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Baseline and Targeted Ecological Assessment of the Cleve Wind Farm Project area

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Executive Summary

The Cleve Wind Farm (CWF) ecological assessment was undertaken to assess potential impacts on flora and fauna values within the approximately 23,840 ha CWF Project area. The assessment primarily focused on turbine sites, cable routes, and access tracks. The assessment consisted of an initial desktop study followed by two field surveys targeting national and state threatened species and communities, along with other ecologically significant matters within the wider area.

Results of the desktop assessment indicated that the Project area consisted predominantly of agricultural land use with approximately 30% remnant vegetation found mainly in protected reserves, heritage agreements, and along road reserves and riparian corridors. Although there were numerous records for conservation significant flora and fauna within the Project area, these records were predominantly linked to protected reserves.

The NVC Bushland Assessment Methods were used to survey all areas of native vegetation interacting with the project footprint. Eight broad vegetation associations were recorded within the Project area including one Threatened Ecological Community (TEC). Eyre Peninsula Blue Gum (*Eucalyptus petiolaris*) Woodland Ecological communities are listed as Endangered under the EPBC Act. Additionally, three species of flora of state conservation significance were identified within the Project area, *Daviesia pectinata* (Zig-zag Bitter-pea, NPW: R), *Eucalyptus cretata* (Darke Peak Mallee, NPW: R) and *Sarcozona bicarinata* (Ridged Noon-flower, NPW: V). The locations of these threatened species and communities have been mapped and clearance should be avoided where possible.

Each Wind Turbine Generator (WTG) position, along with its associated stringline and road access, were surveyed for potential impacts to native vegetation. While some WTGs and stringlines were situated in cleared paddocks, posing no risk to native vegetation, others were positioned near or within larger patches of vegetation, some of which held significant ecological value. Marginal adjustments to the positioning of many WTGs could be made to minimise the impact on vegetation. However, some WTGs may need to be relocated to prevent clearance of areas with high ecological value. Recommendations for each turbine site have been included in the report.

Avian surveys were conducted to establish a baseline of bird species present within the Project area, with targeted efforts focused on threatened avian species likely to inhabit the wider Project area, including the Diamond Firetail (*Stagonopleura guttata*, EPBC: VU, NPW: V) and Malleefowl (*Leipoa ocellata*, EPBC: VU, NPW: V). All areas of suitable habitat were targeted with a particular emphasis on water sources for the Diamond Firetail and ground-truthing past records for Malleefowl. Additionally, large trees that could potentially serve as nest sites for Wedge-tailed Eagles (*Aquila audax*) were assessed throughout the entire Project area. Diamond Firetail

were observed within the CWF Project area with suitable habitat identified across the wider Project area, while habitat for the Malleefowl was restricted to areas of native vegetation already protected under heritage agreements and conservation parks.

Potential direct impacts from the project include native vegetation clearance, fauna habitat fragmentation, disturbance, and the risk of injury and mortality to fauna. However, it is anticipated that the majority of these impacts can be avoided, minimised, or mitigated through the implementation of various measures during the detailed design phase.

Recommendations for minimising impacts include the following:

- Micro-siting efforts should prioritise the avoidance of native vegetation clearance wherever feasible.
- Align wind turbines, cable routes, and access tracks to impact cleared landscapes and avoid areas with higher ecological value.
- Prioritise the avoidance of habitat fragmentation to mitigate negative effects on species populations, including edge effects and reduced gene flow and focus on preserving habitat connectivity, particularly for threatened species and communities.
- Identify and highlight nest sites for resident species with specific foraging strategies, such as soaring, gliding, and low flight patterns, to ensure adequate buffers for habitat sustainability.
- Further surveys to rule out the presence of conservation significant bat species, and densities of other bat species.

Glossary

Abbreviation	Description
AHD	Australian Height Datum
BAM	Bushland Assessment Method
BDBSA	Biological Databases of South Australia
BoM	Bureau of Meteorology
CP	Conservation Park
CWF	Cleve Wind Farm
DEW	Department for Environment and Water
EAAF	East Asia-Australasian Flyway
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
EP	Eyre Peninsula
EPBGW	Eyre Peninsula Blue Gum (*Eucalyptus petiolaris*) Woodland
GPS	Global Positioning System
IBRA	Interim Biogeographic Regionalisation for Australia
km	Kilometres
LSA Act	*Landscape South Australia Act 2019*
MNES	Matters of National Environmental Significance
NPW Act	*National Parks and Wildlife Act 1972*
NV Act	*Native Vegetation Act 1991*
NVC	Native Vegetation Council
NV Regs	*Native Vegetation Regulations 2017*
NVIS	Native Vegetation Information System
PDI Act	*Planning Development and Infrastructure Act 2016*
PMST	Protected Matters Search Tool
Project area	Cleve Wind Farm project boundary
SA	South Australia
Study area	Cleve Wind Farm project boundary plus additional 5km buffer
TEC	Threatened Ecological Community
UBS	Unit Biodiversity Score
WONs	Weed of National Significance
WTG	Wing Turbine Generator

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1 Introduction

Owned and operated by Vestas, the proposed Cleve Wind Farm project (CWF) will consist of up to 70 turbines, providing a potential 500mW of energy. If the CWF is approved, the project will deliver renewable, low-cost energy to the national grid and contribute to the SA Government's net-zero emission target by 2027 (Vestas 2024). The project will result in 350 jobs during the construction phase with 12 people in full time employment in an ongoing capacity.

The proposed CWF is located on the eastern Eyre Peninsula (EP) (Figure 1), approximately 6 kilometres (km) north of the regional town of Cleve (Figure 2). The overall project encompass a total area of approximately 23,840 hectares (ha). The CWF site and Cleve district is rich in agricultural resources with a rainfall above that of the surrounding districts due to an elevated topography with an average annual rainfall around 400mm. Land use is dominated by cropping and secondarily grazing.

1.1 Objectives

Ecosphere were engaged by AECOM on behalf of Vestas to undertake an ecological assessment within the CWF boundary (the Project area). This has been conducted over two surveys, initially as a baseline assessment with which to refine a provisional layout and then as a follow up targeted assessment during spring to determine the presence of threatened species or issues associated with flora and fauna values present within the CWF Project area. Specifically, the objectives of the ecological baseline and targeted assessment were to:

- Conduct database searches to identify matters of Commonwealth and State environmental significance within the Project area plus a 5 km buffer around the Project area (Study area).
- Review any existing mapping data (e.g., vegetation communities, vegetation condition and aerial photographs) relevant to the Study area.
- Document the results of the database searches, including the environmental setting, vegetation covered under the *Native Vegetation Act 1991*, Matters of National Environmental Significance (MNES), Nationally Threatened Ecological Communities (TEC's), threatened flora and fauna, migratory fauna and state threatened flora, fauna and ecological communities.
- Discuss the potential impacts of the project to species with conservation listings under the *Native Vegetation Act 1991* (NV Act), *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) MNES and *National Parks and Wildlife Act 1972* (NPW Act) threatened species.
- Identify any specific habitats within the area that have potential ecologically significant value.

- Describe the existing ecological setting based on the available information and identify data gaps that can addressed as part of field survey work.

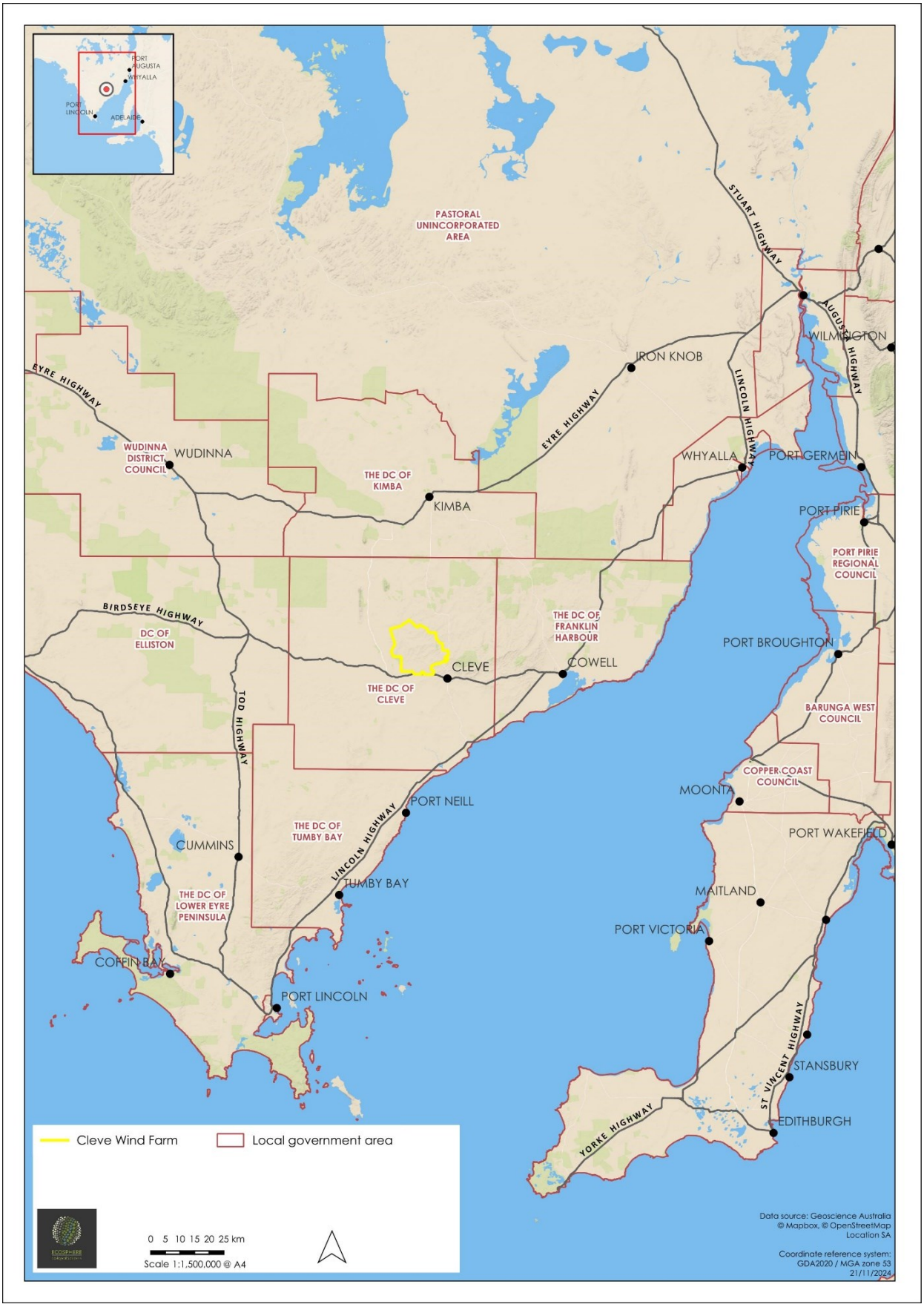


Figure 1. Location of the CWF on the Eyre Peninsula.

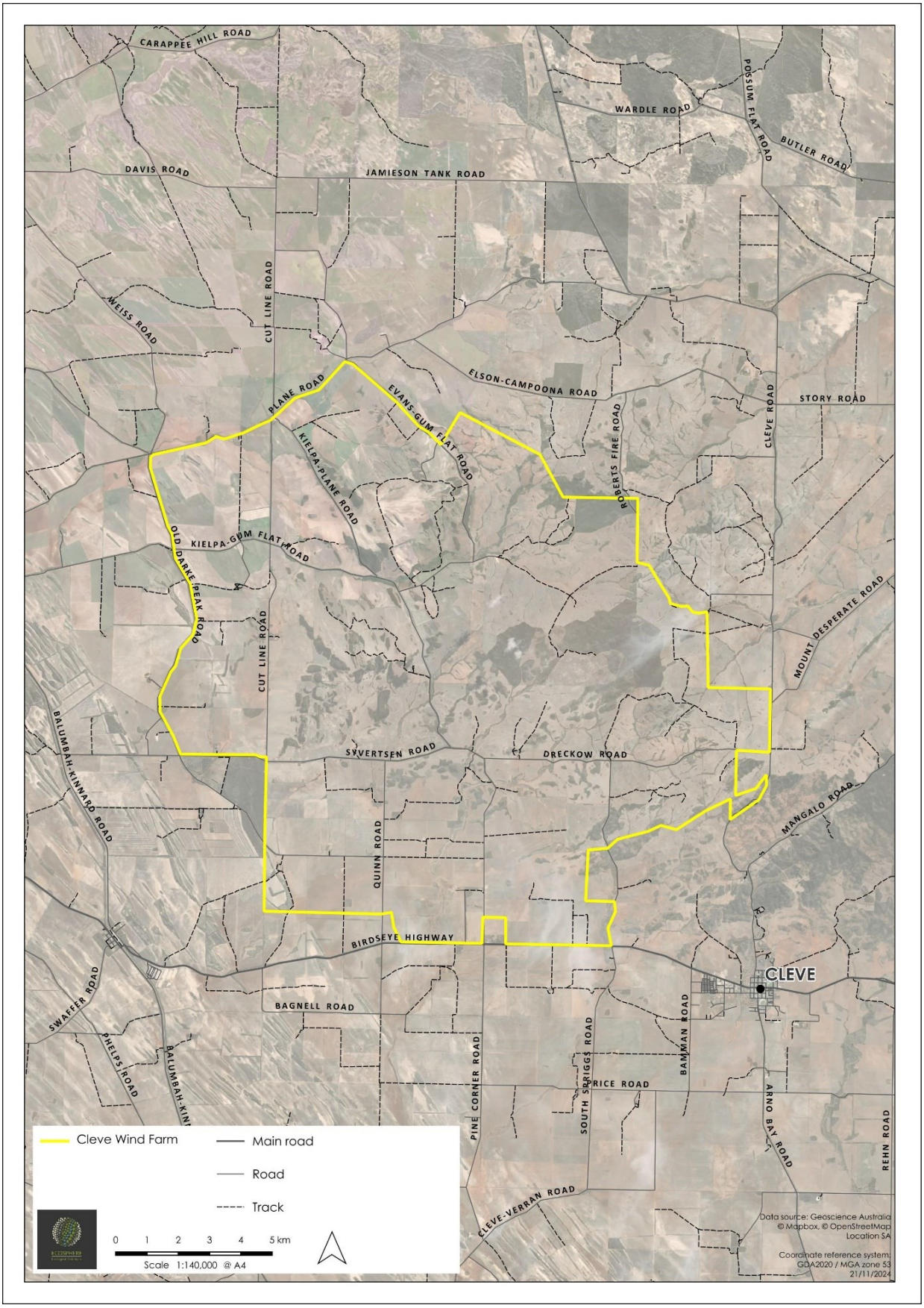


Figure 2. Location of the CWF north of the Cleve township

2 Background

2.1 Project Extent

The Project area is located within the Cleve Hills district and has a topography defined by low hills and valleys. Bounded to the south by the Birdseye highway, the Project area covers an area around 20 x 20 km in geographical extent. The upper elevations of the Project area stand at approximately 395 m Australian Height Datum (AHD) with the lower areas lying 130m AHD and the average elevation at 283m AHD.

The CWF project is a large-scale renewable energy generation and storage project comprising the following infrastructure (Figure 3):

- Wind farm up to 500MW, consisting of approximately 70 turbines. The turbines are proposed to be the Vestas V172-7.2 MW model and comprise the following dimensions:
    - Blade length – 84m
    - Hub Height – 150m
    - Overall Height – 250m
- 240MW battery storage facility (final site to be determined)
- Substation (final site to be determined)
- Associated onsite facilities and infrastructure, including:
    - Turbine pads
    - Crane hard stands pads (for construction)
    - Internal road network upgrades and new roads to accommodate turbine transport and maintenance.
    - Underground transmission cables
    - Construction compound
    - Concrete Batch Plant
    - O&M building
- Transmission connections to the Yadnarie Substation (final location to be determined)

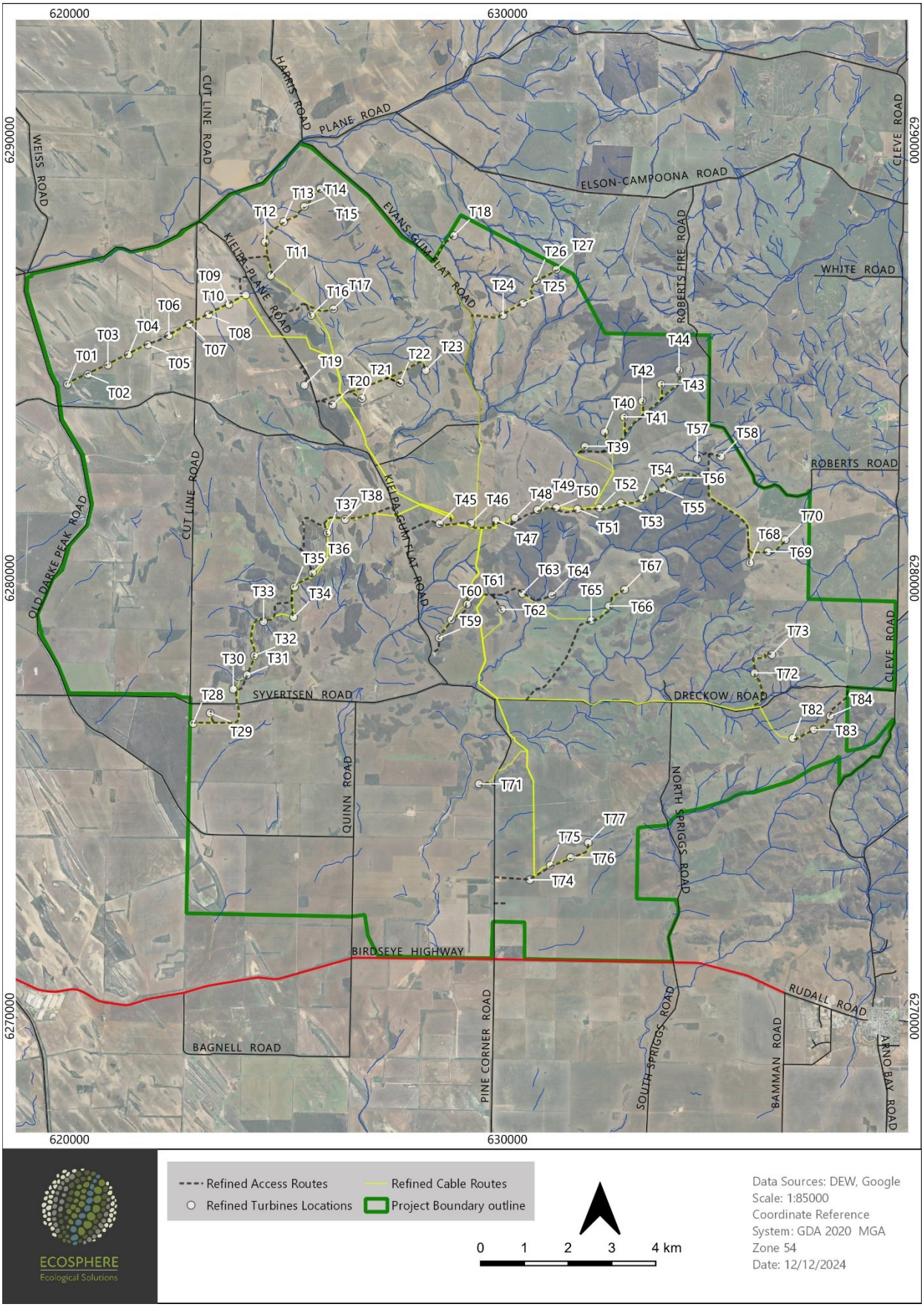


Figure 3. Refined layout of CWF Project area including access roads, turbine locations and transmission cable routes.

2.2 IBRA

The Interim Biogeographical Regionalisation of Australia (IBRA) identifies geographically distinct bioregions based on common climate, geology, landform, native vegetation and species information. The bioregions are further refined into subregions and environmental associations (DoEE 2012). The CWF Project area is located within the Eyre York Block Bioregion and the Eyre Hills Subregion and is extends across two Environmental Associations, the Cleve Environmental Association and the Mount Desperate Environmental Association (Figure 4). Native vegetation remnancy figures for IBRA subregions and associations are useful for setting regional landscape targets and therefore relevant to the project with respect to available vegetation and habitat extent.

2.2.1 Cleve Environmental Association Description

The Cleve Environmental Association is characterised by gently sloping sandy plains and foot slopes with some dunes and low cliffs along the coastline. Soils are typically red calcareous earths, hard pedal red duplex soils, brownish sands and whitish calcareous sands. The association has 17% native vegetation cover, of which 17% is formally protected in reserves and heritage agreements (DoEE 2012). Vegetation consists of open scrub of *Eucalyptus socialis* (Beaked Red Mallee) and *Eucalyptus gracilis* (Yorrell), sometimes with *Eucalyptus incrassata* (Ridge-fruited Mallee) and *Melaleuca uncinata* (Broombush), open heath of *Olearia axillaris* (Coast Daisy-bush), *Leucopogon parviflorus* (Coast Beard-heath) and *Acacia longifolia* (Coastal Wattle).

2.2.2 Mt. Desperate Environmental Association Description

The Mt Desperate Environmental Association is characterised by hills on metasediments with short foot slopes and fans. Soils are typically dense brown loams, hard pedal red duplex soils and hard pedal mottled-yellow duplex soils. The association has 38% native vegetation cover of which 16% is formally protected in reserves and heritage agreements. The vegetation consists of open scrub of *Eucalyptus socialis* (Beaked Red Mallee), *Eucalyptus gracilis* (Yorrell), *Eucalyptus incrassata* (Ridge-fruited Mallee) and *Melaleuca uncinata* (Broombush) and low woodland of *Allocasuarina verticillata* (Drooping Sheoak).

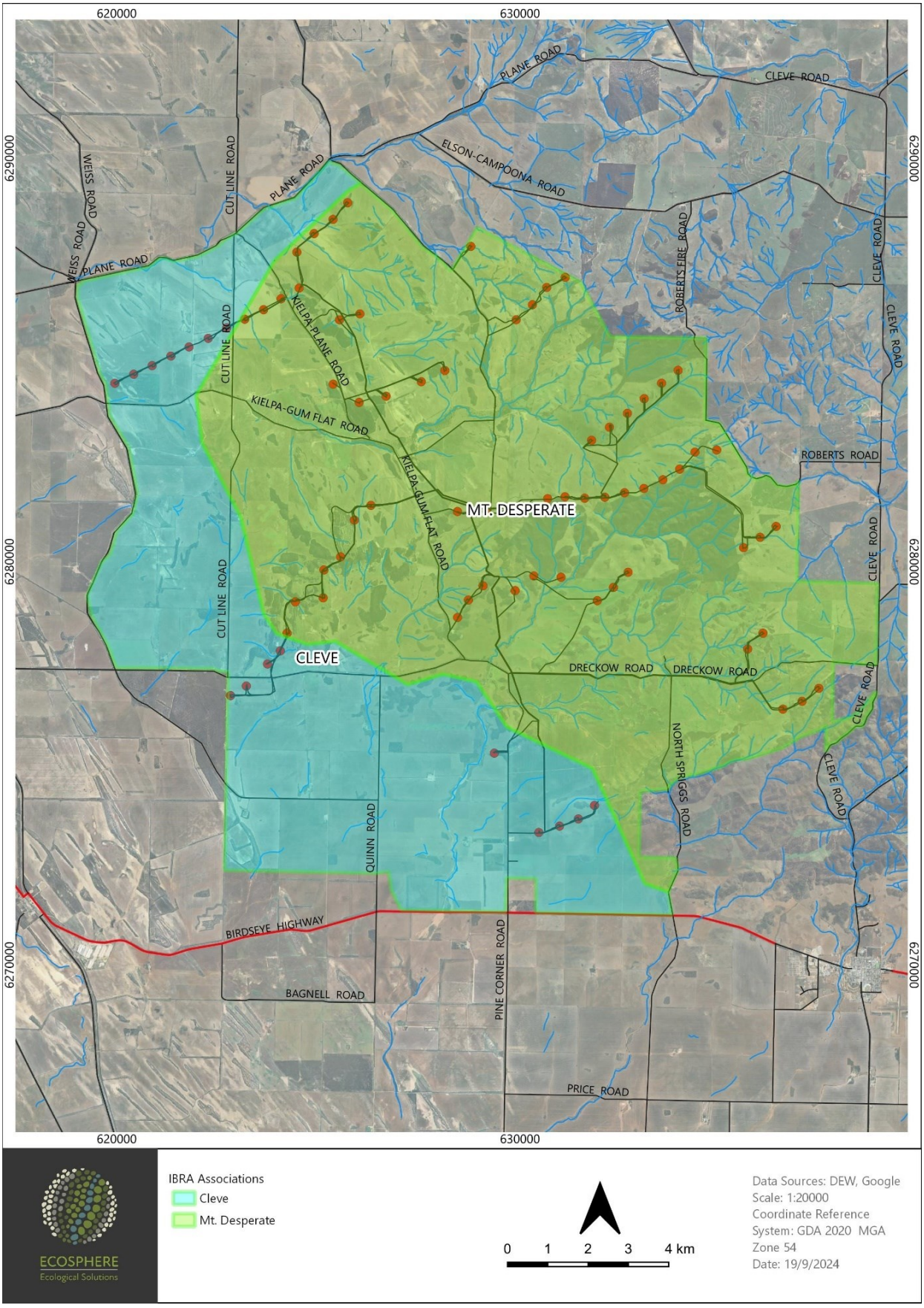


Figure 4. IBRA associations relevant to CWF Project.

2.3 Historical Land Use

The primary land uses in the Eyre York Block bioregion are pastoral activities and cereal crop production, with some areas of parks or reserves. Characterised by low open mallee woodlands, shrublands and heaths, the majority of which has been cleared for agriculture purposes.

The environment of the region has been heavily influenced by sheep grazing and cereal crop production since the 1900's. Grazing by domestic livestock and the invasive rabbit since European settlement have led to significant habitat modification of vegetation communities within the region, posing a major threat to indigenous flora and fauna. Key threats recognised for indigenous fauna species in the region include the presence of invasive predators (primarily cats and foxes) and exotic weed invasion of remnant vegetation (particularly in highly fragmented and disturbed areas such as roadsides).

2.4 National Vegetation Information System

The National Vegetation Information System (NVIS) is a comprehensive data system that provides information on the extent and distribution of vegetation types in Australian landscapes. The NVIS broadly maps the CWF Project area as primarily *Eucalyptus* Mallee Forest and Mallee Woodland. More specifically, remnant vegetation within the Project area is mapped *as Eucalyptus incrassata* (Ridge Fruited Mallee)*, Eucalyptus leptophylla* (Narrow-leaved Mallee) mid mallee woodland over *Leptospermum coriaceum* (Dune Tea-tree), *Melaleuca uncinata* (Broombush)*, Callitris verrucosa* (Scrubby Cypress Pine)*, Babingtonia behrii* (Silver Broombush) shrubs over *Hibbertia australis* (Guinea Flower)*, Glischrocaryon behrii* (Golden Pennants) shrubs with low limestone dune ridges and sandy soils.

2.5 Watercourses

There were no major watercourses recorded within the CWF Project area. Seasonal ephemeral creeks are known throughout the Project area including Gum Creek, She-oak Creek, Poolalalie Creek and Yadnarie Creek with these forming part of the Driver River Catchment. These creek lines experience seasonal flows after periods of heavy rainfall only and recede into dry channels for most of the year.

2.6 Climate

The Cleve weather station (Station Number: 018014) is located approximately 4 km south of the Study area and has records for rainfall and temperature available for the previous 80 years. Cleve shows an annual mean rainfall of 401.3 mm (BoM, 2023) and experiences a mean maximum temperature of 28.3°C in January, with overnight mean minimum temperatures of 15.8°C (Figure 5). The winter months have the coolest mean maximum and

minimum temperatures coupled with the higher rainfall periods. The climate is therefore Mediterranean but with drier cooler winters and relatively low annual rainfall (370-423 mm, NatureMaps, 2023).

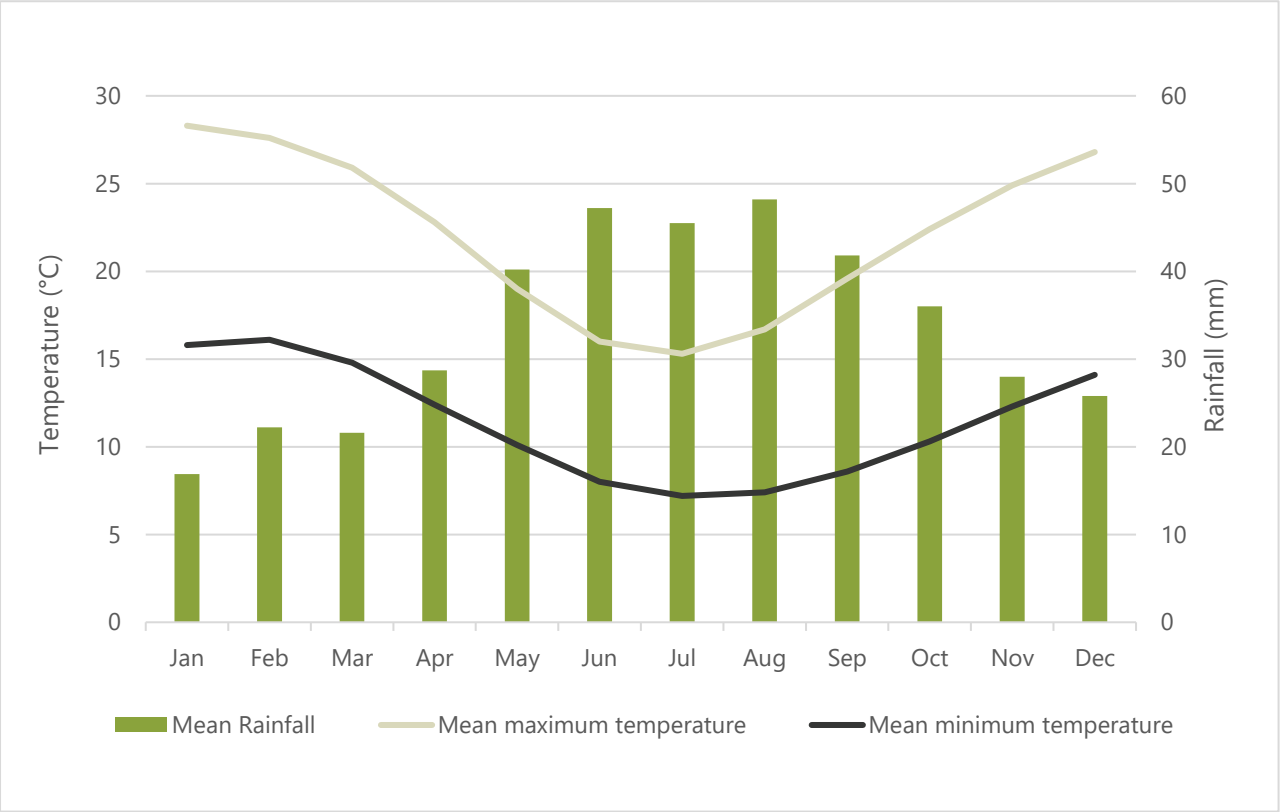


Figure 5. Average monthly temperatures and rainfall in Cleve (BOM, 2023)

3 Legislative Summary

A summary of key legislation relating to flora, fauna and ecological values and their relevance to the CWF Project area is provided in Table 1 below.

Table 1. Summary of Relevant Commonwealth and State Legislation.

Legislation	Summary	Relevance
Commonwealth		
Environment Protection and Biodiversity Conservation Act 1999	To protect 'matters of national environmental significance' (MNES): • World Heritage properties • National Heritage properties • wetlands of international importance (Ramsar wetlands) • listed threatened species and ecological communities. • migratory species • Commonwealth marine areas • the Great Barrier Reef Marine Park • nuclear actions (including uranium mining). • a water resource, in relation to coal seam gas development and large coal mining development	Where an activity may trigger requirements of the EPBC Act, this legislation must be considered. Any action that has, will have, or is likely to have, a significant impact on a matter of national environmental significance requires referral and approval. Significant penalties apply. To determine whether an action is likely to have a significant impact on a matter of national environmental significance, refer to the Significant Impact Guidelines (Commonwealth of Australia 2009) at: http://www.environment.gov.au/epbc/publications/pubs/nes-guidelines.pdf.
South Australia		
National Parks and Wildlife Act 1972	Allows for the protection of habitat and wildlife through the establishment of parks and reserves (both on land and in State waters); provides for the protection of native flora and fauna; identifies flora and fauna species considered to be of conservation significance (under Schedules 7, 8, and 9 of the Act); and provides for the use of approved wildlife through a system of permits allowing certain actions, i.e. keeping and selling (s.58), harvesting (s.60G), farming (s.60C), hunting (s.68A), releasing (s.55) and undertaking scientific research (s.53) on/of native fauna species, and for the taking of plants (s.49).	Legislated for the conservation of animals, plants and ecosystems. Protected animals and plants are listed within the Act, giving effect to the international system of IUCN Red List of threatened species.

Legislation	Summary	Relevance
Native Vegetation Act 1991	To preserve, enhance and manage the State's native vegetation; provide a regulatory framework to control clearance of vegetation; and provide incentives and assistance to landowners to encourage them to preserve and enhance native vegetation. The Act protects all native vegetation that naturally occurs, i.e., vegetation which has not been planted. This includes all naturally occurring local native plants, from small ground covers and native grasses to mallee scrub and tall trees. It does not cover planted trees.	Significant penalties apply if a person clears native vegetation without the permission of the NVC. Approval is required for the clearance of native vegetation. Clearance is defined as: • the killing or destruction of native vegetation • the removal of native vegetation • the severing of branches, limbs, stems or trunks of native vegetation. • the burning, poisoning and slashing of native vegetation. any other substantial damage to native vegetation including activities such as the draining for the reclamation of wetlands or flooding of land, grazing land where stock have been excluded for more than ten years. The Act also provides the opportunity for landholders to enter into voluntary "Heritage Agreement(s)" to ensure vegetation on private land is protected for perpetuity (s.23).
Landscape South Australia Act 2019	From July 1, 2020, the *Landscape South Australia Act 2019* (LSA Act) replaced the *Natural Resources Management Act 2004*, as the key framework for managing the state's land, water, pest plants and animals, and biodiversity across the state.	Under the South Australian LSA Act, landholders have a legal responsibility to manage declared pest plants and animals and prevent land and water degradation. A key priority of landscape boards is to support local communities and landowners to be solely responsible for sustainably managing their region's landscapes with an emphasis on land and water management, pest animal and plant control, and biodiversity. This includes providing greater funding and partnership opportunities with local community organisations to deliver on ground works and projects.

4 Methods

4.1 Database Searches

4.1.1 Protected Matters Search Tool (PMST) – EPBC Act

A PMST report was generated on 5th April 2024 to identify MNES under the EPBC Act, relevant to the Project area (DCCEEW, 2024). The PMST is maintained by the Department of Climate Change Energy, the Environment and Water (DCCEEW) and was used to identify flora and fauna species or ecological communities of national environmental significance that may occur or likely to have suitable habitat within the CWF Study area.

4.1.2 Biological Database of South Australia (BDBSA) – NPW Act

A Biological Database of South Australian (BDBSA) search was obtained from the South Australian Department for Environment and Water (DEW) on 5th April 2024 to identify flora and fauna species previously recorded within the CWF Study area (record number: DEWNRBDBSA240112-1, DEW 2024). The BDBSA is comprised of an integrated collection of corporate databases which meet DEW standards for data quality, integrity and maintenance. In addition to DEW biological data, the BDBSA also includes data from partner organisations (Birds Australia, Birds SA, Australasian Wader Study Group, SA Museum, and other State Government Agencies). This data is included under agreement with the partner organisation for ease of distribution, but they remain owners of the data and should be contacted directly for further information.

4.2 Desktop Study Limitations

The content of the desktop study was derived from existing datasets and references from a range of sources. Flora and fauna records were sourced from the Protected Matters Database via the PMST. The BDBSA only includes verified flora and fauna records submitted to DEW or partner organisations. It is recognised that drawing conclusions can be unreliable within areas that have been underrepresented in terms of biological studies. It is possible, therefore, that significant species occur within the CWF Study area that were not reflected by database records or that records prior to the advent of GPS within the Project area have limitations regarding location accuracy.

4.3 Field Survey

Ecosphere Ecological Solutions conducted field surveys for the CWF in March and October of 2024 as autumn and spring surveys in which to record a cross section of ecological assets available. The autumn survey was conducted from the 18th of March to the 22nd of March with three ecologists which primarily focused on the

Project area as a whole with some bias toward provisional turbine locations, cable and access routes. Two ecologists undertook broad vegetation assessments covering the extent of the Project area generally with the remaining field ecologist targeting individual avian species and habitat assessment.

The spring survey was conducted from the 1st to the 3rd of October 2024 with two field ecologists and focused on the provisional refined layout for threatened flora with a focus on identifying species only present seasonally such as orchids or other spring flowering species, and vegetation interacting with refined turbine and cable route locations. Any other opportunistic fauna observations were also recorded during this survey with a focus on threatened species considered likely to occur such as Diamond Firetail. This approach enabled observation of seasonal variations in plant presence and visibility, increasing the likelihood of achieving a more comprehensive species assessment.

See Section 4.3.1 for more information on vegetation survey methodology, and Section 4.3.2 for more information on fauna survey methodology.

4.3.1 Vegetation Survey

Vegetation surveys were performed in accordance with the Bushland Assessment Methodology (BAM) (NVC 2020). The BAM was designed for assessing vegetation that is located within the agricultural region of South Australia.

The BAM uses biodiversity 'surrogates' or 'indicators' to measure biodiversity value against benchmark communities. Each area to be assessed is termed an application area ('Block'), within which different vegetation associations ('Sites') are identified. For the BAM, three components of the biodiversity value of the Site are measured and scored (Vegetation Condition, Landscape Context, and Conservation Significance). These three component scores are combined to provide a 'Unit Biodiversity Score' (UBS) for a hectare and then multiplied by the size (hectares) of the Site to provide a 'Total Biodiversity Score' for the Site. Multiple Sites within a Block are totalled to reach the final overall score.

During the March survey, using the above methodology, each turbine site and cable route was assessed where native vegetation was present and could potentially be impacted by the construction and/or presence of the infrastructure. Access tracks through private property were assessed, including narrow tracks that would need to be widened to allow vehicles and larger machinery access during the construction of the CWF.

Roadside vegetation on the public roads along defined access routes throughout the Project area were assessed where road width was less than 8 metres, and in future would need to be widened to allow for vehicles and machinery during construction. See Section 6.2 for results of the March survey.

The October survey focused on areas of higher value vegetation as previously identified in the March survey for threatened species that may not have been visible during the previous survey. Targeted surveys focusing on larger, more intact areas of woodland for species such as orchids were conducted, as well as surveys of vegetation that may be impacted due to revised cable routes, not assessed in the previous survey. See Section **Error! Reference source not found.** for results of the October survey.

4.3.2 Avian Survey

Avian surveys were conducted during the March survey to establish a baseline of species richness within the Project area with targeted efforts on threatened species. The desktop assessment was used to identify any threatened species likely to utilise habitat within the Project area and thereby require targeted survey efforts.

Historical records from the BDBSA database search were ground-truthed for species such as Malleefowl (*Leipoa ocellata*) and their nesting mounds by walking a grid around the previous record for a nest mound, and a ramble walk in the general area to compensate for potentially inaccurate historical GPS coordinates.

Key areas such as water sources were specifically targeted for species known to frequent them for example Diamond Firetails (*Stagonopleura guttata*) and large trees possibly suitable for Wedge-tailed Eagle (*Aquila audax*) nest sites were examined throughout the entire Project area. Though not threatened this species was specifically targeted due to the heightened strike risk associated with large birds of prey in wind farm environments.

Bird point counts across a variety of habitats within the Project area were conducted for 20 minutes per site. Sites were chosen by using a combination of factors; how intact or undisturbed the native vegetation was, the size of the vegetation patch, the likelihood of providing habitat for threatened species, proximity to proposed turbine locations and historical records.

Upon arrival at a site, the observer would remain in the vehicle with the engine off for 10 minutes to allow any disturbance from arrival to subside. The sites were then traversed by foot for 20 minutes using a ramble method (observers chose a random route through the site) and where possible covering an area of one hectare per site. Bird species were identified by calls or a direct sighting.

Opportunistic sightings within roadside vegetation were also recorded while traveling between sites.

During the October survey opportunistic avian sightings were recorded while traveling between sites and during vegetation surveys. See Section 6.3 for results of the Avian Survey.

4.4 Assessment of the Likelihood of Occurrence

The likelihood of each threatened flora and fauna species occurring within the CWF Study area was assessed. A likelihood of occurrence rating (Highly Likely / Known, Likely, Possible and Unlikely) was assigned to each threatened species identified in the desktop PMST and BDBSA search. Field survey observations were used to inform on the presence of species or suitable habitat for species within the Project area and these observations were used to updated desktop results post-survey (Table 2).

Table 2. Criteria for the likelihood of occurrence of conservation significant flora and fauna within the Project area based on BDBSA records and the field survey(s)[1].

Likelihood	Criteria
Highly Likely/Known	Recorded in the Study area within the previous 10 years. The species does not have highly specific niche requirements. The habitat within the Project area is largely intact and falls within the known species distribution or the species was recorded as part of field surveys.
Likely	Recorded in the Study area within the previous 20 years. The area falls within the known distribution of the species and the Project area provides species habitat which is largely intact.
Possible	Recorded in the Study area within the previous 20 years. The Project area falls inside the known distribution of the species, but the Project area does not provide species habitat which is largely intact. Recorded in the Study area within 20-40 years. Survey effort is considered adequate. Habitat within the Project area is present and intact, and species of similar habitat needs have been recorded in the Project area.
Unlikely	Recorded in the Study area within 20-40 years. However, suitable habitat does not occur, and species of similar habitat requirements have not been recorded in the Project area. No records within the Study area within the previous 40 years despite suitable habitat being known to occur in the Project area. No records despite adequate survey effort.

[1]The final likelihood of the occurrence of conservation significant flora and fauna within the Project area was modified based on local knowledge and information obtained during the field survey(s).

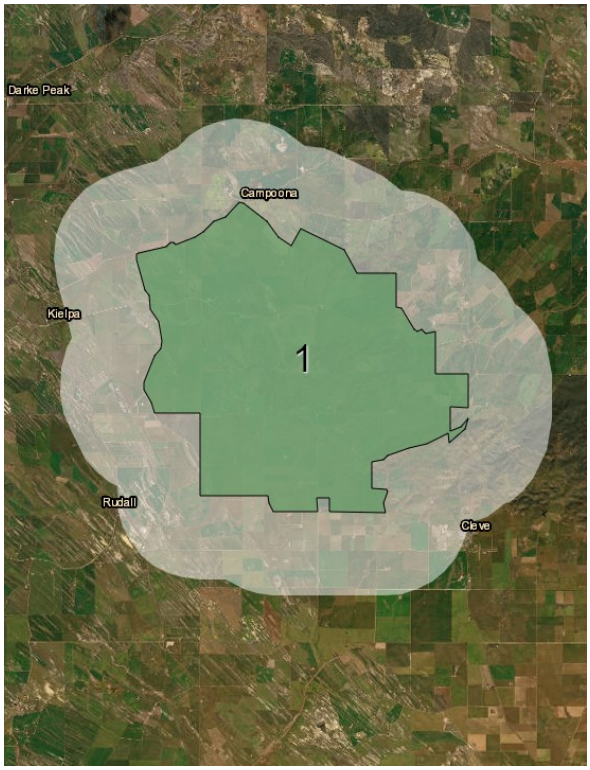
5 Desktop Assessment Outcomes

Results of the PMST and BDBSA databases searches as well as field survey ground truthing outcomes for matters of State and National conservation significance highlighted by the database searches are detailed below.

5.1 Matters of National Environmental Significance

The EPBC Act PMST report summary (Table 3) (DCCEEW 2024) highlights MNES potentially occurring or having suitable habitat potentially occurring within the CWF Study area. Marine only species were not assessed as part of this desktop assessment due to a lack of connectivity to marine environments within the scope of the CWF Project area. Individual matters relevant to the site are detailed below.

Table 3. EPBC Act PMST report results summary.

Study area	Matters of National Environmental Significance	Identified in Study area
	World Heritage Properties	0
	National Heritage Places	0
	Wetlands of International Importance (RAMSAR)	0
	Great Barrier Reef Marine Park	0
	Commonwealth Marine Area	0
	Listed Threatened Ecological Communities	1
	Listed Threatened Species	26
	Listed Migratory Species	11
	Other Matters Protected by the EPBC	
	Commonwealth Lands	0
	Commonwealth Heritage Places	0
	Listed Marine Species	18
	Whales and Other Cetaceans	0
	Critical Habitats	0
	Commonwealth Reserves Terrestrial	0
	Australian Marine Parks	0
	Habitat Critical to the Survival of Marine Turtles	0
	Extra Information	
	State and Territory Reserves	6
	Regional Forest Agreements	0
	Nationally Important Wetlands	0
	EPBC Act Referrals	6
	Key Ecological Features	0
	Biologically Important Areas	0
	Bioregional Assessments	0
	Geological and Bioregional Assessments	0

5.1.1 State and Territory Reserves

Six State and Territory reserves were highlighted by the PMST report. None of the reserves were located within the Project area. The Rudall Conservation Park (CP) covers approximately 360 ha and occurs just outside the southwestern boundary of the CWF Project area. One Heritage Agreement is located within the project footprint (HA1152) and a further two are located within the wider Study area. See Figure 6 below for locations of reserves within and surrounding the CWF Study area.

5.1.2 National Heritage Places

No National Heritage Places were identified within the Study area by the PMST.

5.1.3 Wetlands of National Importance

No wetlands of national importance were identified by the PMST as being within the Study area.

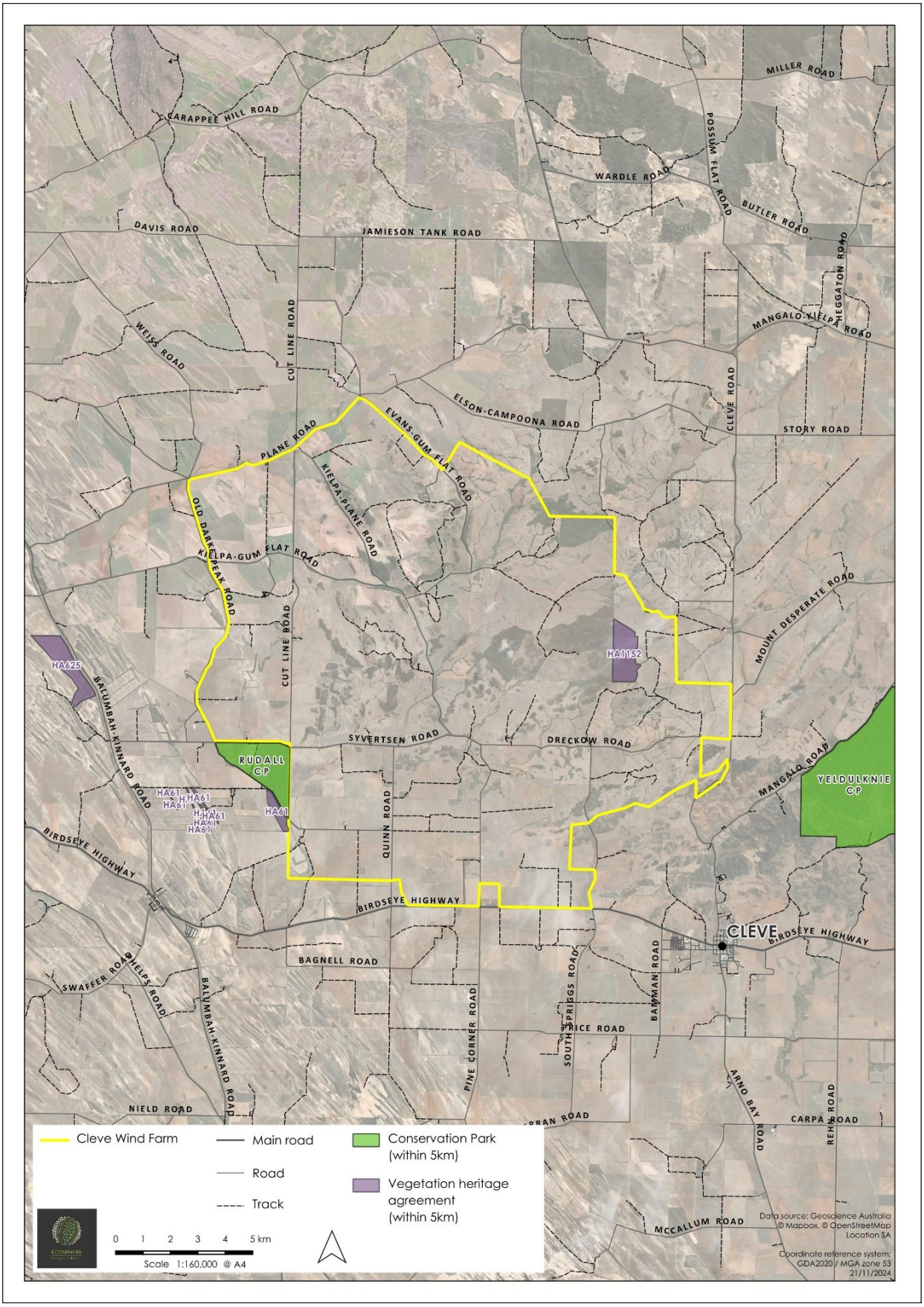


Figure 6. Protected areas within and external to the CWF Project area.

5.2 Threatened Ecological Communities

5.2.1 Nationally Threatened Ecosystems

One TEC was identified by the PMST as likely to occur within the CWF Project area. Eyre Peninsula Blue Gum (*Eucalyptus petiolaris*) Woodland Ecological communities are listed as Endangered under the EPBC Act.

The Eyre Peninsula Blue Gum Woodland (EPBGW) occurs south of the Gawler Ranges mainly in the Koppio Hills, Cleve Hills and west of the Marble Range where the mean rainfall is above 370 mm annually (Figure 7). The ecological community is predominantly restricted to well-drained, moderate to high fertility soils associated with sheltered valleys, lower hill slopes and watercourses (Bonifacio et al., 2012 in DOE 2024)

The typical structure of the ecological community is a woodland but may form open forest. The mid and ground layer can show considerable variation in floristic composition and structure, being greatly influenced by the history of disturbance and management of remnant patches.

National listing focuses legal protection on remaining patches of the ecological community that are most functional, relatively natural (as described by the 'Description') and in relatively good condition. Patches that do not meet the minimum condition thresholds are excluded from full national protection. Although very degraded/modified patches are not protected as the ecological community listed under the EPBC Act, it is recognised that patches that do not meet the condition thresholds may still retain important natural values and may be critical to protecting those patches that meet minimum thresholds.

The season in which surveys are undertaken is important as the ecological community can be variable in its appearance throughout the year and between years depending on hydrological inputs. Assessment should occur during spring and early summer when the greatest number of species are likely to be evident.

Therefore, the field survey aimed to identify potential areas of EPBGW within the project footprint that were likely to meet the criteria specified in the TEC listing advice. If any intact patches of potential EPBGW were found to interact with the project footprint, further investigations to determine whether the community meets the listing criteria would be required. This would include assessing the condition category of the TEC and the significance of any impacts to the TEC.

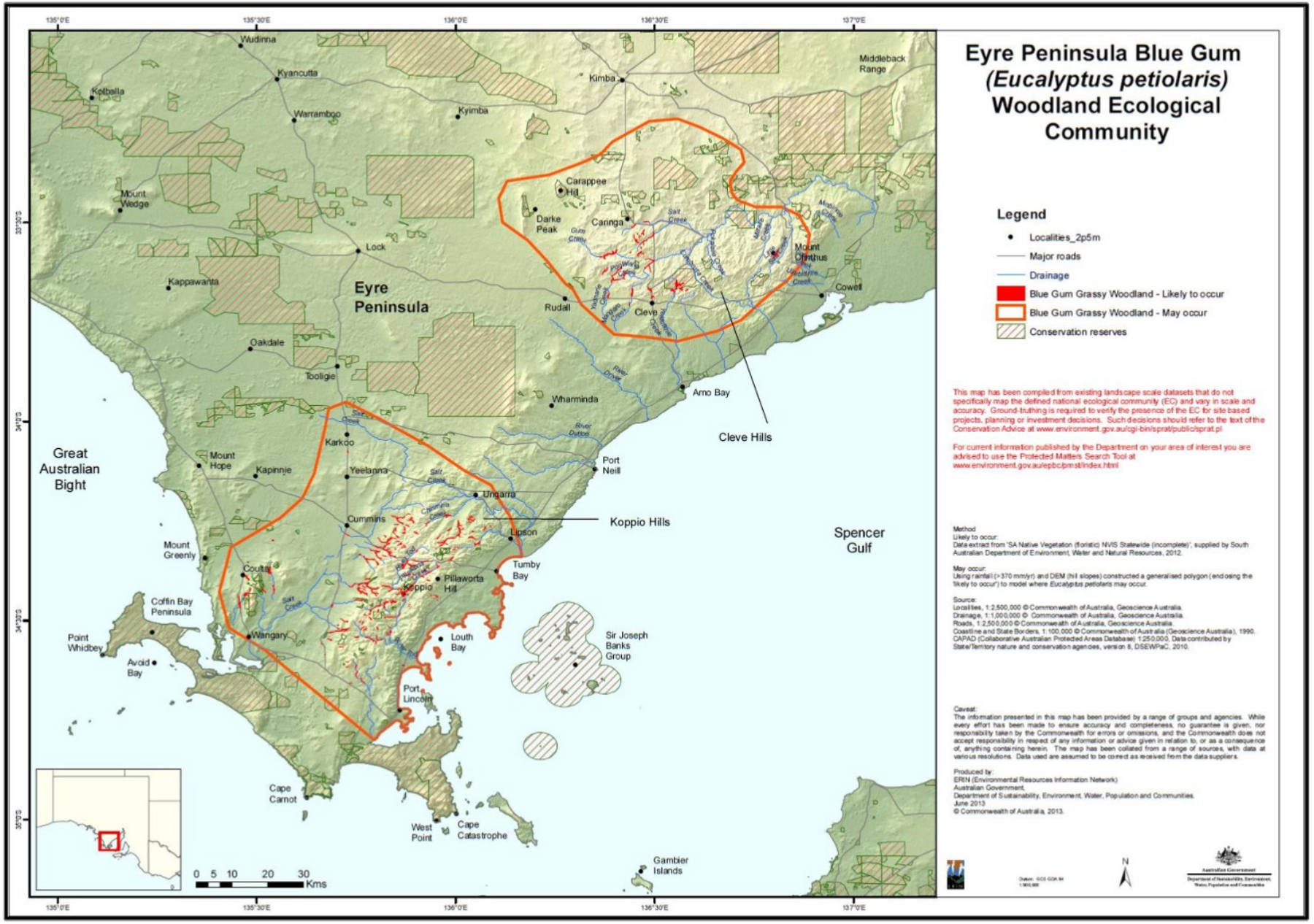


Figure 7. Potential locations of EPBC listed TEC *Eucalyptus petiolaris* (Eyre Peninsula Blue-gum) Woodland

5.2.2 State Provisional List of Threatened Ecosystems

The state provisional list of threatened ecosystems (DEH in progress), lists two communities which are both loosely associated with the TEC. These were:

E. peninsularis, E. dumosa complex Mallee on loams or clay-loams on flats. Very limited range with only small areas remaining in reserves. Reduced in extent and modified by clearance and grazing. IBRA Regions: EYB, Trend: declining

Eucalyptus petiolaris Grassy Woodland on heavy, fertile soils on plains. Few examples and highly modified by clearance, grazing, salinisation and degradation by weed invasion. Trend: declining.

Given the TEC was observed in agricultural zones in vastly degraded states the state provisional listings provide additional conservation targets to be broader and focused on avoidance and protection of these fringe or transitional communities. Any EPBGW communities not reaching condition criteria fulfilling the EPBC listing should be considered conservation significant under the state listing as this has no minimum criteria.

5.3 Significant Flora

5.3.1 Nationally Threatened Flora

Eleven flora species listed as threatened under the EPBC Act were identified in the PMST report as potentially occurring or having suitable habitat within the Study area (DCCEEW 2024). Of these, one had historical records within the Study area (See Table 4 & Figure 8):

***Acacia praemorsa* (Senna Wattle) EPBC: VU, SA: E**

This species was considered unlikely to occur outside of intact vegetation stratums which will be avoided as part of the overall project. Senna Wattle was not recorded within flora surveys targeted for the presence of threatened species within or surrounding the CWF footprint. Senna Wattle is found on the lower slopes of small gullies in low, rocky ranges (Lang et al., 1990 and reference herewith in DWEHA 2009), on north-facing slopes in thick, low scrub (State Herbarium of South Australia, 2005) and in shady, sheltered sites in open mallee woodlands at the base of steep gullies (Lang et al., 1990). Senna Wattle was not recorded in areas associated with the footprint during targeted surveys and is considered sufficiently conspicuous to be readily identified if present.

5.3.2 State Threatened Flora

Twenty flora species of state conservation significance had historical records within the Study area from the BDBSA (Table 4 & Figure 8). Of these, seven were recorded within the Project area. Four species were likely or known to occur within the Project area, These were:

***Daviesia pectinata* (Zig-zag Bitter-pea) NPW: R**

Usually associated with Mallee habitats and most commonly with areas of *Eucalyptus odorata* (Peppermint Box) on Eyre Peninsula which were present within the Project area. Peppermint Box communities in the Project area were often fragmented and intergrades in poor condition within road reserves and not consistent with the typical habitat for *Daviesia pectinata*. Despite this some poor condition individuals were recorded within the project area during the targeted survey but not interacting with the footprint. See section 6.4 for further detail and locations.

***Eucalyptus cretata* (Darke Peak Mallee) NPW: R**

Eucalyptus cretata has a scattered distribution on the central Eyre Peninsula and is particularly common in the Darke Peake and Carappee Hill areas. A spreading mallee or rarely a small tree which grows on plains in calcareous loams or clays, or on the sides of granite hills. This species is widespread within the Project area and is too commonly occurring to map due to extent and numbers of individuals. Considered conservation significant due to lack of extent and endemism in response to level of clearance in area. See 6.4 for further detail.

***Philotheca angustifolia* ssp. *angustifolia* (Narrow-leaf Wax-flower) NPW: R**

Philotheca angustifolia ssp. *angustifolia* has two records from a heritage agreement area within the Project area (Figure 8) and with a widespread distribution and habitat described as open woodland and mallee. Subspecies *angustifolia* occurs in central Victoria and in south-eastern South Australia. Subspecies *montana* only occurs in mountainous areas in western Victoria. Most likely to occur in intact patches and is commonly described as undershrub in woodland communities. Potentially occurs in intact Mallee and woodland patches within the Project area. This species was targeted as art of the spring surveys and while other *Prostanthera* species were recorded, none of this species were located during the spring survey.

Table 4. Threatened flora species listed under the EPBC Act and NPW Act identified in the PMST (Source 1), BDBSA (Source 2) database searches or observed during the field surveys (Source3). Likelihood of occurrence refers to occurrence within the Project area.

Scientific Name	Common Name	EPBC Act	NP&W Act	Data Source	Date of last record	Species known habitat preferences	Likelihood of occurrence
Acacia enterocarpa	Jumping-jack Wattle	EN	E	1	None	Mallee And grassy woodland with heavy clay soils with good rainfall. Highly unlikely in this area.	Unlikely
Acacia praemorsa	Senna Wattle	VU	E	1,2	23/06/2018	Mallee woodlands, open scrubs and open heath scrubs and in shady, sheltered sites in open mallee woodlands at the base of steep gullies. Not recorded during field survey.	Likely
Acacia rhetinocarpa	Neat Wattle	VU	V	1	None	Intact mallee on friable loams and often associated with areas where areas have been heavily cleared for cropping. Very unlikely this far north and no local records	Unlikely
Austrostipa tenuifolia	Spear Grass	-	R	2	01/12/1954	Sandy soils in grassland or grassy woodland associated with *Callitris* or *Allocasuarina*. Not recorded during field survey. Last record 1954.	Unlikely
Caladenia brumalis	Winter Spider-orchid	VU	V	1	None	Grows among grass and shrubs in light woodland or sedgeland usually over limestone and within a few kilometres of the sea.	Unlikely
Caladenia tensa	Green-comb Spider-orchid	EN	-	1	None	Intact woodlands and fragments where disturbance occurs but stratums still present.	Unlikely
Caladenia zephyra	West Wind Spider-orchid	-	V	2	01/09/2016	Grows in mixed *Callitris* - *Allocasuarina* woodland	Unlikely
Ceratogyne obionoides	Wingwort	-	R	2	05/11/1998	Records within Project area.	Unlikely
Daviesia benthamii ssp. *humilis*	Mallee Bitter-pea	-	R	2	05/11/1998	Grows in mallee.	Unlikely
Daviesia devito	Mallee Bitter-pea	-	R	2	30/10/1986	Grows in mallee, sometimes woodland or heathland and is found in scattered populations from the Eyre Peninsula in South Australia.	Unlikely
Daviesia pectinata	Zig-zag Bitter-pea	-	R	2	28/11/2012	Dryland Mallee and woodland. Not recorded within footprint but as isolated individuals in the general area.	Likely
Eremophila gibbifolia	Coccid Emubush	-	R	2	02/09/2016	Sandy loams usually under mallee	Unlikely
Eucalyptus cretata	Darke Peak Mallee	-	R	2,3	24/10/1977	Grow in mallee communities on the central Eyre Peninsula.	Known
Goodenia benthamiana	Bentham's Goodenia	-	R	2	16/10/1986	Forest, woodland and mallee scrubland.	Unlikely
Limosella granitica	Granite Mudwort	VU	V	1	None	Wet areas around granitic soils and depressions	Unlikely
Lobelia cleistogamoides	-	-	R	2	12/11/1998	Favours a coarse sand or gravelly loam often over granite.	Unlikely

Scientific Name	Common Name	EPBC Act	NP&W Act	Data Source	Date of last record	Species known habitat preferences	Likelihood of occurrence
Maireana rohrlachii	Rohrlach's Bluebush	-	R	2	7/11/1998	Saline or sandy loam soils rich in gypsum, often fringing lakes, and in seasonally wet areas.	Unlikely
Olax obcordata	-	-	R	2	16/10/1986	Woodlands, mallee and shrubland. Historic records suggest an association with calcareous soils or calcrete, predominately coastal.	Unlikely
Olearia adenolasia	Musk Daisy-bush	-	R	2	16/10/1986	In mallee on sandy soils.	Unlikely
Olearia pannosa ssp. *pannosa*	Silver Daisy-bush	VU	V	1	None	Open Mallee and grassy woodlands, often occurs in roadside reserves as disturbance tolerant.	Unlikely
Philotheca angustifolia ssp. *angustifolia*	Narrow-leaf Wax-flower	-	R	2	02/09/2016	Grows in open woodland.	Likely
Prasophyllum fecundum	Self-pollinating Leek-orchid	-	R	2	2/10/1998	Sandy soil, often with Callitris trees.	Possible
Prasophyllum occultans	Hidden Leek-orchid	-	R	2	6/10/1989	Mallee-Broombush or in low scrub about rock outcrops in the Lower North wheat-belt.	Possible
Pterostylis mirabilis	Nodding Rufoushood	VU	V	1	None	Occurs in coastal areas to areas about 100 km inland, in the high country (75–200 m above sea level) between Cleve and Kimba.	Unlikely
Pterostylis sp. *Hale*	Hale Dwarf Greenhood	EN	V	1	None	Occurring in mallee on Eyre Peninsula	Unlikely
Pterostylis xerophila	Desert Greenhood	VU	V	1	None	Dry woodland or granite or quartzite rock outcrops	Unlikely
Spyridium bifidum ssp. *bifidum*	Marble Range Spyridium	-	V	2	02/11/1998	Mallee shrubland on the Marble Range and on the hills to the east of Edillilie.	Possible
Spyridium erymnocladum	Cloaked Spyridium	-	R	2	6/10/1995	Open Shrubland	Possible
Swainsona pyrophila	Yellow Swainson-pea	VU	R	1	None	Short-lived, fire-adapted species that occurs in mallee vegetation communities in inland south-eastern Australia, where it is widely distributed from the northern Eyre Peninsula	Unlikely
Wurmbea decumbens	Trailing Nancy	-	R	2	20/07/1994	Moist well drained soils in open forest and woodland.	Unlikely

EPBC Act; EN = Endangered, VU = Vulnerable, NP&W Act; E = Endangered, V = Vulnerable, R = Rare.

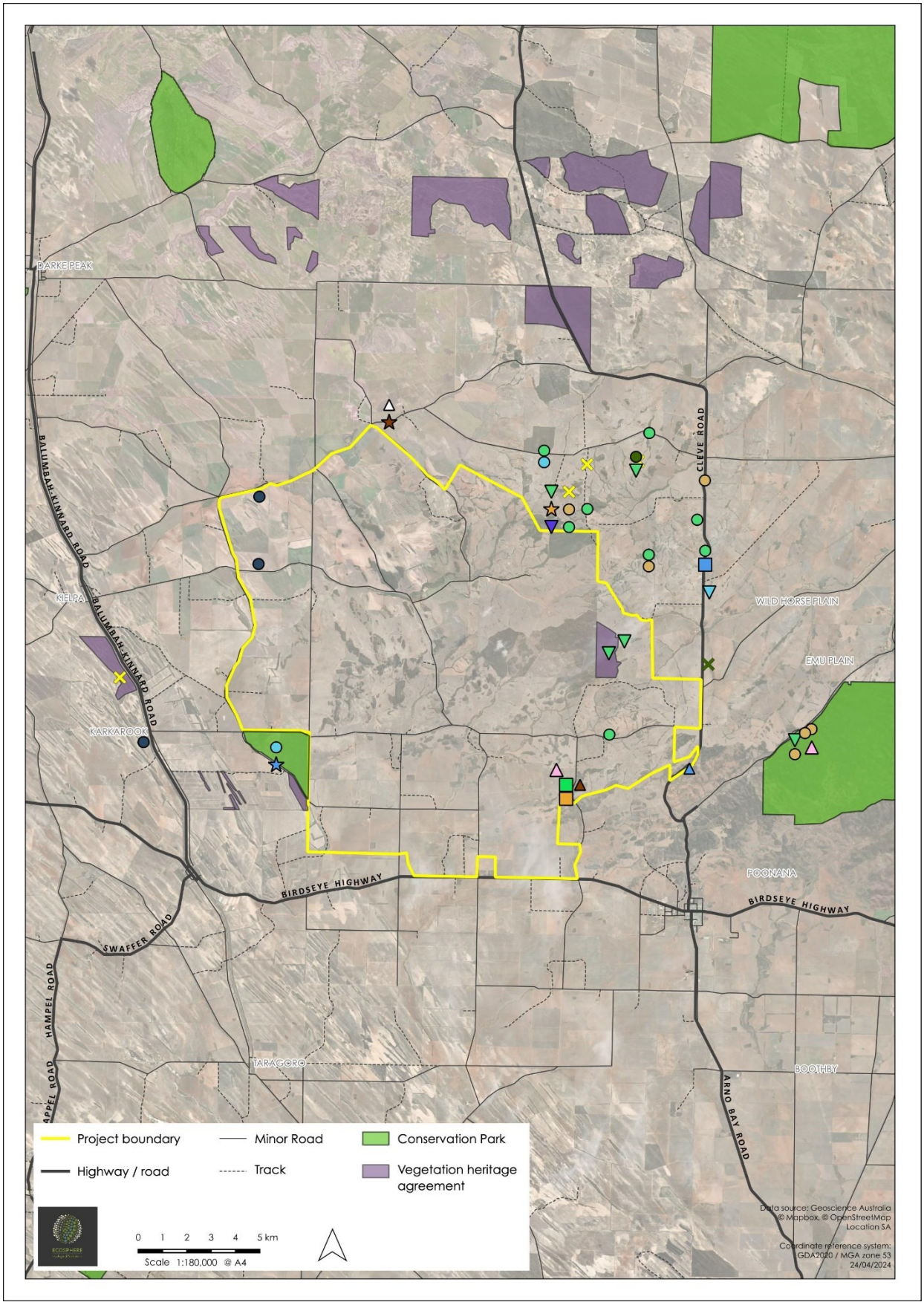


Figure 8. Historical BDBSA threatened flora records within CWF Study area (See Figure 9 for flora legend).

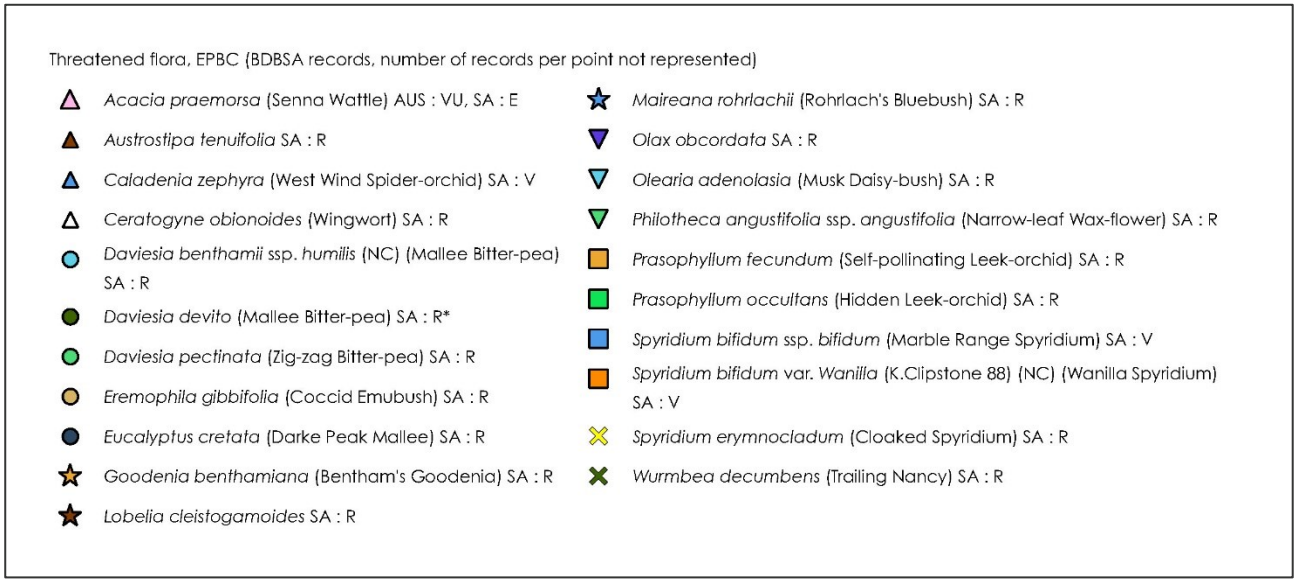


Figure 9. Historical BDBSA threatened flora records within CWF Study area legend.

5.4 Significant Fauna

5.4.1 Nationally Significant Fauna

Fifteen fauna species listed as threatened under the EPBC Act were identified in the PMST report as potentially occurring or having suitable habitat within the CWF Study area (Table 5 & Figure 8).

Two species of national conservation significance had historical BDBSA records and were known from or considered possible or likely to occur in the Project area given the presence of suitable habitat. These were:

- Malleefowl (*Leipoa ocellata*) AUS:VU, SA: V
- Diamond Firetail (*Stagonopleura guttata*) AUS: VU, SA: V

Malleefowl (*Leipoa* ocellata) EPBC: VU, NPW: V

Malleefowl were listed as Vulnerable under the EPBC Act on 16 July 2000 due to continued population decline (DCCEEW, 2023c). Their population has shown steep declines in breeding densities over the past decade and further declines are expected as many remaining populations are small and isolated, are threatened by introduced competitors and predators, and are subject to recurrent catastrophic events that severely threaten habitat quality and the viability of populations. Malleefowl are found principally in the semi-arid to arid zone in shrublands and low woodlands dominated by mallee, in particular, habitats on sandy substrates that support *Triodia* (Spinifex) were of greatest importance. They are generalist feeders, and their diet includes seeds, flowers, fruits, invertebrates, tubers and fungi (Benshemesh, 2007). The species was considered as possibly occurring within the Study area based on the desktop assessment. However, following ground truthing of historical records and a lack of suitable habitat recorded within the Project area, this was downgraded to a presence likelihood of Unlikely. No evidence of critical habitat or historical nesting mounds, either active or

inactive, were observed during the field assessment. The habitat, in lacking significant *Triodia* and dense litter cover therefore was marginal at best. The site has a high level of fragmentation meaning individuals would find dispersal and finding new mates difficult and unable to persist in this environment.

Diamond Firetail (*Stagonopleura* guttata) EPBC: VU, NPW: V

Diamond Firetail was listed as Vulnerable under the EPBC Act on 31st March 2023 due to continued population decline (DCCEEW, 2023d) attributed to the clearance of native vegetation for large scale agriculture which has reduced the size and quality of important nesting and breeding habitats. Diamond Firetails occur in *Eucalypt, Acacia* or *Casuarina* woodlands, open forests and other lightly timbered habitats, including farmland and grassland with scattered trees. They feed predominantly on grass and herb seeds, green leaves and insects. Habitat critical to the survival of the Diamond Firetail includes areas of low tree density, few large logs, and little litter cover but high grass cover for foraging, roosting and breeding. This type of habitat is present across the wind farm site with many fragments having good grass cover despite the loss of mid and lower storey shrubs in many areas. The species or species habitat is known to occur within the Study area and this species was observed during targeted surveys in spring 2024. See section 8.3 for further detail.

5.4.2 Migratory Species

Eleven migratory species listed under the EPBC Act were highlighted as potentially present within the Study area (Table 5). None were considered likely to utilise the Project area due to a lack of habitat deemed suitable for migratory species. This includes shallow wetlands such as lakes and vegetated swamps, ephemeral salt pans and large waterbodies that supply invertebrate feeding habitat and protection from predators. The potential impact of wind farms on migratory species must be considered, however, when considering the Cleve area is likely to be under migratory flight paths for many species highlighted as part of desktop studies. See Section 8.2 for more information.

5.4.3 State Threatened Fauna

Six fauna species of state conservation significance had historical records from the BDBSA search within the Study area (Table 5. Threatened fauna and migratory species listed under the EPBC Act and NPW Act identified in the PMST (Source 1) and BDBSA (Source 2) database searches or observed during the field survey (Source 3).Of these, three species were considered as likely or possible to occur within the Project area:

- Shy Heathwren (*Hylacola cauta cauta*) NPW: R
- Purple-gaped Honeyeater (*Lichenostomus cratitius occidentalis*) NPW: R
- Gilbert's Whistler (*Pachycephala inornata*) NPW: R

Shy Heathwren (*Hylacola cauta cauta*) NPW: R

This species occurs within dense shrub or heath understorey in mallee woodland or shrubland so is likely to be largely confined to larger remnant patches away from the project footprint. The most recent record occurs from 2004 in the heritage agreement in the eastern portion of the Study area and is unlikely to occur within more fragmented areas of the site. The threats to this species from a project perspective are increased fragmentation of intact areas and disturbance from noise associated with construction.

Purple-gaped Honeyeater (*Lichenostomus cratitius occidentalis*) NPW: R

Occurs in Mallee and woodland habitats within the Study area and therefore is likely to occur periodically. Primarily feeds on nectar from mallee eucalypts and banksias but will also take insects from foliage and bark or whilst on the wing. Seeds, pollen and honeydew from scale insects (coccids) are less frequently consumed. Key threats in this area would be loss of connectivity between feeding areas such as creek lines, road reserves and other corridors that allow for movement through the landscape in search of foraging habitat.

Gilbert's Whistler (*Pachycephala inornata*) NPW: R

The species is typically found in semi-arid mallee woodland and occasionally in taller, semi-arid eucalypt woodland or forest, usually where a dense understory is present (Higgins and Peter 2002). The Gilbert's Whistler feeds on the ground and in understorey layers, primarily on invertebrate prey, although they also eat fruit and seeds (Higgins and Peter 2002).

A list of all fauna species with records within the survey area is shown in Appendix 2.

Table 5. Threatened fauna and migratory species listed under the EPBC Act and NPW Act identified in the PMST (Source 1) and BDBSA (Source 2) database searches or observed during the field survey (Source 3). Likelihood of habitat use refers to habitat use within the Project area.

Scientific Name	Common Name	EPBC Act	NP&W Act	Data Source	Date of last record	Species known habitat preferences	Likelihood of habitat use
Aves							
Actitis hypoleucos	Common Sandpiper	Mi	R	1,2	16/10/2002	Migratory shorebird. Does not breed in Australia. Wide range of both coastal wetlands and some inland wetlands (Birdlife International 2024).	Unlikely
Amytornis textilis myall	Western Grasswren (Gawler Ranges)	VU	V	1	None	Inhabit low Blackbush (*Maireana pyramidata*) and/or Australian boxthorn (*Lycium australe*) shrublands as well as Western Myall (*Acacia papyrocarpa*) low woodland (DoE, 2014). Preferred habitats occur on drainage lines, low rocky hills, and semi-arid woodlands.	Unlikely
Aphelocephala leucopsis	Southern Whiteface	VU	-	1	None	Occurs across most of mainland Australia south of the tropics in a wide range of open woodlands and shrublands where there is an understorey of grasses or shrubs, or both. Prefers habitat with low tree densities and herbaceous understory litter cover which provides essential foraging habitat (DCCEEW 2023a). No previous records occur within the Study area.	Unlikely
Apus pacificus	Fork-tailed Swift	Mi	-	1	None	Aerial migratory species. Rarely recorded on the ground (ALA, 2024). No previous records within the Study area.	Unlikely
Botaurus poiciloptilus	Australasian Bittern	EN	E	1	None	Inhabit shallow, vegetated freshwater or brackish swamps and on occasion can feed away from waterbodies such as in grassland or crop stubble (Birdlife International 2024).	Unlikely
Calidris acuminata	Sharp-tailed Sandpiper	VU, Mi	-	1	None	Migratory shorebird. Does not breed in Australia. Inhabits Intertidal mudflats, freshwater swamps, and saltwater lakes (ALA, 2024). No previous records within the Study area.	Unlikely
Calidris ferruginea	Curlew Sandpiper	CR, Mi	E	1	None	Migratory shorebird. Does not breed in Australia. Prefers coastal or inland mudflats but will also visit artificial dams and inland water habitats, freshwater and brackish wetlands (BirdLife International, 2024).	Unlikely
Calidris melanotos	Pectoral Sandpiper	Mi	R	1	None	Migratory shorebird. Inhabits freshwater or brackish wetlands, grassy or lightly vegetated coastal and inland swamps (BirdLife International, 2024).	Unlikely

Scientific Name	Common Name	EPBC Act	NP&W Act	Data Source	Date of last record	Species known habitat preferences	Likelihood of habitat use
Charadrius veredus	Oriental Plover	Mi	-	1	None	Migratory shorebird. Inhabits both coastal habitats (estuarine mudflats and sandbanks, sandy or rocky ocean beaches or nearby reefs, near-coastal grasslands) and flat, open, semi-arid or arid grasslands (DCCEEW, 2024).	Unlikely
Cinclosoma castanotum	Chestnut Quailthrush	-	R	2	01/08/2020	Inhabits mallee shrubland as well as other types of dry woodlands and scrublands over much of the southern inland	Unlikely
Falco hypoleucos	Grey Falcon	VU	R	1	None	Inhabits shrubland, grassland and wooded watercourses in arid/semi-arid regions of inland areas. Widespread, but sparse distribution across Australia (BirdLife International, 2024).	Unlikely
Gallinago hardwickii	Latham's Snipe	Mi	R	1	None	Migratory wetland species. Inhabits tussock grass and low dense sedges surrounding freshwater, permanent and ephemeral wetlands (BirdLife International, 2024). Can also occur in habitats with saline or brackish water.	Unlikely
Grantiella picta	Painted Honeyeater	VU	R	1	None	Inhabits dry, open forests and woodlands. Associated with mistletoe (DCCEEW, 2023c). Project area occurs outside of species known range.	Unlikely
Hylacola cauta cauta	Shy Heathwren (EP, YP, FR, MM, upper SE)	-	R	2	20/11/2004	Dense shrub or heath understorey in mallee woodland or shrubland (BirdLife International, 2024).	Possible
Leipoa ocellata	Malleefowl	VU	V	1,2	1/1/1973	Ground-dwelling species which makes large conspicuous nesting mounds. Inhabits semi-arid to arid shrublands and low woodlands. Sandy soils and abundance leaf litter are required for breeding (DCCEEW, 2024c).	Unlikely
Lichenostomus cratitius occidentalis	Purple-gaped Honeyeater (mainland SA)	-	R	2	28/11/2002	Mallee woodland and heathland (BirdLife Australia, 2024)	Likely
Motacilla cinerea	Grey Wagtail	Mi	-	1	None	Uncommon terrestrial migratory species. Prefers fast-flowing streams and rivers often in forested areas, in addition to lowland watercourses (BirdLife International, 2024).	Unlikely
Motacilla flava	Yellow Wagtail	Mi	-	1	None	Uncommon terrestrial migratory species. Has undergone taxonomic revision, this race is now *M. tschutschensis*. Inhabits a variety of damp or wet habitats including marshes and bogs (BirdLife International, 2024). Forages in damp grassland or on bare ground at the edge of rivers, lakes and other wetlands.	Unlikely

Scientific Name	Common Name	EPBC Act	NP&W Act	Data Source	Date of last record	Species known habitat preferences	Likelihood of habitat use
Neophema chrysostoma	Blue-winged Parrot	VU	V	1	None	Inhabits a range of habitats from coastal, sub-coastal and inland areas, through to semi-arid zones. Favours grasslands and grassy woodlands and are often found near wetlands both near the coast and in semi-arid zones. Also occurs in altered environments such as airfields, golf-courses and paddocks. Will forage on saltmarsh.	Unlikely
Pachycephala inornata	Gilbert's Whistler	-	R	2	28/09/1995	Semi-arid woodland and shrublands (BirdLife International, 2024).	Possible
Pandion haliaetus	Osprey	Mi	E	1	None	Areas around shallow waters, sufficiently tolerant of human settlement to persist in suburban and sometimes urban environments (BirdLife International, 2024).	Unlikely
Pedionomus torquatus	Plains-wanderer	CR	E	1	None	Small, ground-dwelling bird. Inhabits semi-arid, native grasslands with a diversity of plant species, which usually occur on red-brown soils.	Unlikely
Rostratula australis	Australian Painted Snipe	EN	E	1	None	Wetland species. Inhabits freshwater wetlands with dense reeds and rushes/ well vegetated margins.	Unlikely
Stagonopleura guttata	Diamond Firetail	VU	V	1,2,3	27/11/2012	Eucalypt, acacia or casuarina woodlands, open forests and other lightly timbered habitats, including farmland and grassland. Prefer areas with relatively low tree density, little litter cover but high grass cover (DCCEEW, 2023d).	Likely
Sternula nereis nereis	Australian Fairy Tern	VU	E	1	None	Inhabits coasts and estuaries, and breeds on sandy beaches and banks above the high tide line and below vegetation.	Unlikely
Mammals							
Sminthopsis psammophila	Sandhill Dunnart	EN	V	1	None	Occurs in sandy substrates in arid and semi-arid regions dominated by spinifex hummock grass (*Triodia* species) and sand dunes.	Unlikely

Source: 1: EPBC Act; CR = Critically Endangered, EN = Endangered, VU = Vulnerable, Mi = Migratory. 2: NP&W Act; E = Endangered, V = Vulnerable, R = Rare.

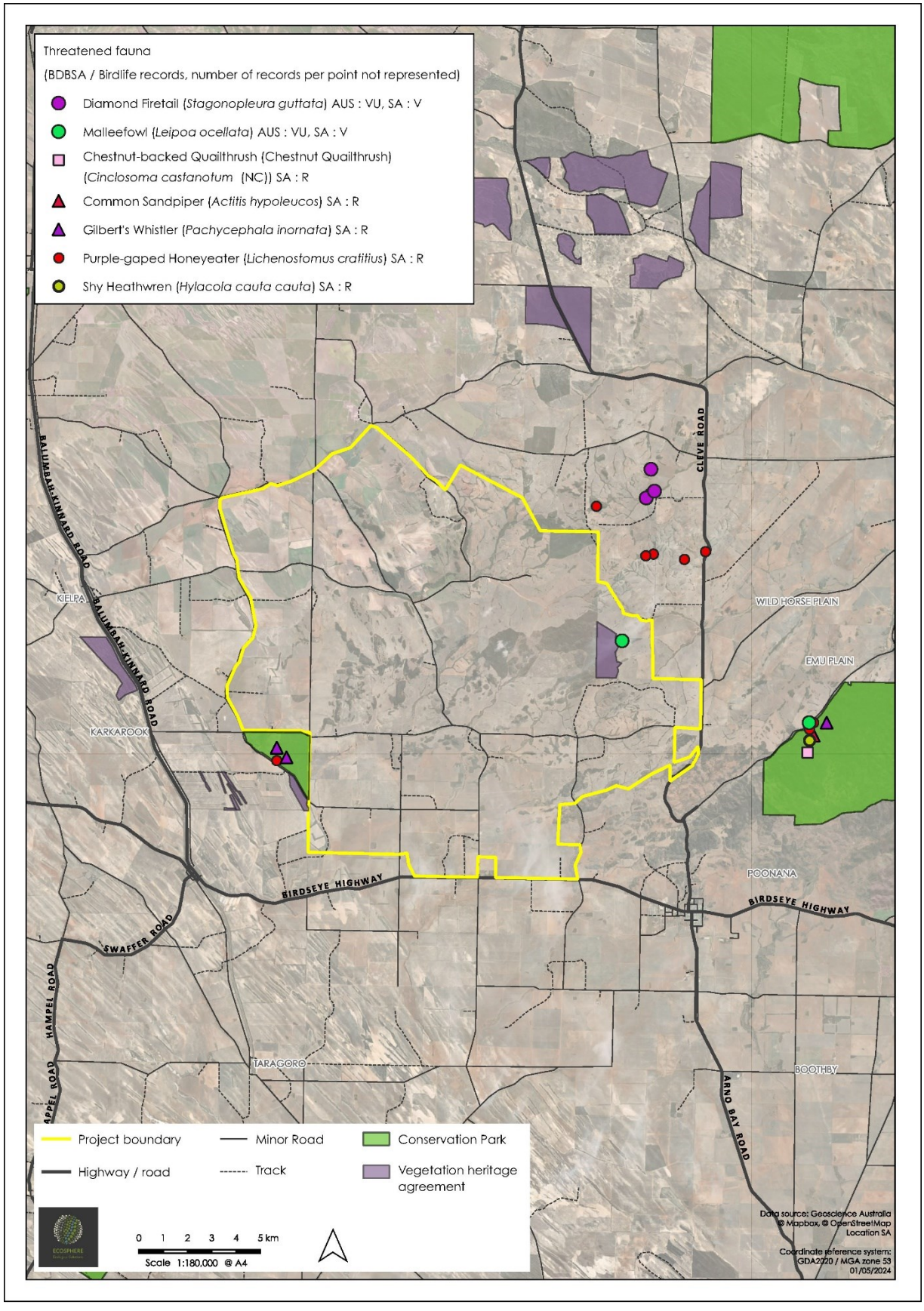


Figure 10. Historical BDBSA threatened fauna records within CWF Study area

6 Field Survey Results

6.1 General Landscape

The landscape generally consisted of low undulating plains supporting *Eucalyptus odorata* and *Eucalyptus petiolaris* or reddish sand loams with rock outcrops supporting *Eucalyptus incrassata* / *Melaleuca uncinata* mallee. The Project area overwhelmingly consisted of open, cropped paddocks with vegetation mainly restricted to areas not suitable for cropping as either rocky or deep sandy rises and hills or deeper valleys and ephemeral creeks, many of which were degraded due to grazing from stock and/or rabbits or spoilage from cropping activities (e.g., large mounds of rocks removed from paddocks), in drainage lines and other inaccessible areas, and as roadside corridors. Three large areas of intact vegetation totalling approximately 870 ha were present within the project boundary.

The remnant vegetation patches had evidence of grazing (scats) from livestock (sheep), native fauna (Kangaroo) and/or invasive species (rabbit), and edge effects of erosion and weeds from cropping land.

6.2 Baseline Survey

The baseline survey focussed on the CWF Project area as a whole. Despite being a broad overarching assessment, some targeted assessment approaches were used where availability of information allowed for a refined approach to species considered likely to occur such as Mallee Fowl where ground truthing of historical observations (i.e. nesting mounds) could be undertaken to give definitive outcomes for presence or availability of habitat. A provisional layout also allowed for targeted assessments where the layout interacted with areas such as:

- Historical conservation significant species observations
- Areas of high conservation value such as reserves or large intact blocks
- Specific habitats/niches such as creeks or outcrops

The observations and outcomes of the baseline assessment combined with the desktop assessment provided the information necessary as a first step to refinement of the provisional layout. A hierarchical approach of avoidance and minimisation was integral in planning for the project wherever it interacted with areas of moderate or high ecological value.

6.2.1 Vegetation Associations

Eight broad vegetation associations were recorded within the Project area during the March survey (Table 6), however this was exclusive of large intact patches and reserves not interacting directly with the Project area. Associations were limited therefore to vegetation that:

- Interacts with or in the vicinity of cable routes, access routes and turbine pads
- Occurs on road reserves leading to access and cable routes
- Areas that may provide alternative alignments of lower value
- Areas of vegetation outside of footprints likely to contain or provide habitat for species of conservation significance

Vegetation association 3 was consistent with the EPBC listed TEC EPBGW (See Sections 5.2 and 8.1 for more information).

Table 6. Vegetation Association Descriptions

Assoc	Association Description
1	*Allocasuarina verticillata* (Drooping Sheoak) +/- *Eucalyptus socialis* (Red Mallee) very low open forest over open grassland and +/- sedges
2	*Eucalyptus brachycalyx* (Gilja) very open mallee over native grassland
3	*Eucalyptus petiolaris* (Eyre Peninsula Blue Gum) / *Eucalyptus odorata* (Peppermint Box) low woodland (TEC)
4	*Eucalyptus* spp. mixed mallee over *Bursaria Spinosa* (Christmas Bush) / *Melaleuca uncinata* (Broom Bush) very open shrubland and open grassland
5	*Eucalyptus* spp. mixed mallee over *Melaleuca uncinata* (Broom Bush) open shrubland
6	*Eucalyptus* spp. mixed mallee over *Melaleuca uncinata* (Broom Bush) open shrubland +/- native grasses and sedges
7	*Melaleuca uncinata* (Broom Bush) shrubland over +/- very open grassland and very open sedgeland
8	*Melaleuca uncinata* (Broom Bush) tall shrubland with emergent *Eucalyptus phenax* (White Mallee) / *Eucalyptus oleosa* (Red Mallee) / *Eucalyptus leptophylla* (Narrow-leaved Red Mallee)

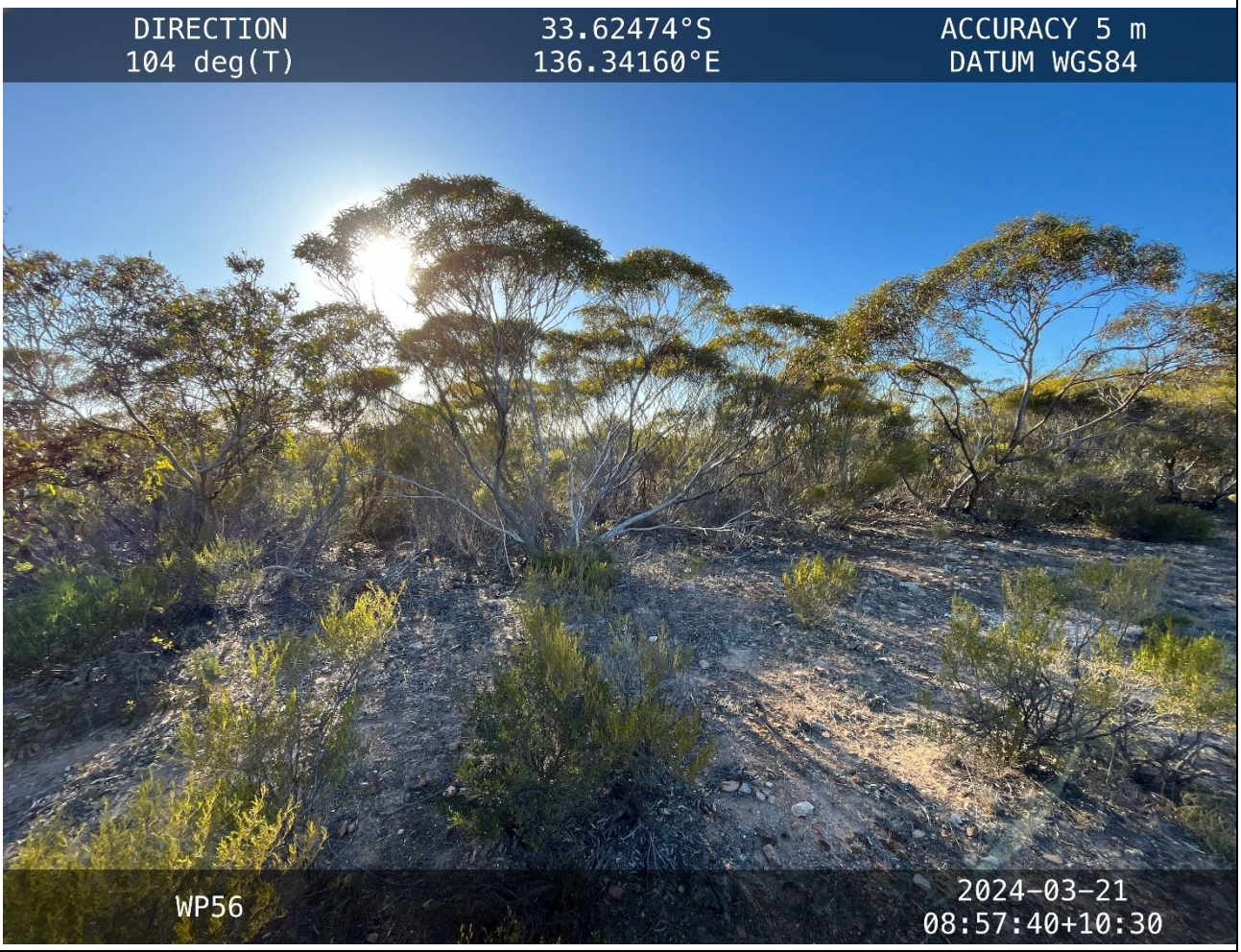
A description of the habitats associated with the wind farm are described in detail below.

Vegetation Association 1	***Allocasuarina verticillata*** **(Drooping Sheoak) +/-** ***Eucalyptus socialis*** **(Red Mallee) very low open forest over open grassland and +/- sedges**
	
General description	Open forest in good condition with a sparse understorey of low shrubs and grasses. Weed coverage is greater where the edges border with agricultural paddocks and decrease towards the interior into fairly intact forest. This community is not consistent with Drooping Sheoak (*Allocasuarina verticillata*) Grassy Woodland on Calcrete of the Eyre Yorke Block Bioregion, a nationally significant TEC.
Threatened species or community	The vegetation association could possibly provide habitat for the following threatened fauna species: • Gilbert's Whistler (*Pachycephala inornata*) NPW: R • Diamond Firetail (*Stagonopleura guttata*) EPBC: VU, NPW: V

Vegetation Association 2	***Eucalyptus brachycalyx* (Gilja) very open mallee over native grassland**
	
General description	Grassland with very open mallee canopy and scattered small shrubs. More intact and in good condition at the top of the rise where there is a substantial covering of small rocks with moss and deteriorates with more weeds present towards agricultural paddocks.
Threatened species or community	The vegetation association could possibly provide habitat for the following threatened fauna species: • Diamond Firetail (*Stagonopleura guttata*) EPBC: VU, NPW: V

Vegetation Association 3	***Eucalyptus petiolaris* (Eyre Peninsula Blue Gum) / *Eucalyptus odorata* (Peppermint Box) low woodland**
	
General description	Fairly intact woodland with understorey of medium shrubs and grasses. Few weed species present and in small numbers. Located in a drainage line, with some deeper depressions that would potentially hold larger amounts of water during wetter months. This patch representative by TEC Patch 1.
Threatened species or community	The Eyre Peninsula Blue gum (*Eucalyptus petiolaris*) Woodland is a Threatened Ecological Community listed as Endangered under the EPBC Act. The vegetation association could possibly provide habitat for the following threatened fauna species: • Purple-gaped Honeyeater (*Lichenostomus cratitius*) NPW: R • Diamond Firetail (*Stagonopleura guttata*) EPBC: VU, NPW: V

Vegetation Association 4	**Eucalyptus spp. mixed mallee over *Bursaria Spinosa* (Christmas Bush) / *Melaleuca uncinata* (Broom Bush) very open shrubland and open grassland**
	
General description	Moderately degraded habitat with evidence of grazing from livestock and rabbits and greater abundance of weeds. Few taller trees, with a mix of native and exotic grasses.
Threatened species or community	The vegetation association could possibly provide habitat for the following threatened fauna species: • Purple-gaped Honeyeater (*Lichenostomus cratitius*) NPW: R • Gilbert's Whistler (*Pachycephala inornata*) NPW: R • Diamond Firetail (*Stagonopleura guttata*) EPBC: VU, NPW: V

Vegetation Association 5	**Eucalyptus spp. mixed mallee over *Melaleuca uncinata* (Broom Bush) open shrubland**
	
General description	Intact Mallee with areas of bare open ground and low weed cover. Limestone strew with a good cover of medium height shrubs, vegetation in good condition with little grass cover. These communities were often of higher species richness and condition due to lack of soil depth making it difficult for exotic species to compete with indigenous flora.
Threatened species or community	The vegetation association could possibly provide habitat for the following threatened fauna species: • Purple-gaped Honeyeater (*Lichenostomus cratitius*) NPW: R • Gilbert's Whistler (*Pachycephala inornata*) NPW: R

Vegetation Association 6	**Eucalyptus spp. mixed mallee over *Melaleuca uncinata* (Broom Bush) open shrubland +/- native grasses and sedges**
	
General description	Low mallee often present as fragments where shallow soil depth was not suitable for cropping with ironstone and stone strew coupled with exposure to wind on crests and slopes of hills leading to poor growth with many small trees rather than less large habit trees. A resulting lower ecological value for this community with a lack of structures present such as hollow bearing limbs, mid and understorey shrubs and grass tussocks. A large number of these fragments were also narrow and long in shape aligning with rocky ridges and therefore further reduced quality due to high edge effect impacts with annual grass invasion into fringes of community.
Threatened species or community	The vegetation association could possibly provide habitat for the following threatened fauna species: • Purple-gaped Honeyeater (*Lichenostomus cratitius*) NPW: R • Gilbert's Whistler (*Pachycephala inornata*) NPW: R • Diamond Firetail (*Stagonopleura guttata*) EPBC: VU, NPW: V

Vegetation Association 7	***Melaleuca uncinata*** **(Broom Bush) shrubland over +/- very open grassland and very open sedgeland**
	
General description	Only observed as roadside vegetation. In good condition, medium shrubs with no trees and small sedges and grasses with few weeds present. The soil type this community favours is less favourable for exotic grass species with shallow soils and pH values that lock up nutrients for species not adapted to these conditions.
Threatened species or community	The vegetation association could possibly provide habitat for the following threatened species: • Purple-gaped Honeyeater (*Lichenostomus cratitius*) NPW: R • Gilbert's Whistler (*Pachycephala inornata*) NPW: R

Vegetation Association 8	***Melaleuca uncinata*** **(Broom Bush) tall shrubland with emergent** ***Eucalyptus phenax*** **(White Mallee) /** ***Eucalyptus oleosa*** **(Red Mallee) /** ***Eucalyptus leptophylla*** **(Narrow-leaved Red Mallee)**
	
General description	Tall shrubland with few emergent eucalypt species. Substantial rock cover and extensive moss, heavily grazed and in poor condition with few grasses or sedges. As with association 6 these communities are relatively well represented within Project areas as these are remnants on areas not cleared for cropping due to lack of soil. Granite outcropping consists of species adapted to soil type and usually has low species richness and degraded of significant forb growth due to grazing.
Threatened species or community	The vegetation association could possibly provide habitat for the following threatened species: • Purple-gaped Honeyeater (*Lichenostomus cratitius*) NPW: R

6.3 Threatened Ecological Communities

As described in section 5.2, one TEC was recorded during initial assessment and the targeted survey was undertaken in part to determine the quality of EPBGW patches during spring when annual forbs and grasses were most likely to be present and therefore provide reliability in aligning with diagnostic characteristics and species richness totals.

Patches potentially interacting directly with the Project area were assessed against the Condition Thresholds as prescribed by the conservation advice for this TEC (See Appendix 2 for condition categories and thresholds information). Patches along roadside reserves that did not interact directly with the CWF project were not assessed, however were still mapped due to final layouts and access routes for the project still being finalised at the time of writing this report.

Eight patches were identified during the targeted survey (Table 8 and Figure 12) with three being assessed against the Condition Thresholds as prescribed by the conservation advice for this TEC (See Appendix XX for more information).

A summary of an assessment against the TEC criteria provided in the listing advice is presented in Table 7. A representative photo of the TEC is shown in Figure 11. The extent of the TEC within the CWF Project area is shown in Figure 13 to Figure 15.

Table 7. *Eucalyptus petiolaris* Key diagnostic characteristics.

Key diagnostic characteristics	**Meets condition**
Distribution occurs within the Eyre York Block bioregion – in the Eyre Hills subregion EYB03 with outliers possibly occurring within the Talia subregion EYB04 (IBRA Version 7) of the Eyre Peninsula	Yes – Eyre Hills Sub-region.
Vegetation structure is typically woodland to open forest.	Yes.
The upper layer is dominated or co-dominated by *Eucalyptus petiolaris* (blue gum), and the tree canopy cover is 10% or more.	Yes, normally co-dominant with *Eucalyptus odorata* (Peppermint Box)
The mid layer varies from open to dense in response to soil moisture and disturbance and/or management history and consists of native sclerophyllous shrubs and small trees.	Generally open as all areas interacting with the project are grazed and therefore much under and mid storey diversity is compromised from the benchmark community.
The ground layer is variable in development and composition, ranging from sparse to a thick layer of native grasses and other herbs. Ground layer flora typically is dominated by one or more of the graminoid genera: *Austrostipa, Carex, Chorizandra*, *Gahnia, Juncus, Lepidosperma, Lomandra* and *Rytidosperma*; but also, often contains other herbs and small shrubs.	Generally degraded condition but present.
The ecological community is mainly restricted to well-drained, moderate to high fertility soils and is typically associated with sheltered valleys, lower hill slopes and watercourses in the higher rainfall districts of the Eyre Peninsula.	Yes.

Figure 11. Patch 3a Mixed *Eucalyptus petiolaris* / *E. odorata* Woodland along watercourse qualifying as the EPBGW TEC.

Table 8. EPBGW patches within the CWF Project area

Patch Number	Category Rating	Comment
1	C2	Identified during autumn survey, targeted survey in spring – layout refined to be avoided.
2	Not Assessed	Explore refinement options
3A	C2 – Potentially C1	Further refinement may be required to minimise impacts
3B	C2 – Potentially C1	Further refinement may be required to minimise impacts
4	Not Assessed	Explore refinement options
5	Not Assessed	Explore refinement options
6	Not Assessed	Explore refinement options
7	Not Assessed	Explore refinement options

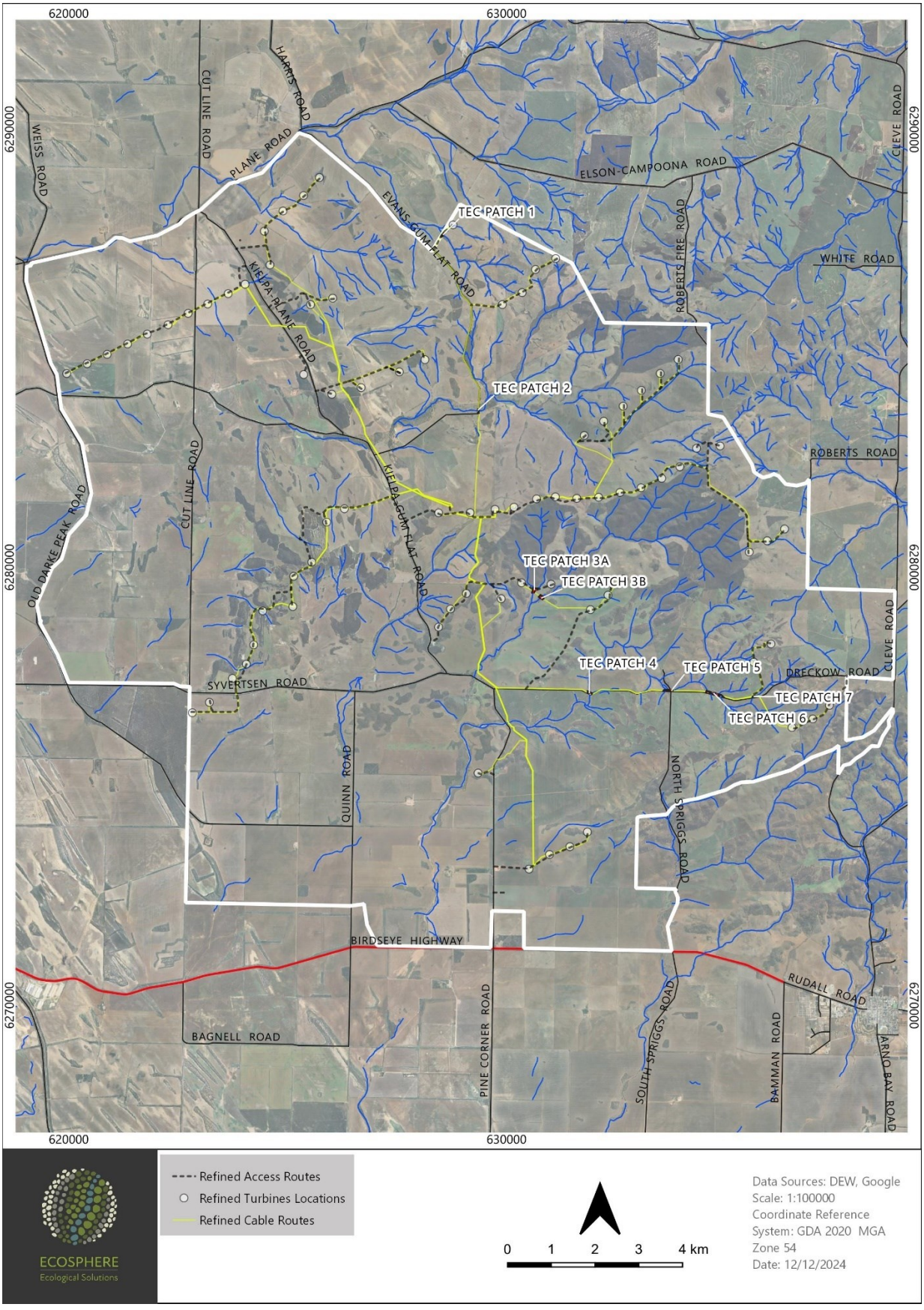


Figure 12. TEC locations within the CWF Project area.

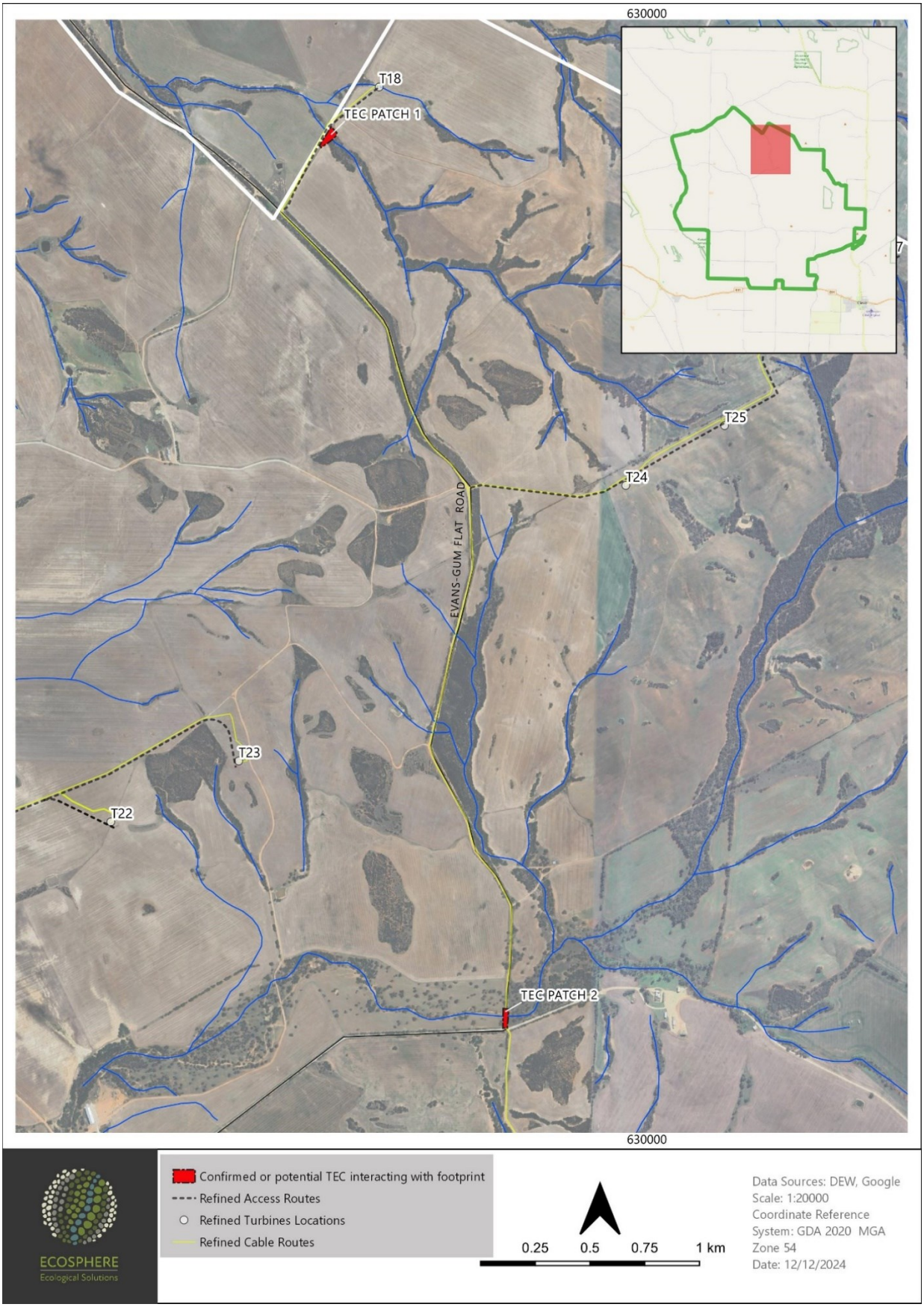


Figure 13. Locations of EPBGW TEC patch 1 and 2 interacting with or in close proximity to CWF footprint.

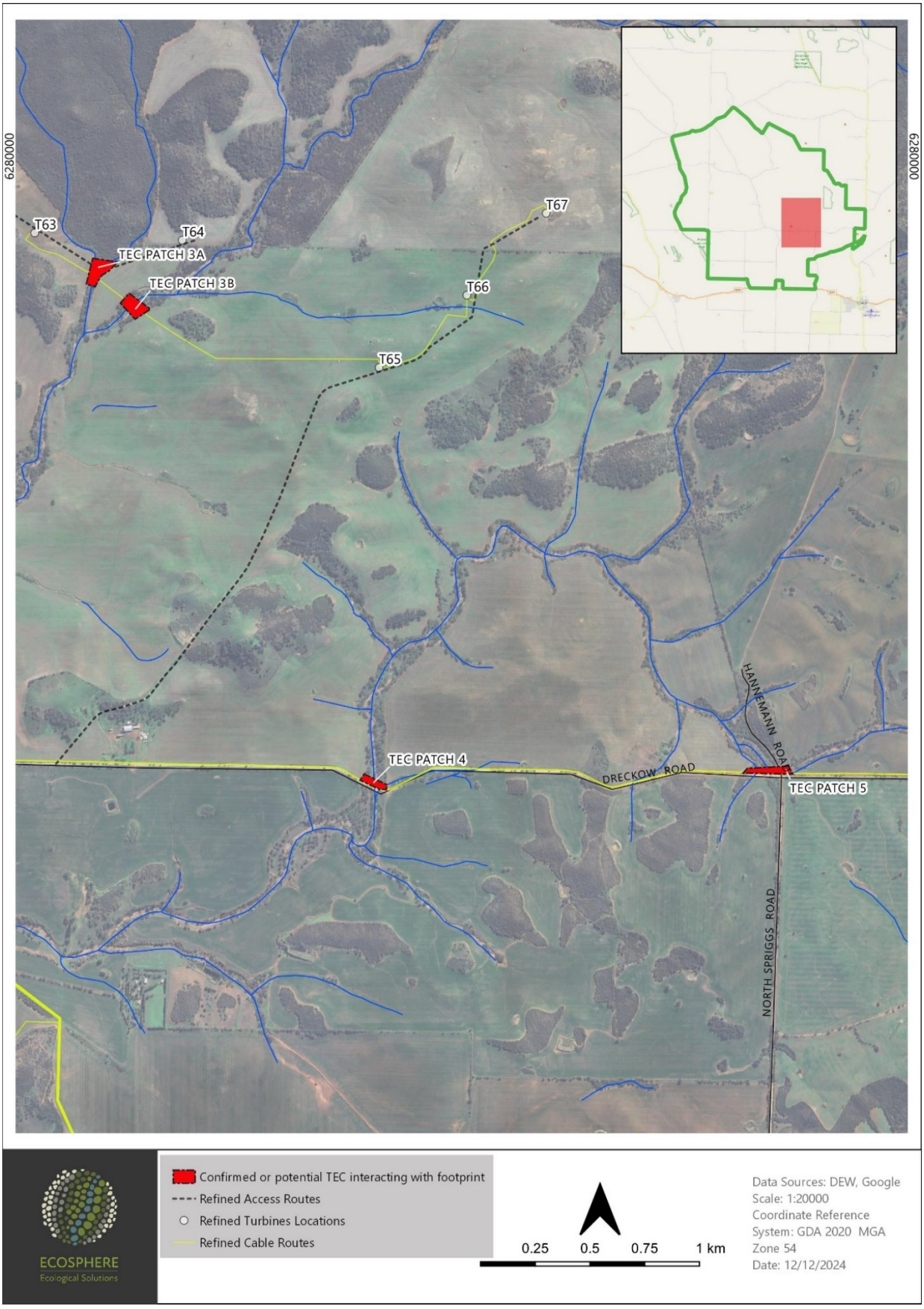


Figure 14. EPBGW TEC communities patches 3a, 3b, 4 and 5.

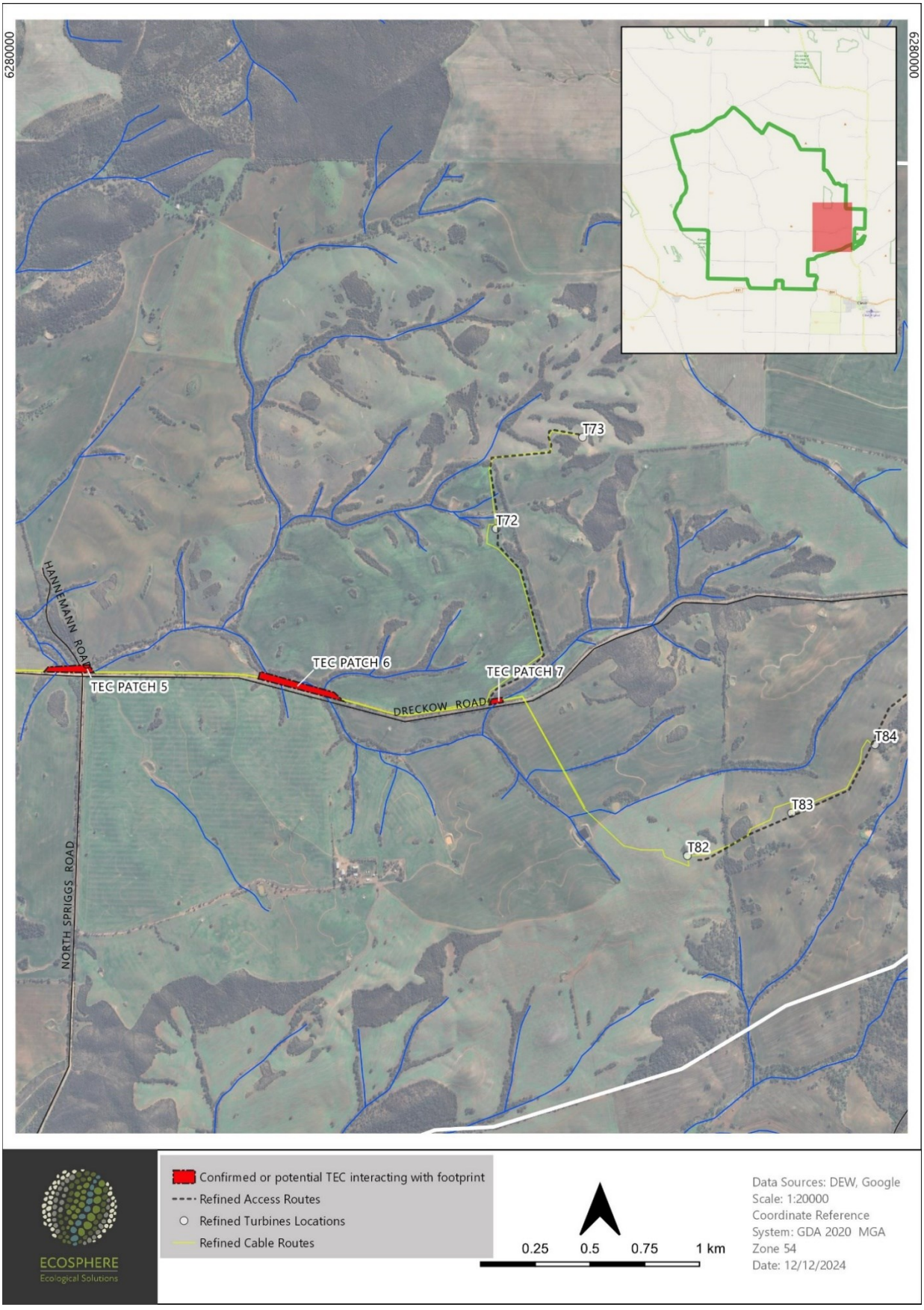


Figure 15. Locations of EPBGW TEC communities patches 5, 6 and 7.

6.4 Threatened Flora

Three threatened flora species were recorded during the targeted survey on the refined layout.

Daviesia pectinata (Zig-zag Bitter-pea, NPW: R - Figure 16), was recorded within the Syvertson Road reserve as scattered individuals however were not interacting directly with the CWF footprint. The individuals observed were in poor condition and likely to be some of the last fragments in the area. Some management of the individuals location may be required during construction phases to manage indirect impacts such as dust accumulation.

Figure 16. *Daviesia pectinata* (Zig Zag Bitter pea) present as poor condition individuals within road reserves.

Eucalyptus cretata (Darke Peak Mallee, NPW: R - Figure 17) was recorded throughout the Project area during survey and areas were highlighted as a limiting factor for micro-siting and refinement of the layout. This species was prevalent in road reserves and remnant areas and far too prolific to map accurately. The targeted survey aimed to provide refinements to the layout to avoid any interaction with this species.

Figure 17. *Eucalyptus cretata* (Darke Peak Mallee) within Project area.

Sarcozona bicarinata (Ridged Noon Flower, NPW: V) was recorded within road reserve areas as a scattered understorey species. This species has no historical records within the Study area despite being relatively well dispersed and moderately frequent. Considered very rare in South Australia the lack of records may be due to its close affinity with other *Sarcozona* and *Carpobrotus* (pigface) species. When in flower as was the case during the targeted spring survey it is given certainty through the distinct ridged (carinate) fruits as shown below in the specimen photographed within the CWF Project area (Figure 18). See Figure 21 for the locations of this and other threatened flora species recorded within the Project area.

Orchids were recorded prolifically throughout many of the road reserves within the Project area. No species recorded were of conservation significance however and species of the genera *Caladenia* and *Thelymitra* (Figure 19) were most frequent as well as *Pterostylis* and *Prasophyllum*. The presence of conservation significant species is likely within larger, more intact areas of the Project area which have been avoided as part of the planning process.

Figure 18. *Sarcozona bicarinata* (Ridged Noon flower) in CWF Project area

Figure 19. Two orchid species recorded during targeted surveys, *Caladenia septuosa* and *Thelymitra megcalyptra*

6.5 Threatened Fauna

Two Diamond Firetail (*Stagonopleura guttata* – EPBC VU, NPW: V) were observed within the Project area during the targeted spring assessment (Figure 20). Habitat is present throughout the project site, and it is expected that this area is a key area for Diamond Firetail given the presence of open modified woodlands and grass lands in degraded creeks and hillslopes. See Figure 21 for locations of the observations made.

Figure 20. Diamond Firetail (*Stagonopleura guttata*) within CWF Project area.

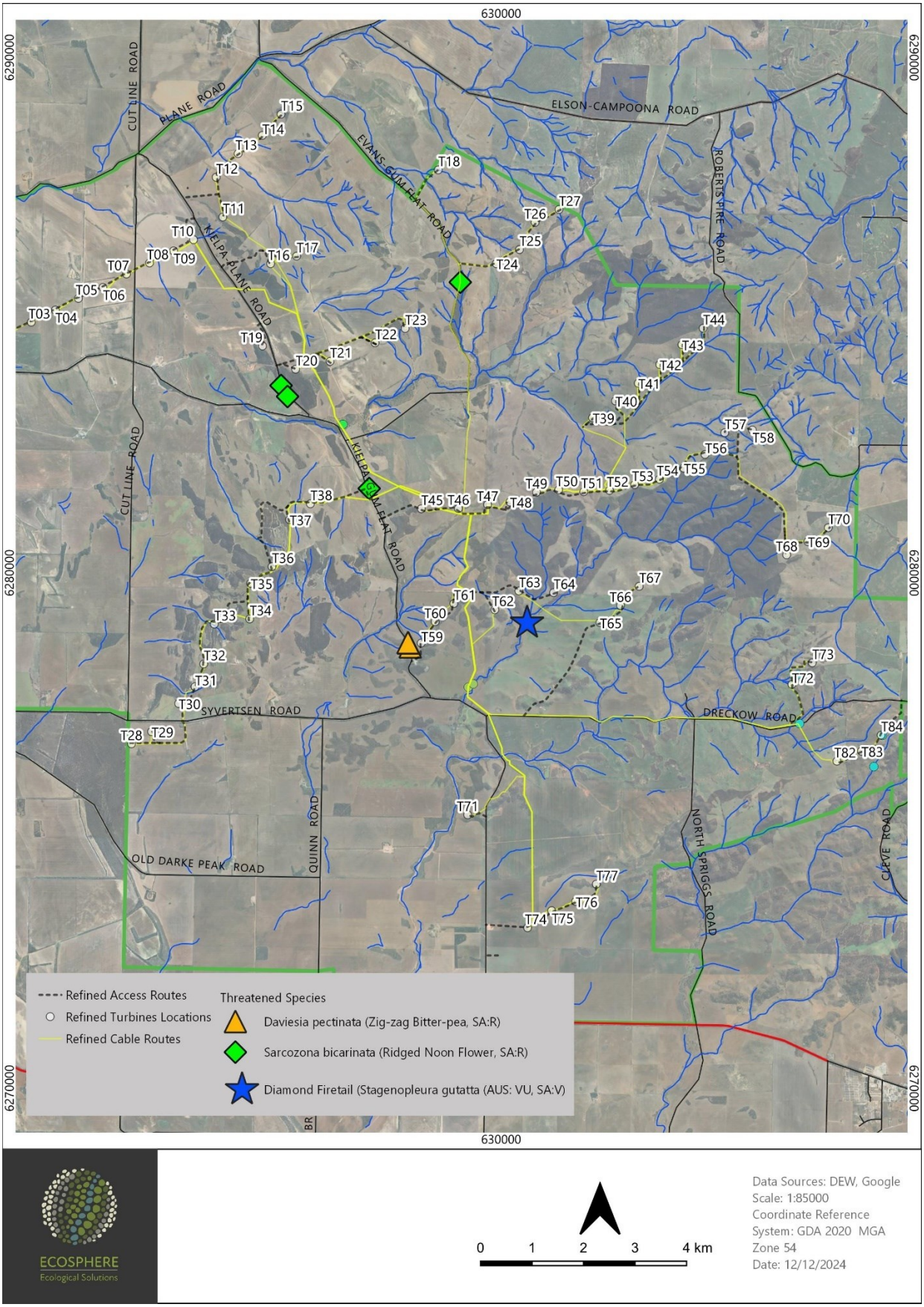


Figure 21. Locations of threatened flora and fauna species observed within the CWF Project area.

6.6 Avian Survey

Thirty-nine avian species (27 indigenous and 2 exotic) were recorded across 19 locations (Figure 22) during bird point counts throughout the Project area during the March survey. Species recorded were largely consistent with species expected in open and fragmented communities degraded through grazing and weed invasion. Species likely to utilise rotor sweep heights are listed below (Table 9) and are typical for South Australian agricultural environments. No large raptor nests were recorded during surveys to the site however are likely to occur within larger remnant patches of vegetation out of line of sight from adjoining cleared areas. The density of the remnant patches makes moving through these areas limiting and therefore there may need to be assumptions that these occur and the potential for rotor strikes in risk assessments made on these assumptions of presence. See Appendix 1 for all avian survey results.

Further avian utilisation assessments may be required to determine the utilisation times for these species within rotor sweep heights, however given this, baseline surveys suggest a low density of raptors and other species with soaring or gliding flight behaviours at these heights.

6.6.1 Malleefowl

There is one historical record for Mallee Fowl within the Project area recorded in 1973. The area around the record was searched with a grid for any sign of this species such as existing or old nest mounds, tracks or feathers. No evidence of this species persisting in this area was observed and based on the targeted survey for this species, the level of fragmentation and lack of significant litter and lack of any other records within the past 45 years within the Project area meant that it was considered unlikely that individuals persist within the Project area or surrounding reserves.

Table 9. Avian species recorded within the CWF Project area and likelihood to utilise rotor sweep heights.

Exotic	Scientific Name	Common Name	EPBC Act	NPW Act	Utilises rotor sweep height
	Acanthagenys rufogularis	Spiny-cheeked Honeyeater	-	-	-
	Acanthiza apicalis	Inland Thornbill	-	-	-
	Acanthiza chrysorrhoa	Yellow-rumped Thornbill	-	-	-
	Anthochaera carunculata	Red Wattlebird	-	-	-
	Anthus australis	Australian Pipit	-	-	Possible
	Aquila audax audax	Wedge-tailed Eagle	-	-	Yes
	Artamus cyanopterus	Dusky Woodswallow	-	-	Possible
	Barnardius zonarius	Australian Ringneck	-	-	Yes
	Cincloramphus cruralis	Brown Songlark	-	-	Yes
	Colluricincla harmonica	Grey Shrikethrush	-	-	-
	Coracina novaehollandiae	Black-faced Cuckooshrike	-	-	-
	Corvus coronoides	Australian Raven	-	-	Yes

Exotic	Scientific Name	Common Name	EPBC Act	NPW Act	Utilises rotor sweep height
	Corvus mellori	Little Raven	-	-	Yes
	Coturnix sp.	Quails	-	-	-
	Cracticus torquatus leucopterus	Grey Butcherbird	-	-	-
	Drymodes brunneopygia	Southern Scrub Robin	-	-	-
	Elanus axillaris	Black-shouldered Kite	-	-	Yes
	Eolophus roseicapilla	Galah	-	-	Yes
	Falco cenchroides cenchroides	Nankeen Kestrel	-	-	Yes
	Falco longipennis	Australian Hobby	-	-	Yes
	Gavicalis virescens	Singing Honeyeater	-	-	-
	Grallina cyanoleuca cyanoleuca	Magpielark	-	-	-
	Gymnorhina tibicen	Australian Magpie	-	-	Yes
	Lichenostomus cratitius	Purple-gaped Honeyeater	-	R	-
	Manorina flavigula	Yellow-throated Miner	-	-	-
	Manorina melanocephala	Noisy Miner	-	-	-
	Melithreptus brevirostris	Brown-headed Honeyeater	-	-	-
	Ocyphaps lophotes lophotes	Crested Pigeon	-	-	-
	Pachycephala fuliginosa fuliginosa	Western Whistler	-	-	-
	Pachycephala rufiventris rufiventris	Rufous Whistler	-	-	-
	Pardalotus punctatus	Spotted Pardalote	-	-	-
	Pardalotus striatus	Striated Pardalote	-	-	-
*	*Passer domesticus domesticus*	House Sparrow	-	-	-
	Phaps chalcoptera	Common Bronzewing	-	-	-
	Pomatostomus superciliosus	White-browed Babbler	-	-	-
	Rhipidura leucophrys leucophrys	Willie Wagtail	-	-	-
	Smicrornis brevirostris	Weebill	-	-	-
	Stagonopleura guttata	Diamond Firetail	VU	V	-
*	*Sturnus vulgaris vulgaris*	Common Starling	-	-	Yes
	Zosterops lateralis	Silvereye	-	-	-

6.7 Bat Surveys

No bat specific surveys were undertaken as part of baseline surveys and the BDBSA identified only three species as occurring within 50 km of the site. No species were highlighted as part of the EPBC PMST indicating a lack of conservation significant bat species records in the region. This may be due to lack of survey effort however and further studies to rule out the presence of conservation significant bat species and densities of other bat species will be undertaken as follow up surveys.

There are no known caves within the Project area or surrounds and therefore bat species are likely to be limited to those that seek shelter in tree hollows or under bark, old ruins etc.

Table 10. BDBSA records for bat species within 50km of the Project area.

Species Name	Common Name	EPBC Act	NPW Act
Austronomus australis	White-striped Free-tailed Bat	-	-
Chalinolobus gouldii	Gould's Wattled Bat	-	-
Nyctophilus geoffroyi	Lesser Long-eared Bat	-	-

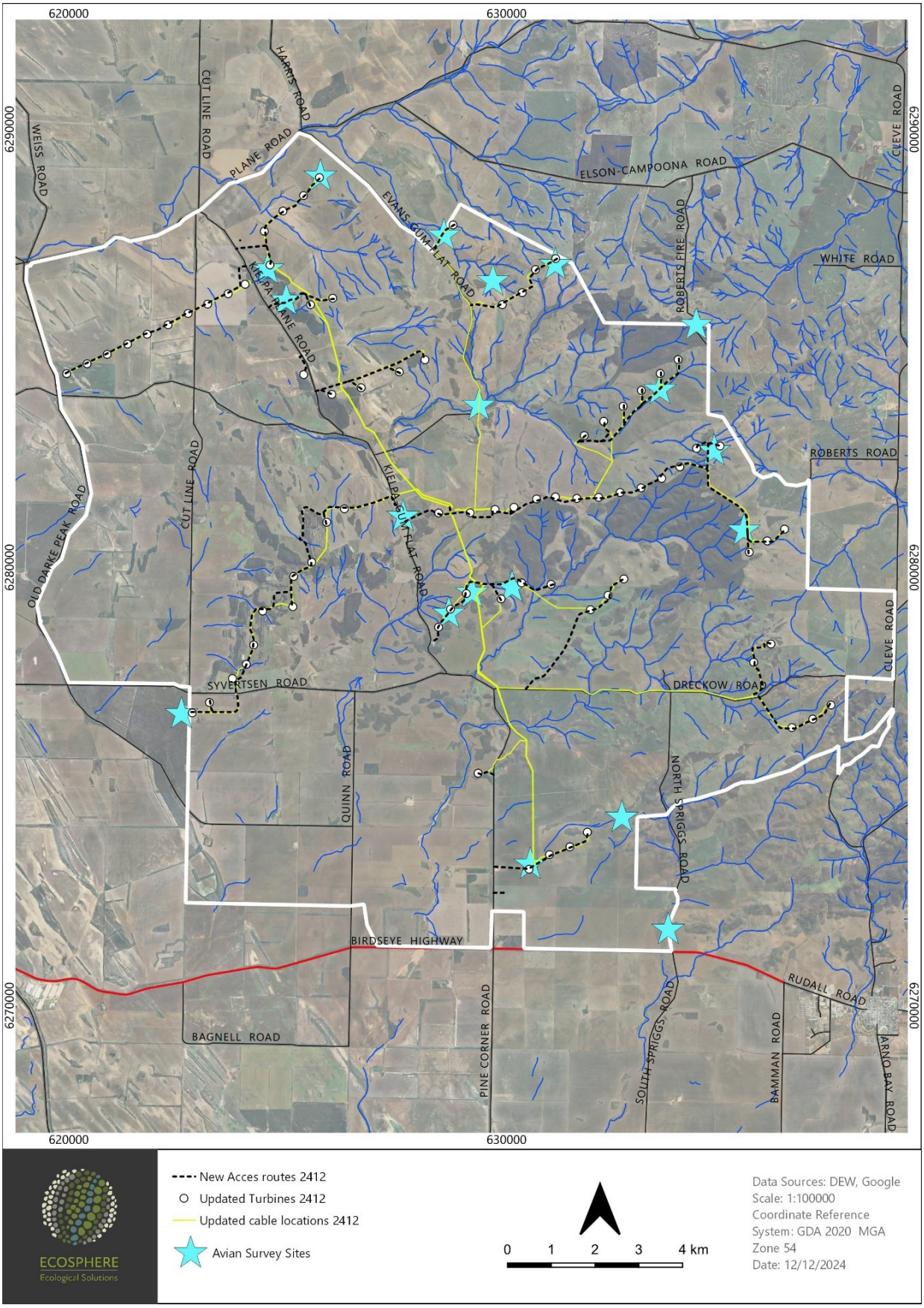


Figure 22. Locations of Avian survey sites

6.8 Exotic Species

6.8.1 Declared Weeds

Declared plants are weeds that are regulated under the *Landscape South Australia Act 2019* due to their threat to primary industry, the natural environment and public safety. Eight declared weed species had historical records from the NatureMaps BDBSA search within the Study area. A further three Weeds of National Significance (**bold**) were identified by the BDBSA or during previous ecological surveys across the wider area.

- ***Asparagus asparagoides*** **(Bridal Creeper)**
- *Cenchrus setaceus* (Fountain Grass
- *Chondrilla juncea* (Skeleton Weed)
- *Echium plantagineum* (Salvation Jane)
- *Gazania linearis* (Gazania)
- ***Lycium ferocissimum*** **(African Boxthorn)**
- *Marrubium vulgare* (Horehound)
- ***Solanum elaeagnifolium*** **(Silver-leaf Nightshade)**

Two WONs were identified during the field surveys, *Asparagus asparagoides* (Bridal Creeper) and *Lycium ferocissimum* (African Boxthorn), and one declared weed, *Marrubium vulgare* (Horehound). None of the species recorded were considered a significant concern from a project perspective whereby specific management is required outside of weed hygiene principles applied to construction sites in agricultural areas generally. These include:

- Identification of significant weed outbreaks prior to construction being identified through engagement with stakeholders such as landowners
- Application of exclusion zones for any known outbreaks and management to ensure no weeds spread from known location
- Wash down areas and hygiene stations for machinery moving across the project site

As the district is farmed at an intensive broadacre scale and the grain product is valued on seed cleanliness, outbreaks are generally controlled. A weed regarded significant locally was *Tribulus terrestris* (Caltrop) with local farmers expressing a concern for this weed and ensuring vehicle hygiene measures were implemented before entering site.

6.8.2 Exotic Fauna

Nine exotic fauna species had historical records from the NatureMaps BDBSA search within the Study area.

Five mammal species:

- Cattle (European Cattle) (*Bos taurus)*
- Dingo (*Canis lupus dingo*)
- House Mouse (*Mus musculus*)
- Rabbit (European Rabbit) (*Oryctolagus cuniculus*)
- Fox (Red Fox) (*Vulpes vulpes*)

And four of bird species:

- House Sparrow (*Passer domesticus domesticus*)
- Spotted Dove (*Spilopelia chinensis*)
- Common Starling (*Sturnus vulgaris vulgaris*)
- Common Blackbird (*Turdus merula merula*)

Two exotic bird species were identified during field surveys, House Sparrow (*Passer domesticus domesticus*) and Common Starling (*Sturnus vulgaris vulgaris*). One Red Fox (*Vulpes vulpes*) was sighted and several Rabbits (*Oryctolagus cuniculus)* including active warrens were present at several locations within the Project area.

7 Project Interaction with Ecological Values

7.1 Baseline Survey

The initial baseline survey assessed the general Project area and a provisional layout in which each Wind Turbine Generator (WTG/WTG's) position, and road access were surveyed for potential impacts to native vegetation. While some WTG's and stringlines were in clear open paddocks with no impact, others were located either close to, or in larger patches of vegetation, with some located in vegetation of high ecological value. The position of many WTG's could potentially be altered only marginally to avoid any impact on vegetation; however, some will need to be completely relocated to avoid clearance of areas of high ecological value or threatened vegetation species.

7.2 Targeted Survey

Following refinement of the project layout, the access and cable routes have been further modified with the mitigation hierarchy in mind to avoid minimise and mitigate. This most recent refinement addresses avoidance of interaction with areas of high ecological value, threatened species observations and intact vegetation areas where possible. The resulting layout interacts predominantly with vegetation of lower value, quantified using the bushland assessment method and checked for threatened flora species presence and critical habitat for threatened fauna. Areas remaining that interacts with TEC's may require additional thought on achieving connection of transmission lines or slight additional modification of the layout. The figures below show the refined layout.

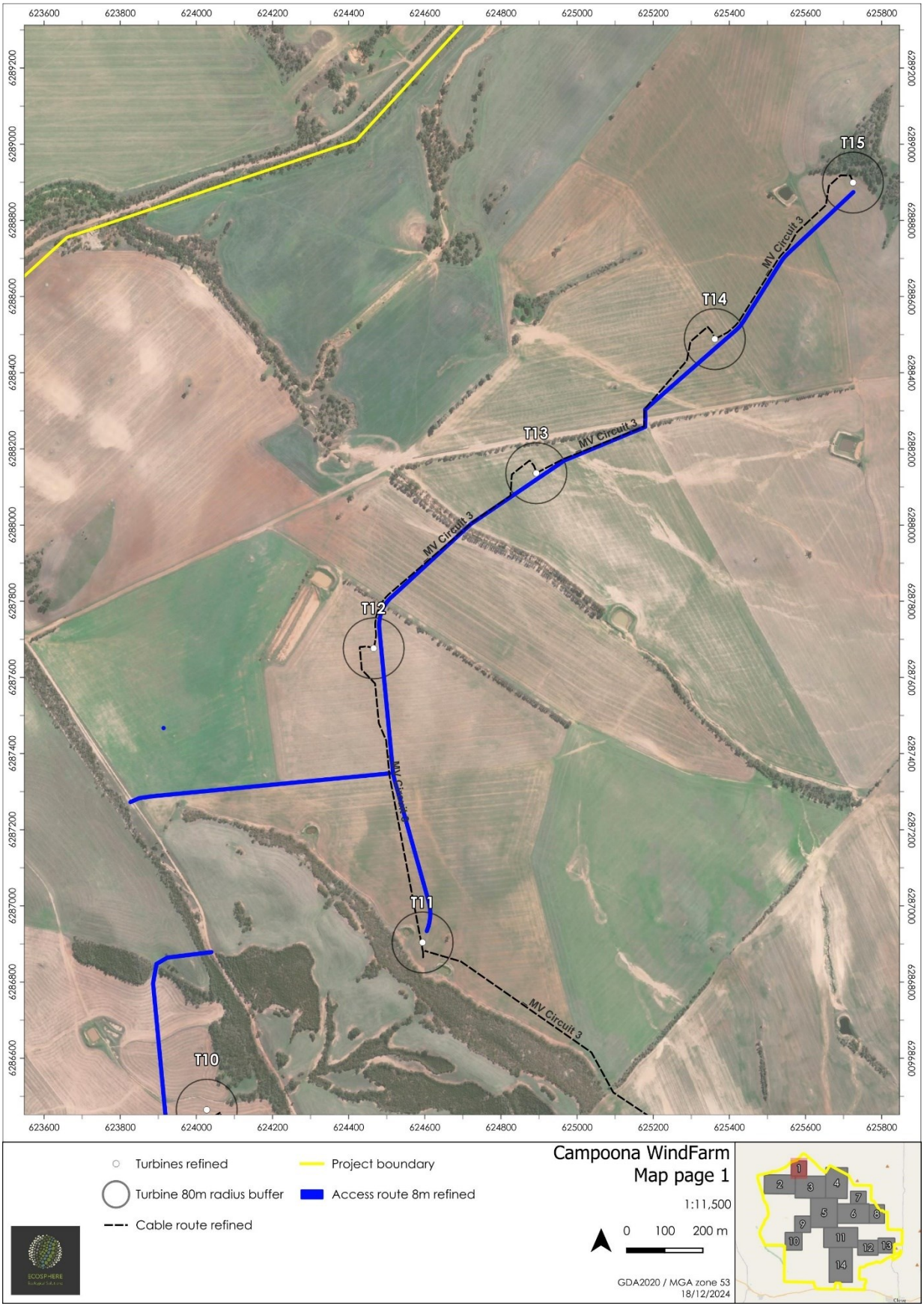


Figure 23. Map 1 of 14

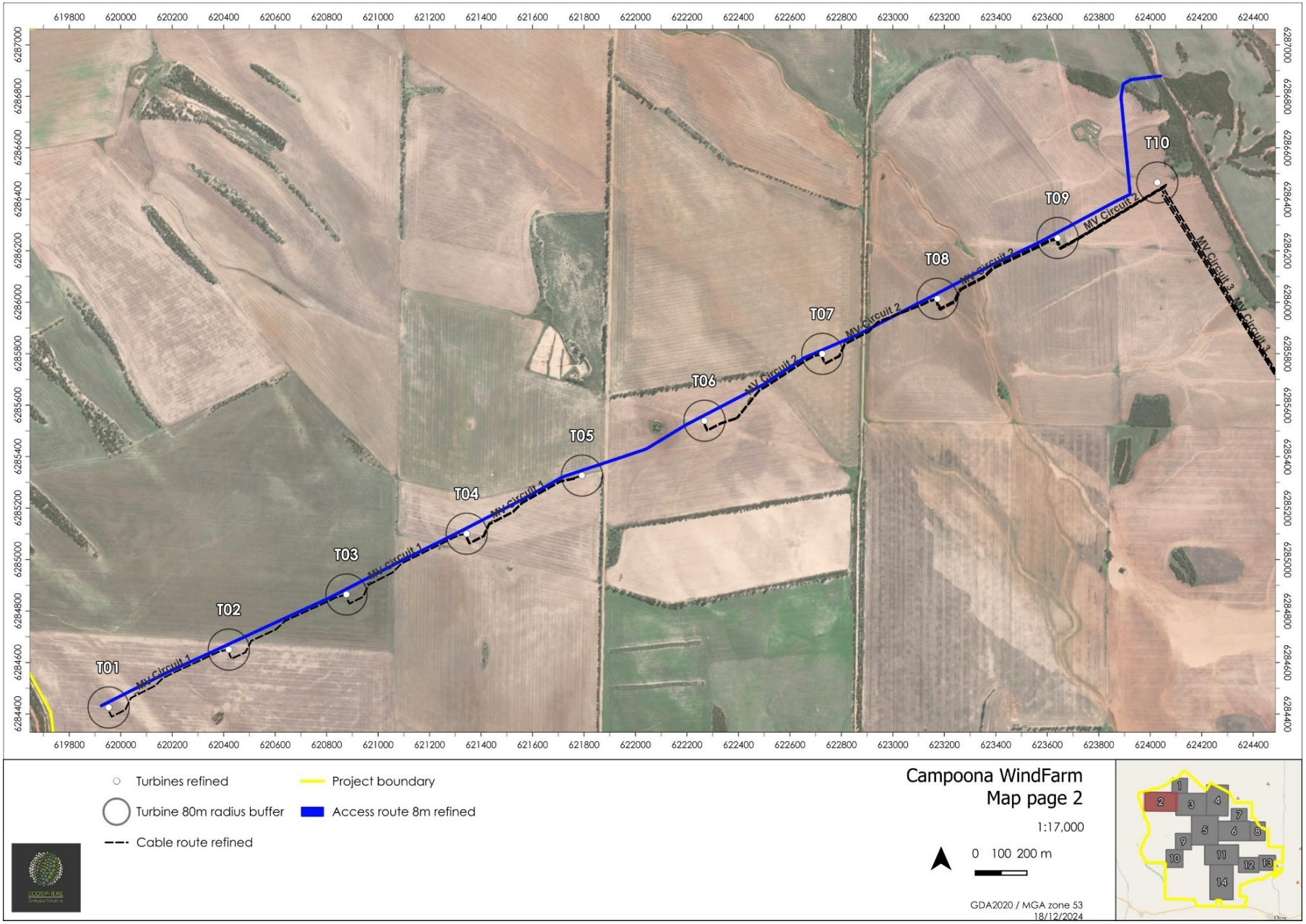


Figure 24. Map 2 of 14

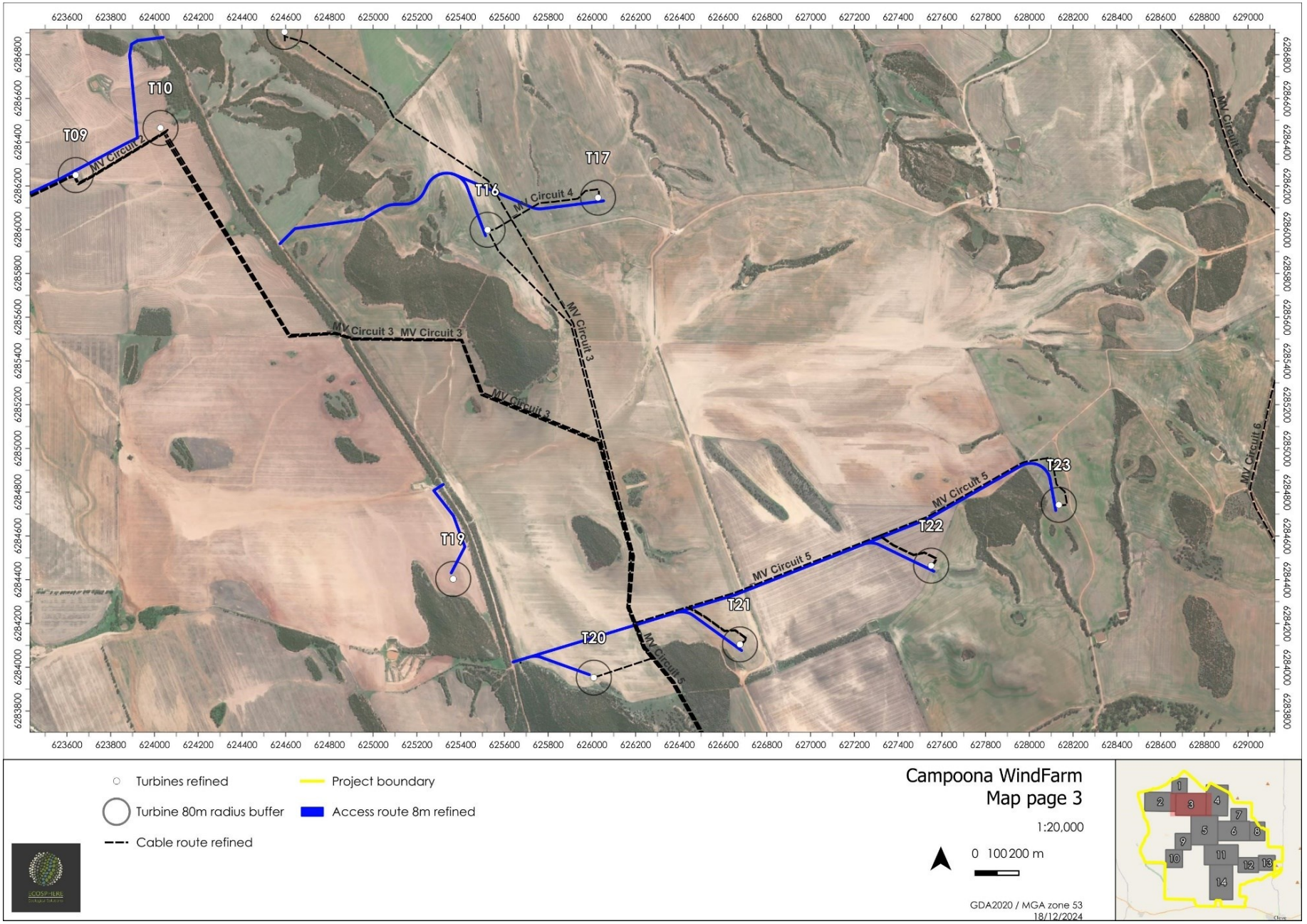


Figure 25. Map 3 of 14

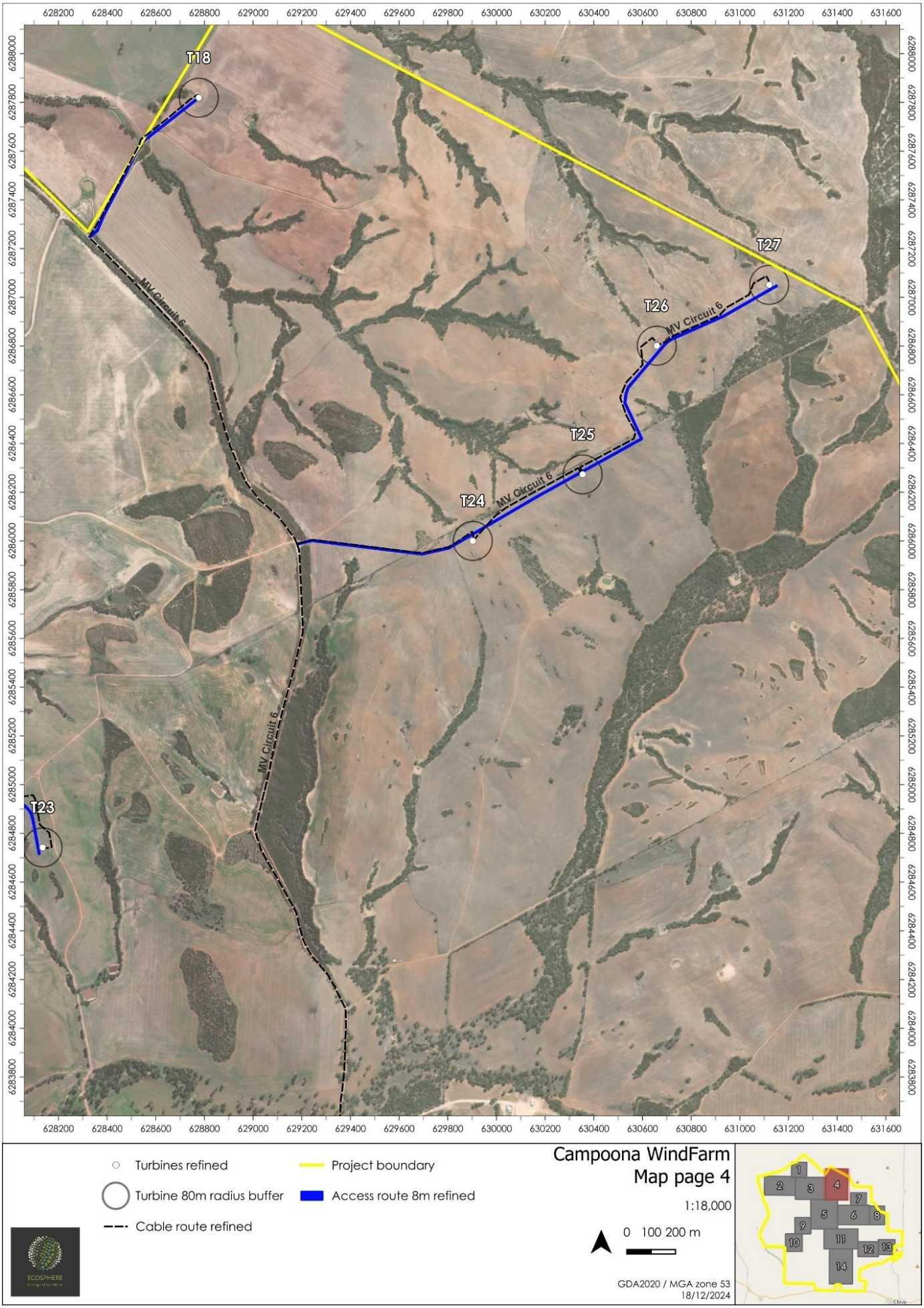


Figure 26. Map 4 of 14

Figure 27. Map 5 of 14

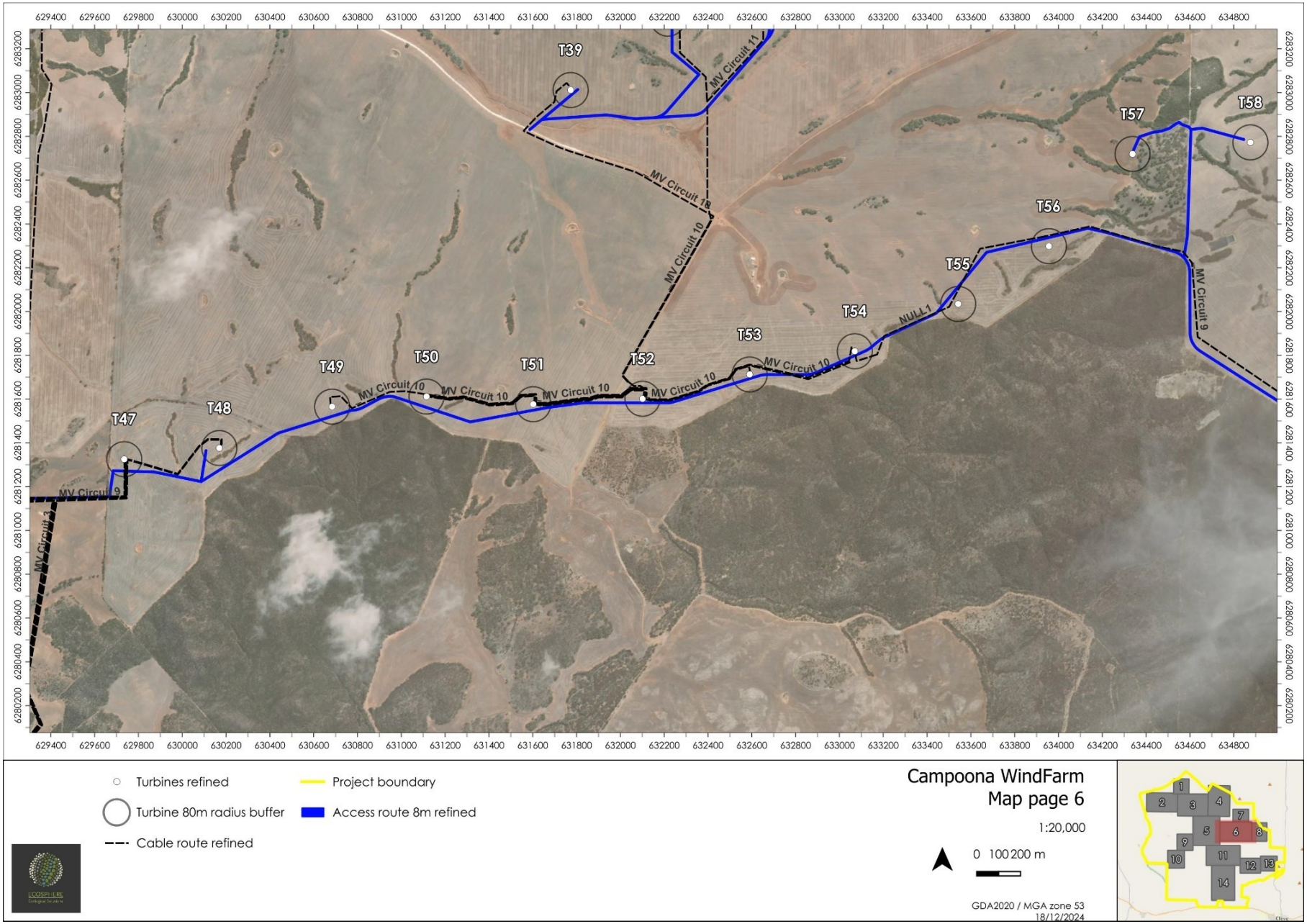


Figure 28. Map 6 of 14

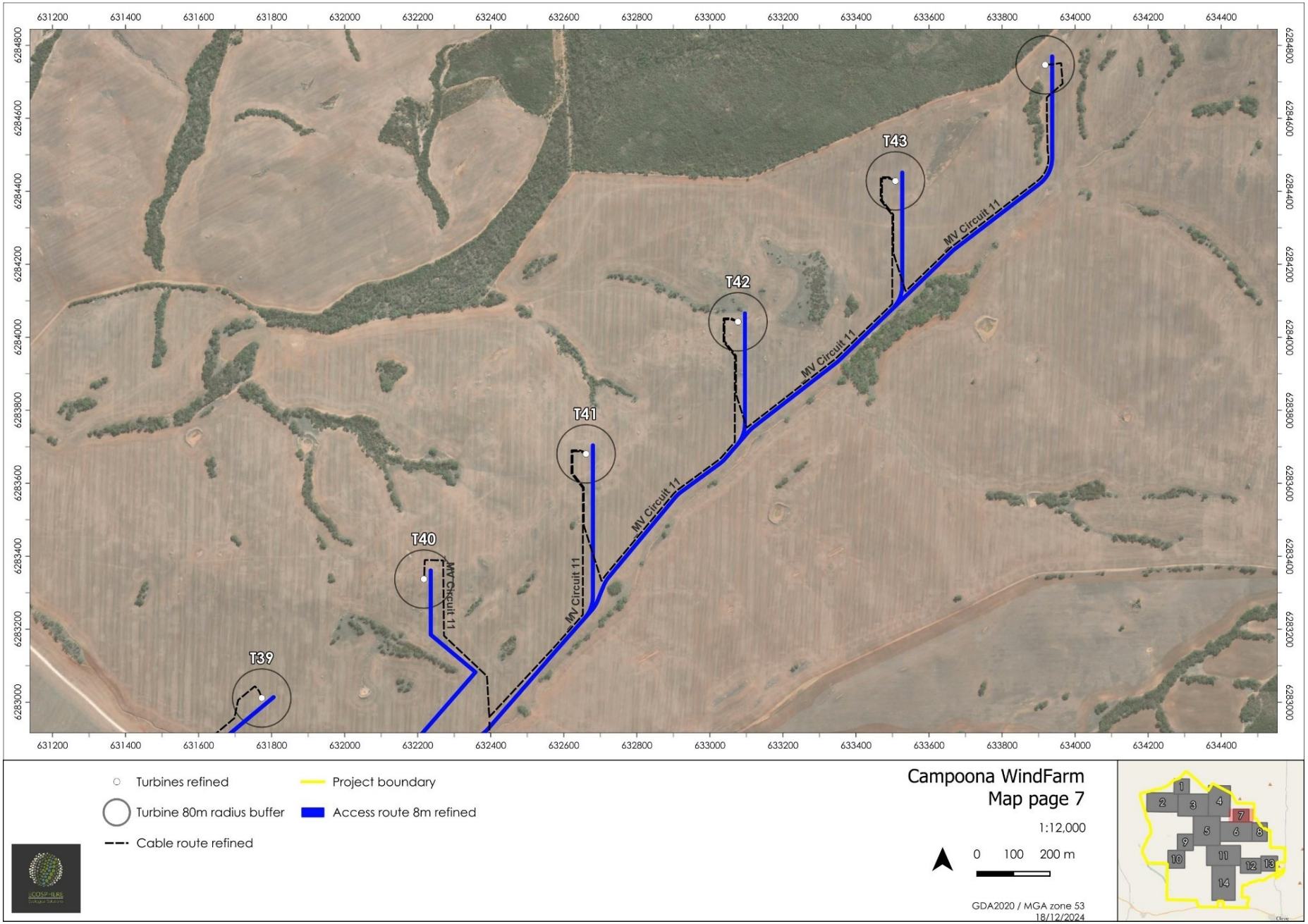


Figure 29. Map 7 of 14

Figure 30. Map 8 of 14

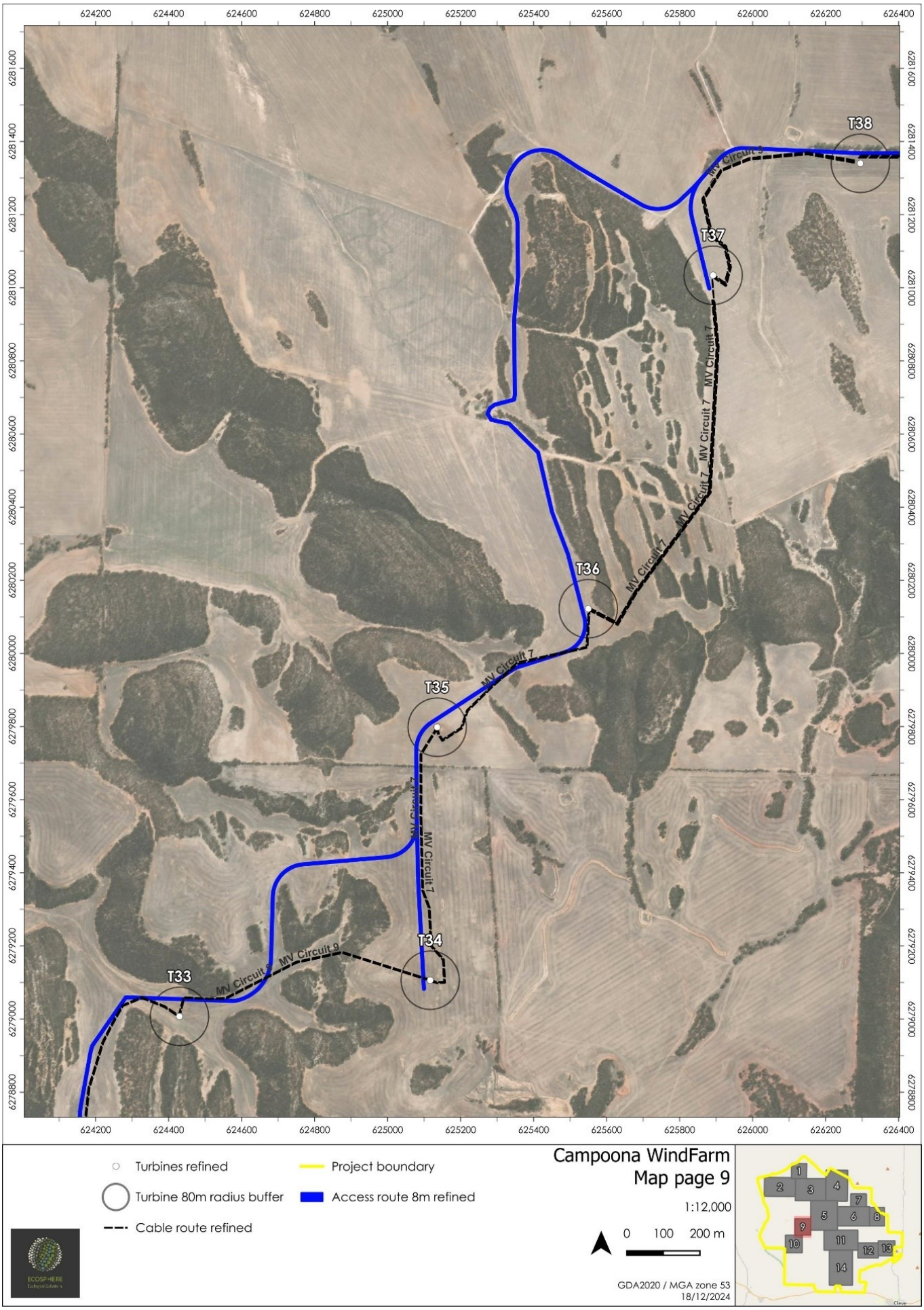


Figure 31. Map 9 of 14

Figure 32. Map 10 of 14

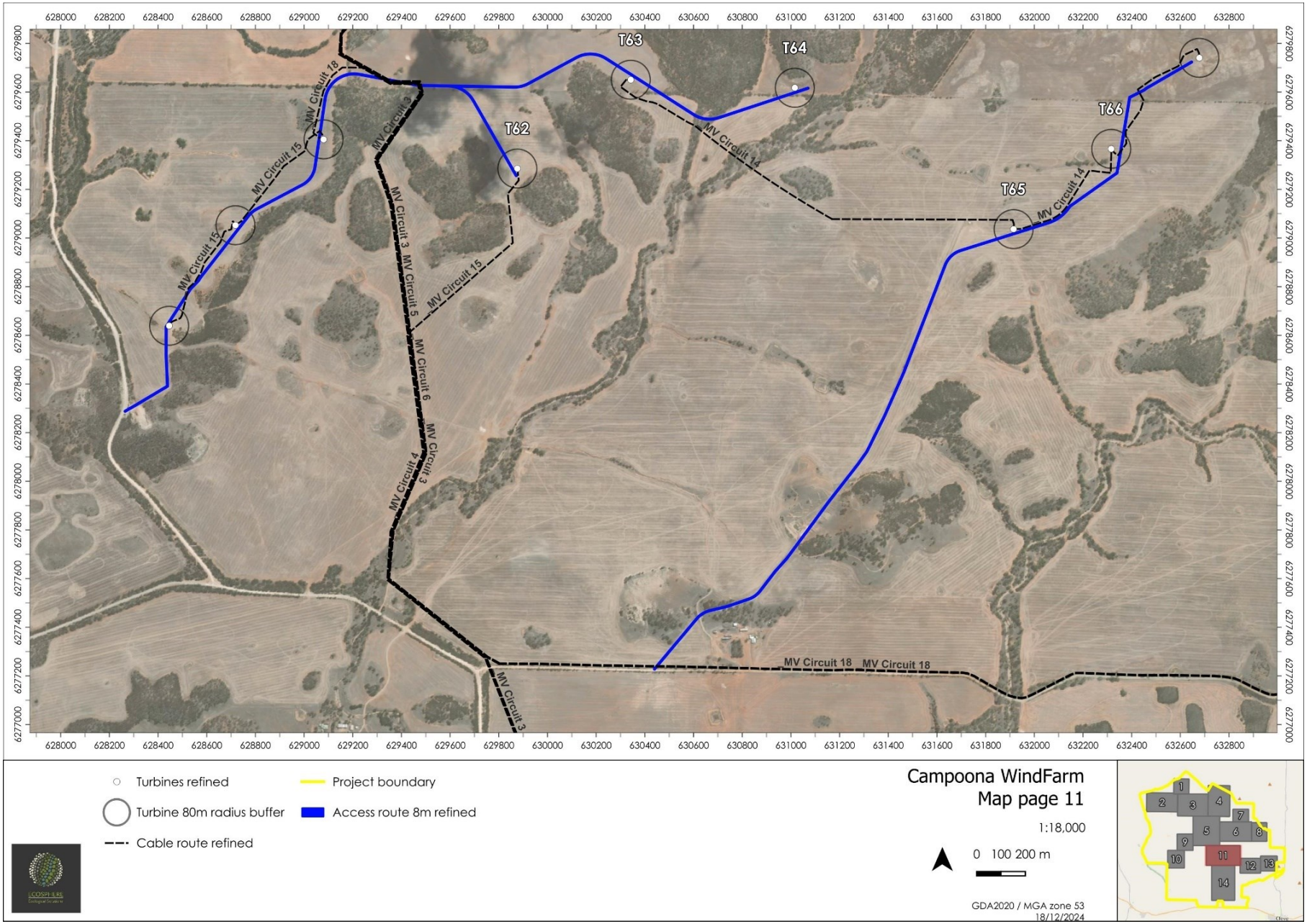


Figure 33. Map 11 of 14

Figure 34. Map 12 of 14

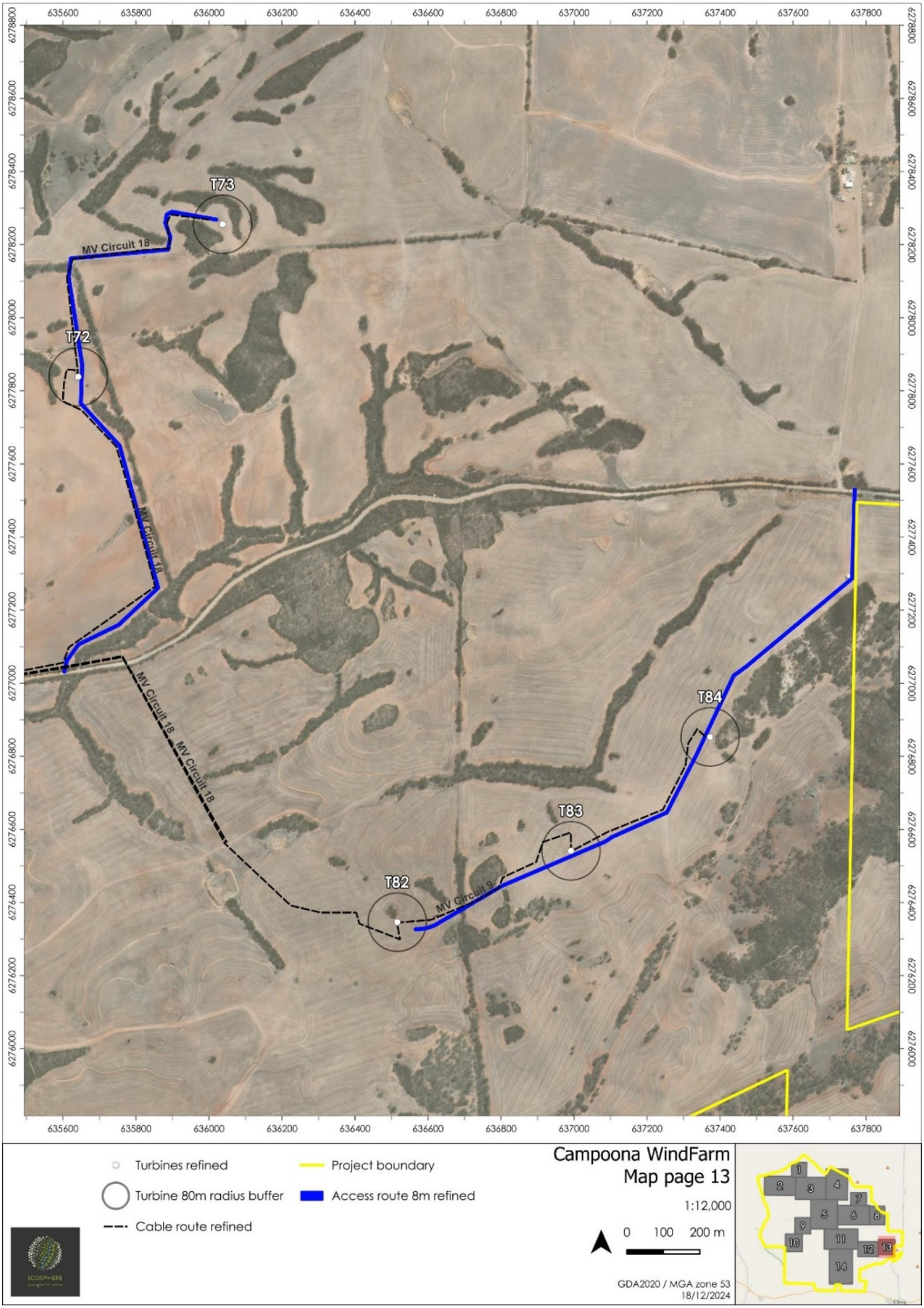


Figure 35. Map 13 of 14

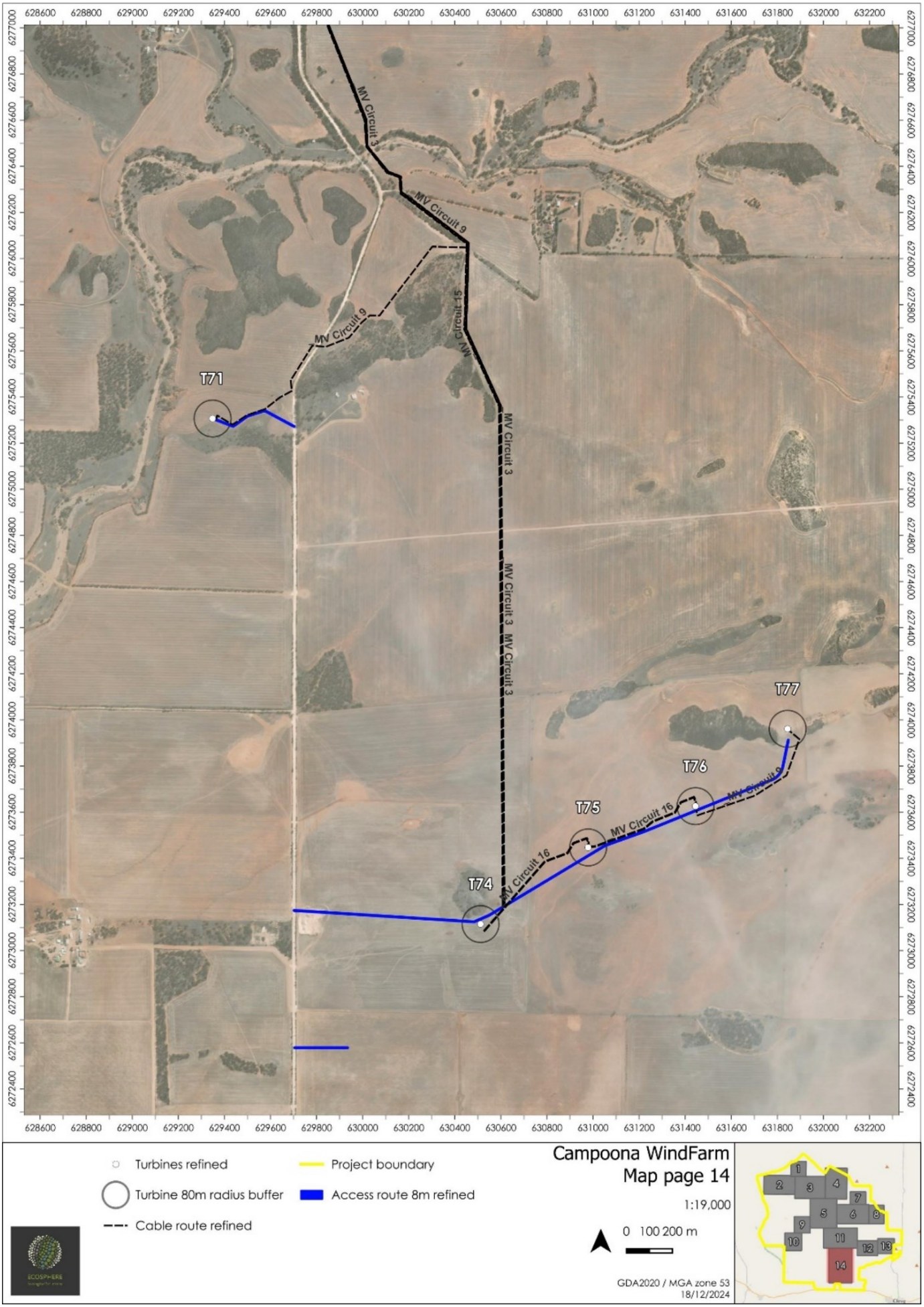


Figure 36. Map 14 of 14

8 Assessment of Significance

Assessments of Significance (AoS) for EPBC Act listed entities known or likely to occur within the Project area include the Diamond Firetail (*Stagonopleura guttata*) and the Eyre Peninsula Blue Gum (*Eucalyptus petiolaris*) Woodland Threatened Ecological Community.

8.1 Threatened Ecological Communities

One EPBC Act listed TEC was recorded within the Project area, Eyre Peninsula Blue Gum (*Eucalyptus petiolaris*) Woodland (EPBGW). This TEC was located in eight separate patches throughout the CWF Project area.

An action is likely to have a significant impact on a critically endangered or endangered ecological community if there is a real chance or possibility that it will:

1. **Reduce the extent of an ecological community:**

The EPBGW has undergone significant historical clearance throughout the Eyre Peninsula. What patches remain are highly disturbed, generally lacking significant understorey due to grazing pressures from livestock, introduced fauna (rabbits) and an overabundance of native fauna (kangaroos). The locations of the WTGs and associated cable and access routes have been micro-sited to avoid further clearance of this TEC within the CWF Project area, and thus will not further reduce the extent on this ecological community.

2. **Fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines:**

The TEC is already highly fragmented in the greater area due to clearance for dryland agriculture and grazing, and the patches are not prime examples of this community. The re-alignment of the WTGs, cable routes and access routes to areas of existing clearance will therefore not fragment this community further.

3. **Adversely affect habitat critical to the survival of an ecological community:**

By avoiding the extent of the community then no impact can occur to the habitat. The primary risk to sustainability of the community is changes in hydrology. Cutting new tracks or impacting the flow of surface and sub surface water is likely to impact the community. Use of existing tracks is not likely to adversely impact habitat.

4. **Modify or destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival, including reduction of groundwater levels, or substantial alteration of surface water drainage patterns:**

The remnant patches of this TEC are located in drainage lines in paddocks used for dryland cropping, or in road reserves. The surrounding area has previously been highly modified due to farming practices or altered surface water drainage patters due to run-off from the existing roads. The CWF will not further impact upon the TEC beyond the current existing levels.

5. **Cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting:**

The patches of this TEC throughout the CFW Project area have been altered due to grazing from livestock, introduced fauna and native fauna, leading to many of the understorey species making up this TEC to be absent. Highly palatable species are favoured by rabbits, and with the patches being unfenced, livestock such as sheep cause grazing pressure and disturbance to the surface layer. It is unlikely the CWF will cause a substantial change in the species composition or occurrence beyond what has historically occurred.

6. **Cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including but not limited to:**
    - **Assisting invasive species, that are harmful to the listed ecological community, to become established, or**
    - **Causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community, or**

Invasive species known in the wider area include rabbits and domestic livestock that have contributed to habitat degradation through over grazing which can remove the shrub layer and assist in the dispersal of exotic plant seeds. With some of the TEC patches located in a shallow drainage lines in paddocks used for cropping, there is a possibility of pollutants used by agriculture to drain into these areas, similarly with patches located in road reserves. With micro-siting to avoid clearance, the CWF is unlikely to change the current drainage patterns and increase agriculture related runoff.

7. **Interfere with the recovery of an ecological community:**

The vegetation in this community is highly fragmented, have edge effects from farming and are located in highly disturbed areas, with grazing from introduced species such as rabbits and domestic livestock. The patches are unfenced, and any emergent vegetation will be unprotected from further grazing pressures. The CWF is unlikely to interfere with the recovery of this ecological community.

8.2 Migratory Species

Eleven migratory species listed under the EPBC Act were highlighted as potentially present within the Study area. Of these five were rare vagrants and not further considered in this assessment. Six species were waders and unlikely to utilise the Project area considering the lack of wetland or saltmarsh habitats that support many migratory species.

These species breed in wetland environments in the northern hemisphere during the northern summer, before migrating south to Australia and other locations over winter (Australian summer). As part of the annual migration, shorebirds tend to aggregate at significant coastal wetland and intertidal sites across Australia. Within South Australia the main feeding grounds for these species are in the Adelaide International Bird Sanctuary and Northern Gulf St Vincent.

The Project area is located approximately 193 km to the west from the Adelaide International Bird Sanctuary, an important rest and feeding stop for migratory birds, which is at the southern end of the East-Australasian Flyway (EAAF). The EAAF is a route that migratory birds traverse on an annual basis. It is especially important for the millions of migratory waders or shorebirds that breed in northern Asia and Alaska and spend the non-breeding season in South-East Asia and Australasia.

Waders departing feeding grounds for migration climb steeply to high altitude just after take-off. Several studies focussing on various shorebird/wader species confirm many species fly anywhere between 2000m and 5000m above sea level during migratory flights.

The height of each WTG (including blade length) is 250m and the highest elevation for the Project area is 395mAHD. With the combined height of the highest elevation and WTG being 645mAHD, this falls well below the altitudes that migratory birds have been recorded flying. This factor, in conjunction with the distance of the CWF location and direction (west) from the nearest habitat for migratory birds (migratory birds are travelling in north-south directions) and how quickly they gain altitude after take-off, this project is unlikely to pose a significant impact upon migratory species.

8.3 Threatened Species

Diamond Firetail (*Stagonopleura guttata*) are listed as Vulnerable under the EPBC Act. There are records for Diamond Firetail 3 km north-east of the north-east boundary of the Project area, and this species was observed during the October survey.

All populations of Diamond Firetail are considered important populations when considering impacts to the species based on the criterion listed below. Therefore, the populations must be considered for significant impact assessments, environmental impact assessments and EPBC referral.

8.3.1 Significant Impact Criteria for Vulnerable Species: Diamond Firetail (*Stagonopleura guttata*)

In accordance with the Significant Impact Assessment Guidelines, an action is likely to have a significant impact on a vulnerable species if there is a real chance or possibility that it will:

1. **Lead to a long-term decrease in the size of an important population of a species:**

Diamond Firetail was listed as Vulnerable under the EPBC Act in March 2023 due to continued population decline (DCCEEW, 2023d). Key threats to the species relate to habitat loss through clearance for agriculture, the replacement of native perennial grasses with exotic annual grasses, and overgrazing by domestic livestock, rabbits, and overabundant kangaroo populations. Diamond Firetail were recorded in the Project area during the October field survey.

The Diamond Firetail is a granivorous species, foraging largely in grass cover and almost exclusively at ground level (Antos and Bennett 2006, DCCEEW, 2023d). The species is therefore susceptible to disturbances in the ground-layer. Invasive weeds, changes in grazing regimes and changes in grass and forb communities can all impact their food supply (Hodder et al 2018). The project is unlikely to cause a change in grass species composition or restrict the availability of perennial grass seed as foraging material given that the project layout has been realigned to minimise the clearance of vegetation of higher ecological value, including habitat suitable for threatened species. In particular, areas with low density of trees and shrubs, a high cover of native herbs, and fallen timber on the ground will be avoided during micro siting. The blade sweep arc is also unlikely to interfere with ground foraging species. Therefore, the CWF project is unlikely to lead to a long-term decrease in the population size of the species.

2. **Reduce the area of occupancy of an important population:**

Diamond Firetail occur on the south-east of mainland Australia, and in South Australia have three isolated subpopulations (Eyre Peninsula, My Lofty to Southern Flinders Ranges, and the south-east) (DCCEEW, 2023d). The species occurs in eucalypt, acacia or casuarina woodlands, open forests, and other lightly timbered habitats, including farmland and grassland with scattered trees. The removal of vegetation within the Project area is unlikely to significantly reduce the area of occupancy for the species, given micro siting will be implemented to ensure areas of suitable habitat for the species area avoided. Importantly, sites requiring clearance lack the quantity of native grasses required for species forging.

3. **Fragment an existing important population into two or more populations:**

Diamond Firetails appear to be sedentary, though some populations move locally (DCCEEW, 2023d). Diamond Firetail were observed within the Project area during the October survey however, there are no historical records for the species within the CWF Project area. Suitable habitat is present with the Project area and the species is considered likely to move through the area as resources become available. Realignment of the project footprint has been recommended to avoid fragmentation of suitable habitat. Areas proposed for clearance consist predominantly of areas historically cleared for agricultural cropping and livestock grazing or areas of low habitat suitability. Therefore, it is unlikely that clearance of habitat within the CWF Project area will cause fragmentation of an existing population.

4. **Adversely affect habitat critical to the survival of the species:**

Habitat critical to the survival of Diamond Firetail includes areas of relatively low tree density, few large logs and little litter cover but high grass cover of native perennial grasses for foraging, roosting, and breeding. The areas of proposed clearance have a low cover of native grasses and are generally unsuitable as habitat for Diamond Firetails. Therefore, the project is unlikely to affect habitat critical to the survival of the species.

5. **Disrupt the breeding cycle of an important population:**

Habitat requirements for breeding include large areas of grassland for feeding, and suitable areas to build nests, such as in the base of nests of larger raptor species (e.g. Whistling Kites or Brown Falcons), in the prickly foliage of shrubs such as hakeas/boxthorn, in thickly foliaged branches of trees and shrubs or in mistletoe growing on eucalypts. The vegetation proposed for removal lacks both shrub vegetation that is appropriate for nest building and grassland vegetation that is suitable for foraging. Therefore, the removal of this vegetation is unlikely to disrupt the breeding cycle of any potential important populations within the Project area.

6. **Modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline:**

Although clearance of habitat is proposed, realignment of the project footprint has been undertaken to avoid areas of high ecological value, including those areas suitable for Diamond Firetail. Therefore, the areas proposed for clearance are generally degraded and lack the critical factors needed for the species (e.g. high cover of native grasses and appropriate shrub species for nest-building).

7. **Result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat:**

Invasive species known to be harmful to Diamond Firetail include livestock, rabbits, and exotic grasses. Whilst livestock and rabbits have led to habitat degradation through over grazing which can remove the shrub layer,

the replacement of native perennial grasses with exotic annual grasses (exacerbated by overgrazing) has resulted in food shortages during periods as exotic annual grass seed germinates only in the late autumn and winter. Given rabbits and livestock are already present in the survey area, there is a low likelihood that clearance will increase the abundance of rabbits above the background density.

8. **Introduce disease that may cause the species to decline:**

The Conservation Advice for the Diamond Firetail does not list any diseases as a threat to populations of the species (DCCEEW, 2023d).

9. **Interfere substantially with the recovery of the species:**

There is no recovery plan for the species. The Conservation Advice for the species includes ensuring all known populations of the species are stable and habitat important for the survival of the species is protected (DCCEEW, 2023d). Management priorities include retaining and protecting woodland, open forest, grassland, and mallee habitat from clearing, fragmentation and disturbance. The vegetation proposed for clearance in the Project area is of low quality, and therefore low value as habitat for Diamond Firetail. Realignment of the project footprint to avoid area of high habitat value ensure adherence to the conservation advice for the species.

Referral Requirements: Based on the significant impact assessment undertaken for Diamond Firetail (*Stagonopleura guttata*) within the Project area, no significant impact in accordance with Significant Impact Guidelines 1.1 was considered to occur and it is not recommended to undertake a referral for this species.

9 Clearance Summary

9.1 Cumulative Impact

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

All impacts (direct and indirect) will be confined to the Project area, including any supporting infrastructure or ancillary works. Clearance will be mitigated through design and placement of turbine, stringlines and associated infrastructure, and management of stormwater runoff and dust during construction which will aid in preventing cumulative impacts post construction.

9.2 Address the Mitigation Hierarchy

When exercising a power or making a decision under Division 5 of the Native Vegetation Regulations 2017, the NVC must have regard to the mitigation hierarchy. The NVC will also consider, with the aim to minimize, impacts on biological diversity, soil, water and other natural resources, threatened species or ecological communities under the EPBC Act or listed species under the NP&W Act.

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

To avoid clearance of native vegetation the following measures will be adopted where possible/practical:

- The position of WTGs, stringlines and all other infrastructure associated with a WTG have been placed in areas with the least amount of native vegetation e.g., in an area of open paddock, or if vegetation cannot be avoided, in areas with the least amount of vegetation, or areas of vegetation that are more degraded.
- The use of pre-existing tracks for access to WTG locations has negated the need to clear vegetation in many areas.
- The layout avoids fragmentation of larger patches of vegetation.
- Areas that are known to contain threatened species have been avoided.

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

Clearing extents will be minimised where practical, and vegetation clearance, interference or damage will occur in pre-approved areas only. Workers to be made aware of vegetation management requirements during induction training through work instructions.

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

All areas around WTGs and stringline footprints will be rehabilitated back to pre-construction condition.

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

SEB offset through payment into the Native Vegetation Fund. To be calculate upon final project layout finalisation.

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

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

10 Discussion

10.1 Direct Impacts

10.1.1 Vegetation Clearance

The total Project area currently covers an approximate area of 23,853 ha. However, clearance is likely to be limited to the immediate project footprint (turbine sites, cable routes, access tracks and associated infrastructure). The project footprint will largely be aligned to impact on cleared landscapes and located in areas where there is availability of wind resource but at the same time, lacks intact habitats and native vegetation. Any clearance is likely to be limited to crossovers or where fences and road reserves have no other option for access. Micro siting works will avoid clearance wherever possible.

10.1.2 Fauna Habitat Fragmentation

Habitat fragmentation can impact species populations through increasing edge effects, reducing gene flow between small and isolated populations, reducing potential for species to adapt to climate change, and loss or severe modification of the interactions between species. Avoidance of fragmentation will be a high priority of the project. This particularly applies to threatened species and communities present within the general area.

10.1.3 Disturbance, Injury and Mortality to Fauna

Fauna mortality has the potential to occur during the operational phases of wind farms. Micro siting will target areas of high habitat value for resident and migratory species (if present). Nest sites for species that are resident and have foraging strategies such as soaring, gliding and low flight patterns will be highlighted in order to provide sufficient buffers to enable species such as this to maintain sustainable habitats.

10.2 Summary

The assessment has been prepared to assess the ecological values of the Project area including EPBC Act and NPW Act listed threatened species and communities and provide guidance on targeting subsequent field survey of the area.

Results of the broad desktop assessment indicate that the Project area consists of mostly of farmland under agricultural land use but has around 30% on average remnant vegetation present largely as patches of protected reserves and heritage agreements, vegetation associated with road reserves and riparian corridors. This is largely Mallee vegetation however some areas of the EPBC Act listed threatened Ecological community exists in the Project site and some alternatives will be sought to avoid interference where possible i.e., directional drilling.

Numerous federal and state listed conservation significant flora and fauna have records from within and surrounding the Project area. However, records are very strongly linked to reserves and larger intact patches on areas not previously cleared. This demonstrates the importance of avoidance and interaction with further fragmentation of existing corridors between smaller patches.

Potential direct impacts from the Project include native vegetation clearance, fauna habitat fragmentation, disturbance, injury and mortality to fauna. It is anticipated that most impacts from the Project can be avoided, minimised or mitigated through the implementation of a variety of measures during the detailed design phase. With the majority of the Project area under cereal cropping land use, the potential to utilise these areas for burial of transmission cables means that levels of disturbance during construction of this element is low. Access tracks are present throughout the Project area as part of standard farming practices and additional access to to turbine sites also results in minimal disturbance. Turbines as part of the operational phase avoid areas of intact vegetation and area anticipated to not have a significant impact above that of wind farms in other parts of the Eyre Peninsula. Threatened fauna species known to utilise the area are low flying and ground dwelling species not known to generally fly at heights in the blade sweep area. Monitoring to determine impacts to higher flying species with soaring habits such as raptors (Eagles, Falcons, Kites etc.) are a common risk associated with operations around windfarms however have shown to be adaptable to these types of infrastructure in similar environments elsewhere.

A Native Vegetation Clearance Report / Application including Significant Environmental Benefit (SEB) calculations would be required for removal of native vegetation.

11 References

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12 Appendices

Appendix 1. Avian survey results.

Species	Common Name	Site																		Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Acanthagenys rufogularis	Spiny-cheeked Honeyeater		1											1	1			1	1		5
Acanthiza apicalis	Inland Thornbill						1	1											1		3
Acanthiza chrysorrhoa	Yellow-rumped Thornbill				1			1	1												3
Acanthiza sp.	thornbills													1			1				2
Anthochaera carunculata	Red Wattlebird		1			1	1	1			1		1		1			1	1		9
Anthus australis	Australian Pipit		1						1												2
Aquila audax audax	Wedge-tailed Eagle									1											1
Artamus cyanopterus	Dusky Woodswallow		1	1																	2
Artamus sp.	woodswallows													1				1			2
Barnardius zonarius	Australian Ringneck													1				1	1	1	4
Cincloramphus cruralis	Brown Songlark												1					1			2
Colluricincla harmonica	Grey Shrikethrush						1							1			1		1		4
Coracina novaehollandiae	Black-faced Cuckooshrike	1															1				2
Corvus coronoides	Australian Raven																		1		1
Corvus mellori	Little Raven		1		1	2						1		1				1			7
Corvus sp.	Crows						1				1				1						3
Coturnix sp.	Quails		1																		1
Cracticus torquatus leucopterus	Grey Butcherbird				1	3								1		1			1		7
Drymodes brunneopygia	Southern Scrub Robin													3							3
Elanus axillaris	Black-shouldered Kite		1																		1

Species	Common Name	Site																			Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Eolophus roseicapilla	Galah										1			1	1						3
Falco cenchroides cenchroides	Nankeen Kestrel			1	1																2
Gavicalis virescens	Singing Honeyeater			1	1	1								1		1	1		1		7
Grallina cyanoleuca cyanoleuca	Magpielark		1								1		1							1	4
Gymnorhina tibicen	Australian Magpie			1	1	1					1			1					1		6
Lichenostomus cratitius	Purple-gaped Honeyeater				1	1															2
Manorina flavigula	Yellow-throated Miner							1					1								2
Manorina melanocephala	Noisy Miner					5															5
Melithreptus brevirostris	Brown-headed Honeyeater																		1		1
Ocyphaps lophotes lophotes	Crested Pigeon				1			1								1					3
Pachycephala fuliginosa fuliginosa	Western Whistler																		1		1
Pachycephala rufiventris rufiventris	Rufous Whistler																1				1
Pardalotus punctatus	Spotted Pardalote													1			1		1		3
Pardalotus sp.	Pardalote				1																1
Pardalotus striatus	Striated Pardalote						1	1													2
Passer domesticus domesticus	House Sparrow	1																			1
Phaps chalcoptera	Common Bronzewing	1			1								1	1					1		5
Pomatostomus superciliosus	White-browed Babbler																1		1		2
Rhipidura leucophrys leucophrys	Willie Wagtail						1	1					1	1	1	1	1				7
Smicrornis brevirostris	Weebill						1	1					1				1				4
Sturnus vulgaris vulgaris	Common Starling		1																		1
Zosterops lateralis	Silvereye																		1		1
Total		3	9	4	10	14	7	8	2	1	5	1	7	16	5	4	9	6	15	2	128

Appendix 2.
Condition categories and thresholds for the Eyre Peninsula Blue Gum *(Eucalyptus petiolaris*) Woodland Ecological Community.

Category and Rationale	Thresholds
A. Exceptional quality – larger patches with very high native species vegetation cover and very diverse understorey.	Patch size is ≥ 1ha; **AND** ≥70% of total vegetative cover[1] in the mid and ground layers are comprised of native species[2]; **AND** 18 or more native species from Appendix B, Table B1 are present in the mid and ground layers.
B. High quality – good native vegetation cover and good native species diversity in the understorey.	Patch size is ≥ 0.2 ha; **AND** ≥50% of total vegetative cover in the mid and ground layers are comprised of native species; **AND** 12 or more native species from Appendix B, Table B1 are present in the mid and ground layers.
C1. Medium quality – good native vegetation cover and diverse native species in the understorey.	Patch size is ≥ 0.2 ha; **AND** ≥50% of total vegetative cover in the mid and ground layers are comprised of native species; **AND** 4 or more native species from Appendix B, Table B1 are present in the mid and ground layers;
OR	
C2. Medium quality – patches with connectivity to other native vegetation remnants in the landscape.	Patch size is ≥ 0.2 ha; **AND** ≥30% of total vegetative cover in the mid and ground layers are comprised of native species; **AND** 4 or more native species from Appendix B, Table B1 are present in the mid and ground layers; **AND** The patch is contiguous with a native vegetation remnant (any native vegetation where cover in each layer present is dominated by native species) that is ≥1ha in area.
OR	
C3. Medium quality – patches that have large mature trees or trees with hollows (habitat)	Patch size is ≥ 0.2 ha; AND ≥30% of total vegetative cover in the mid and ground layers are comprised of native species; AND 4 or more native species from Appendix B, Table B1 are present in the mid and ground layers; AND The patch has at least one tree with hollows or at least one large tree (≥80cm dbh[3]) from the upper layer species list in Table B1. Where patches are ≥1 ha, a density of at least one mature tree or tree with hollows per hectare is required.

[1] Vegetative cover excludes mosses and lichens, patches of bare grounds, plant litter.
[2] Mid and ground layers exclude juvenile canopy species. This applies to categories A, B, C1, C2, and C3.
[3] dbh: diameter at breast height.

BDBSA Flora records within the Study area.

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Acacia ancistrophylla var. lissophylla	Hook-leaf Wattle			13/05/2004
Acacia ancistrophylla/sclerophylla	(blank)			1/10/2020
Acacia beckleri (NC)	Beckler's Rock Wattle			1/02/1990
Acacia beckleri ssp. beckleri	Beckler's Rock Wattle			24/09/2003
Acacia brachybotrya	Grey Mulga-bush			2/12/1999
Acacia burkittii	Pin-bush Wattle			9/11/2021
Acacia calamifolia	Wallowa			8/11/2021
Acacia calamifolia (NC)	Wallowa			13/05/2004
Acacia continua	Thorn Wattle			25/03/2014
Acacia cretacea	Chalky Wattle	EN	E	3/02/1962
Acacia cupularis	Cup Wattle			2/12/2002
Acacia enterocarpa	Jumping-jack Wattle	EN	E	9/11/2021
Acacia euthycarpa	Wallowa			24/09/2003
Acacia farinosa	Mealy Wattle			2/12/1999
Acacia gillii	Gill's Wattle			20/11/1998
Acacia hakeoides	Hakea Wattle			7/11/1998
Acacia halliana	Hall's Wattle			1/10/2020
Acacia halliana/microcarpa	(blank)			1/12/1999
Acacia hexaneura	Six-nerve Spine-bush		R	8/11/2021
Acacia ligulata	Umbrella Bush			13/05/2004
Acacia merrallii	Merrall's Wattle			8/11/2021
Acacia microcarpa	Manna Wattle			28/11/2002
Acacia notabilis	Notable Wattle			8/11/2021
Acacia nyssophylla	Spine Bush			18/07/1991
Acacia oswaldii	Umbrella Wattle			7/11/1998
Acacia paradoxa	Kangaroo Thorn			4/05/2012
Acacia praemorsa	Senna Wattle	VU	E	20/06/2018
Acacia pycnantha	Golden Wattle			24/07/2014
Acacia rhetinocarpa	Resin Wattle	VU	V	5/09/2006
Acacia rhigiophylla	Dagger-leaf Wattle		R	4/11/1998
Acacia rigens	Nealie			25/03/2014
Acacia rupicola	Rock Wattle			25/03/2014
Acacia sclerophylla var. sclerophylla	Hard-leaf Wattle			9/11/2021
Acacia sericophylla	Wirewood			9/11/2021
Acacia sp.	Wattle			9/11/2021
Acacia spinescens	Spiny Wattle			25/03/2014
Acacia wilhelmiana	Dwarf Nealie			26/03/2008
Acrotriche cordata	Blunt-leaf Ground-berry			30/10/1991
Acrotriche patula	Prickly Ground-berry			3/09/2016
Actinobole uliginosum	Flannel Cudweed			24/09/2003
Adenanthos terminalis	Yellow Gland-flower			3/10/2002
Adriana quadripartita	Coast Bitter-bush			26/11/1985
Agrostis avenacea var. avenacea (NC)	Common Blown-grass			7/11/1998

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Aira caryophyllea	Silvery Hair-grass			8/11/2021
Aira cupaniana	Small Hair-grass			24/09/2003
Aira sp.	Hair-grass			8/11/2021
Aizoon pubescens	Coastal Galenia			2/12/1999
Aizoon secundum	Galenia			9/11/2021
Alectryon oleifolius ssp. canescens	Bullock Bush			13/05/2004
Allocasuarina helmsii	Helm's Oak-bush			1/06/1941
Allocasuarina muelleriana ssp.	Common Oak-bush			25/03/2014
Allocasuarina muelleriana ssp. muelleriana	Common Oak-bush			9/11/1998
Allocasuarina pusilla	Dwarf Oak-bush			7/03/1991
Allocasuarina verticillata	Drooping Sheoak			25/03/2014
Aloe arborescens	(blank)			24/07/2014
Alyogyne hakeifolia	Hakea-leaf Hibiscus			1/10/1998
Alyogyne huegelii	Native Hibiscus			2/12/2002
Alyogyne huegelii (NC)	Native Hibiscus			25/03/2014
Alyxia buxifolia	Sea Box			2/09/2016
Amanita sp.	(blank)			29/06/2000
Amphibromus archeri	Pointed Swamp Wallaby-grass		R	29/09/1989
Amphibromus macrorhinus	Long-nosed Swamp Wallaby-grass		R	8/10/1990
Amphipogon caricinus var. caricinus	Long Grey-beard Grass			10/11/1998
Amyema melaleucae	Tea-tree Mistletoe			2/11/1998
Amyema miquelii	Box Mistletoe			1/02/1990
Amyema miraculosa ssp. boormanii	Fleshy Mistletoe			1/10/1998
Amyema sp.	Mistletoe			5/02/1984
Anagallis sp.	(blank)			8/11/2021
Androcalva tatei	Trailing Commersonia			3/10/2002
Angianthus preissianus	Salt Angianthus			15/11/1990
Angianthus tomentosus	Hairy Angianthus			16/12/1992
Anthocercis anisantha ssp.	Spiny Ray-flower			1/02/1990
Anthocercis anisantha ssp. collina	Gawler Ranges Ray-flower			21/10/1998
Aotus subspinescens	Mallee Aotus			10/11/1998
Arctotheca calendula	Cape Weed			9/11/2021
Argentipallium obtusifolium	Blunt Everlasting			13/11/1990
Argyranthemum frutescens ssp. foeniculaceum	Teneriffe Daisy			29/09/1989
Aristida behriana	Brush Wire-grass			29/11/2002
Aristida contorta	Curly Wire-grass			24/09/2003
Aristida personata	Purple Wire-grass			24/01/1996
Aristida sp.	Three-awn/Wire-grass			8/11/2021
Arrhenia sp.	(blank)			22/07/2016
Arthropodium minus	Small Vanilla-lily			16/09/2000
Asparagus asparagoides (NC)	Bridal Creeper			25/10/2000
Asparagus asparagoides f.	Bridal Creeper			25/03/2014
Asparagus asparagoides f. asparagoides	Bridal Creeper			8/09/2010

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Asperula conferta	Common Woodruff			2/11/1998
Asphodelus fistulosus	Onion Weed			9/11/2021
Asplenium subglandulosus	Blanket Fern			24/09/2003
Asteridea athrixioides	Wirewort			21/10/1998
Asteridea athrixioides f. athrixioides (NC)	Wirewort			2/11/1998
Atriplex acutibractea ssp. acutibractea	Pointed Saltbush			7/11/1998
Atriplex acutibractea ssp. karoniensis	Pointed Saltbush			6/11/1998
Atriplex paludosa ssp.	Marsh Saltbush			5/02/1984
Atriplex semibaccata	Berry Saltbush			9/11/2021
Atriplex sp.	Saltbush			26/11/1985
Atriplex stipitata	Bitter Saltbush			1/10/2020
Atriplex suberecta	Lagoon Saltbush			13/05/2004
Atriplex vesicaria	Bladder Saltbush			8/11/2021
Atriplex vesicaria ssp. (NC)	Bladder Saltbush			1/12/1999
Austrostipa acrociliata	Graceful Spear-grass			8/11/2021
Austrostipa blackii	Crested Spear-grass			10/11/1998
Austrostipa drummondii	Cottony Spear-grass			9/11/2021
Austrostipa elegantissima	Feather Spear-grass			9/11/2021
Austrostipa eremophila	Rusty Spear-grass			8/11/2021
Austrostipa exilis	Heath Spear-grass			10/11/1998
Austrostipa hemipogon	Half-beard Spear-grass			8/11/2021
Austrostipa hemipogon/mollis	(blank)			15/10/1998
Austrostipa macalpinei	Annual Spear-grass			7/11/1998
Austrostipa mollis	Soft Spear-grass			6/11/1998
Austrostipa mundula	Neat Spear-grass			6/11/1998
Austrostipa nitida	Balcarra Spear-grass			24/11/2009
Austrostipa nodosa	Tall Spear-grass			10/11/1998
Austrostipa platychaeta	Flat-awn Spear-grass			3/12/2002
Austrostipa puberula	Fine-hairy Spear-grass			7/11/1998
Austrostipa scabra group	Falcate-awn Spear-grass			1/10/2020
Austrostipa scabra ssp.	Rough Spear-grass			8/11/2021
Austrostipa scabra ssp. falcata	Slender Spear-grass			9/11/2021
Austrostipa scabra ssp. scabra	Rough Spear-grass			9/11/2021
Austrostipa sp.	Spear-grass			9/11/2021
Austrostipa tenuifolia	(blank)		R	1/12/1954
Austrostipa trichophylla	(blank)			9/11/1998
Avellinia festucoides	Avellinia			24/09/2003
Avena barbata	Bearded Oat			9/11/2021
Avena fatua	Wild Oat			1/01/1987
Avena sp.	Oat			2/12/1999
Bellardia latifolia	Red Bartsia			4/11/1998
Bertya tasmanica ssp. vestita	Mitchell's Bertya			1/12/2002
Beyeria lechenaultii	Pale Turpentine Bush			1/10/2020
Billardiera cymosa (NC)	Sweet Apple-berry			4/12/2002

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Billardiera cymosa ssp. cymosa	Sweet Apple-berry			8/11/2021
Billardiera cymosa ssp. pseudocymosa	Sweet Apple-berry			30/10/1983
Billardiera sericophora	Silky Apple-berry			2/12/2002
Billardiera sp.	Apple-berry			16/12/1992
Billardiera versicolor	Yellow-flower Apple-berry			13/11/1990
Blennospora drummondii	Dwarf Button-flower			14/08/2008
Boronia coerulescens ssp. coerulescens	Blue Boronia			3/10/2002
Boronia inornata ssp. leptophylla	Dryland Boronia			9/11/2021
Brachyscome ciliaris var. ciliaris	Variable Daisy			7/11/1998
Brachyscome ciliaris var. lanuginosa	Woolly Variable Daisy			12/04/1992
Brachyscome goniocarpa	Dwarf Daisy			1/02/1990
Brachyscome lineariloba	Hard-head Daisy			14/08/2008
Brachyscome perpusilla	Tiny Daisy			2/09/2016
Brachyscome sp.	Native Daisy			8/11/2021
Brassica sp.	(blank)			9/11/2021
Brassica tournefortii	Wild Turnip			9/11/2021
Briza minor	Lesser Quaking-grass			6/11/1998
Bromus diandrus	Great Brome			10/11/1998
Bromus diandrus (NC)	Great Brome			25/10/2000
Bromus madritensis	Compact Brome			1/02/1990
Bromus rubens	Red Brome			24/09/2003
Bromus sp.	Brome			2/10/1990
Buglossoides arvensis	Sheepweed			1/02/1990
Bulbine semibarbata	Small Leek-lily			24/09/2003
Bupleurum semicompositum	Hare's Ear			1/10/1998
Bursaria spinosa ssp.	Bursaria			25/03/2014
Bursaria spinosa ssp. spinosa	Sweet Bursaria			24/09/2003
Caladenia brumalis	Winter Spider-orchid	VU	V	1/02/1990
Caladenia capillata	Wispy Spider-orchid			6/09/2000
Caladenia cardiochila	Heart-lip Spider-orchid			21/09/1990
Caladenia carnea	Pink Fingers			1/02/1990
Caladenia clavula	Brown-club Spider Orchid			10/11/1998
Caladenia fuscata	Dusky Caladenia			15/09/2000
Caladenia septuosa	Eyre Peninsula Spider-orchid			24/09/2003
Caladenia sp.	Spider-orchid			7/03/1991
Caladenia stricta	Upright Caladenia			2/10/1990
Caladenia tentaculata	King Spider-orchid			21/10/1998
Caladenia verrucosa	Yellow-club Spider-orchid			26/11/1985
Caladenia White spider orchid group	White Spider-orchid			1/10/1998
Caladenia zephyra	West Wind Spider-orchid		V	1/09/2016
Calandrinia calyptrata	Pink Purslane			24/09/2003
Calandrinia corrigioloides	Strap Purslane			24/09/2003
Calandrinia eremaea	Dryland Purslane			5/09/2006
Calandrinia granulifera	Pigmy Purslane			16/10/2007

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Calandrinia sp.	Purslane/Parakeelya			20/09/1990
Callistemon rugulosus	Scarlet Bottlebrush			8/11/2021
Callistemon rugulosus var. (NC)	Scarlet Bottlebrush			2/12/1999
Callitris glaucophylla	White Cypress-pine			14/09/1974
Callitris gracilis	Southern Cypress Pine			25/03/2014
Callitris sp.	Native Pine			20/11/1998
Callitris sp. Limestone (M.D.Crisp 11785)	Limestone Cypress Pine			7/03/1991
Callitris verrucosa	Scrub Cypress Pine			9/11/2021
Calotis cymbacantha	Showy Burr-daisy			9/11/2021
Calotis erinacea	Tangled Burr-daisy			23/10/1998
Calotis hispidula	Hairy Burr-daisy			6/11/1998
Calytrix involucrata	Cup Fringe-myrtle			9/11/2021
Calytrix sp.	Fringe-myrtle			25/03/2014
Calytrix tetragona	Common Fringe-myrtle			25/03/2014
Carduus tenuiflorus	Slender Thistle			27/10/1983
Carex breviculmis	Short-stem Sedge			5/11/1998
Carpobrotus modestus	Inland Pigface			10/11/1998
Carpobrotus modestus/rossii	Native Pigface			16/12/1992
Carpobrotus rossii	Native Pigface			5/11/1998
Carpobrotus rossii (NC)	Native Pigface			7/11/1998
Carpobrotus sp.	Pigface			18/07/1991
Carrichtera annua	Ward's Weed			9/11/2021
Carthamus lanatus	Saffron Thistle			8/11/2021
Cassinia arcuata	Drooping Cassinia			26/03/2008
Cassinia arcuata (NC)	Drooping Cassinia			26/03/2008
Cassinia complanata	Sticky Cassinia			20/06/2018
Cassinia uncata	(blank)			5/11/1998
Cassinia uncata (NC)	Sticky Cassinia			7/11/1998
Cassytha glabella f. dispar	Slender Dodder-laurel			1/10/2020
Cassytha melantha	Coarse Dodder-laurel			9/11/2021
Cassytha peninsularis	Peninsula Dodder-laurel			25/03/2014
Cassytha pubescens	Downy Dodder-laurel			16/12/1992
Cassytha sp.	Dodder-laurel			9/11/2021
Casuarina glauca	Grey Buloak			1/10/2004
Casuarina pauper	Black Oak			13/05/2004
Casuarinaceae sp.	Sheoak Family			2/12/1999
Caustis pentandra	Thick Twist-rush			13/07/1993
Cenchrus clandestinus	Kikuyu			24/07/2014
Cenchrus setaceus	Fountain Grass			2/12/1999
Centaurea melitensis	Malta Thistle			8/11/2021
Centaurea solstitialis	St Barnaby's Thistle			8/11/2021
Centaurea sp.	Centaury			8/11/2021
Centaurium erythraea	Common Centaury			8/11/2021
Centaurium tenuiflorum	Branched Centaury			25/03/2014

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Centaurium tenuiflorum (NC)	Branched Centaury			4/11/1998
Centipeda cunninghamii	Common Sneezeweed			8/11/2021
Centrolepis aristata	Pointed Centrolepis			24/09/2003
Centrolepis cephaloformis ssp. cephaloformis	Cushion Centrolepis		R	18/10/1998
Centrolepis polygyna	Wiry Centrolepis			24/09/2003
Centrolepis strigosa ssp. strigosa	Hairy Centrolepis			24/09/2003
Ceratogyne obionoides	Wingwort		R	18/09/2008
Chamelaucium uncinatum	Geraldton Wax			9/10/2013
Cheilanthes austrotenuifolia	Annual Rock-fern			24/09/2003
Cheilanthes distans	Bristly Cloak-fern			1/10/1998
Cheilanthes lasiophylla	Woolly Cloak-fern			21/10/1998
Cheilanthes sieberi ssp.	Narrow Rock-fern			25/03/2014
Cheilanthes sieberi ssp. sieberi	Narrow Rock-fern			1/10/1998
Cheiranthera alternifolia	Hand-flower			2/11/1998
Chenopodium curvispicatum	Cottony Goosefoot			9/11/2021
Chenopodium desertorum ssp.	Desert Goosefoot			18/07/1991
Chenopodium desertorum ssp. anidiophyllum	Mallee Goosefoot			8/11/2021
Chenopodium desertorum ssp. desertorum	Frosted Goosefoot			15/08/2013
Chenopodium desertorum ssp. microphyllum	Small-leaf Goosefoot			8/11/2021
Chenopodium desertorum ssp. rectum	Erect Goosefoot			12/04/1992
Chloris truncata	Windmill Grass			8/11/2021
Chondrilla juncea	Skeleton Weed			20/11/1998
Choretrum chrysanthum	Yellow Sour-bush		R	14/12/2022
Choretrum chrysanthum/glomeratum	Sour-bush			1/12/2002
Choretrum glomeratum	White Sour-bush			28/11/2002
Choretrum sp.	Sour-bush			18/06/1986
Chrysanthemoides monilifera ssp. monilifera	Boneseed			30/06/2008
Chrysocephalum apiculatum	Common Everlasting			9/11/2021
Chrysocephalum apiculatum (NC)	Common Everlasting			20/11/1998
Chrysocephalum baxteri	White Everlasting			7/11/1998
Chrysocephalum semipapposum	Clustered Everlasting			8/11/2021
Chrysocephalum sp.	Everlasting			8/11/2021
Chthonocephalus pseudevax	Ground-heads			5/09/2006
Citrullus colocynthis	Colocynth			31/03/1965
Clematis microphylla	Old Man's Beard			25/03/2014
Clematis microphylla var. microphylla (NC)	Old Man's Beard			28/11/2002
Clematis sp.	(blank)			31/10/1986
Comesperma calymega	Blue-spike Milkwort			28/11/2002
Comesperma scoparium	Broom Milkwort			3/10/2002
Comesperma volubile	Love Creeper			24/09/2003
Commersonia tatei (NC)	Trailing Commersonia			7/11/1998

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Compositae sp.	Daisy Family			2/12/1999
Conospermum patens	Slender Smoke-bush			7/11/1998
Convolvulus angustissimus	Narrow-leaf Bindweed			8/11/2021
Convolvulus angustissimus ssp. peninsularum (NC)	Narrow-leaf Bindweed			1/10/1998
Convolvulus erubescens (NC)	Australian Bindweed			2/11/1998
Convolvulus eyreanus (NC)	Silver Bindweed			12/04/1992
Convolvulus remotus	Grassy Bindweed			7/11/1998
Correa backhouseana var. coriacea	Thick-leaf Correa			3/12/2002
Correa reflexa (NC)	Common Correa			28/11/2002
Correa reflexa var.	(blank)			25/03/2014
Correa sp.	Correa			19/06/1986
Cortinarius sp.	(blank)			22/07/2016
Crassula closiana	Stalked Crassula			20/08/2007
Crassula colligata ssp. lamprosperma	(blank)			24/09/2003
Crassula colorata var.	Dense Crassula			24/09/2003
Crassula colorata var. acuminata	Dense Crassula			10/11/1998
Crassula colorata var. colorata	Dense Crassula			10/11/1998
Crassula decumbens var. decumbens	Spreading Crassula			6/11/1998
Crassula exserta	Large-fruit Crassula		R	19/10/1998
Crassula sieberiana ssp. tetramera (NC)	Australian Stonecrop			10/11/1998
Crassula sp.	Crassula/Stonecrop			8/11/2021
Cratystylis conocephala	Bluebush Daisy			23/10/1998
Critesion sp. (NC)	Barley-grass			2/10/1990
Cryptandra amara var. (NC)	Cryptandra			15/11/1990
Cryptandra amara var. amara (NC)	Spiny Cryptandra			13/05/2004
Cryptandra amara var. floribunda (NC)	Pretty Cryptandra			10/11/1998
Cryptandra propinqua	Silky Cryptandra			14/07/1993
Cryptandra sp.	Cryptandra			4/06/1986
Cryptandra sp. Floriferous (W.R.Barker 4131)	Pretty Cryptandra			27/08/1995
Cryptandra sp. Floriferous (W.R.Barker 4131) (NC)	Pretty Cryptandra			14/10/1998
Cryptandra tomentosa (NC)	Heath Cryptandra			27/08/1995
Cucumis myriocarpus ssp. myriocarpus	Paddy Melon			8/11/2021
Cullen discolor	Prostrate Scurf-pea			24/11/2009
Cymbopogon ambiguus	Lemon-grass			25/03/2014
Cymbopogon obtectus	Silky-head Lemon-grass			15/09/1974
Cynanchum viminale ssp. australe	Caustic Bush			22/07/1985
Cynodon dactylon (NC)	Couch			3/11/1998
Cynodon dactylon var. dactylon	Couch			24/07/2014
Cyperus gymnocaulos	Spiny Flat-sedge			24/07/2014
Cyphanthera myosotidea	Small-leaf Ray-flower			3/10/2002
Cyrtostylis robusta	Robust Gnat-orchid			1/02/1990
Dampiera dysantha	Shrubby Dampiera			9/06/1984

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Dampiera lanceolata var. lanceolata	Grooved Dampiera			2/12/2002
Dampiera rosmarinifolia	Rosemary Dampiera			9/11/2021
Danthonia sp. (NC)	Wallaby-grass			13/05/2004
Daucus glochidiatus	Native Carrot			24/09/2003
Daviesia aphylla	Dryland Bitter-pea			4/11/1998
Daviesia arenaria	Sand Bitter-pea			23/05/1990
Daviesia benthamii ssp. (NC)	Spiny Bitter-pea			13/05/2004
Daviesia benthamii ssp. humilis (NC)	Mallee Bitter-pea		R	4/10/2002
Daviesia brevifolia	Leafless Bitter-pea			4/06/1986
Daviesia devito	Mallee Bitter-pea		R*	30/10/1986
Daviesia genistifolia	Broom Bitter-pea			31/10/1986
Daviesia pectinata	Zig-zag Bitter-pea		R	28/11/2012
Daviesia ulicifolia ssp. aridicola	Gorse Bitter-pea			13/10/1984
Dianella brevicaulis	Short-stem Flax-lily			9/11/2021
Dianella brevicaulis/revoluta var.	Black-anther Flax-lily			11/04/1992
Dianella revoluta var.	(blank)			4/12/2002
Dianella revoluta var. revoluta	Black-anther Flax-lily			9/11/2021
Dianella sp.	Flax-lily			2/12/1999
Dichondra repens	Kidney Weed			25/03/2014
Dicrastylis verticillata	Whorled Sand-sage			9/11/2021
Dillwynia hispida	Red Parrot-pea			1/02/1990
Dillwynia sparsifolia	Sparse-leaf Parrot-pea			1/10/2020
Disphyma crassifolium ssp. clavellatum	Round-leaf Pigface			3/12/2002
Dittrichia graveolens	Stinkweed			13/05/2004
Diuris pardina	Spotted Donkey-orchid			2/11/1998
Diuris pardina (NC)	Spotted Donkey-orchid			2/11/1998
Dodonaea baueri	Crinkled Hop-bush			8/11/2021
Dodonaea bursariifolia	Small Hop-bush			9/11/2021
Dodonaea hexandra	Horned Hop-bush			1/10/2020
Dodonaea sp.	Hop-bush			9/11/2021
Dodonaea stenozyga	Desert Hop-bush			9/11/2021
Dodonaea viscosa ssp.	Sticky Hop-bush			8/11/2021
Dodonaea viscosa ssp. angustissima	Narrow-leaf Hop-bush			26/03/2008
Dodonaea viscosa ssp. spatulata	Sticky Hop-bush			25/03/2014
Drosera glanduligera	Scarlet Sundew			24/09/2003
Drosera hookeri	Pale Sundew			21/10/1998
Drosera macrantha ssp. planchonii	Climbing Sundew			24/09/2003
Drosera peltata (NC)	Pale Sundew			21/10/1998
Drosera peltata s.str.	Swamp Sundew			3/09/2016
Dysphania melanocarpa	Black Crumbweed			8/11/2021
Echium plantagineum	Salvation Jane			25/03/2014
Ehrharta calycina	Perennial Veldt Grass			25/10/2000
Ehrharta longiflora	Annual Veldt Grass			5/11/1998
Ehrharta sp.	Veldt Grass			7/05/1981

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Einadia nutans ssp.	Climbing Saltbush			26/11/1985
Einadia nutans ssp. nutans	Climbing Saltbush			8/11/2021
Elymus scaber var. scaber (NC)	Native Wheat-grass			4/11/1998
Enchylaena tomentosa var.	Ruby Saltbush			9/11/2021
Enchylaena tomentosa var. tomentosa	Ruby Saltbush			9/11/2021
Enneapogon nigricans	Black-head Grass			1/10/1998
Enneapogon sp.	Bottle-washers/Nineawn			2/12/1999
Eragrostis cilianensis	Stink Grass			22/04/1955
Eragrostis dielsii	Mulka			1/10/1998
Eremophila alternifolia	Narrow-leaf Emubush			26/03/2008
Eremophila behriana	Rough Emubush			9/11/2021
Eremophila crassifolia	Thick-leaf Emubush			1/12/2002
Eremophila deserti	Turkey-bush			21/10/1998
Eremophila gibbifolia	Coccid Emubush		R	2/09/2016
Eremophila glabra ssp.	Tar Bush			8/11/2021
Eremophila glabra ssp. glabra	Tar Bush			25/03/2014
Eremophila longifolia	Weeping Emubush			13/05/2004
Eremophila scoparia	Broom Emubush			13/05/2004
Eremophila subfloccosa ssp. lanata	Woolly Emubush			12/04/1992
Eremophila weldii	Purple Emubush			23/10/1998
Erigeron bonariensis	Flax-leaf Fleabane			8/11/2021
Erigeron sp. (NC)	Fleabane			8/11/2021
Eriochilus collinus ssp. sericeus	Parson's Bands			23/03/2013
Eriochiton sclerolaenoides	Woolly-fruit Bluebush			18/10/1998
Eriochlamys behrii	Woolly Mantle			1/11/1963
Erodium botrys	Long Heron's-bill			18/10/1998
Erodium cicutarium	Cut-leaf Heron's-bill			1/10/1998
Erodium crinitum	Blue Heron's-bill			6/11/1998
Erodium sp.	Heron's-bill/Crowfoot			24/09/2003
Eucalyptus brachycalyx	Gilja			27/08/2014
Eucalyptus cajuputea	Green Mallee			5/01/1996
Eucalyptus calcareana	Nundroo Mallee			28/12/1989
Eucalyptus calycogona ssp.	Square-fruit Mallee			9/11/2021
Eucalyptus calycogona ssp. calycogona	Square-fruit Mallee			8/11/2021
Eucalyptus calycogona ssp. spaffordii	Spafford's Square-fruit Mallee		E	17/10/1977
Eucalyptus calycogona ssp. trachybasis	Square-fruit Mallee			15/07/1993
Eucalyptus calycogona var. calycogona (NC)	Square-fruit Mallee			13/05/2004
Eucalyptus camaldulensis ssp.	River Red Gum			20/11/1998
Eucalyptus cretata	Darke Peak Mallee		R	14/02/2002
Eucalyptus diversifolia (NC)	Coastal White Mallee			26/10/2000
Eucalyptus diversifolia ssp. diversifolia	Coastal White Mallee			28/06/1959
Eucalyptus dumosa	White Mallee			9/11/2021
Eucalyptus dumosa complex	White Mallee			2/06/1992

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Eucalyptus dumosa complex -- Eucalyptus phenax ssp.	White Mallee			28/11/2002
Eucalyptus gracilis	Yorrell			26/03/2008
Eucalyptus incrassata	Ridge-fruited Mallee			9/11/2021
Eucalyptus leptophylla	Narrow-leaf Red Mallee			9/11/2021
Eucalyptus leptophylla (NC)	Narrow-leaf Red Mallee			3/12/2002
Eucalyptus leucoxylon ssp. leucoxylon	South Australian Blue Gum			2/10/1944
Eucalyptus odorata	Peppermint Box			25/03/2014
Eucalyptus odorata (NC)	Peppermint Box			28/11/2002
Eucalyptus oleosa (NC)	Red Mallee			13/05/2004
Eucalyptus oleosa ssp.	(blank)			9/11/2021
Eucalyptus oleosa ssp. ampliata	Red Mallee			29/08/1983
Eucalyptus oleosa ssp. oleosa	Red Mallee			8/11/2021
Eucalyptus peninsularis	Merrit			14/08/2013
Eucalyptus petiolaris	Eyre Peninsula Blue Gum			25/03/2014
Eucalyptus phenax (NC)	Sessile-fruit White Mallee			4/12/2002
Eucalyptus phenax ssp.	(blank)			25/03/2014
Eucalyptus phenax ssp. phenax	White Mallee			1/10/2020
Eucalyptus pileata	Capped Mallee			25/10/2000
Eucalyptus porosa	Mallee Box			26/03/2008
Eucalyptus rugosa	Coastal White Mallee			30/10/1983
Eucalyptus socialis (NC)	Beaked Red Mallee			13/05/2004
Eucalyptus socialis ssp.	Beaked Red Mallee			25/03/2014
Eucalyptus socialis ssp. socialis	Beaked Red Mallee			9/11/2021
Eucalyptus socialis ssp. victoriensis	Victoria Desert Beaked Red Mallee			30/07/2014
Eucalyptus socialis ssp. viridans	Beaked Red Mallee			7/05/1987
Eucalyptus sp.	(blank)			8/11/2021
Eucalyptus yalatensis	Yalata Mallee			7/02/2016
Eucalyptus yumbarrana	Yumbarra Mallee			8/06/1970
Euchiton involucratus (NC)	Star Cudweed			1/02/1990
Euchiton sphaericus	Annual Cudweed			7/11/1998
Euphorbia sp. (NC)	Spurge			25/10/2000
Euphorbia tannensis ssp. eremophila	Desert Spurge			1/10/1998
Euphorbia terracina	False Caper			19/10/1998
Eutaxia diffusa	Large-leaf Eutaxia			5/11/1998
Eutaxia microphylla	Common Eutaxia			8/11/2021
Eutaxia sp.	Eutaxia			31/10/1986
Exocarpos aphyllus	Leafless Cherry			9/11/2021
Exocarpos cupressiformis	Native Cherry			14/09/1974
Exocarpos sp.	Native Cherry/Ballart			5/02/1984
Exocarpos sparteus	Slender Cherry			25/03/2014
Exocarpos syrticola	Coast Cherry			2/12/1999
Gahnia deusta	Limestone Saw-sedge			25/03/2014
Gahnia lanigera	Black Grass Saw-sedge			9/11/2021
Galium gaudichaudii (NC)	Rough Bedstraw			6/11/1998

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Galium leptogonium	Reflexed Bedstraw			6/11/1998
Galium murale	Small Bedstraw			6/11/1998
Gazania linearis	Gazania			11/02/2011
Gazania sp.	Gazania			1/01/2010
Geijera linearifolia	Sheep Bush			13/05/2004
Genoplesium nigricans	Black Midge-orchid			18/07/1991
Geococcus pusillus	Earth Cress			2/09/2016
Geranium retrorsum	Grassland Geranium			10/11/1998
Geranium solanderi	Austral Geranium			1/02/1990
Glischrocaryon angustifolium	Golden Pennants			1/02/1990
Glischrocaryon behrii	Golden Pennants			26/10/2000
Glischrocaryon flavescens	Yellow Pennants			1/10/1998
Glischrocaryon sp.	Golden Pennants			17/10/1983
Glossostigma cleistanthum	Spoon Mud-mat			23/09/1978
Glossostigma sp.	Mud-mat			1/02/1990
Glycine rubiginosa	Twining Glycine			1/10/1998
Gnephosis drummondii	Slender Golden-tip			23/05/1990
Gnephosis tenuissima	Dwarf Golden-tip			25/08/1983
Gonocarpus elatus	Hill Raspwort			29/10/1991
Gonocarpus mezianus	Broad-leaf Raspwort			25/03/2014
Gonocarpus sp.	Raspwort			8/11/2021
Goodenia arguta	Toothed Velleia			1/02/1990
Goodenia benthamiana	Bentham's Goodenia		R	8/11/2021
Goodenia blackiana	Native Primrose			18/07/1991
Goodenia connata	Cup Velleia			7/11/1998
Goodenia havilandii	Hill Goodenia			24/09/2003
Goodenia ovata	Hop Goodenia			2/12/1999
Goodenia pinnatifida	Cut-leaf Goodenia			6/11/1998
Goodenia pusilliflora	Small-flower Goodenia			8/11/2021
Goodenia quasilibera	(blank)			10/11/1998
Goodenia robusta	Woolly Goodenia			30/08/2007
Goodenia varia	Sticky Goodenia			3/12/2002
Goodenia willisiana	Silver Goodenia			9/11/2021
Goodia medicaginea	Western Golden-tip			1/10/1998
Gramineae sp.	Grass Family			2/12/1999
Grammosolen dixonii	(blank)			13/10/1984
Grevillea aspera	Rough Grevillea			24/09/2003
Grevillea dilatata	Holly-leaf Grevillea			21/09/1988
Grevillea huegelii	Comb Grevillea			9/11/2021
Grevillea ilicifolia complex	Holly-leaf Grevillea			28/11/2002
Grevillea ilicifolia ssp. ilicifolia	Holly-leaf Grevillea			12/09/1989
Grevillea ilicifolia var. ilicifolia (NC)	Holly-leaf Grevillea			3/12/2002
Grevillea pterosperma	Dune Grevillea			3/10/2002
Gyrostemon australasicus	Buckbush Wheel-fruit			3/10/2002

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Gyrostemon ramulosus	Bushy Wheel-fruit			27/08/2002
Gyrostemon thesioides	Broom Wheel-fruit			12/09/1989
Haeckeria cassiniiformis	Dogwood Haeckeria		R	16/12/1992
Hakea cycloptera	Elm-seed Hakea			25/03/2014
Hakea francisiana	Bottlebrush Hakea			1/12/2002
Hakea leucoptera ssp. leucoptera	Silver Needlewood			24/09/2003
Hakea mitchellii	Heath Needlebush			1/12/1999
Hakea sp.	Hakea/Needlewood			9/11/2021
Hakea vittata	Limestone Needlebush			1/02/1990
Halgania andromedifolia	Scented Blue-flower			4/12/2002
Halgania cyanea	Rough Blue-flower			25/03/2014
Halgania sp.	Blue-flower			17/10/1983
Haloragis acutangula f.	Smooth Raspwort			15/07/1991
Haloragis aspera	Rough Raspwort			5/11/1998
Haloragis odontocarpa f. pterocarpa	Mulga Nettle			6/02/1984
Helianthus annuus	Sunflower			24/07/2014
Helichrysum leucopsideum	Satin Everlasting			9/11/2021
Helichrysum sp.	Everlasting			26/11/1985
Heliotropium asperrimum	Rough Heliotrope			22/11/1952
Hibbertia devitata	Smooth Guinea-flower			3/12/2002
Hibbertia paeninsularis	Peninsula Guinea-flower			6/11/1998
Hibbertia riparia	Bristly Guinea-flower			25/03/2014
Hibbertia riparia (NC)	Guinea-flower			7/11/1998
Hibbertia sp.	Guinea-flower			9/08/1983
Hibbertia virgata	Twiggy Guinea-flower			3/12/2002
Homoranthus homoranthoides	Port Lincoln Ground-myrtle			18/11/1983
Homoranthus wilhelmii	Wilhelm's Homoranthus			3/10/2002
Hordeum distichon	(blank)			8/11/2021
Hordeum glaucum	Blue Barley-grass			13/05/2004
Hordeum leporinum	Wall Barley-grass			14/10/1998
Hordeum vulgare	Barley			9/11/2021
Hordeum vulgare ssp. (NC)	(blank)			1/12/1999
Hyalosperma demissum	Dwarf Sunray			24/09/2003
Hyalosperma glutinosum ssp. glutinosum	Golden Sunray			14/08/2008
Hyalosperma semisterile	Orange Sunray			2/09/2016
Hydrocotyle callicarpa	Tiny Pennywort			24/09/2003
Hydrocotyle intertexta	Buttercup Pennywort			24/09/2003
Hydrocotyle rugulosa	Mallee Pennywort			2/09/2016
Hypochaeris glabra	Smooth Cat's Ear			25/03/2014
Hypochaeris radicata	Rough Cat's Ear			6/11/1998
Hypochaeris sp.	Cat's Ear			8/11/2021
Hypoxis sp.	Yellow Star-lily			18/07/1991
Hysterobaeckea behrii	Silver Broombush			9/11/2021
Indigofera australis ssp. hesperia	Austral Indigo			5/09/2006

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Indigofera helmsii	Helm's Indigo			25/03/2014
Indigofera sp.	Indigo			12/04/1992
Isoetopsis graminifolia	Grass Cushion			1/02/1990
Isolepis australiensis	Southern Club-rush			1/02/1990
Isolepis cernua	Nodding Club-rush			21/10/1998
Isolepis congrua	Slender Club-rush			1/10/1998
Isolepis hookeriana	Grassy Club-rush			6/11/2011
Isolepis marginata	Little Club-rush			7/11/1998
Isolepis platycarpa	Flat-fruit Club-rush			6/11/2011
Isolepis trachysperma	Grassy Club-rush			1/10/1998
Isotoma petraea	Rock Isotome			1/10/1998
Juncus aridicola	Inland Rush			14/07/1993
Juncus bufonius	Toad Rush			1/10/1998
Juncus kraussii	Sea Rush			2/06/1992
Juncus pallidus	Pale Rush			8/11/2021
Juncus sp.	Rush			8/11/2021
Juncus subsecundus	Finger Rush			18/09/2000
Kennedia prostrata	Scarlet Runner			14/09/1974
Lachnagrostis aemula	Blown-grass			13/07/1993
Lachnagrostis aemula (NC)	Blown-grass			10/11/1998
Lachnagrostis filiformis	Common Blown-grass			23/10/1998
Lactuca serriola (NC)	Prickly Lettuce			6/11/1998
Lactuca serriola f.	Prickly Lettuce			8/11/2021
Lagenophora gunniana	Coarse Bottle-daisy			3/09/2016
Lasiopetalum baueri	Slender Velvet-bush			25/03/2014
Lasiopetalum behrii	Pink Velvet-bush			9/11/2021
Lawrencia glomerata	Clustered Lawrencia			12/04/1992
Leiocarpa tomentosa	Woolly Plover-daisy			26/11/1985
Leontodon rhagadioloides	Cretan Weed			21/10/1998
Lepidium africanum	Common Peppercress			8/11/2021
Lepidium phlebopetalum	Veined Peppercress			11/10/1969
Lepidosperma carphoides	Black Rapier-sedge			10/11/1998
Lepidosperma concavum (NC)	Spreading Sword-sedge			4/11/1998
Lepidosperma congestum	(blank)			1/08/2003
Lepidosperma congestum (NC)	Clustered Sword-sedge			23/10/1998
Lepidosperma laeve	(blank)			7/11/1998
Lepidosperma semiteres	Wire Rapier-sedge			26/11/1985
Lepidosperma sp.	Sword-sedge/Rapier-sedge			9/11/2021
Lepidosperma viscidum	Sticky Sword-sedge			9/11/2021
Leptorhynchos elongatus	Lanky Buttons		E	29/09/1989
Leptorhynchos tetrachaetus	Little Buttons			1/11/1963
Leptospermum coriaceum	Dune Tea-tree			1/12/2002
Leucopogon sp.	Beard-heath			1/02/1990
Levenhookia dubia	Hairy Stylewort			2/09/2016

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Levenhookia stipitata	(blank)		R	1/10/1998
Lichen sp.	(blank)			10/11/1998
Limonium companyonis	Sea-lavender			1/05/2010
Limonium sinuatum	Notch-leaf Sea-lavender			1/10/2015
Limonium sp.	Sea-lavender			2/12/1999
Limosella granitica	Granite Mudwort	VU	V	1/10/1998
Limosella sp.	Mudwort			1/02/1990
Linum marginale	Native Flax			10/11/1998
Lobelia cleistogamoides	(blank)		R	6/11/1998
Lobelia gibbosa	Tall Lobelia			8/07/1985
Lobelia gibbosa (NC)	Tall Lobelia			10/11/1998
Logania crassifolia	Coast Logania			4/06/1986
Logania linifolia	Flax-leaf Logania			7/11/1998
Logania ovata	Oval-leaf Logania			1/09/2016
Lolium rigidum	Wimmera Ryegrass			25/10/2000
Lolium sp.	Ryegrass			8/11/2021
Lomandra collina	Sand Mat-rush			3/12/2002
Lomandra effusa	Scented Mat-rush			9/11/2021
Lomandra juncea	Desert Mat-rush			1/07/1993
Lomandra leucocephala ssp. robusta	Woolly Mat-rush			9/11/2021
Lomandra micrantha ssp.	Small-flower Mat-rush			18/07/1985
Lomandra micrantha ssp. micrantha	Small-flower Mat-rush			10/11/1998
Lomandra multiflora ssp. dura	Hard Mat-rush			1/10/2020
Lomandra sp.	Mat-rush			2/12/1999
Lotus cruentus	Red-flower Lotus			2/10/1958
Lycium australe	Australian Boxthorn			4/11/1998
Lycium ferocissimum	African Boxthorn			25/03/2014
Lysiana exocarpi ssp. exocarpi	Harlequin Mistletoe			2/06/1992
Lysimachia arvensis	Pimpernel			24/09/2003
Lythrum hyssopifolia	Lesser Loosestrife			7/11/1998
Machaerina juncea	Bare Twig-rush			25/03/2014
Maireana brevifolia	Short-leaf Bluebush			9/11/2021
Maireana enchylaenoides	Wingless Fissure-plant			24/09/2003
Maireana erioclada	Rosy Bluebush			4/11/1998
Maireana pentatropis	Erect Mallee Bluebush			3/12/2002
Maireana pyramidata	Black Bluebush			8/11/2021
Maireana radiata	Radiate Bluebush			15/10/1998
Maireana rohrlachii	Rohrlach's Bluebush		R	7/11/1998
Maireana sedifolia	Bluebush			13/05/2004
Maireana sp.	Bluebush/Fissure-plant			20/09/1990
Maireana suaedifolia	Lax Bluebush		R	1/01/2010
Maireana trichoptera	Hairy-fruit Bluebush			8/11/2021
Marrubium vulgare	Horehound			8/11/2021
Medicago minima	Little Medic			10/11/1998

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Medicago polymorpha	Burr-medic			2/11/1998
Medicago scutellata	Snail Medic			2/11/1998
Medicago truncatula	Barrel Medic			6/11/1998
Melaleuca acuminata ssp. acuminata	Mallee Honey-myrtle			9/11/2021
Melaleuca armillaris ssp. akineta	Needle-leaf Honey-myrtle		R	24/09/2003
Melaleuca brevifolia	Short-leaf Honey-myrtle			1/10/2015
Melaleuca decussata	Totem-poles			7/11/1998
Melaleuca eleuterostachya	Hummock Honey-myrtle			9/11/2021
Melaleuca lanceolata	Dryland Tea-tree			9/11/2021
Melaleuca lanceolata ssp. lanceolata (NC)	Dryland Tea-tree			26/10/2000
Melaleuca oxyphylla	Pointed-leaf Honey-myrtle		R	4/12/2002
Melaleuca pauperiflora ssp. mutica	Boree			8/11/2021
Melaleuca sp.	Tea-tree			5/02/1984
Melaleuca uncinata	Broombush			9/11/2021
Melaleuca uncinata (NC)	Broombush			13/05/2004
Mesembryanthemum crystallinum	Common Iceplant			9/11/2021
Mesembryanthemum guerichianum	(blank)			8/11/2021
Mesembryanthemum nodiflorum	Slender Iceplant			9/11/2021
Microcybe multiflora ssp.	Small-leaf Microcybe			9/11/2021
Microcybe multiflora ssp. multiflora	Small-leaf Microcybe			4/12/2002
Microcybe pauciflora ssp. pauciflora	Yellow Microcybe			15/11/1990
Microseris walteri	Yam Daisy			10/11/1998
Microtis arenaria	Notched Onion-orchid			21/10/1998
Millotia muelleri	Common Bow-flower			14/08/2008
Millotia myosotidifolia	Broad-leaf Millotia			24/09/2003
Millotia perpusilla	Tiny Bow-flower			17/09/2000
Millotia tenuifolia var.	Soft Millotia			1/09/2016
Millotia tenuifolia var. tenuifolia	Soft Millotia			5/09/2006
Minuria annua	Annual Minuria			8/11/2021
Minuria leptophylla	Minnie Daisy			8/11/2021
Monoculus monstrosus	Tripteris			21/10/1998
Moraea setifolia	Thread Iris			24/09/2003
Moss sp.	(blank)			10/11/1998
Muehlenbeckia adpressa	Climbing Lignum			2/12/2002
Muehlenbeckia diclina ssp. diclina	Twiggy Lignum			5/09/2006
Myoporum brevipes	Warty Boobialla			3/02/1962
Myoporum platycarpum ssp.	False Sandalwood			13/05/2004
Myoporum platycarpum ssp. platycarpum	False Sandalwood			4/12/2002
Myoporum sp.	(blank)			8/11/2021
Neurachne alopecuroidea	Fox-tail Mulga-grass			1/10/2020
Nicotiana goodspeedii	Small-flower Tobacco			24/11/2009
Nicotiana maritima	Coast Tobacco			27/08/1995
Nicotiana rosulata ssp.	(blank)			24/09/2003
Nicotiana velutina	Velvet Tobacco			27/08/1995

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Nitraria billardierei	Nitre-bush			13/05/2004
Not naturalised in SA sp.	(blank)			2/12/1999
Oenothera stricta ssp. stricta	Common Evening Primrose			2/12/1999
Olax obcordata	(blank)		R	16/10/1986
Olearia adenolasia	Musk Daisy-bush		R	9/11/2021
Olearia brachyphylla	Short-leaf Daisy-bush			2/11/1998
Olearia ciliata var.	Fringed Daisy-bush			1/10/2020
Olearia ciliata var. ciliata	Fringed Daisy-bush			3/10/2002
Olearia decurrens	Winged Daisy-bush			9/11/2021
Olearia floribunda	Heath Daisy-bush			8/11/2021
Olearia lepidophylla	Clubmoss Daisy-bush			9/11/2021
Olearia minor	Heath Daisy-bush			4/12/2002
Olearia muelleri	Mueller's Daisy-bush			9/11/2021
Olearia passerinoides ssp. passerinoides	Feather Daisy-bush			12/04/1992
Olearia picridifolia	Rasp Daisy-bush		R	6/10/1956
Olearia pimeleoides	Pimelea Daisy-bush			12/04/1992
Olearia ramulosa	Twiggy Daisy-bush			2/12/2002
Olearia rudis	Azure Daisy-bush			16/12/1992
Olearia sp.	Daisy-bush			18/06/1986
Oligocarpus calendulaceus	(blank)			24/09/2003
Omphalolappula concava	Burr Stickseed			4/11/1998
Opercularia scabrida	Stalked Stinkweed			7/11/1998
Opercularia turpis	Twiggy Stinkweed			27/07/2011
Opercularia varia	Variable Stinkweed			26/11/1985
Ophioglossum lusitanicum	Austral Adder's-tongue			24/09/2003
Opuntia ficus-indica	Indian Fig			21/11/1985
Opuntia puberula	(blank)			21/02/1985
Orbea variegata	Carrion-flower			14/04/1983
Orchidaceae sp.	Orchid Family			8/07/1985
Orianthera nuda	Leafless Logania			16/12/1992
Orthoceras strictum	Horned Orchid			1/12/1981
Oxalis perennans	Native Sorrel			6/11/1998
Oxalis perennans/exilis	Native Oxalis			25/03/2014
Oxalis radicosa	Downy Native Sorrel			8/11/2021
Ozothamnus decurrens	Ridged Bush-everlasting			4/12/2002
Ozothamnus retusus	Notched Bush-everlasting			9/11/2021
Parapholis incurva	Curly Ryegrass			18/10/1998
Parietaria debilis	Smooth-nettle			27/08/1995
Parietaria debilis (NC)	Smooth-nettle			1/02/1990
Paspalum sp.	(blank)			20/11/1998
Paspalum vaginatum	Salt-water Couch			2/12/1999
Pauridia glabella var. glabella	Tiny Star			24/09/2003
Pelargonium australe (NC)	Austral Stork's-bill			7/11/1998
Pelargonium littorale	Native Pelargonium			29/10/1991

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Pelargonium sp.	Storks-bill			12/04/1992
Pentameris airoides ssp. airoides	False Hair-grass			24/09/2003
Persicaria prostrata	Creeping Knotweed			7/11/1998
Petrorhagia dubia	Velvet Pink			5/11/1998
Phebalium bullatum	Silvery Phebalium			9/11/2021
Pheladenia deformis	Bluebeard Orchid			1/02/1990
Philotheca angustifolia ssp. angustifolia	Narrow-leaf Wax-flower		R	2/09/2016
Phyla canescens	Lippia			11/09/2018
Phyllangium divergens	Wiry Mitrewort			6/11/1998
Phyllota remota	Slender Phyllota			7/11/1998
Pigea floribunda	Shrub Spade Flower			7/11/1998
Pigea monopetala	Slender Spade Flower			1/10/1998
Pimelea flava ssp. dichotoma	Diosma Riceflower			28/11/2002
Pimelea glauca	Smooth Riceflower			30/10/1991
Pimelea imbricata var. petraea	Rock Woolly Riceflower			1/10/1998
Pimelea micrantha	Silky Riceflower			10/11/1998
Pimelea microcephala ssp.	Shrubby Riceflower			31/10/1986
Pimelea microcephala ssp. microcephala	Shrubby Riceflower			17/01/1959
Pimelea octophylla	Woolly Riceflower			7/11/1998
Pimelea sp.	Riceflower			8/11/2021
Pimelea stricta	Erect Riceflower			3/09/2016
Pimelea subvillifera	Silky Riceflower			16/12/1992
Pimelea williamsonii	Williamson's Riceflower		R	7/11/1998
Pinus sp.	Pine			2/12/1999
Piptatherum miliaceum	Rice Millet			2/12/1999
Pittosporum angustifolium	Native Apricot			25/03/2014
Plantago coronopus ssp.	Bucks-horn Plantain			1/10/1998
Plantago drummondii	Dark Plantain			7/11/1998
Plantago hispida	Hairy Plantain			27/10/1983
Plantago sp.	Plantain			1/12/1999
Plantago sp. B (R.Bates 44765)	Little Plantain			24/09/2003
Platysace heterophylla var.	Slender Platysace			4/06/1986
Platysace heterophylla var. heterophylla	Slender Platysace			3/12/2002
Poa annua	Winter Grass			15/09/1974
Poa annua (NC)	Winter Grass			1/01/1987
Poa clelandii	Matted Tussock-grass			6/11/1998
Poa crassicaudex	Thick-stem Tussock-grass			5/11/1998
Poa drummondiana	Knotted Poa		R	29/09/1989
Poa labillardieri var. labillardieri	Common Tussock-grass			10/11/1998
Poa sp.	Meadow-grass/Tussock-grass			8/11/2021
Podolepis capillaris	Wiry Podolepis			8/11/2021
Podolepis muelleri	Button Podolepis		V	2/10/1990
Podolepis rugata var. rugata (NC)	Pleated Copper-wire Daisy			23/10/1998
Podolepis tepperi	Delicate Copper-wire Daisy			10/11/1998

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Podotheca angustifolia	Sticky Long-heads			1/12/2002
Pogonolepis muelleriana	Stiff Cup-flower			7/11/1998
Polycarpon tetraphyllum	Four-leaf Allseed			1/10/1998
Polygonum aviculare	Wireweed			1/05/1979
Polygonum aviculare (NC)	Wireweed			5/11/1998
Polygonum plebeium	Small Knotweed			7/11/1998
Pomaderris flabellaris	Fan Pomaderris			4/11/1998
Pomaderris obcordata	Wedge-leaf Pomaderris			28/11/2002
Pomaderris paniculosa ssp.	(blank)			30/10/1991
Pomaderris paniculosa ssp. paniculosa	Mallee Pomaderris			21/10/1998
Poranthera microphylla	Small Poranthera			6/11/1998
Poranthera microphylla (NC)	Small Poranthera			7/11/1998
Poranthera triandra	Three-petal Poranthera			7/11/1998
Prasophyllum elatum	Tall Leek-orchid			7/11/1998
Prasophyllum fecundum	Self-pollinating Leek-orchid		R	2/10/1998
Prasophyllum occidentale	Plains Leek-orchid			24/09/2003
Prasophyllum occultans	Hidden Leek-orchid		R	6/10/1989
Prasophyllum odoratum	Scented Leek-orchid			10/11/1998
Prasophyllum odoratum (NC)	Scented Leek-orchid			10/11/1998
Prasophyllum sp.	Leek-orchid			24/09/2003
Prostanthera ammophila	Sand Mintbush			16/12/1992
Prostanthera aspalathoides	Scarlet Mintbush			9/11/2021
Prostanthera serpyllifolia ssp.	Thyme Mintbush			15/07/1991
Prostanthera serpyllifolia ssp. microphylla	Small-leaf Mintbush			25/03/2014
Prostanthera serpyllifolia ssp. microphylla (purplish-green flowers)	Small-leaf Mintbush			23/10/1998
Prostanthera serpyllifolia ssp. serpyllifolia	Thyme Mintbush			3/10/2002
Prostanthera serpyllifolia ssp. serpyllifolia (purplish-green flowers)	Thyme Mintbush			3/10/2002
Prostanthera serpyllifolia ssp. serpyllifolia (red flowers)	Thyme Mintbush			5/11/1998
Pseudognaphalium luteoalbum	Jersey Cudweed			8/11/2021
Pterostylis biseta	Two-bristle Greenhood			2/11/1998
Pterostylis biseta (NC)	Two-bristle Greenhood			10/11/1998
Pterostylis boormanii	Boorman's Greenhood			24/09/2003
Pterostylis dolichochila	Mallee Shell-orchid			14/07/1993
Pterostylis excelsa	Dryland Greenhood			9/11/1998
Pterostylis excelsa (NC)	Dryland Greenhood			9/11/1998
Pterostylis mirabilis	Mount Olinthus Greenhood	VU	V*	1/12/2000
Pterostylis mutica	Midget Greenhood			6/11/1998
Pterostylis nana	Dwarf Greenhood			10/11/1998
Pterostylis plumosa	Bearded Greenhood			1/09/2000
Pterostylis pusilla	Small Rusty-hood			7/11/1998
Pterostylis sanguinea	Blood Greenhood			18/07/1991
Pterostylis sp.	Greenhood			24/09/2003

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Ptilotus exaltatus	Pink Mulla Mulla			26/11/1985
Ptilotus nobilis ssp. nobilis (NC)	Yellow-tails			12/04/1992
Ptilotus obovatus	Silver Mulla Mulla			8/11/2021
Ptilotus seminudus	Rabbit-tails			16/10/2007
Ptilotus spathulatus	Pussy-tails			9/11/2021
Pultenaea acerosa	Bristly Bush-pea			13/11/1990
Pultenaea tenuifolia	Narrow-leaf Bush-pea			2/10/2010
Pultenaea teretifolia var. teretifolia	Terete-leaf Bush-pea			6/11/1998
Pultenaea trinervis	Three-nerve Bush-pea			7/11/1998
Pyrorchis nigricans	Black Fire-orchid			7/11/1998
Quinetia urvillei	Quinetia			30/08/2007
Ranunculus sessiliflorus var. sessiliflorus	Annual Buttercup			2/09/2016
Ranunculus sp.	Buttercup			1/02/1990
Rapistrum rugosum ssp. rugosum	Turnip Weed			6/11/1998
Reichardia tingitana	False Sowthistle			6/11/1998
Rhagodia candolleana ssp. candolleana	Sea-berry Saltbush			4/12/2002
Rhagodia crassifolia	Fleshy Saltbush			13/05/2004
Rhagodia parabolica	Mealy Saltbush			13/05/2004
Rhagodia preissii ssp. preissii	Mallee Saltbush			9/11/2021
Rhagodia sp.	Saltbush			8/11/2021
Rhagodia spinescens	Spiny Saltbush			1/10/2020
Rhagodia ulicina	Intricate Saltbush			3/12/2002
Rhodanthe laevis	Smooth Daisy			4/09/2016
Rhodanthe polygalifolia	Milkwort Everlasting			2/09/2016
Rhodanthe pygmaea	Pigmy Daisy			14/08/2008
Rhodanthe sp.	Everlasting			9/11/2021
Rhodanthe stuartiana	Clay Everlasting			3/10/1958
Rinzia orientalis	Desert Heath-myrtle			9/11/2021
Roepera angustifolia	Scrambling Twinleaf			6/11/1998
Roepera apiculata	Pointed Twinleaf			8/11/2021
Roepera aurantiaca ssp.	Shrubby Twinleaf			13/05/2004
Roepera aurantiaca ssp. aurantiaca	Shrubby Twinleaf			8/11/2021
Roepera confluens	Forked Twinleaf			8/11/2021
Roepera glauca	Pale Twinleaf			7/11/1998
Roepera ovata	Dwarf Twinleaf			6/11/1998
Roepera sp.	Twinleaf			1/12/1999
Romulea rosea var. australis	Common Onion-grass			8/11/2021
Romulea sp.	Onion-grass			18/07/1991
Rostraria cristata	Annual Cat's-tail			6/11/1998
Rumex hypogaeus	Three-corner Jack			1/02/1990
Rumex sp.	Dock			1/12/1999
Rytidosperma caespitosum	Common Wallaby-grass			8/11/2021
Rytidosperma caespitosum (NC)	Common Wallaby-grass			10/11/1998
Rytidosperma erianthum	Hill Wallaby-grass			2/11/1998

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Rytidosperma setaceum	Small-flower Wallaby-grass			8/11/2021
Rytidosperma sp.	Wallaby-grass			9/11/2021
Sagina apetala	Annual Pearlwort			1/10/1998
Sagina maritima	Sea Pearlwort			26/10/1983
Salicornia blackiana	Thick-head Samphire			18/07/1991
Salicornia quinqueflora ssp. quinqueflora	Beaded Samphire			4/04/2017
Salsola australis	Buckbush			9/11/2021
Salvia verbenaca var.	Wild Sage			13/05/2004
Santalum acuminatum	Quandong			9/11/2021
Santalum murrayanum	Bitter Quandong			4/12/2002
Santalum sp.	(blank)			5/02/1984
Santalum spicatum	Sandalwood		V	21/04/2016
Sarcozona praecox	Sarcozona			9/11/2021
Scaevola aemula	Fairy Fanflower			7/11/1998
Scaevola humilis	Inland Fanflower			7/11/1998
Scaevola linearis ssp. linearis	Rough Fanflower			4/10/2002
Scaevola spinescens	Spiny Fanflower			7/11/1998
Schenkia australis	Spike Centaury			16/12/1992
Schinus molle	Pepper-tree			20/11/1998
Schismus barbatus	Arabian Grass			18/10/1998
Schoenus apogon	Common Bog-rush			6/11/1998
Schoenus breviculmis	Matted Bog-rush			25/03/2014
Schoenus nanus	Little Bog-rush			24/09/2003
Schoenus racemosus	Sandhill Bog-rush			3/12/2002
Schoenus sculptus	Gimlet Bog-rush		R	21/10/1998
Schoenus sp.	Bog-rush			1/02/1990
Schoenus subaphyllus	Desert Bog-rush			10/11/1998
Scleranthus minusculus	Cushion Knawel			10/11/1998
Scleranthus pungens	Prickly Knawel			1/10/1998
Sclerolaena diacantha	Grey Bindyi			9/11/2021
Sclerolaena eriacantha	Silky Bindyi			8/11/2021
Sclerolaena obliquicuspis	Oblique-spined Bindyi			13/05/2004
Sclerolaena parviflora	Small-flower Bindyi			15/10/1998
Sclerostegia sp. (NC)	Samphire			18/07/1991
Senecio gawlerensis	Gawler Ranges Groundsel		R	16/10/2007
Senecio glossanthus	Annual Groundsel			4/11/1998
Senecio glossanthus (NC)	Annual Groundsel			10/11/1998
Senecio lacustrinus	(blank)			1/10/1980
Senecio picridioides	Purple-leaf Groundsel			6/11/1998
Senecio pinnatifolius (NC)	Variable Groundsel			10/11/1998
Senecio pterophorus	African Daisy			25/03/2014
Senecio quadridentatus	Cotton Groundsel			8/11/2021
Senecio sp.	Groundsel			1/02/1990
Senecio spanomerus	Native Groundsel			8/11/2021

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Senna artemisioides ssp.	Desert Senna			20/11/1998
Senna artemisioides ssp. filifolia	Fine-leaf Desert Senna			25/03/2014
Senna artemisioides ssp. petiolaris	(blank)			26/03/2008
Senna artemisioides ssp. petiolaris (NC)	Flat-stalk Senna			13/05/2004
Senna artemisioides ssp. X coriacea	Broad-leaf Desert Senna			8/11/2021
Setaria constricta	Knotty-butt Paspalidium			7/11/1998
Sida corrugata var.	Corrugated Sida			5/11/1998
Sida petrophila	Rock Sida			14/09/1974
Silene apetala	Sand Catchfly			2/11/1998
Silene gallica var. gallica	French Catchfly			2/10/1998
Silene nocturna	Mediterranean Catchfly			24/09/2003
Silene sp.	Catchfly			24/09/2003
Silene tridentata	Spanish Catchfly			10/11/1998
Siloxerus multiflorus	Small Wrinklewort			24/09/2003
Sisymbrium erysimoides	Smooth Mustard			9/11/2021
Sisymbrium orientale	Indian Hedge Mustard			2/11/1998
Sisymbrium sp.	Wild Mustard			2/12/1999
Sixalix atropurpurea	Pincushion			1/12/1999
Solanum coactiliferum	Tomato-bush			20/11/1998
Solanum elaeagnifolium	Silver-leaf Nightshade			1/05/2010
Solanum hystrix	Afghan Thistle			17/03/1972
Solanum nigrum	Black Nightshade			8/11/2021
Solanum petrophilum	Rock Nightshade			28/08/1967
Solanum simile	Kangaroo Apple			7/11/1998
Solanum sp.	Nightshade/Potato-bush			12/04/1992
Solanum triflorum	Three-flower Nightshade			7/03/2016
Sonchus asper ssp. glaucescens	Rough Sow-thistle			1/10/1998
Sonchus oleraceus	Common Sow-thistle			8/11/2021
Sonchus sp.	Sow-thistle			13/05/2004
Sorghum halepense	Johnson Grass			4/04/2017
Spartium junceum	Spanish Broom			27/08/1995
Spergularia diandra	Lesser Sand-spurrey			2/11/1998
Spergularia diandra (NC)	Lesser Sand-spurrey			2/11/1998
Spergularia rubra	Red Sand-spurrey			8/11/2021
Spergularia rubra (NC)	Red Sand-spurrey			2/11/1998
Spyridium bifidum ssp. bifidum	Marble Range Spyridium		V	9/11/2021
Spyridium bifidum var.	(blank)			15/07/1991
Spyridium bifidum var. bifidum (NC)	Forked Spyridium			9/11/1998
Spyridium bifidum var. Wanilla (K.Clipstone 88) (NC)	Wanilla Spyridium		V	7/03/1991
Spyridium daphnoides	Spoon-leaved Spyridium		R	2/06/1992
Spyridium eriocephalum var. eriocephalum (NC)	Heath Spyridium			7/12/1993
Spyridium erymnocladum	Cloaked Spyridium		R	6/10/1995
Spyridium sp.	Spyridium			8/07/1985

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Spyridium stenophyllum ssp. renovatum	Forked Spyridium			4/10/2013
Spyridium stenophyllum ssp. stenophyllum	Forked Spyridium			21/09/1988
Spyridium subochreatum	Velvet Spyridium			31/10/1986
Spyridium subochreatum var. subochreatum (NC)	Velvet Spyridium			7/11/1998
Stackhousia aspericocca ssp.	Bushy Candles			30/10/1991
Stackhousia aspericocca ssp. One-sided inflorescence (W.R.Barker 697)	One-sided Candles			1/10/1998
Stackhousia monogyna	Creamy Candles			5/09/2006
Stackhousia monogyna (NC)	Creamy Candles			24/09/2003
Stackhousia muricata ssp. Perennial (W.R.Barker 3641)	Yellow Candles			24/09/2003
Stackhousia subterranea	Creamy Candles			24/10/1977
Stellaria filiformis	Thread Starwort			2/09/2016
Stellaria media	Chickweed			18/10/1998
Stenanthemum leucophractum	White Cryptandra			10/11/1998
Stenanthemum notiale ssp. notiale	Trident Spyridium			23/10/1998
Stenanthera conostephioides	Flame Heath			25/03/2014
Stenopetalum lineare	Narrow Thread-petal			6/11/1998
Stenopetalum lineare (NC)	Narrow Thread-petal			7/11/1998
Stenopetalum sphaerocarpum	Round-fruit Thread-petal			24/09/2003
Stylidium calcaratum	Spurred Trigger-plant			1/10/1998
Stylidium inundatum (NC)	Hundreds And Thousands			1/10/1998
Stypandra glauca	Nodding Grass-lily		V	1/10/1998
Styphelia cordifolia	Heart-leaf Beard-heath			9/11/2021
Styphelia humifusa	Cranberry Heath			9/11/2021
Styphelia rufa	Ruddy Beard-heath			7/11/1998
Styphelia woodsii	Nodding Beard-heath			23/05/1990
Suaeda baccifera	Seablite			2/05/2010
Swainsona microphylla	Small-leaf Swainson-pea			4/09/2011
Swainsona pyrophila	Yellow Swainson-pea	VU	R	7/11/1998
Tamarix aphylla (NC)	Athel Pine			20/11/1998
Tamarix ramosissima	(blank)			2/10/1998
Tecticornia halocnemoides ssp. halocnemoides	Grey Samphire			18/07/1991
Tecticornia indica ssp. bidens	Brown-head Samphire			11/09/2018
Tecticornia indica ssp. leiostachya	Brown-head Samphire			3/12/2002
Tecticornia pergranulata ssp. pergranulata	Black-seed Samphire			3/12/2002
Templetonia retusa	Cockies Tongue			29/10/1991
Templetonia rossii	Flat Mallee-pea			7/11/1998
Teucrium sessiliflorum	Mallee Germander			24/11/2009
Thelymitra alcockiae	Scented Sun-orchid			14/09/1974
Thelymitra antennifera	Lemon Sun-orchid			2/10/1990
Thelymitra azurea	Azure Sun-orchid			14/09/1974
Thelymitra luteocilium	Yellow-tuft Sun Orchid			24/09/2003
Thelymitra nuda	(blank)			9/11/1998

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Thelymitra nuda (NC)	Scented Sun-orchid			24/09/2003
Thelymitra pauciflora	Slender Sun-orchid			2/10/1998
Thelymitra pauciflora (NC)	Slender Sun-orchid			1/02/1990
Thelymitra pauciflora complex	(blank)			24/09/2003
Thelymitra sp.	Sun-orchid			4/06/1986
Themeda triandra	Kangaroo Grass			25/03/2014
Thinopyrum elongatum	Tall Wheat-grass			4/04/2017
Threlkeldia diffusa	Coast Bonefruit			7/11/1998
Thryptomene micrantha	Ribbed Thryptomene			2/12/2002
Thysanotus baueri	Mallee Fringe-lily			10/11/1998
Thysanotus patersonii	Twining Fringe-lily			24/09/2003
Thysanotus sp.	Fringe-lily			16/12/1992
Thysanotus wangariensis	Eyre Peninsula Fringe-lily		R	16/11/1983
Trachymene cyanopetala	Purple Trachymene			14/08/2008
Trachymene ornata	Cotton-ball Trachymene			24/09/2003
Trachymene ornata var. ornata (NC)	Sponge-fruit Trachymene			5/11/1998
Trachymene pilosa	Dwarf Trachymene			7/11/1998
Trachymene sp.	Trachymene			7/12/1993
Tricoryne elatior	Yellow Rush-lily			29/10/1991
Tricoryne tenella	Tufted Yellow Rush-lily			10/11/1998
Trifolium angustifolium	Narrow-leaf Clover			4/11/1998
Trifolium arvense var. arvense	Hare's-foot Clover			8/11/2021
Trifolium campestre	Hop Clover			5/11/1998
Trifolium glomeratum	Cluster Clover			2/11/1998
Trifolium hirtum	Rose Clover			6/11/1998
Trifolium tomentosum	Woolly Clover			1/10/1998
Triglochin calcitrapum (NC)	Spurred Arrowgrass			24/09/2003
Triglochin centrocarpum (NC)	Dwarf Arrowgrass			24/09/2003
Triglochin isingiana	Spurred Arrowgrass			26/10/1983
Triodia bunicola (NC)	Flinders Ranges Spinifex			7/11/1998
Triodia irritans	Spinifex			25/03/2014
Triodia irritans complex	Spinifex			3/06/1992
Triodia lanata	Woolly Spinifex			1/10/2020
Triodia scariosa	Spinifex			9/11/2021
Triodia scariosa (NC)	Spinifex			7/11/1998
Triodia scariosa ssp. (NC)	Spinifex			13/05/2004
Triodia sp.	Spinifex			9/11/2021
Triodia sp. (NC)	Spinifex			2/12/1999
Triptilodiscus pygmaeus	Small Yellow-heads			10/11/1998
Triticum aestivum	Wheat			1/12/1999
Trymalium wayi	Grey Trymalium			29/08/1983
Tulostoma berteroanum	(blank)			22/07/2016
Urospermum picroides	False Hawkbit			24/09/2003
Ursinia anthemoides	(blank)			6/11/2011

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Vicia cracca	Tufted Vetch			29/09/1989
Vittadinia australasica var. australasica	Sticky New Holland Daisy			16/12/1992
Vittadinia cervicularis var. cervicularis	Waisted New Holland Daisy			7/11/1998
Vittadinia cuneata var.	Fuzzy New Holland Daisy			9/11/2021
Vittadinia cuneata var. cuneata	Fuzzy New Holland Daisy			10/11/1998
Vittadinia dissecta var. hirta	Dissected New Holland Daisy			25/03/2014
Vittadinia gracilis	Woolly New Holland Daisy			8/11/2021
Vittadinia sp.	New Holland Daisy			18/07/1991
Vulpia muralis	Wall Fescue			10/11/1998
Vulpia myuros f. myuros	Rat's-tail Fescue			3/12/2002
Vulpia sp.	Fescue			9/11/2021
Wahlenbergia communis	Tufted Bluebell			7/11/1998
Wahlenbergia gracilenta	Annual Bluebell			8/11/2021
Wahlenbergia luteola	Yellow-wash Bluebell			6/11/1998
Wahlenbergia multicaulis	Tadgell's Bluebell			2/10/1958
Wahlenbergia preissii	(blank)			7/11/1998
Wahlenbergia sp.	Native Bluebell			9/11/2021
Wahlenbergia stricta ssp. stricta	Tall Bluebell			24/09/2003
Waitzia acuminata var. acuminata	Orange Immortelle			6/10/2020
Westringia eremicola	Slender Westringia			7/11/1998
Westringia rigida	Stiff Westringia			8/11/2021
Wilsonia rotundifolia	Round-leaf Wilsonia			2/05/2010
Wurmbea decumbens	Trailing Nancy		R	30/08/2007
Wurmbea dioica ssp. brevifolia	Early Nancy			9/11/1998
Wurmbea dioica ssp. dioica	Early Nancy			6/11/1998
Wurmbea dioica ssp. dioica (NC)	Early Nancy			10/11/1998
Xanthoparmelia amphixantha	(blank)			23/09/1994
Zaluzianskya divaricata	Spreading Night-phlox			23/10/1998
Zygophyllum ammophilum (NC)	Sand Twinleaf			1/02/1990
Zygophyllum aurantiacum ssp. aurantiacum (NC)	Shrubby Twinleaf			7/11/1998
Zygophyllum aurantiacum/eremaeum	Shrubby Twinleaf			1/10/2020
Zygophyllum eremaeum (NC)	Pale-flower Twinleaf			18/07/1991

BDBSA Fauna records within the Study area.

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Acanthagenys rufogularis	Spiny-cheeked Honeyeater			13/06/2021
Acanthiza apicalis	Inland Thornbill			5/05/2020
Acanthiza chrysorrhoa	Yellow-rumped Thornbill			13/06/2021
Acanthiza uropygialis	Chestnut-rumped Thornbill			7/01/2016
Accipiter cirrocephalus cirrocephalus	Collared Sparrowhawk			5/12/2003
Accipiter fasciatus fasciatus	Brown Goshawk			26/10/2017

Species Name	Common Name	EPBC Act	NPW Act	Most Recent Obs.
Acrocephalus australis australis	Australian Reed Warbler			4/12/2002
Actitis hypoleucos	Common Sandpiper		R	16/10/2002
Aegotheles cristatus cristatus	Australian Owlet-nightjar			13/06/2021
Amphibolurus norrisi	Mallee Tree-dragon			18/11/2006
Amytornis whitei aenigma	Yellabinna Rufous Grasswren		R	2/12/2002
Anas castanea	Chestnut Teal			16/10/2002
Anas gracilis gracilis	Grey Teal			28/11/2012
Anas superciliosa	Pacific Black Duck			24/11/2012
Anthochaera carunculata	Red Wattlebird			9/09/2019
Anthochaera carunculata woodwardi	Red Wattlebird (MLR, AP, YP, EP, far west, Yellabinna)			13/06/2021
Anthus australis	Australian Pipit			28/11/2012
Aprasia inaurita	Red-tailed Worm-lizard			12/01/2022
Aquila audax audax	Wedge-tailed Eagle			31/07/2016
Ardenna tenuirostris	Short-tailed Shearwater			20/09/2010
Ardeotis australis	Australian Bustard		V	24/03/2022
Artamus cyanopterus	Dusky Woodswallow			27/07/2014
Artamus personatus	Masked Woodswallow			11/10/1991
Artamus superciliosus	White-browed Woodswallow			11/10/1991
Austronomus australis	White-striped Free-tailed Bat			1/12/2002
Aythya australis	Hardhead			16/10/2002
Barnardius zonarius	Australian Ringneck			13/06/2021
Bos taurus	Cattle (European Cattle)			27/11/2002
Brachyurophis semifasciatus	Half-girdled Snake			12/01/2022
Cacomantis flabelliformis flabelliformis	Fan-tailed Cuckoo			5/10/2017
Cacomantis pallidus	Pallid Cuckoo			27/07/2014
Caligavis chrysops	Yellow-faced Honeyeater			29/11/2012
Capra hircus	Goat (Feral Goat)			3/12/2002
Castiarina gardnerae	n/a			2/02/2010
Castiarina pallidipennis	n/a			2/02/2010
Castiarina subtincta	n/a			2/02/2010
Cercartetus concinnus	Western Pygmy-possum			12/01/2022
Chalcites basalis	Horsfield's Bronze Cuckoo			9/09/2019
Chalcites osculans	Black-eared Cuckoo			7/08/2009
Chalinolobus gouldii	Gould's Wattled Bat			2/12/2002
Charadrius bicinctus bicinctus	Double-banded Plover			26/11/2012
Chenonetta jubata	Maned Duck			3/12/2002
Cheramoeca leucosterna	White-backed Swallow			26/07/2014
Cincloramphus cruralis	Brown Songlark			25/09/2015
Cincloramphus mathewsi	Rufous Songlark			11/10/1991
Cinclosoma castanotum (NC)	Chestnut-backed Quailthrush (Chestnut Quailthrush)		ssp	17/03/2004
Circus assimilis	Spotted Harrier			2/12/2002
Climacteris rufus	Rufous Treecreeper			6/10/2014
Colluricincla harmonica	Grey Shrikethrush			13/06/2021

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Coracina maxima	Ground Cuckooshrike			3/12/2002
Coracina novaehollandiae	Black-faced Cuckooshrike			5/10/2017
Corcorax melanorhamphos	White-winged Chough		R	10/02/2006
Corcorax melanorhamphos whiteae	White-winged Chough (Gawler Ranges, EP, southern FR, MLR)		SP	4/01/2019
Corvus bennetti	Little Crow			19/03/2004
Corvus coronoides	Australian Raven			5/10/2017
Corvus mellori	Little Raven			24/09/2017
Corvus sp.	Crows			11/10/2019
Coturnix pectoralis	Stubble Quail			25/10/2011
Cracticus torquatus leucopterus	Grey Butcherbird			3/09/2017
Ctenophorus cristatus	Crested Dragon			14/01/2022
Ctenophorus fionni	Eyre Peninsula Dragon			4/12/2003
Ctenophorus ibiri	Eyre Peninsula Mallee Dragon			15/02/2005
Ctenotus atlas	Southern Spinifex Ctenotus			14/01/2022
Ctenotus orientalis	Spotted Ctenotus			28/11/2012
Ctenotus regius	Eastern Desert Ctenotus			3/12/2002
Ctenotus robustus	Eastern Striped Skink			5/12/2003
Ctenotus schomburgkii	Sandplain Ctenotus			11/02/2005
Cyclodomorphus melanops	Spinifex Slender Bluetongue			17/12/2004
Dacelo novaeguineae novaeguineae	Laughing Kookaburra			9/09/2019
Daphoenositta chrysoptera pileata	Black-capped Sittella			13/06/2021
Delma australis	Marble-faced Delma			17/11/2006
Delma butleri	Unbanded Delma			14/01/2022
Delma petersoni	Painted Delma			11/01/2022
Demansia psammophis	Yellow-faced Whipsnake			1/10/2009
Diplodactylus furcosus	Ranges Stone Gecko			12/01/2022
Diplodactylus vittatus complex (NC)	Stone Geckos			15/02/2005
Dromaius novaehollandiae	Emu	ssp	ssp	12/10/2014
Drymodes brunneopygia	Southern Scrub Robin			5/10/2017
Drysdalia mastersii	Master's Snake			14/07/1977
Echiopsis curta	Bardick		R	3/05/1981
Egretta novaehollandiae	White-faced Heron			25/09/2015
Elanus axillaris	Black-shouldered Kite			17/04/2017
Elseyornis melanops	Black-fronted Dotterel			16/10/2002
Eolophus roseicapilla	Galah			9/09/2019
Eolophus roseicapilla albiceps	Galah (most of SA)			13/06/2021
Eopsaltria griseogularis rosinae	Western Yellow Robin			13/06/2021
Epthianura albifrons	White-fronted Chat			29/11/2012
Eurostopodus argus	Spotted Nightjar			19/11/2004
Falco berigora berigora	Brown Falcon			17/02/2018
Falco cenchroides cenchroides	Nankeen Kestrel			17/04/2017
Falco longipennis murchisonianus	Australian Hobby			3/12/2002
Falco subniger	Black Falcon		R	3/12/2002
Felis catus	Domestic Cat (Feral Cat)			1/12/2002

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Fulica atra australis	Eurasian Coot			16/10/2002
Gavicalis virescens	Singing Honeyeater			9/09/2019
Gavicalis virescens sonorus	Singing Honeyeater (EP, YP, FR, MN, AP, MM, coastal SE)			13/06/2021
Gehyra lazelli	Southern Rock Dtella			2/12/2002
Gehyra variegata (NC)	Tree Dtella			8/10/1964
Gehyra variegata complex				8/10/1964
Gehyra versicolor	Eastern Tree Dtella			5/05/2020
Gliciphila melanops	Tawny-crowned Honeyeater			7/08/2009
Grallina cyanoleuca cyanoleuca	Magpielark			16/09/2017
Gymnorhina tibicen	Australian Magpie			9/09/2019
Hemiergis initialis	Western Earless Skink			2/12/2002
Hemiergis peronii	Four-toed Earless Skink			5/05/2020
Heteronotia binoei	Bynoe's Gecko			4/12/2003
Hirundo neoxena neoxena	Welcome Swallow			16/09/2017
Hylacola cauta	Shy Heathwren	ssp	ssp	1/10/2020
Hylacola cauta cauta	Shy Heathwren (EP, YP, FR, MM, upper SE)		R	20/11/2004
Lasiorhinus latifrons	Southern Hairy-nosed Wombat			29/11/2001
Leipoa ocellata	Malleefowl	VU	V	27/05/2022
Lerista distinguenda	Dwarf Four-toed Slider		R	14/01/2022
Lerista dorsalis	Southern Four-toed Slider			27/11/2012
Lerista edwardsae	Myall Slider			14/01/2022
Lerista sp.				15/02/2005
Lerista taeniata	Ribbon Slider			14/01/2022
Lerista terdigitata	Southern Three-toed Slider			14/01/2022
Lialis burtonis	Burton's Snake-lizard			5/05/2020
Lichenostomus cratitius	Purple-gaped Honeyeater		ssp	24/09/2017
Lichenostomus cratitius occidentalis	Purple-gaped Honeyeater (mainland SA)		R	29/11/2012
Liopholis inornata	Desert Skink			14/01/2022
Lucasium damaeum	Beaded Gecko			14/01/2022
MACROPODIDAE sp.	kangaroos			17/09/2019
Macropus (Osphranter) robustus	Euro			1/07/2008
Macropus (Osphranter) rufus	Red Kangaroo			1/01/1984
Macropus fuliginosus	Western Grey Kangaroo			5/05/2020
Macropus sp.				3/12/2003
Malacorhynchus membranaceus	Pink-eared Duck			16/10/2002
Malurus assimilis assimilis	Purple-backed Fairywren			29/04/2016
Malurus cyaneus leggei	Superb Fairywren (Mainland SA)			13/06/2021
Malurus leucopterus leuconotus	White-winged Fairywren			4/12/2002
Malurus pulcherrimus	Blue-breasted Fairywren			5/06/2016
Malurus sp.	fairywrens			19/11/2004
Malurus splendens callainus	Turquoise Fairywren (NW, northern EP)			2/12/2002
Manorina flavigula	Yellow-throated Miner	ssp	ssp	11/10/2014
Melanodryas cucullata westralensis	Hooded Robin (EP, NW)			18/11/2004
Melithreptus brevirostris	Brown-headed Honeyeater	ssp		5/10/2017

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Melithreptus brevirostris leucogenys	Brown-headed Honeyeater (EP)			13/06/2021
Menetia greyii	Dwarf Skink			14/01/2022
Merops ornatus	Rainbow Bee-eater			2/12/2003
Microeca fascinans	Jacky Winter		ssp	18/07/1991
Milvus migrans affinis	Black Kite			19/10/1994
Moloch horridus	Thorny Devil			1/11/2009
Morethia adelaidensis	Adelaide Snake-eye			2/12/2002
Morethia obscura	Mallee Snake-eye			14/01/2022
Mus musculus	House Mouse			28/11/2012
Neobatrachus pictus	Burrowing Frog			4/12/2003
Neophema sp.	Neophema parrots			28/11/2002
Nephrurus stellatus	Starred Knob-tailed Gecko			14/01/2022
Nesoptilotis leucotis	White-eared Honeyeater	ssp		5/10/2017
Nesoptilotis leucotis schoddei	White-eared Honeyeater (Yellabinna, Gawler Ranges, EP)			13/06/2021
Ningaui ridei	Wongai ningaui			14/01/2022
Notomys mitchellii	Mitchell's Hopping-mouse			4/12/2002
Nyctophilus geoffroyi	Lesser Long-eared Bat			6/12/2003
Nyctophilus sp.				1/12/2002
Ocyphaps lophotes lophotes	Crested Pigeon			9/09/2019
Oreoica gutturalis	Crested Bellbird			29/04/2016
Oryctolagus cuniculus	Rabbit (European Rabbit)			5/05/2020
Pachycephala fuliginosa fuliginosa	Western Whistler			26/10/2017
Pachycephala inornata	Gilbert's Whistler		R	31/07/2016
Pachycephala pectoralis youngi	Australian Golden Whistler			13/06/2021
Pachycephala rufiventris rufiventris	Rufous Whistler			29/04/2016
Pardalotus punctatus	Spotted Pardalote			5/05/2020
Pardalotus punctatus xanthopyge	Yellow-rumped Pardalote			29/11/2012
Pardalotus striatus	Striated Pardalote			13/06/2021
Pardalotus striatus substriatus	Striated Pardalote			5/05/2020
Parvipsitta porphyrocephala	Purple-crowned Lorikeet			18/11/2004
Passer domesticus domesticus	House Sparrow			16/09/2017
Petrochelidon nigricans	Tree Martin			5/12/2002
Petroica goodenovii	Red-capped Robin			13/06/2021
Phaps chalcoptera	Common Bronzewing			5/05/2020
Phaps elegans elegans	Brush Bronzewing			7/01/2016
Phaps sp.	bronzewings			28/11/2002
Phylidonyris novaehollandiae	New Holland Honeyeater			5/10/2017
Phylidonyris novaehollandiae novaehollandiae	New Holland Honeyeater (mainland SA)			28/11/2012
Podargus strigoides	Tawny Frogmouth			24/11/2012
Pogona minor	Western Bearded Dragon			17/10/1954
Pogona vitticeps	Central Bearded Dragon			19/11/2006
Poliocephalus poliocephalus	Hoary-headed Grebe			26/11/2012
Pomatostomus superciliosus	White-browed Babbler			5/05/2020

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Poodytes gramineus goulburni	Little Grassbird			4/12/2002
Psephotellus varius	Mulga Parrot			1/10/2020
Pseudomys bolami	Bolam's Mouse			4/12/2002
Pseudonaja affinis	Dugite			15/09/1974
Pseudonaja aspidorhyncha	Patch-nosed Brown Snake			1/03/2010
Pseudonaja nuchalis (NC)	Western Brown Snake			28/11/2002
Pseudonaja sp.				22/10/2007
Ptilotula ornata	Yellow-plumed Honeyeater			6/10/2014
Ptilotula penicillata	White-plumed Honeyeater			29/04/2016
Purnella albifrons	White-fronted Honeyeater			12/10/2014
Pygopus lepidopodus	Common Scaly-foot			26/11/2012
Rhipidura albiscapa	Grey Fantail			5/06/2016
Rhipidura leucophrys leucophrys	Willie Wagtail			9/09/2019
Sericornis frontalis (NC)	White-browed Scrubwren			12/10/2014
Sericornis maculatus mellori	Spotted Scrubwren (south-western SA, EP, YP, upper Gulf St Vincent)			28/11/2012
Simoselaps bertholdi	Desert Banded Snake			2/12/2002
Smicrornis brevirostris	Weebill			9/09/2019
Smicrornis brevirostris occidentalis	Weebill (Yellabinna, Gawler Ranges, EP, YP, southern FR, MN, MLR, MM)			13/06/2021
Sminthopsis dolichura	Little Long-tailed Dunnart			12/01/2022
Sminthopsis fuliginosus fuliginosus	Grey-bellied Dunnart			17/12/2004
Sminthopsis psammophila	Sandhill Dunnart	EN	V	12/01/2022
Spilopelia chinensis	Spotted Dove			28/11/2002
Stagonopleura guttata	Diamond Firetail	VU	V	29/04/2016
Strepera versicolor	Grey Currawong		ssp	13/06/2021
Strepera versicolor intermedia	Brown Currawong (Yellabinna, GR, EP, YP)			29/11/2012
Strophurus intermedius	Southern Spiny-tailed Gecko			14/09/1974
Sturnus vulgaris vulgaris	Common Starling			9/09/2019
Tachybaptus novaehollandiae novaehollandiae	Australasian Grebe			28/11/2012
Tachyglossus aculeatus	Short-beaked Echidna	ssp	ssp	1/10/2020
Tiliqua occipitalis	Western Bluetongue			19/12/2004
Tiliqua rugosa	Sleepy Lizard			10/10/2019
Tiliqua scincoides	Eastern Bluetongue			27/11/2012
Tiliqua sp.				22/10/2007
Todiramphus pyrrhopygius	Red-backed Kingfisher			24/09/2017
Tribonyx ventralis	Black-tailed Nativehen			16/10/2002
Trichoglossus moluccanus moluccanus	Rainbow Lorikeet			9/09/2019
Trichosurus vulpecula	Common Brushtail Possum		R	6/03/1913
Turdus merula merula	Common Blackbird			28/11/2002
Turnix varius varius	Painted Buttonquail		R	17/03/2004
Turnix velox	Little Buttonquail			25/10/2011
Tyto javanica delicatula	Eastern Barn Owl			24/11/2012
Underwoodisaurus milii	Common Barking Gecko			3/05/1981

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Vanellus miles	Masked Lapwing			19/11/2004
Varanus gouldii	Sand Goanna			14/01/2022
Varanus rosenbergi	Heath Goanna		V	24/11/2015
Varanus sp.	goannas			27/11/2015
Vulpes vulpes	Fox (Red Fox)			5/05/2020
Zosterops lateralis	Silvereye			26/10/2017
Zosterops lateralis pinarochrous	Silvereye (EP, YP, FR, MLR, MM, SE)			13/06/2021