond Firetail	<i>Stagonopleura guttata</i>	Vulnerable	Vulnerable	Open grassy woodland, heath and farmland or grassland with scattered trees.	NPR	No	Unlikely
Mammals							
South-eastern Long-eared Bat	<i>Nyctophilus corbeni</i>	Vulnerable	Endangered	Found in a wide range of inland woodland vegetation types including box / ironbark / cypress pine woodlands, Buloke woodlands, Brigalow woodland, Belah woodland, smooth-barked apple woodland, river red gum forest, black box woodland, and various types of tree mallee.	NPR	No	Unlikely
Frogs							

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Common Name	Species Name	EPBC Act Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Sloane's Froglet	<i>Crinia sloanei</i>	Endangered	Endangered	Temporary and permanent waterbodies including oxbows off creeks and rivers, farm dams, large and small natural wetlands, constructed frog ponds and temporary puddles. It prefers wetlands that contain riparian and aquatic vegetation	NPR	No	Unlikely
Growling Grass Frog	<i>Litoria raniformis</i>	Vulnerable	Vulnerable	Permanent lakes, swamps, dams and lagoons.	1982 (11)	No	Unlikely
Reptiles							
Pink-tailed Worm-Lizard	<i>Aprasia parapulchella</i>	Vulnerable	Endangered	Favours areas with native grasses and partially buried rock. Shelters beneath rocks and in tunnels. Isolated population near Bendigo.	NPR	No	Unlikely
Samphire Skink	<i>Morethia adelaidensis</i>	-	Endangered	Have a preference for arid shrublands, its spatial distribution is primarily linked to the presence of Saltbush chenopod shrubs.	1982 (20)	Yes	Moderate
Fish							
Flat-headed Galaxias	<i>Galaxias rostratus</i>	Critically Endangered	Vulnerable	Still or slow moving water bodies such as wetlands and lowland streams. They have been associated with a range of habitats including rock and sandy bottoms and aquatic vegetation.	NPR	No	Unlikely

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Common Name	Species Name	EPBC Act Status	FFG Act Status	Habitat Preferences	Most Recent Record	Habitat Present on Site	Likelihood of Presence*
Murray Cod	<i>Maccullochella peelii</i>	Vulnerable	Endangered	Small clear, rocky, upland streams with riffle and pool structure on the upper western slopes of the Great Dividing Range to large, meandering, slow-flowing, often silty rivers in the alluvial lowland reaches of the Murray-Darling Basin.	NPR	No	Unlikely
Murray Hardyhead	<i>Craterocephalus fluviatilis</i>	Endangered	Critically Endangered	Remnant populations of Murray hardyhead occupy still and slow-flowing waters including billabongs, lakes and margins and backwaters of lowland rivers. Individuals are frequently observed schooling in open-water and amongst aquatic vegetation such as fringing emergent rushes.	NPR	No	Unlikely
Silver Perch	<i>Bidyanus bidyanus</i>	Critically Endangered	Endangered	Preference for faster-flowing water, including rapids and races, and more open sections of river, throughout the Murray-Darling Basin	NPR	No	Unlikely
Trout Cod	<i>Maccullochella macquariensis</i>	Endangered	Endangered	The Trout Cod is a riverine species, inhabiting a variety of flowing waters with cover in the form of woody debris in the mid to upper reaches of rivers and streams in north eastern Victoria, south eastern NSW and the ACT.	NPR	No	Unlikely

Table Notes:

This table excludes species listed exclusively as 'migratory' or 'marine' under the EPBC Protected Matters Search results.

NPR – Not previously recorded, modelled presence only under the EPBC Protected Matters Search results.

*** Likelihood of Presence Definitions:**

Unlikely – Site does not contain habitat and/or it is outside the species' known, current distribution. Birds and bats may fly over.

Low – Site contains some marginal habitat, but the species was not observed and has not been recorded in previous recent surveys in the area. Birds and bats may fly over.

Moderate – Site contains preferred habitat that may support a population of the species. Birds and bats may opportunistically or seasonally forage at the site.

High – Site contains preferred habitat which is likely to support the species. Birds and bats are likely to regularly (at least seasonally) forage or roost at the site.

Present – Preferred habitat is present on the site, and the species was observed on the site, or recently recorded on the site.

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Appendix 2. Legislation

Commonwealth Legislation

Environment Protection and Biodiversity Conservation Act 1999 (Cth)

The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) is to provide for the conservation of 'Matters of National Environmental Significance'. The Act defines eight Matters of National Environmental Significance:

- World Heritage properties;
- National Heritage Places;
- Ramsar wetlands of international significance;
- Nationally listed threatened species and ecological communities;
- Listed migratory species;
- Commonwealth marine areas;
- The Great Barrier Reef Marine Park; and,
- Nuclear actions.

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Under the Act, actions that are likely to have a significant impact upon Matters of National Environmental Significance require approval from the Federal Environment Minister. This approval is sought through a referral process for a particular action. An action includes any project, development, undertaking, activity or series of activities. Consideration of the requirement for an 'EPBC Referral' to the Minister has been made within this report.

State Legislation

Environmental Effects Act

The *Environment Effects Act 1978* (Vic) provides for assessment of proposed projects (works) that are capable of having a significant effect on the environment. The Act does this by enabling the Minister administering the Environment Effects Act to decide that an Environment Effects Statement (EES) should be prepared.

The Minister might typically require a proponent to prepare an EES when:

- There is a likelihood of regionally or State significant adverse effects on the environment;
- There is a need for integrated assessment of potential environmental effects (including economic and social effects) of a project and relevant alternatives; and,
- Normal statutory processes would not provide a sufficiently comprehensive, integrated and transparent assessment (Department of Sustainability and Environment 2007).

Referral criteria: individual potential environmental effects

- Individual types of potential effects on the environment that might be of regional or State significance, and therefore warrant referral of a project, are:
- Potential clearing of 10 ha or more of native vegetation from an area that:
 - is of an Ecological Vegetation Class identified endangered by the Department of Sustainability and Environment (in accordance with Appendix 2 of Victoria's Native Vegetation Management Framework); or

- is, or is likely to be, of very high conservation significance (as defined in accordance with Appendix 3 of Victoria's Native Vegetation Management Framework); and
- is not authorised under an approved Forest Management Plan or Fire Protection Plan
- Potential long-term loss of a significant proportion (e.g. 1 to 5 percent depending on the conservation status of the species) of known remaining habitat or population of a threatened species within Victoria;
- Potential long-term change to the ecological character of a wetland listed under the Ramsar Convention or in 'A Directory of Important Wetlands in Australia';
- Potential extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems, over the long term;
- Potential extensive or major effects on the health, safety or well-being of a human community, due to emissions to air or water or chemical hazards or displacement of residences; and,
- Potential greenhouse gas emissions exceeding 200,000 tonnes of carbon dioxide equivalent per annum, directly attributable to the operation of the facility (Department of Sustainability and Environment 2007).

Flora and Fauna Guarantee Act 1988 (Vic)

The *Flora and Fauna Guarantee Act 1998 (Vic)* (FFG Act) provides a legal framework for enabling and promoting the conservation of all Victoria's native flora and fauna, and to enable management of potentially threatening processes on public land. The Act lists native species, communities, and processes that threaten native flora and fauna, under Schedules of the Act. This enables the assessor and regulators to establish management measures to mitigate impacts on listed values within Victoria.

The FFG Act was amended in 2021 and now contains an obligation or duty on public authorities and ministers to consider potential biodiversity impacts when exercising their functions. The FFG Act requires ministers and public authorities (including Councils) reasonably consider the objectives of the Act where projects may impact upon biodiversity, so far as is consistent with the proper exercising of their functions.

The types of potential impacts on biodiversity that should be considered include:

- Long and short term impacts;
- Detrimental and beneficial impacts;
- Direct and indirect impacts;
- Cumulative impacts; and,
- Potentially threatening processes (Department of Environment Land Water and Planning 2021).

It is therefore anticipated that regulators will give due consideration to the FFG Act when considering the approval for the BESS development.

In addition, a 'Permit to Take Protected Flora' is required to 'take' listed flora species that are members of listed communities or protected flora from public land. 'Taking' flora is defined as any action which results in the removal or death of a native plant. A permit is not required under the FFG

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Act for private land, unless listed species are present and the land is declared 'critical habitat' for the species. On public land the permit is issued by DELWP.

An evaluation of the likelihood of the presence of significant flora and fauna species on the subject site, including those listed under the FFG Act that have previously been recorded in the vicinity of the site, has been undertaken.

Planning and Environment Act 1987 (Vic)

The *Planning and Environment Act 1987* (Vic) (P&E Act), later amended by the *Planning and Environment (Planning Schemes) Act 1996* (Vic) provides the foundation of planning schemes in Victoria. Planning schemes set out policies and provisions for the development and protection of land within each municipality in Victoria.

The *Planning and Environment (Planning Schemes) Act 1996* provides for the Minister for Planning to prepare a set of standard provisions for planning schemes called the Victoria Planning Provisions (VPP). The VPP is a state-wide reference document or template from which planning schemes are sourced and constructed. Incorporation of references such as the *Guidelines for the Removal Destruction or Lopping of Native Vegetation* into Section 12 of the VPP ensures that all municipalities must consider this policy. Local zones and overlays, such as Environmental Significance Overlays, may be incorporated into Section 30 and 40 of the planning provisions by each Council, but only remain relevant within that municipality.

The objectives of the P&E Act are to integrate local land use, development planning and development policy with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels through a set of planning schemes. The Act also establishes a clear procedure for public participation in decision making in amending planning schemes.

Some important sections of the planning scheme, in relation to the ecological values of a site, include:

- Section 12 of the State Planning Policy Framework, which identifies, and aims to protect, key biodiversity assets from inappropriate development;
- Clause 52.17 which identifies where native vegetation removal is exempt from requiring a planning permit; and
- Clause 66 which identifies all of the mandatory referral authorities. In particular, the Victorian Department of Energy, Environment and Climate Action is identified as the recommending referral authority if a proponent proposes:
 - 'To remove, destroy or lop native vegetation in the Detailed Assessment Pathway as defined in the *Guidelines for the removal, destruction or lopping of native vegetation*;
 - To remove, destroy or lop native vegetation if a property vegetation plan applies to the site; and
 - To remove, destroy or lop native vegetation on Crown land which is occupied or managed by the responsible authority' (Department of Transport and Planning 2025).

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Catchment and Land Protection Act 1994 (Vic)

The *Catchment and Land Protection Act 1994* (Vic) (CALP Act) is the principle legislation relating to the management of pest plants and animals in Victoria. Under this Act, landowners have a responsibility to avoid causing or contributing to land degradation. Where possible, landowners are required to conserve soil, protect water resources, eradicate 'regionally prohibited' weeds, prevent the growth and spread of 'regionally controlled' weeds and control pest animals. The CALP Act lists the species that are considered weeds and pest animals.

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Wildlife Act 1975 (Vic)

Victoria's *Wildlife Act 1975* (Vic) and the *Wildlife Regulations 2002* (Vic) protect all indigenous vertebrate fauna, some non-indigenous vertebrate fauna, and some invertebrate fauna listed as 'threatened' under the FFG Act. The *Wildlife Act 1975* (Vic) prevents intentional injury to wildlife and stipulates that a licence should be granted where there is a possibility that wildlife are injured, or where wildlife is to be kept, relocated or traded.

In most cases, where the proponent is planning to develop a site, a planning permit approval provides this licencing approval, however, this report advises if an additional permit is required. Circumstances where this legislation may not be relevant is where fish are involved, on public land where additional regulatory approval is required, or where other permits are required (such as where fauna are required to undergo invasive procedures or installation of telemetry systems).

Fisheries Act 1995 (Vic)

The *Fisheries Act 1995* (Vic) provides the legislative framework for the regulation, management conservation of Victorian fish species and their habitats. As with the Victorian *Wildlife Act 1975* described above, the key method to ensure compliance is through licencing. Where fish, or their habitats, are likely to be impacted, this report will identify additional requirements.

Other relevant policy

Guidelines for the Removal, Destruction or Lopping of Native Vegetation (Department of Environment Land Water and Planning 2017c)

The *Guidelines for the Removal, Destruction or Lopping of Native Vegetation* (Department of Environment Land Water and Planning 2017) were released by DELWP in December 2017. A permit to remove native vegetation under clause 52.16 and 52.17 of the Victoria Planning Provisions is required unless:

- The table of exemptions to this clause specifically states that a permit is not required;
- It is native vegetation or an area specified in the schedule to the clause;
- A Native Vegetation Precinct Plan corresponding to the land is incorporated into the relevant planning scheme; or
- Bushfire exemptions apply in bushfire prone areas (Department of Environment Land Water and Planning 2017).

The Guidelines describe the permitting process for applications to remove native vegetation on private and public property within Victoria. A key strategy of the State Planning Policy Framework,

relating to biodiversity, is to ensure that there is no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. This is achieved through iteratively applying the three-step approach:

1. Avoiding the removal, destruction or lopping of native vegetation.
2. Minimising impacts from the removal, destruction or lopping of native vegetation that cannot be avoided.
3. Providing an offset to compensate for the biodiversity impact from the removal, destruction or lopping of native vegetation (Department of Environment Land Water and Planning 2017; p. 4).

Native vegetation is defined in the Victoria Planning Provisions as 'plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses' (Department of Environment Land Water and Planning 2017).

Native vegetation is further classified into two categories (Department of Environment Land Water and Planning 2017):

- A remnant patch of native vegetation (measured in hectares) is either:
 - An area of vegetation where at least 25 per cent of the total perennial understorey plant cover is native, or
 - Any area with three or more native canopy trees where the drip line of each tree touches the drip line of at least one other tree, forming a continuous canopy, or
 - Any mapped wetland included in the *Current Wetlands Map*, available in DELWP systems and tools.

OR

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- A scattered tree (measured in number of trees), is a native canopy tree that does not form a patch (Department of Environment Land Water and Planning 2017).

In addition, a canopy tree with a Diameter at Breast Height (DBH) greater than or equal to the large tree benchmark for the relevant bioregional EVC is defined as a large tree. Large trees can be either a large scattered tree or a large tree within a patch.

The contribution that is made by native vegetation to the biodiversity values of Victoria is determined through an assessment of both site-based information and landscape scale information.

At a site-based level, the contribution is determined through an assessment of:

- The extent of native vegetation;
- The number of large trees (either within a patch or scattered trees), relative to the appropriate EVC benchmark;
- The native vegetation condition, which is determined through a Habitat Hectare assessment
- The conservation status of the Ecological Vegetation Class (EVC) to which the vegetation can be classified; and,
- The presence of sensitive wetlands and coastal areas.

At a landscape scale, the value of the vegetation is determined with reference to its strategic context in the Victorian landscape. This is determined by the vegetation's 'Strategic Biodiversity Score' (SBS) and its 'Habitat Importance Score' (HIS) for its value to rare and threatened species (Department of Environment Land Water and Planning 2017).

All native vegetation within Victoria has a SBS that has been determined through spatial modelling, based on its rarity, level of depletion, species habitats, and condition and connectivity (Department of Environment Land Water and Planning 2017). SBS scores are between 0 and 1 and are used to determine the offset required for the loss of that vegetation. Native vegetation only has a HIS score if it is habitat for a particular rare or threatened species (Department of Environment Land Water and Planning 2017). There are two types of rare or threatened species habitats that may be provided by native vegetation:

- **Highly localised habitats for rare or threatened species** – where impact to this particular patch of native vegetation could result in a significant biodiversity impact, such as a breeding colony or species with a limited geographic extent.
- **Dispersed rare or threatened species habitats** – where habitat for the threatened species has become depleted or fragmented over time (Department of Environment Land Water and Planning 2017).

The HIS is used to apply the decision guidelines in relation to the removal of a patch of native vegetation and to determine offset requirements (Department of Environment Land Water and Planning 2017).

Applications to remove native vegetation are categorised against one of three assessment pathways. These pathways are categorised as:

- Basic – limited impacts on biodiversity.
- Intermediate – could impact on large trees, endangered EVCs, and sensitive wetlands and coastal areas.
- Detailed – could impact on large trees, endangered EVCs, sensitive wetlands and coastal areas, and could significantly impact on habitat for rare or threatened species (Department of Environment Land Water and Planning 2017).

This is initially determined in two ways, based on the 'location map' and the extent risk of the vegetation proposed to be removed. The location risk is determined with reference to the *Native Vegetation Location Risk* map available on DEECA's website. This map shows whether native vegetation is classified as Location 1, 2 or 3.

The extent risk is determined based on the amount of native vegetation that is proposed for removal and includes the area (in hectares) of impact to native vegetation, the number of scattered trees, and the number of large trees (Table A5).

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Table A5. Assessment pathways for removal of remnant patches of native vegetation (Department of Environment Land Water and Planning 2017).

Extent	Location		
	Location 1	Location 2	Location 3
Less than 0.5 hectares and not including any large trees	Basic	Intermediate	Detailed
Less than 0.5 hectares and including one or more large trees	Intermediate	Intermediate	Detailed
0.5 hectares or more	Detailed	Detailed	Detailed

All applications to remove native vegetation must include the following information:

1. Information about the native vegetation to be removed, including:
 - a. The assessment pathway and reason for the assessment pathway;
 - b. A description of the native vegetation to be removed;
 - c. Maps showing the native vegetation and property in context;
 - d. The offset requirement, determined in accordance with section 5 of the Guidelines that will apply if the native vegetation is approved to be removed.
2. Topographic and land information relating to the native vegetation to be removed;
3. Recent, dated photographs of the native vegetation to be removed;
4. Details of any other native vegetation approved to be removed, or that was removed without the required approvals, on the same property or on contiguous land in the same ownership as the applicant, in the five year period before the application for a permit is lodged;
5. An 'Avoid and Minimise' statement;
6. A copy of any Property Vegetation Plan contained within an agreement made pursuant to section 69 of the *Conservation, Forests and Lands Act 1987* (Vic) that applies to the native vegetation to be removed;
7. Where the removal of native vegetation is to create defensible space, a written statement explaining why the removal of native vegetation is necessary;
8. If the application is under Clause 52.16, a statement that explains how the proposal responds to the Native Vegetation Precinct Plan considerations at decision guideline 8, and
9. An offset statement providing evidence that an offset that meets the offset requirements for the native vegetation to be removed has been identified, and can be secured in accordance with the Guidelines (Department of Environment Land Water and Planning 2017; p. 20-21).

If the application will be assessed under the Detailed Assessment Methodology, the following additional requirements apply:

10. A site assessment report of the native vegetation to be removed, including:
 - a. A habitat hectare assessment of any patches of native vegetation, including the condition, extent (in hectares), Ecological Vegetation Class and bioregional conservation status.
 - b. The location, number, circumference (in centimetres measured at 1.3 metres above ground level) and species of any large trees within patches.

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- c. The location, number, circumference (in centimetres measured at 1.3 metres above ground level) and species of any scattered trees, and whether each tree is small or large.
11. Information about impacts on rare or threatened species habitat, including:
 - a. The relevant section of the Habitat importance map for each rare or threatened species requiring a species offset.
 - b. For each rare or threatened species that the native vegetation to be removed is habitat for, according to the Habitat importance maps: - the species' conservation status - the proportional impact of the removal of native vegetation on the total habitat for that species - whether their habitats are highly localised habitats, dispersed habitats, or important areas of habitat within a dispersed species habitat (Department of Environment Land Water and Planning 2017; p. 22).

Ten decisions guidelines are identified within the Guidelines that the responsible or referral authority must consider when deciding on an application to remove native vegetation. These are summarised as follows:

1. The degree to which the application avoids and minimises impacts to native vegetation, and where vegetation is proposed to be removed, the highest quality vegetation is avoided;
2. The role that the vegetation to be removed has in relation to landscape services such as erosion control, ground-water quality, waterway quality;
3. The role of the vegetation in the preservation of landscape features;
4. Whether any part of the native vegetation to be removed, destroyed or lopped is protected under the *Aboriginal Heritage Act 2006* (Vic);
5. The need to remove, destroy or lop native vegetation to create defensible space to reduce the risk of bushfire to life and property, having regard to other available bushfire risk mitigation measures;
6. Whether the native vegetation to be removed is in accordance with any Property Vegetation Plan that applies to the site;
7. Whether an offset that meets the offset requirements for the native vegetation to be removed has been identified and can be secured in accordance with the Guidelines;
8. Whether the application is consistent with a Native Vegetation Precinct Plan (where relevant);
9. For applications in both the Intermediate and Detailed Assessment Pathway only, the impacts on biodiversity values that would occur as a result of vegetation removal; and,
10. For applications in the Detailed Assessment Pathway only, the impacts on habitat for rare or threatened species (Department of Environment Land Water and Planning 2017).

Offset requirements

In all cases where native vegetation is approved for removal, the proponent is liable for the security of an offset site that meets the requirements under the Guidelines. An offset can be either a:

- First party offset – on the same property as the proposed removal of native vegetation, or on another property owned or managed (in the case of Crown land) by the party requiring the offset, or
- Third party offset – on another party's property. Third party offsets are traded as native vegetation credits.

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In most cases a third party offset is the simplest and most cost effective means of securing the required offset.

There are three components to offset requirements:

1. Offset type (general or species).
2. Offset amount (measured in general or species habitat units).
3. Offset attributes.

Two types of offset are identified: General Offsets and Specific Offsets. Specific Offsets may only be required if the native vegetation to be removed is habitat for rare or threatened species that are identified in an Intermediate or Detailed Assessment Pathway application (Department of Environment Land Water and Planning 2017). To determine this, a 'Specific Biodiversity Equivalence Score' is calculated by multiplying the habitat hectares with the HIS for each species that may be impacted. For each of the species, this figure is divided by the sum of all the Specific Biodiversity Value Scores calculated for the remaining vegetation under investigation to give a specific offset threshold for each species. If the amount of vegetation removed exceeds this threshold, then a Specific Offset is required. If it does not exceed the threshold, then only a General Habitat Offset is required (Table A6)(Department of Environment Land Water and Planning 2017).

Table A6 summarises the offset requirements for each of the Assessment Pathways and offset types.

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Table A6. Offset requirements for the removal of native vegetation

Assessment Pathway	Offset Type	Offset amount		Offset attributes	
		Risk Adjusted Biodiversity Equivalence	Species Habitat Requirement	Vicinity	Strategic Biodiversity Score
Basic Assessment Pathway	General offset	1.5 times the general biodiversity equivalence score ¹ of the native vegetation to be removed.	No restrictions.	In the same Catchment Management Authority boundary as the native vegetation to be removed.	At least 80 per cent of the SBS of the native vegetation to be removed.
Intermediate or Detailed Assessment Pathway	General offset	1.5 times the general biodiversity equivalence score of the native vegetation to be removed.	No restrictions.	In the same Catchment Management Authority boundary as the native vegetation to be removed.	At least 80 per cent of the SBS of the native vegetation to be removed.
	Specific offset	For each species impacted, 2 times the specific biodiversity equivalence score of the native vegetation to be removed.	Likely habitat for each rare or threatened species that a specific offset is required for, according to the specific-general offset test.	No restrictions.	No restrictions.

¹ The general biodiversity equivalence score is determined by multiplying the vegetation's habitat hectare score by its SBS.

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Appendix 3. Native Vegetation Removal Report

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Native Vegetation Removal Report

NVRR ID: 321_20251014_GSF

This report provides information to support an application to remove, destroy or lop native vegetation in accordance with the [Guidelines for the removal, destruction or lopping of native vegetation](#) (the Guidelines). This report is **not an assessment by DEECA** of the proposed native vegetation removal. Offset requirements have been calculated using modelled condition scores.

Report details

Date created: 14/10/2025

Local Government Area: GANNAWARRA SHIRE

Registered Aboriginal Party:

Coordinates: 143.94711, -35.78254

Address:

44 OLD ECHUCA ROAD KERANG 3579

LODDON VALLEY HIGHWAY TRAGOWEL 3579

Regulator Notes

Removal polygons are located:

Summary of native vegetation to be removed

Assessment pathway	Intermediate Assessment Pathway		
Location category	Location 2 The native vegetation extent map indicates that this area is typically characterised as supporting native vegetation. Additionally, it is modelled as encompassing an endangered Ecological Vegetation Class, sensitive wetland or sensitive coastal area. The removal of less than 0.5 hectares of native vegetation in this area will not require a Species Offset.		
Total extent including past and proposed removal (ha) <i>Includes endangered EVCs (ha): 0.214</i>	0.214	<i>Extent of past removal (ha)</i>	0
		<i>Extent of proposed removal - Patches (ha)</i>	0.214
		<i>Extent of proposed removal - Scattered Trees (ha)</i>	0.000
No. Large Trees proposed to be removed	0	<i>No. Large Patch Trees</i>	0
		<i>No. Large Scattered Trees</i>	0
No. Small Scattered Trees	0		

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Offset requirements if approval is granted

Any approval granted will include a condition to secure an offset, before the removal of native vegetation, that meets the following requirements:

General Offset amount ¹	0.09 General Habitat Units
Minimum strategic biodiversity value score ²	0.24
Large Trees	0
Vicinity	North Central CMA or GANNAWARRA SHIRE LGA

NB: values within tables in this document may not add to the totals shown above due to rounding

The availability of third-party offset credits can be checked using the Native Vegetation Credit Register (NVCR) Search Tool - <https://nvcr.delwp.vic.gov.au>

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1. The General Offset amount required is the sum of all General Habitat Units in Appendix 1.

2. Minimum strategic biodiversity value score is 80 per cent of the weighted average score across habitat zones where a General Offset is required.



Application requirements

Applications to remove, destroy or lop native vegetation must include all the below information. If an appropriate response has not been provided the application is not complete.

Application Requirement 1 - Native vegetation removal information

If the native vegetation removal is mapped correctly, the information presented in this Native Vegetation Removal Report addresses Application Requirement 1.

Application Requirement 2 - Topographical and land information

This statement describes the topographical and land features in the vicinity of the proposed works, including the location and extent of any ridges, hilltops, wetlands and waterways, slopes of more than 20% gradient, low-lying areas, saline discharge areas or areas of erosion.

See attached Biodiversity Assessment (Ecolink Consulting Pty Ltd 2025)

Application Requirement 3 - Photographs of the native vegetation to be removed

Application Requirement 3 is not addressed in this Native Vegetation Removal Report. All applications must include recent, timestamped photos of each Patch, Large Patch Tree and Scattered Tree which has been mapped in this report.

Application Requirement 4 - Past removal

If past removal has been considered correctly, the information presented in this Native Vegetation Removal Report addresses Application Requirement 4.

Application Requirement 5 - Avoid and minimise statement

This statement describes what has been done to avoid and minimise impacts on native vegetation and associated biodiversity values.

See attached Biodiversity Assessment (Ecolink Consulting Pty Ltd 2025)

Application Requirement 6 - Property Vegetation Plan

This requirement only applies if an approved Property Vegetation Plan (PVP) applies to the property
Does a PVP apply to the proposal?

No

Application Requirement 7 - Defendable space statement

Where the removal of native vegetation is to create defendable space, this statement:

- 
- Describes the bushfire threat; and
 - Describes how other bushfire risk mitigation measures were considered to reduce the amount of native vegetation proposed for removal (this can also be part of the avoid and minimise statement).

This statement is not required if, If the proposed defensible space is within the Bushfire Management Overlay (BMO), and in accordance with the 'Exemption to create defensible space for a dwelling under Clause 44.06 of local planning schemes' in Clause 52.12-5.

N/A

Application Requirement 8 - Native Vegetation Precinct Plan

This requirement is only applicable if you are removing native vegetation from within an area covered by Native Vegetation Precinct Plan (NVPP), and the proposed removal is not identified as 'to be removed' within the NVPP.

Does an NVPP apply to the proposal?

No

Application Requirement 9 - Offset statement

This statement demonstrates that an offset is available and describes how the required offset will be secured. The Applicant's Guide provides information relating to this requirement.

See attached Biodiversity Assessment (Ecolink Consulting Pty Ltd 2025)

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Next steps

Applications to remove, destroy or lop native vegetation must address all the application requirements specified in the Guidelines. If you wish to remove the mapped native vegetation you are required to apply for approval from the responsible authority (e.g. local Council). This Native vegetation removal report must be submitted with your application and meets most of the application requirements. The following requirements need to be addressed, as applicable.

Application Requirement 3 - Photographs of the native vegetation to be removed

Recent, dated photographs of the native vegetation to be removed **must be provided** with the application. All photographs must be clear, show whether the vegetation is a Patch of native vegetation, Patch Tree or Scattered Tree, and identify any Large Trees. If the area of native vegetation to be removed is large, provide photos that are indicative of the native vegetation.

Ensure photographs are attached to the application. If appropriate photographs have not been provided the application is not complete.

Application Requirement 6 - Property Vegetation Plan

If a PVP is applicable, it must be provided with the application.

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Appendix 1: Description of native vegetation to be removed

General Habitat Units for each zone (Patch, Scattered Tree or Patch Tree) are calculated by the following equation in accordance with the Guidelines

General Habitat Units = extent without overlap x condition score x general landscape factor x 1.5, where the general landscape factor = 0.5 + (strategic biodiversity value score/2)

The General Offset amount required is the sum of all General Habitat Units per zone.

Native vegetation to be removed

Information provided by or on behalf of the applicant			Information calculated by NVR Map							
Zone	Type	DBH (cm)	EVC code (modelled)	Bioregional conservation status	Large Tree(s)	Condition score (modelled)	Polygon extent (ha)	Extent without overlap (ha)	SBV score	General Habitat Units
1	Patch	-	VRiv0829	Endangered	-	0.604	0.123	0.123	0.252	0.070
2	Patch	-	VRiv0097	Endangered	-	0.200	0.091	0.091	0.365	0.019

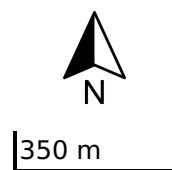
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Appendix 2: Images of mapped native vegetation

1. Property in context



-  Proposed Removal
-  Property Boundaries

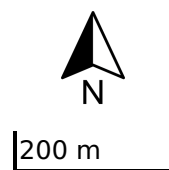


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2. Aerial photograph showing mapped native vegetation

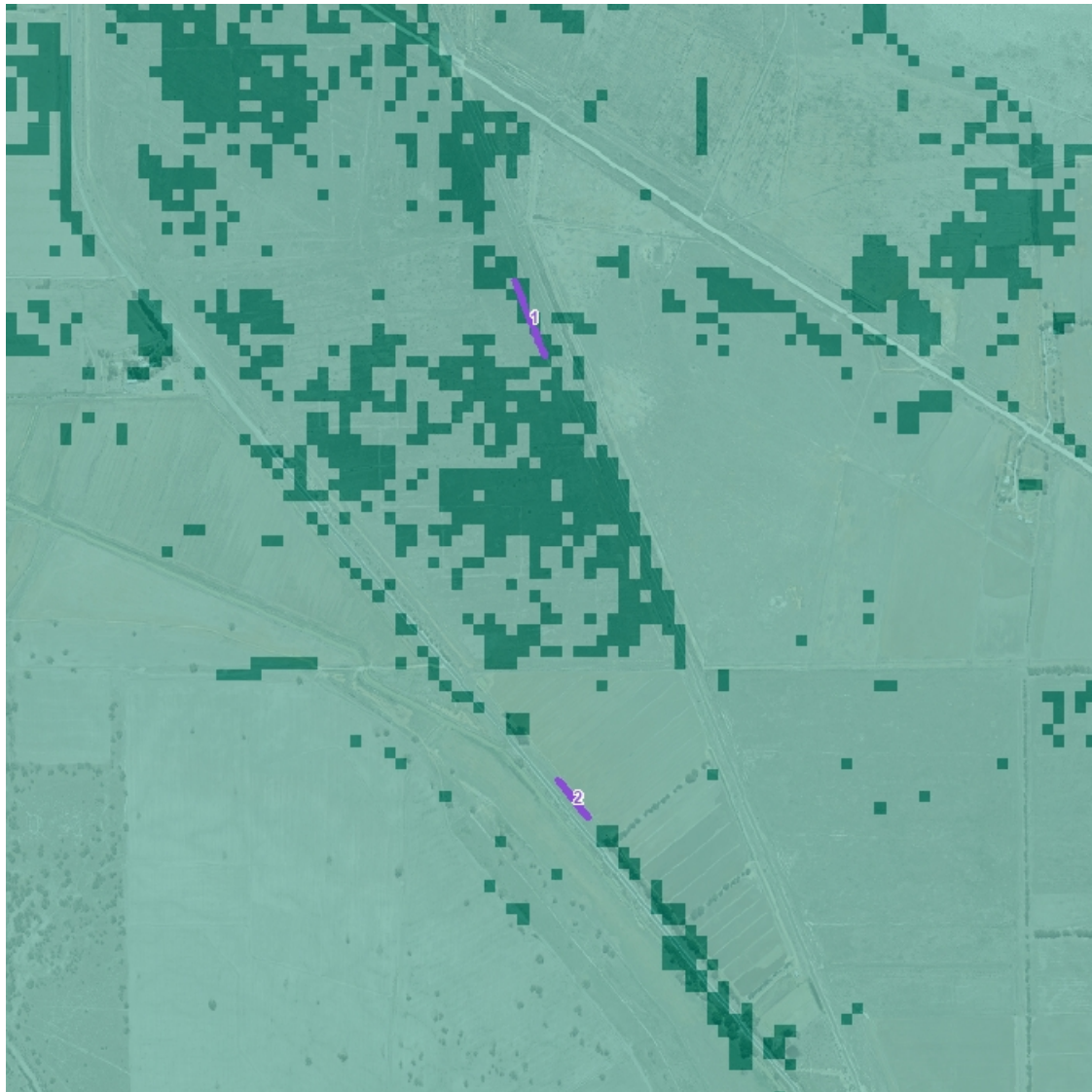


 Proposed Removal



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3. Location Risk Map



Proposed Removal

Location 1

Location 2

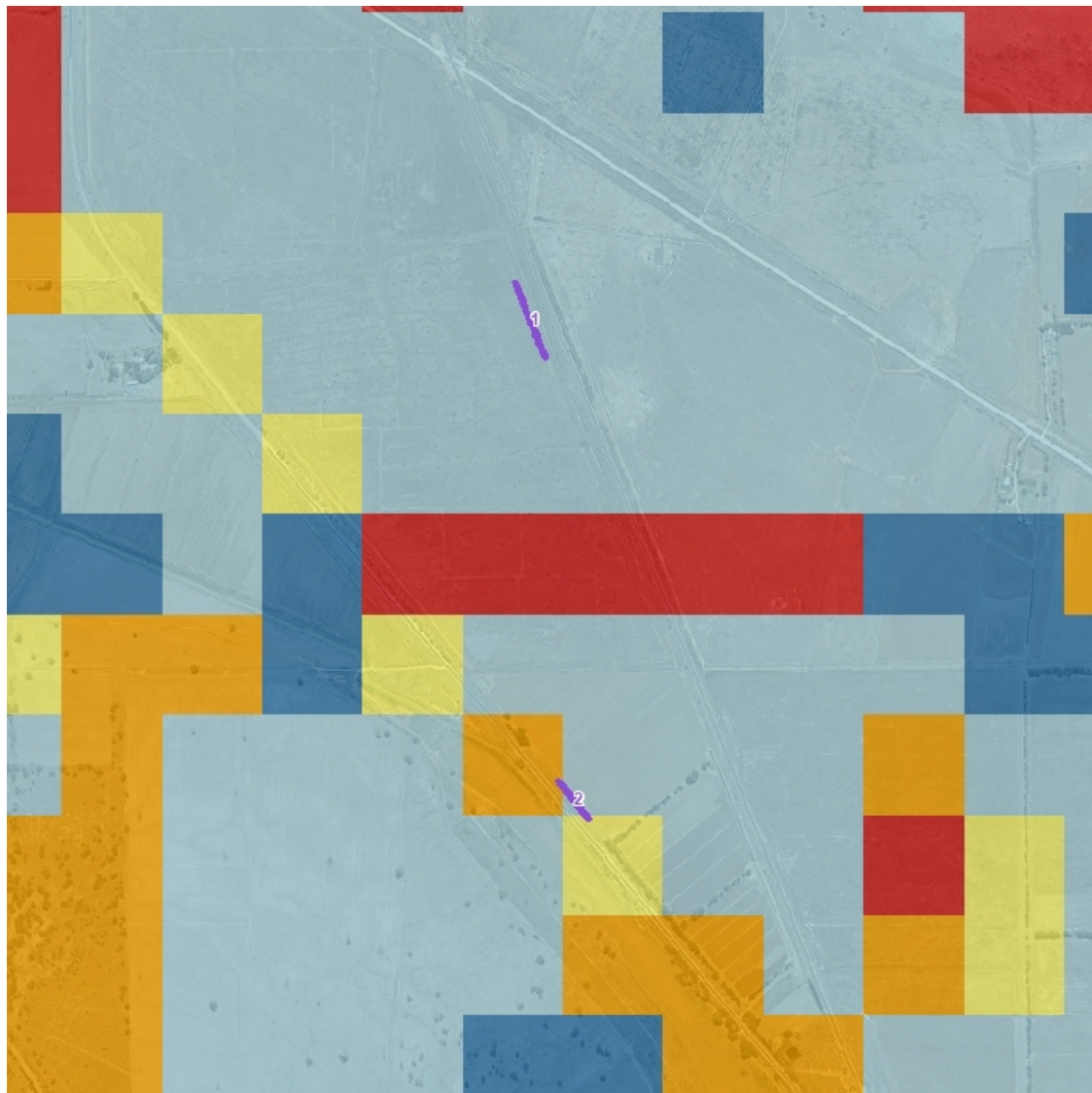
Location 3



200 m

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4. Strategic Biodiversity Value Score Map



Proposed Removal

0.81 - 1.00

0.61 - 0.80

0.41 - 0.60

0.21 - 0.40

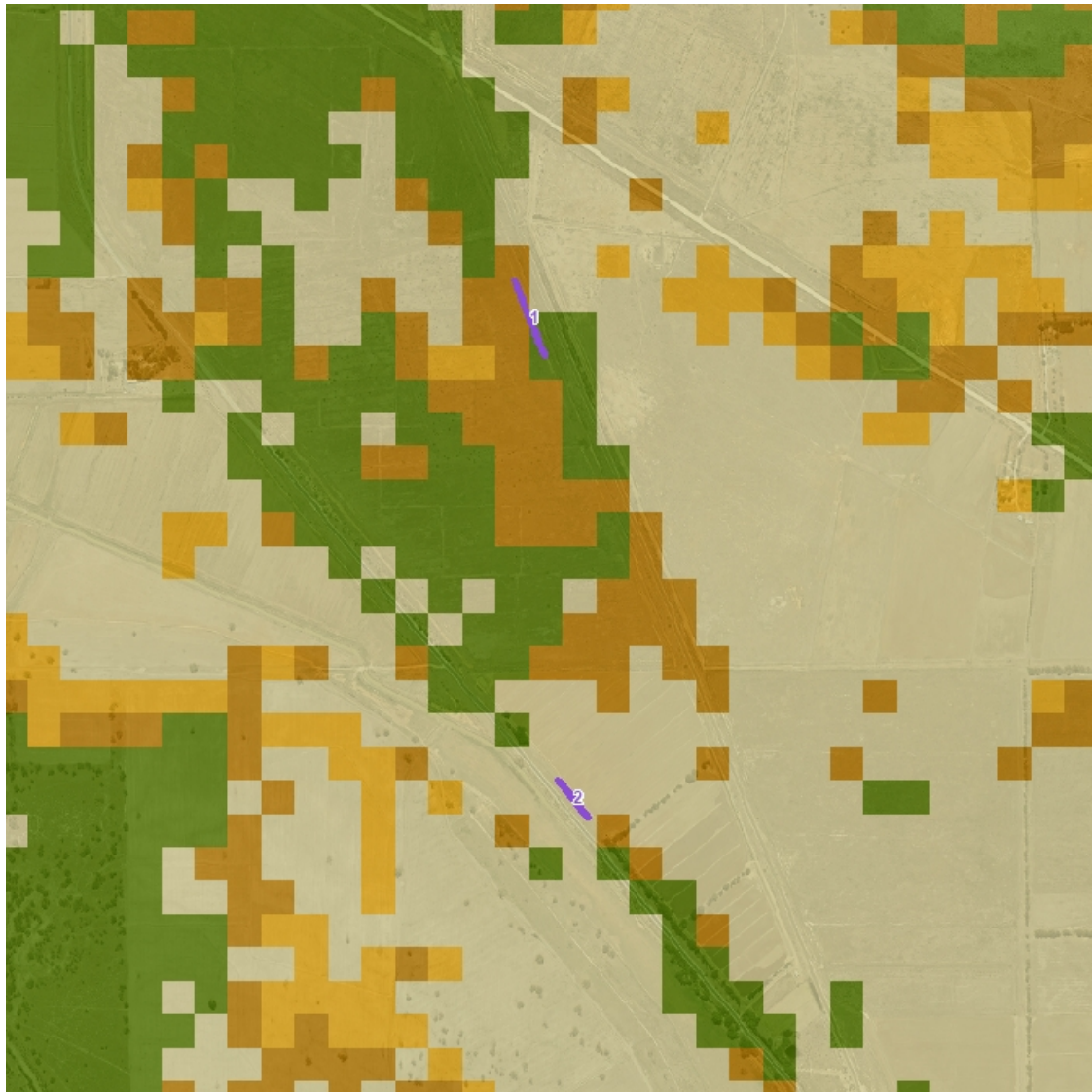
0.00 - 0.20



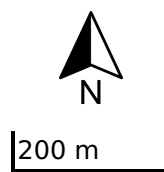
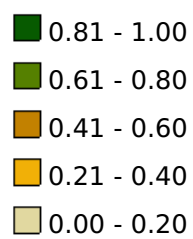
200 m

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5. Condition Score Map

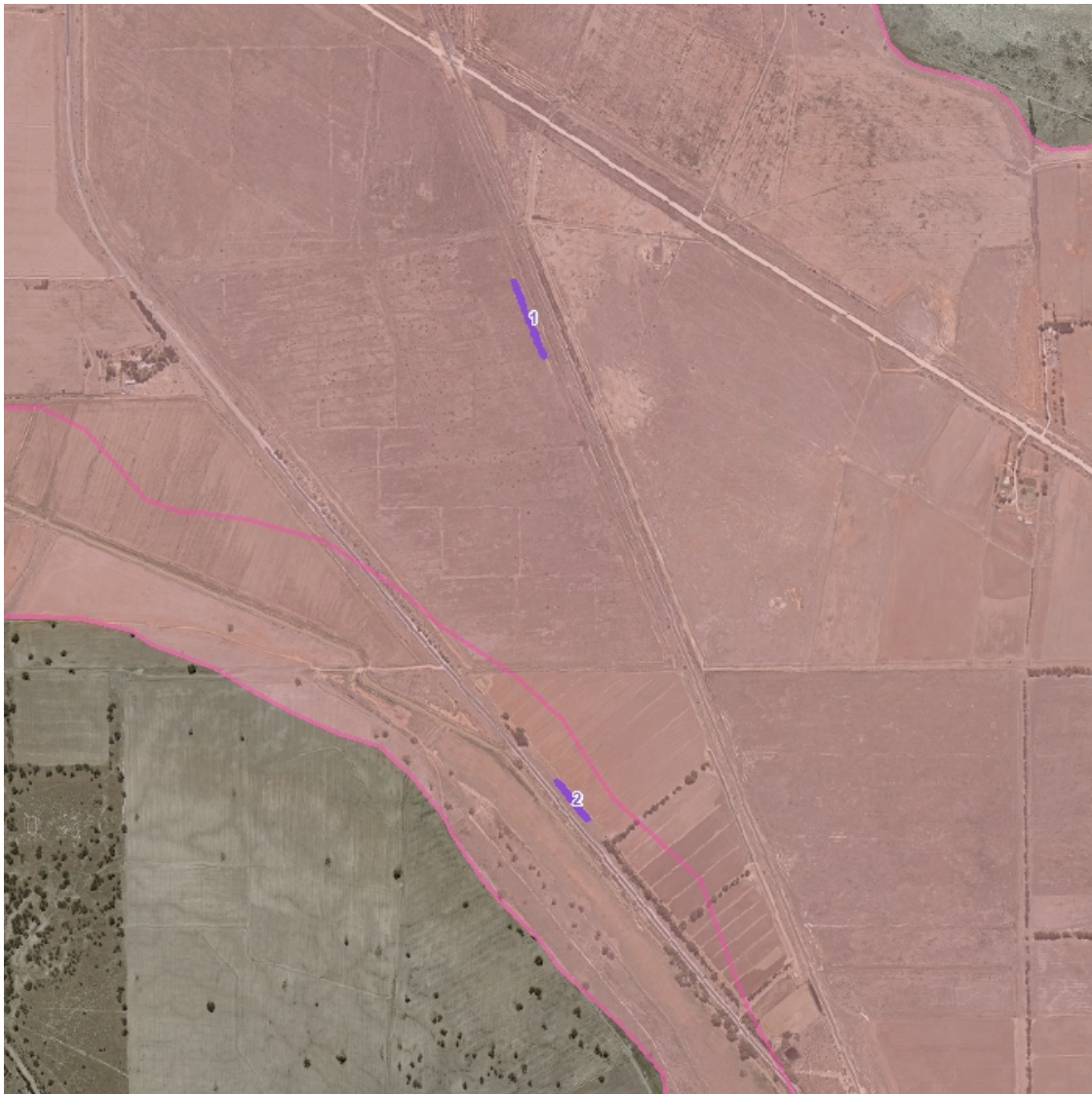


Proposed Removal



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6. Endangered EVCs



■ Proposed Removal

■ Endangered 1750 Ecological Vegetation Classes



200 m

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Appendix 4. Native Vegetation Offset Credit Register Results

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Report of available native vegetation credits

This report lists native vegetation credits available to purchase through the Native Vegetation Credit Register.

This report is **not evidence** that an offset has been secured. An offset is only secured when the units have been purchased and allocated to a permit or other approval and an allocated credit extract is provided by the Native Vegetation Credit Register.

Date and time: 14/10/2025 11:44

Report ID: 32272

What was searched for?

General offset

General habitat units	Strategic biodiversity value	Large trees	Vicinity (Catchment Management Authority or Municipal district)	
0.09	0.24	0	CMA	North Central
			or LGA	Gannawarra Shire

Details of available native vegetation credits on 14 October 2025 11:44

These sites meet your requirements for general offsets.

Credit Site ID	GHU	LT	CMA	LGA	Land owner	Trader	Fixed price	Broker(s)
BBA-0074	0.095	2	North Central	Northern Grampians Shire	Yes	Yes	No	VegLink
BBA-0741	1.691	0	North Central	Pyrenees Shire	Yes	Yes	No	Bio Offsets, VegLink
BBA-0765	0.094	0	North Central	Buloke Shire	Yes	Yes	No	Contact NVOR
BBA-1055	1.509	1	North Central	Gannawarra Shire	Yes	Yes	No	VegLink
BBA-3006	12.020	3	North Central	Greater Bendigo City	No	Yes	No	Ethos
BBA-3052_01	5.917	167	North Central	Northern Grampians Shire	Yes	Yes	No	VegLink
BBA-3052_01	0.949	0	North Central	Northern Grampians Shire	Yes	Yes	Yes	VegLink
TFN_2-C1626	22.893	0	North Central	Gannawarra Shire	No	Yes	No	
TFN-C1662_3	0.908	0	North Central	Gannawarra Shire	Yes	Yes	No	VegLink
TFN-C1702	16.952	16	North Central	Gannawarra Shire	Yes	Yes	No	TFN
TFN-C1854	0.251	0	North Central	Macedon Ranges Shire	No	Yes	No	VegLink
TFN-C1970	4.931	0	North Central	Greater Bendigo City	No	Yes	No	Contact NVOR
VC_CFL-3056_01	2.844	86	North Central	Loddon Shire	Yes	Yes	No	VegLink

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VC_CFL-3071_01	0.105	38	North Central	Loddon Shire	Yes	Yes	No	VegLink
VC_CFL-3076_01	7.807	45	North Central	Pyrenees Shire	Yes	Yes	No	Bio Offsets
VC_CFL-3773_01	1.183	513	North Central	Macedon Ranges Shire	Yes	Yes	No	VegLink
VC_CFL-3785_01	2.907	0	North Central	Mount Alexander Shire	Yes	Yes	No	VegLink
VC_CFL-3815_01	5.000	19	North Central	Central Goldfields Shire	Yes	Yes	No	VegLink
VC_CLO-2451_01	1.630	13	North Central	Greater Bendigo City	No	Yes	No	Ethos
VC_TFN-09554_01	13.291	382	North Central	Macedon Ranges Shire	Yes	Yes	No	Bio Offsets

These sites meet your requirements using alternative arrangements for general offsets.

Credit Site ID	GHU	LT	CMA	LGA	Land owner	Trader	Fixed price	Broker(s)
----------------	-----	----	-----	-----	------------	--------	-------------	-----------

There are no sites listed in the Native Vegetation Credit Register that meet your offset requirements when applying the alternative arrangements as listed in section 11.2 of the Guidelines for the removal, destruction or lopping of native vegetation.

These potential sites are not yet available, land owners may finalise them once a buyer is confirmed.

Credit Site ID	GHU	LT	CMA	LGA	Land owner	Trader	Fixed price	Broker(s)
VC_CFL-3701_01	10.574	18	Goulburn Broken, North Central	Greater Bendigo City	Yes	Yes	No	Bio Offsets
VC_CFL-3742_01	12.301	410	North Central	Loddon Shire	Yes	Yes	No	Contact NVOR

LT - Large Trees

CMA - Catchment Management Authority

LGA - Municipal District or Local Government Authority

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Next steps

If applying for approval to remove native vegetation

Attach this report to an application to remove native vegetation as evidence that your offset requirement is currently available.

If you have approval to remove native vegetation

Below are the contact details for all brokers. Contact the broker(s) listed for the credit site(s) that meet your offset requirements. These are shown in the above tables. If more than one broker or site is listed, you should get more than one quote before deciding which offset to secure.

Broker contact details

Broker Abbreviation	Broker Name	Phone	Email	Website
	Fully traded			
Abezco	Abzeco Pty. Ltd.	(03) 9431 5444	offsets@abzeco.com.au	www.abzeco.com.au
Baw Baw SC	Baw Baw Shire Council	(03) 5624 2411	bawbaw@bawbawshire.vic.gov.au	www.bawbawshire.vic.gov.au
Bio Offsets	Biodiversity Offsets Victoria	0452 161 013	info@offsetsvictoria.com.au	www.offsetsvictoria.com.au
Contact NVOR	Native Vegetation Offset Register	136 186	nativevegetation.offsetregister@deeca.vic.gov.au	www.environment.vic.gov.au/native-vegetation
Ecocentric	Ecocentric Environmental Consulting	0410 564 139	ecocentric@me.com	Not available
Ethos	Ethos NRM Pty Ltd	(03) 5153 0037	offsets@ethosnrm.com.au	www.ethosnrm.com.au
IDES	ID Ecological Management	(03) 9437 0555		www.idecological.com.au
Nillumbik SC	Nillumbik Shire Council	(03) 9433 3316	offsets@nillumbik.vic.gov.au	www.nillumbik.vic.gov.au
TFN	Trust for Nature	8631 5888	offsets@tfn.org.au	www.trustfornature.org.au
VegLink	Vegetation Link Pty Ltd	(03) 8578 4250 or 1300 834 546	offsets@vegetationlink.com.au	www.vegetationlink.com.au
Yarra Ranges SC	Yarra Ranges Shire Council	1300 368 333	biodiversityoffsets@yarraranges.vic.gov.au	www.yarraranges.vic.gov.au

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For more information contact the DEECA Customer Service Centre 136 186 or the Native Vegetation Credit Register at nativevegetation.offsetregister@delwp.vic.gov.au

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Notwithstanding anything else contained in this publication, you must ensure that you comply with all relevant laws, legislation, awards or orders and that you obtain and comply with all permits, approvals and the like that affect, are applicable or are necessary to undertake any action to remove, lop or destroy or otherwise deal with any native vegetation or that apply to matters within the scope of Clauses 52.16 or 52.17 of the Victoria Planning Provisions and Victorian planning schemes

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Report of available native vegetation credits

This report lists native vegetation credits available to purchase through the Native Vegetation Credit Register.

This report is **not evidence** that an offset has been secured. An offset is only secured when the units have been purchased and allocated to a permit or other approval and an allocated credit extract is provided by the Native Vegetation Credit Register.

Date and time: 14/10/2025 11:44

Report ID: 32272

What was searched for?

General offset

General habitat units	Strategic biodiversity value	Large trees	Vicinity (Catchment Management Authority or Municipal district)	
0.09	0.24	0	CMA	North Central
			or LGA	Gannawarra Shire

Details of available native vegetation credits on 14 October 2025 11:44

These sites meet your requirements for general offsets.

Credit Site ID	GHU	LT	CMA	LGA	Land owner	Trader	Fixed price	Broker(s)
BBA-0074	0.095	2	North Central	Northern Grampians Shire	Yes	Yes	No	VegLink
BBA-0741	1.691	0	North Central	Pyrenees Shire	Yes	Yes	No	Bio Offsets, VegLink
BBA-0765	0.094	0	North Central	Buloke Shire	Yes	Yes	No	Contact NVOR
BBA-1055	1.509	1	North Central	Gannawarra Shire	Yes	Yes	No	VegLink
BBA-3006	12.020	3	North Central	Greater Bendigo City	No	Yes	No	Ethos
BBA-3052_01	5.917	167	North Central	Northern Grampians Shire	Yes	Yes	No	VegLink
BBA-3052_01	0.949	0	North Central	Northern Grampians Shire	Yes	Yes	Yes	VegLink
TFN_2-C1626	22.893	0	North Central	Gannawarra Shire	No	Yes	No	
TFN-C1662_3	0.908	0	North Central	Gannawarra Shire	Yes	Yes	No	VegLink
TFN-C1702	16.952	16	North Central	Gannawarra Shire	Yes	Yes	No	TFN
TFN-C1854	0.251	0	North Central	Macedon Ranges Shire	No	Yes	No	VegLink
TFN-C1970	4.931	0	North Central	Greater Bendigo City	No	Yes	No	Contact NVOR
VC_CFL-3056_01	2.844	86	North Central	Loddon Shire	Yes	Yes	No	VegLink

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VC_CFL-3071_01	0.105	38	North Central	Loddon Shire	Yes	Yes	No	VegLink
VC_CFL-3076_01	7.807	45	North Central	Pyrenees Shire	Yes	Yes	No	Bio Offsets
VC_CFL-3773_01	1.183	513	North Central	Macedon Ranges Shire	Yes	Yes	No	VegLink
VC_CFL-3785_01	2.907	0	North Central	Mount Alexander Shire	Yes	Yes	No	VegLink
VC_CFL-3815_01	5.000	19	North Central	Central Goldfields Shire	Yes	Yes	No	VegLink
VC_CLO-2451_01	1.630	13	North Central	Greater Bendigo City	No	Yes	No	Ethos
VC_TFN-09554_01	13.291	382	North Central	Macedon Ranges Shire	Yes	Yes	No	Bio Offsets

These sites meet your requirements using alternative arrangements for general offsets.

Credit Site ID	GHU	LT	CMA	LGA	Land owner	Trader	Fixed price	Broker(s)
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There are no sites listed in the Native Vegetation Credit Register that meet your offset requirements when applying the alternative arrangements as listed in section 11.2 of the Guidelines for the removal, destruction or lopping of native vegetation.

These potential sites are not yet available, land owners may finalise them once a buyer is confirmed.

Credit Site ID	GHU	LT	CMA	LGA	Land owner	Trader	Fixed price	Broker(s)
VC_CFL-3701_01	10.574	18	Goulburn Broken, North Central	Greater Bendigo City	Yes	Yes	No	Bio Offsets
VC_CFL-3742_01	12.301	410	North Central	Loddon Shire	Yes	Yes	No	Contact NVOR

LT - Large Trees

CMA - Catchment Management Authority

LGA - Municipal District or Local Government Authority

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Next steps

If applying for approval to remove native vegetation

Attach this report to an application to remove native vegetation as evidence that your offset requirement is currently available.

If you have approval to remove native vegetation

Below are the contact details for all brokers. Contact the broker(s) listed for the credit site(s) that meet your offset requirements. These are shown in the above tables. If more than one broker or site is listed, you should get more than one quote before deciding which offset to secure.

Broker contact details

Broker Abbreviation	Broker Name	Phone	Email	Website
	Fully traded			
Abezco	Abzeco Pty. Ltd.	(03) 9431 5444	offsets@abzeco.com.au	www.abzeco.com.au
Baw Baw SC	Baw Baw Shire Council	(03) 5624 2411	bawbaw@bawbawshire.vic.gov.au	www.bawbawshire.vic.gov.au
Bio Offsets	Biodiversity Offsets Victoria	0452 161 013	info@offsetsvictoria.com.au	www.offsetsvictoria.com.au
Contact NVOR	Native Vegetation Offset Register	136 186	nativevegetation.offsetregister@deeca.vic.gov.au	www.environment.vic.gov.au/native-vegetation
Ecocentric	Ecocentric Environmental Consulting	0410 564 139	ecocentric@me.com	Not available
Ethos	Ethos NRM Pty Ltd	(03) 5153 0037	offsets@ethosnrm.com.au	www.ethosnrm.com.au
IDES	ID Ecological Management	(03) 9437 0555		www.idecological.com.au
Nillumbik SC	Nillumbik Shire Council	(03) 9433 3316	offsets@nillumbik.vic.gov.au	www.nillumbik.vic.gov.au
TFN	Trust for Nature	8631 5888	offsets@tfn.org.au	www.trustfornature.org.au
VegLink	Vegetation Link Pty Ltd	(03) 8578 4250 or 1300 834 546	offsets@vegetationlink.com.au	www.vegetationlink.com.au
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