



**Adelaide Plains Council Roadside
Marker Scheme
Ecological Assessment**

Adelaide Plains Council Roadside Marker Scheme Ecological Assessment

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Version 2

Prepared by EBS Ecology for Adelaide Plains Council

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GLOSSARY AND ABBREVIATION OF TERMS

APC	Adelaide Plains Council
BAM	Bushland Assessment Method
BCM	Bushland Condition Monitoring
Declared Weed	Weeds that are regulated under the <i>Landscape South Australia Act 2019</i> due to their threat to primary industries.
DEW	Department of Environment and Water (South Australia) (formerly DEWNR)
DEWNR	Department of Environment, Water and Natural Resources (South Australia)
E	East
EBS Ecology	Environment and Biodiversity Services Pty Ltd
GPS	Global Positioning System
Ha	Hectares
LGA Act	<i>Local Government Act 1999</i>
LSA Act	<i>Landscapes South Australia Act 2019</i>
N	North
NA	Northern Agricultural
NE	North East
NPW Act	<i>National Parks and Wildlife Act 1972</i>
NV Act	<i>Native Vegetation Act 1991</i>
NVC	Native Vegetation Council
S	South
Site	A roadside marker site
sp.	Species
spp.	Species plural
ssp.	Subspecies
SW	South West
Rd	Road
RMS	Roadside Marker Scheme
var.	Variant
VCS	Vegetation Condition Score
W	West
WP	Waypoint
WoNS	Weeds of National Significance

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Attachments

Attachment 1: Spatial data package (EX220815_Attachment 1_20230323_RMSAllData_Datapackage) – ZIP File.

EXECUTIVE SUMMARY

EBS Ecology was engaged by Adelaide Plains Council (APC) to undertake vegetation condition assessments for 103 Roadside Marker Sites across the Adelaide Plains (Table 1 and Figure 2). This Project reports on the assessment of RMS Sites and additional roadsides, that have been identified as important throughout the Adelaide Plains Council Local Government Area (LGA).

Adelaide Plains Council (APC) requires Site surveying and an accompanying assessment report to be completed on 99 Roadside Marker System (RMS) Sites, four of which were inaccessible.

The objectives were as followed:

- GPS marking of Site, aerial map high-lighting location, photograph(s) of Site, Site number, road/reserve name, date of survey;
- List of plant species (native and threatening weeds) and their conservation rating (NPW Act and EPBC Act);
- Condition of the vegetation; and
- Site recommendations.

Methods

The field assessment was spread across a two-week period. The first field survey was conducted from 13 December to 16 December 2022, with the second field survey conducted from the 9 January to the 13 of January 2023 by Ecologists E. West and G. Wilson. The native vegetation condition of all Roadside Marker Sites was assessed in accordance with the Bushland Assessment Method (BAM) (NVC 2020a) (section 3.1.1).

Survey findings

Across the Adelaide Plains region, a total of six benchmark communities (Croft *et al.* 2005-2009, Appendix 9.3) were observed, this included:

- NA 4 – Low Woodlands & Open Mallee with dense to mid-dense shrub &/or Spinifex and sedge understorey (three Sites);
- NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory (87 Sites);
- NA 7.1 Riparian Woodlands (one Site);
- NA 9.1 Shrublands and Low Shrublands on Coastal Dunes and Shell-grit Ridges (five Sites);
- NA 9.2 – Low Woodlands on Coastal Dunes and Shell Grit Ridges (three Sites); and
- NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity (four Sites).

Out of 99 Roadside Marker Sites assessed, there were a total of 104 different vegetation associations. Out of these 104 Sites, the following condition was observed:

- 1 Site (Site 85a) had a High Vegetation Condition Score (VCS);
- 7 Sites had a Medium to High VCS;
- 56 Sites had a Medium VCS;
- 27 Sites had a Low to Medium VCS; and
- 13 Sites had a Low VCS

All of the 99 RMS Sites assessed, showed some sign of degradation, this included issues such as:

- Weed invasion;
- Inappropriate management by land holders (roadside verge planting and spray drift);
- Illegal dumping and roadside rubbish; and
- Introduced pests.

1 INTRODUCTION

Native roadside vegetation is considered to have a significant ecological value as these Sites withhold a majority of the remnant native vegetation, which may contain threatened plant species and ecological communities. As such, roadside vegetation is protected in South Australia under both the *Local Government Act* (LGA) 1999 and the *Native Vegetation* (NV) Act 1991. Currently, very limited native vegetation exists across South Australia due to historic clearing for agriculture, grazing and urbanisation. It is therefore essential that local councils maintain remaining pockets of native vegetation, as they provide habitat for local native flora and fauna species. Due to the fragmentation of road reserves across South Australia, it increases their exposure to threats such as weed, and pest, which eventually results in the degradation of the native vegetation. The Roadside Marker Scheme (RMS) was developed, to allow for survey and subsequent protection of ecologically significant roadside remnant vegetation.

EBS Ecology was engaged by Adelaide Plains Council (APC) to undertake vegetation condition assessments for 103 Roadside Marker Sites across the Adelaide Plains (Table 1 and Figure 2). This Project reports on the assessment of RMS Sites and additional roadsides, that have been identified as important throughout the Adelaide Plains Council Local Government Area (LGA). The Council's rural roadsides hold most of the remnant vegetation within the Adelaide Plains District, with a total of 103 roadside marker Sites. Currently, a roadside marker highlights the significance of indigenous flora indicated with a blue and white sign.

1.1 Objectives

Adelaide Plains Council (APC) requires Site surveying and an accompanying assessment report to be completed on 99 Roadside Marker System (RMS) Sites, four of which were inaccessible.

The objectives were as followed:

- GPS marking of Site, aerial map high-lighting location, photograph(s) of Site, Site number, road/reserve name, date of survey;
- List of plant species (native and threatening weeds) and their conservation rating (NPW Act and EPBC Act);
- Condition of the vegetation; and
- Site recommendations.

1.2 Project area

The location of the Roadside Marker Sites is depicted in Figure 2. The Project Area spans across 18 suburbs (Table 1 and Figure 2). The assessment consisted of both on-ground assessment and drive-by assessments. Four Sites (Site 24, 25, 71 and 84) were assessed on-ground, with the existing 95 assessed by drive-by assessments. Of these 103 Sites, the following four inaccessible Sites were excluded from the assessment:

- Roadside Marker Site 89;
- Roadside Marker Site 94 – Roberts Road;
- Roadside Marker Site 96 – Redbanks; and

- Roadside Marker Site 103 – Jenkins Water Reserve.

Table 1. Summary of the Roadside Marker Sites.

Roadside Marker Site	Road	Suburb	Assessment	Section in the report
001	T junction Hamley Bridge Road (Rd) at Edward Rd	Barabba	Drive-by assessment	5.1.1
002	Fridge Rd at Brady Rd	Barabba	Drive-by assessment	5.1.2
003	Fridge Rd	Barabba	Drive-by assessment	5.1.3
004	Pinkerton Rd	Pinkerton Plains	Drive-by assessment	5.2.1
005	March and Davies Rd Intersection	Barabba	Drive-by assessment	5.1.4
006	Wilson Rd	Barabba	Drive-by assessment	5.1.5
007	In a paddock off Brady Rd	Barabba	On-ground assessment for about 100 meters.	5.1.6
008	Tank Rd at Murphy Rd and Fridge Rd at Murphy	Barabba	Drive-by assessment	5.1.7
009	Woolsheds Rd	Pinkerton Plains	Drive-by assessment	5.2.2
010	Boundary Rd	Reeves Plains	Drive-by assessment	5.3.1
011	Gawler Rd at Auger North Rd	Reeves Plains	Drive-by assessment	5.3.2
012	Kenner Rd at Hall Rd (T-intersection)	Korunye	Drive-by assessment	5.4.1
013	Conroy Rd and Humphrey Rd	Reeves Plains	Drive-by assessment	5.3.3
014	Hall Rd	Korunye	Drive-by assessment	5.4.2
015	Sandpit Rd	Reeves Plains	Drive-by assessment	5.3.4
016	Richter Rd	Reeves Plains	Drive-by assessment	0
017	Verner Rd	Redbanks	Drive-by assessment	5.5.1
018	Fischer Rd	Reeves Plains	Drive-by assessment	5.3.6
019	Lynch Rd	Redbanks	Drive-by assessment	5.5.2
020	Helps Rd	Redbanks	Drive-by assessment	5.5.3
021	Hancock Rd	Redbanks	Drive-by assessment	5.5.4
022	Sharpe Rd at Pederick Rd	Lewiston	Drive-by assessment	5.6.1
23	Sharpe Rd at McPharlin Rd	Lewiston	Drive-by assessment	5.6.2
024	Oliver Rd	Reeves Plains	On-ground assessment	5.3.7
025	Oliver Rd	Reeves Plains	On-ground assessment	5.3.8
026	Boundary Rd	Reeves Plains	Drive-by assessment	5.3.9
027	Boundary Rd	Lewiston	Drive-by assessment	5.6.3
028	Cawrse Rd at Curnow Rd	Mallala	Drive-by assessment	5.7.1
029	Limerock Rd	Mallala	Drive-by assessment	5.7.2
030	Frost Rd	Mallala	Drive-by assessment	5.7.3
031	Franks Rd	Mallala	Drive-by assessment	5.7.4
032	Ross Rd	Mallala	Drive-by assessment	5.7.5
033	Tank Rd	Barabba	Drive-by assessment	5.1.8
034	Fidge Rd	Barabba	Drive-by assessment	5.1.9
035	Hall Rd	Mallala	Drive-by assessment	5.7.6
036	Earl Rd	Mallala	Drive-by assessment	5.7.7
037	Hall Rd	Mallala	Drive-by assessment	5.7.8
038	Ross Rd, Hall Rd and Calomba Rd	Mallala	Drive-by assessment	5.7.9
039	Hallion Rd at Hall Rd	Grace Plains	Drive-by assessment	5.8.1

Adelaide Plains Council Roadside Marker Scheme Ecological Assessment

Roadside Marker Site	Road	Suburb	Assessment	Section in the report
040	Tiller Rd	Grace Plains	Drive-by assessment	5.8.2
041	Tiller Rd at Franks Rd	Grace Plains	Drive-by assessment	5.8.3
042	Tiller Rd	Grace Plains	Drive-by assessment	5.8.4
043	Young Rd	Calomba	Drive-by assessment	5.9.1
044	Hallion Rd	Calomba	Drive-by assessment	5.9.2
045	Hallion Rd	Grace Plains	Drive-by assessment	5.8.5
046	Powerline Rd	Grace Plains	Drive-by assessment	5.8.6
047	Calomba Rd	Calomba	Drive-by assessment	5.9.3
048	Daniel Rd	Calomba	Drive-by assessment	5.9.4
049	Turner Rd and Old Dublin Rd	Mallala	Drive-by assessment	0
050	Johnsons Rd	Calomba	Drive-by assessment	5.9.5
051	Pritchard Rd	Windsor	Drive-by assessment	5.10.1
052	Carter Rd	Windsor	Drive-by assessment	5.10.2
053	Avon Rd	Windsor	Drive-by assessment	5.10.3
054	Carslake Rd	Dublin	Drive-by assessment	5.11.1
055	Cawrse Rd	Mallala	Drive-by assessment	5.7.11
056	Limerock Rd	Dublin	Drive-by assessment	5.11.2
057	Shannon Rd	Dublin/lower light	Drive-by assessment	5.11.3
058	Shannon Rd	Dublin	Drive-by assessment	5.11.4
059	Shannon Rd	Calomba	Drive-by assessment	5.9.6
060	Jenkin Rd	Calomba	Drive-by assessment	5.9.7
061	Long Plains Rd	Calomba/Windsor	Drive-by assessment	5.9.8
062	Long Plains Rd	Calomba/Long Plains	Drive-by assessment	5.9.9
063	Parker Rd	Calomba/Long Plains	Drive-by assessment	5.9.10
064	Lawrie Rd	Calomba	Drive-by assessment	5.9.11
065	Lyons Rd	Long Plains	Drive-by assessment	5.12.1
066	Wild Horse Plains Rd	Long Plains	Drive-by assessment	5.12.2
067	Ridley Rd	Long Plains	Drive-by assessment	5.12.3
068	Windsor Rd and Long plains Rd	Calomba/Windsor	Drive-by assessment	5.10.4
069	Port Wakefield Hwy (RHS)	Dublin	Drive-by assessment	5.11.5
070	Port Wakefield Hwy (RHS)	Dublin	Drive-by assessment	5.11.6
071	Seventh St, Dublin	Dublin	On-ground assessment	5.11.7
072	Port Wakefield Hwy (RHS)	Windsor	Drive-by assessment	5.10.5
073	Port Wakefield Hwy (LHS)	Windsor	Drive-by assessment	5.10.6
074	Bakers Rd	Windsor/long plains	Drive-by assessment	5.10.7
075	Sandy Brae Rd	Long Plains/Wild Horse Plains	Drive-by assessment	5.13.1
076	Wild Horse Plains Rd	Long Plains	Drive-by assessment	5.12.4
077	Slant Rd	Wild Horse Plains	Drive-by assessment	5.13.2
078	Webb Beach (look to be walking along Dunes)	Webb Beach	Drive-by assessment	5.14.1
079	The Esplanade (Thompson Beach)	Parham	Drive-by assessment	5.15.1
080	Tickera Rd	Parham	Drive-by assessment	5.15.2

Adelaide Plains Council Roadside Marker Scheme Ecological Assessment

Roadside Marker Site	Road	Suburb	Assessment	Section in the report
081	Bubner Rd at Harris Rd	Dublin	Drive-by assessment	5.11.8
082	Thompson Rd at	Dublin	Drive-by assessment	5.11.9
083	Shingleback Beach Rd	Dublin	Drive-by assessment	5.11.10
084	Port Prime Rd	Lower Light	On-ground assessment	5.16.1
085	North Tet and Beach Tet	Lower Light	Drive-by assessment	5.16.2
086	Thompsons Beach Rd	Lower Light	Drive-by assessment	5.16.3
087	The Esplanade (Thompson Beach)	Thompson Beach	Drive-by assessment	5.17.1
088	Off of Recreation Dr	Port Gawler	Drive-by assessment	5.18.1
089			Was not assessed due to development	
090	Middle Beach	Middle Beach	Drive-by assessment	5.19.1
091	Port Gawler Rd at Applebee Rd	Port Gawler	Drive-by assessment	5.18.2
092	Middle Beach Rd at Smith Rd	Middle Beach	Drive-by assessment	5.19.2
093	Off of Light Beach Rd (In the dunes)	Lower Light	Drive-by assessment	5.16.4
094	Roberts Rd		Does not require surveying	
095	Day Rd	Reeves Plains	Drive-by assessment	5.3.10
096	Redbanks		Does not require surveying	
097	Hamley Bridge Rd	Barraba	Drive-by assessment	5.1.10
098	Collins Rd	Barraba/ Grace Plains	Drive-by assessment	5.1.11
099	Port Wakefield Hwy (RHS)	Windsor	Drive-by assessment	5.10.8
100	Lowey Rd	Windsor	Drive-by assessment	5.10.9
101	Port Wakefield Hwy (RHS)	Wild Horse Plains	Drive-by assessment	5.13.3
102	Light River	Barraba	On-ground assessment	5.1.12
103	Jenkins Water Reserve		Does not require surveying	



Figure 1. The Project Area.

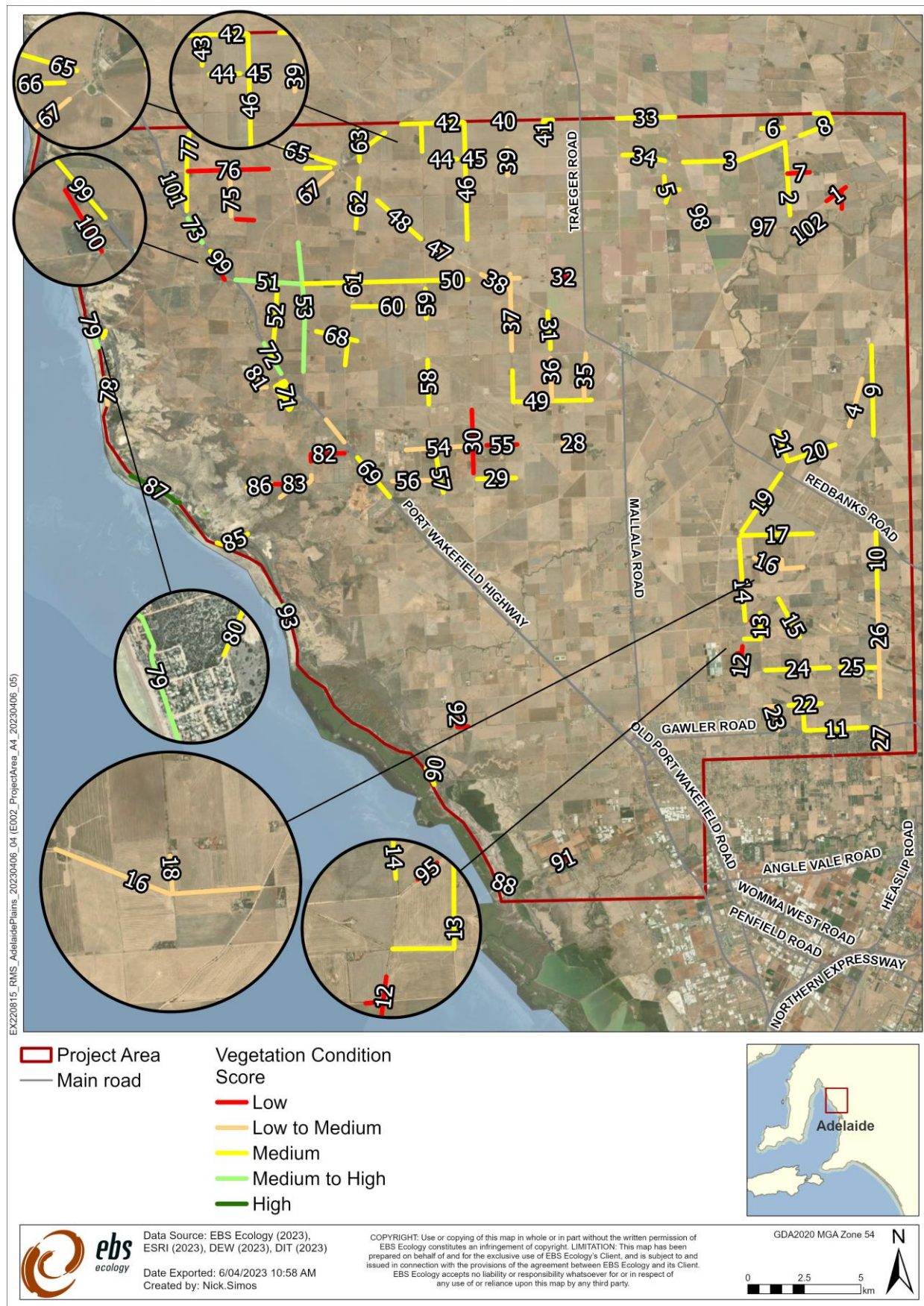


Figure 2. The Roadside Marker Sites across the Adelaide Plains Council Area.

2 BACKGROUND INFORMATION

2.1 Project details

2.1.1 Administrative boundaries

Local government in South Australia is made up of 68 councils, or Local Government Areas (LGAs). The Project Area falls within the Adelaide Plains LGA. The Project Area is situated within the Northern and Yorke Landscape Management Region (LMR).

2.1.2 Previous surveys conducted

Two surveys were previously conducted across the Adelaide Plains LGA, which included:

- J.A Pedler and W.E Matheson 1993. Remnant Vegetation in the Mallala District Council Area. Its Status and Conservation Strategies.
- Vicki Philpott 2004. District Council of Mallala Roadside Vegetation Drive-by Survey #60. Survey Findings and Recommendations to Council.

2.2 Environmental setting

2.2.1 Interim Biogeographical Regionalisation of Australia

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. The Project Area is located within the Eyre Yorke Block IBRA bioregion the St Vincent subregion and Mallala and Parham association (Table 2).

Table 2. IBRA bioregion, subregion, and environmental association environmental landscape summary.

Eyre Yorke Block IBRA bioregion	
Archaean basement rocks and Proterozoic sandstones overlain by undulating to occasionally hilly calcarenite and calcrete plains and areas of aeolian quartz sands, with mallee woodlands, shrublands and heaths on calcareous earths, duplex soils and calcareous to shallow sands, now largely cleared for agriculture.	
St Vincent IBRA subregion	
Most of this region consists of with calcrete development and shallow reddish earths. The plain is mainly dune free but isolated areas are overlain by low indistinct sand dunes. Near the Mt Lofty Ranges, the plains have a definite westerly gradient and merge eastwards with the alluvial fans from the Mt Lofty ranges. Moderately deep red mallee-yorrell (<i>Eucalyptus socialis</i> , <i>E. gracilis</i>) association occurs throughout the region with some woodland of <i>E. porosa</i> on the plains or <i>E. odorata</i> on the hills and footslopes. The subregion has been extensively cleared and sown to crops or exotic pastures so little of the natural vegetation remains. What does exist on road verges and a few isolated blocks.	
Remnant vegetation	Approximately 8% (87,402 ha) of the subregion is mapped as remnant native vegetation, of which 5% (473 2ha) is formally conserved
Landform	Alluvial and littoral plains with NW-SE longitudinal dunes, mainly stabilized, in isolated areas. Near the Mt Lofty Ranges, the plains have a detritic westerly gradient and merge eastwards with the alluvial fans of the Ranges.

Geology	Calcrete development; some variably oriented dunes in north west of unit beyond Port Augusta, calcareous loams clay rich soils, both plastic & cracking varieties.
Soil	Cracking clays, Brown calcareous earths, highly calcareous loamy earths, plastic saline clay soils, hard setting loamy soils with red clayey subsoils.
Vegetation	Mixed chenopod, samphire or forblands.
Conservation significance	125 species of threatened fauna, 103 species of threatened flora. 5 wetlands of national significance.
Mallala IBRA environmental association	
Remnant vegetation	Approximately 3% (5, 874 ha) of the association is mapped as remnant native vegetation, of which 2% (103 ha) is formally conserved
Landform	Undulating plain with occasional dunes.
Geology	Alluvium and sand.
Soil	Brown calcareous loams, hard pedal red duplex soils and brownish sands.
Vegetation	Grasslands.
Conservation significance	73 species of threatened fauna, 32 species of threatened flora. 3 wetlands of national significance.
Parham IBRA environmental association	
Remnant vegetation	Approximately 44% (16, 432 ha) of the association is mapped as remnant native vegetation, of which 7% (1,076 ha) is formally conserved
Landform	Coastal complex of tidal flats, dunes, swamps and sandy beaches, backed by a gently sloping plain.
Geology	Alluvium and sand.
Soil	Grey non-cracking plastic clays, grey duplex soils, whitish sands, grey calcareous loams and greyish calcareous sands.
Vegetation	Low woodland of mangrove, chenopod shrubland of samphire and open heath of coast daisy bush, coast beard heath and coastal wattle.
Conservation significance	71 species of threatened fauna, 14 species of threatened flora. 3 wetlands of national significance.

2.2.2 Pre-European vegetation

The APC rural roadsides now hold most of the remnant vegetation within the APC, which is highlighted by a roadside marker. Pre-European vegetation varied greatly across the Adelaide Plains. A total of nine pre-European communities were present, including: Herbland, Low Open Forest, Low Shrubland, Low Woodland, Mallee, Shrubland, Tall Shrubland, Tussock Grassland and Woodland (Figure 3).

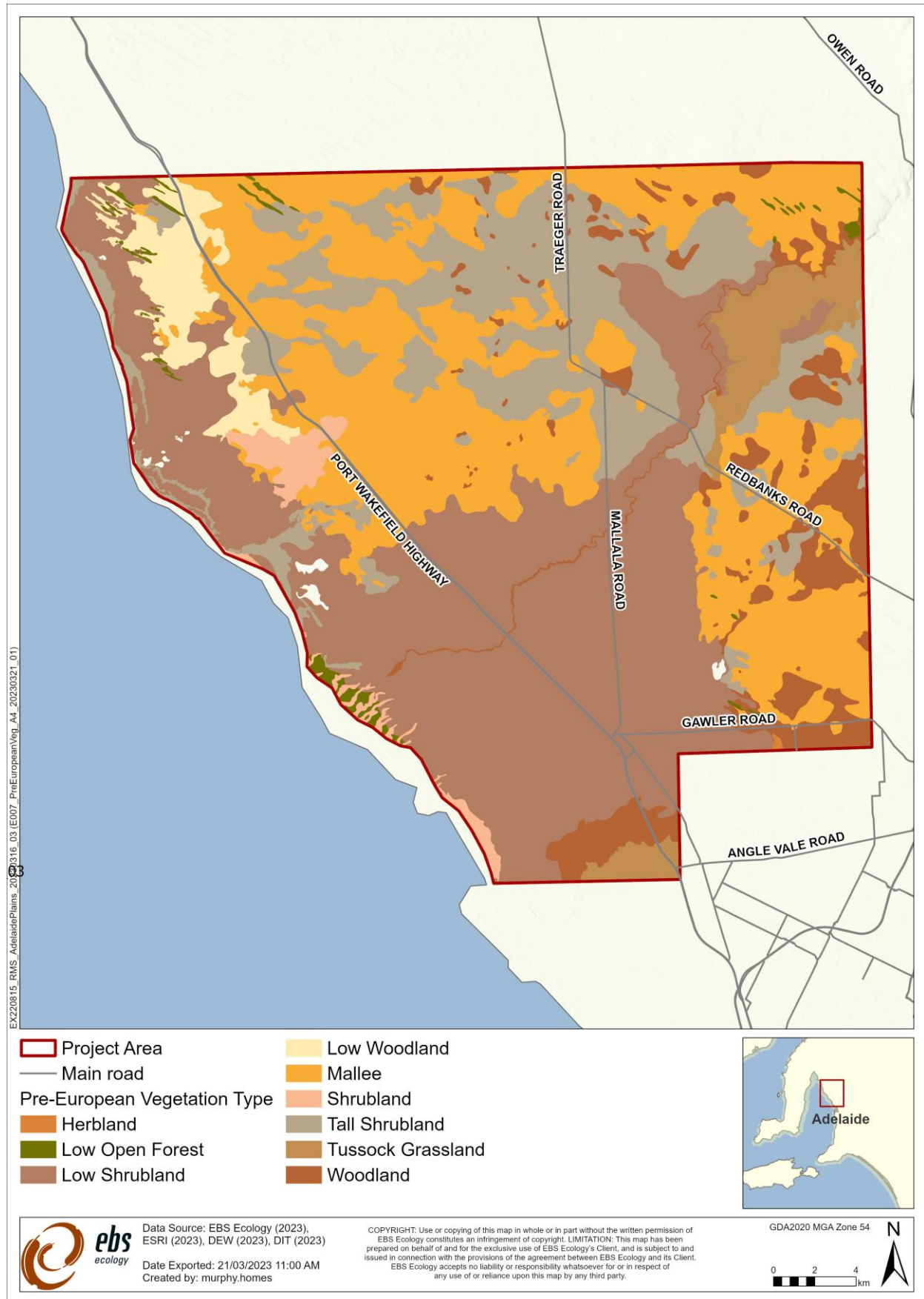


Figure 3. Pre-European vegetation located across the Project Area.

2.2.3 Threatened ecological communities

Three Threatened Ecological Communities (TEC) exists within the Northern and Yorke LMR, including:

- Peppermint Box (*Eucalyptus odorata*) Grassy Woodland – Critically Endangered;
- Iron-grass Natural Temperate Grassland of South Australia – Critically Endangered; and
- Subtropical and Temperate Coastal Saltmarsh – Vulnerable.

Based on the Protected Matters Search (DCCEEW 2023), It is likely that the Critically Endangered Peppermint Box Grassy Woodland and the Vulnerable Subtropical and Temperate Coastal Saltmarsh exist within the Project Area. The Critically Endangered Iron-grass Natural Temperate Grassland of South Australia may exist within the Project Area.

2.2.4 Watercourses and wetlands

Two major river systems flow within the APC: the Gawler River and the Light River (Figure 4). The Light River flows from the northeast slopes of the Mount Lofty Ranges to the southwest, eventually entering the St Vincent Gulf. The Gawler River is the confluence of the North Para and the South Para Rivers in the town of Gawler, flowing west into the Adelaide Plains and eventually draining into the mouth of the Adelaide International Bird Sanctuary National Park (Winaitiyinaityi Pangkara). Other watercourses that flow through the Project Area include:

- Salt Creek (Middle Beach);
- Baker Creek (Dublin);
- Thompson Creek; and
- Templers Creek (Reeves Plains).

The Clinton wetlands are Wetlands of National Significance and extend from the Clinton, through Clinton Conservation Park and south through Port Wakefield and Port Gawler. This wetland consists of mangrove/samphire estuarine area with many large tidal channels fringed by mangroves (Landscape South Australia Northern and Yorke 2023).

2.2.5 Adelaide International Bird Sanctuary National Park – Winaitiyinaityi Pangkara.

A large part of the western section of the Project Area incorporates the Adelaide International Bird Sanctuary National Park (Winaitiyinaityi Pangkara). This sanctuary encompasses a total of 60 km of coastline north of Adelaide. The Bird Sanctuary is positioned at the southern end of the East Asian-Australasian Flyway (EAAF) and is one of the key feeding and roosting Sites for migratory birds that utilise the flyway each year (NPWSSA 2023).



Figure 4. Water courses located within the Project Area.

2.2.6 Fire history

Bushfires are an important part of the Australian environment and these ecosystems have evolved with fire. Many of Australia's native plants are not only prone to fire but require fire to regenerate (Geoscience Australia 2023). Since 2010, nine bushfires have been recorded within the APC (DEW 2023). One of the largest of those bushfires was the Pinery fire that burnt on the 25 of November in 2015, where approximately 78,257 hectares (ha) of land was burnt (Figure 5). The Pinery fire caused a significant loss of native flora and fauna. 20 Roadside Marker Sites across the APC were impacted by the 2015 Pinery bushfire. In order to rehabilitate native vegetation, post-fire on-ground works to stabilise soil with large machinery across the fire scar. Approximately 30,000 native plants, stakes and guards to assist in re-greening the fire scar (Zimmerman 2017).

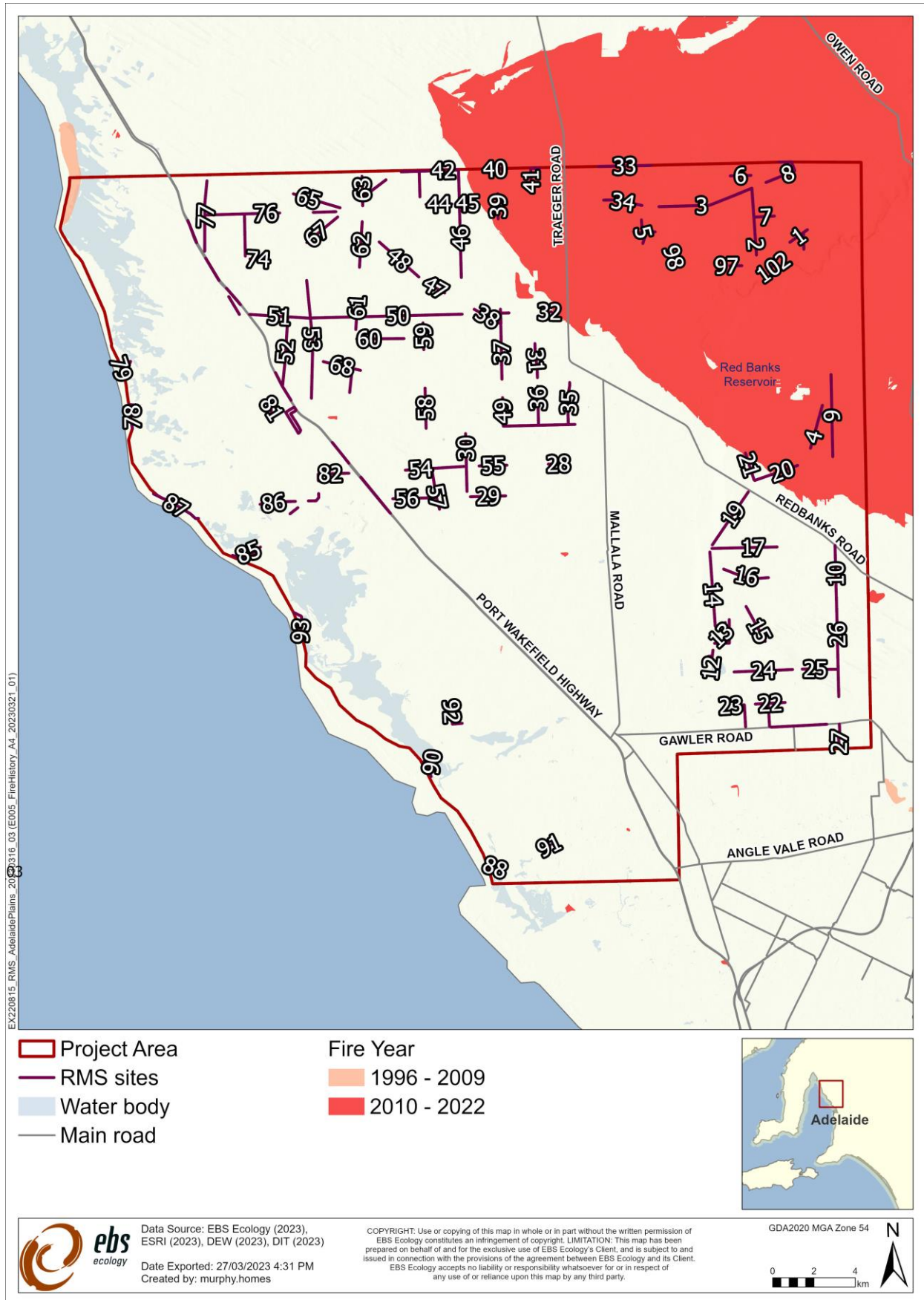


Figure 5. Fire history within the Project Area.

3 METHODS

3.1 Field survey

The field assessment was spread across a two-week period. The first field survey was conducted from 13 December to 16 December 2022, with the second field survey conducted from the 9 January to the 13 of January 2023 by Ecologists E. West and G. Wilson. The native vegetation condition of all Roadside Marker Sites was assessed in accordance with the Bushland Assessment Method (BAM) (NVC 2020a) (section 3.1.1).

3.1.1 Vegetation condition

The condition of vegetation was surveyed according to the BAM. The Native Vegetation Council (NVC) is derived from the Nature Conservation Society of South Australia's Bushland Condition Monitoring (BCM) methodology (Croft *et al.* 2005-2009). This method is suitable for assessing vegetation located within the agricultural regions of South Australia. This method was developed for most vegetation assessments undertaken in the Native Vegetation Branch (NVB), including clearance/regulation applications and potential Significant Environmental Benefit (SEB) areas and Heritage Agreements. However, this method can be used to assess any vegetation for which biological/biodiversity value need to be determined.

For NVC BAM, three components of the biodiversity value of the any specific Site are generally measured and scored:

- Landscape context;
- Vegetation condition; and
- Conservation significance.

The scores of these three components are combined to provide the Unit Biodiversity Score (UBS), which is then multiplied by size (hectares) of the Site to provide a Total Biodiversity Score (TBS). However, as this project is not a clearance/regulation application, only the Vegetation Condition component was utilised for these scope of works (Table 3), generating a score out of 80 for each Site. The Sites are scored based on several factors outlined in Table 4 and Table 5.

Table 3. Factors that influence the value in the BAM scoresheet (NVC 2020a).

Component	Factors	Score range
Landscape context	<ul style="list-style-type: none"> • Percentage vegetation cover within 5 km. • Block shape (cleared perimeter: area ratio). • Native vegetation rampancy of IBRA Association. • Percentage of native vegetation protected within the IBRA Association; and • The presence of riparian vegetation, swamps, or wetlands. 	1.00-1.25
Vegetation condition	<ul style="list-style-type: none"> • Native plant species diversity. • Number of native lifeforms and their cover. • Number of regenerating species. • Weed cover and the level of invasiveness of dominant weed species. • Mature tree health, fallen timber, hollow bearing trees, and tree canopy; and 	max 80.00

Component	Factors	Score range
	<ul style="list-style-type: none"> Native: exotic understorey biomass. 	
Conservation significance	<ul style="list-style-type: none"> The presence of federal or state listed threatened ecological communities, and their conservation rating. Number of threatened plant species recorded at the Site, and their conservation rating; and Number of threatened fauna species and their conservation rating or potential habitat occurs within the Site. 	1.00-1.50

Table 4. Vegetation condition scores (/80).

Vegetation condition component	Overview description
Native Plant Species Diversity	A count of the number of species present is compared to a “benchmark” value for that vegetation type. This is then allocated a score from 0-30.
Weed Score	The cover and abundance of all weed species present is recorded. The 5 weeds with the highest product of threat rating and cover are summed to provide a score. This is then compared to a “benchmark” value for that vegetation type and allocated a score from 0-15.
Native Plant Life Forms	The cover of different native plant life forms is compared to a “benchmark” value for that vegetation type. This is then allocated a score from 0-20.
Regenerating	The total number of woody native species in juvenile or seedling form is recorded and compared to a “benchmark” value for that vegetation type. This is then allocated a score from 0-12.
Native:exotic Understorey Biomass	The percentage of the total <i>vegetative biomass</i> of shrubs and groundcover plants < 2m high that is native is noted. This is then allocated a score from 0-5.
Mature Tree Score	The density of mature trees is an estimate percentage of mature trees present within the Site as a proportion of what would be expected within the benchmark community with a rating of 0-8.
Tree Canopy Cover Score	The area covered by the canopy of tree species that form part of the canopy or subcanopy and then a score from 0-5.
Hollow-bearing Trees Score	This score relates to the number of small and large tree hollows present, with a rating of 0-5.
Fallen timber/debris	This score relates to the amount of branch and trunk sized logs present, with a rating of 0-5.

Table 5. Cover Rating Scores for Introduced species.

Cover Rating	
not many, cover <1%	1
Plentiful, cover <1%	1a
Covering 1 - 5%	2
Covering 5 – 25%	3
Covering 26 –50%	4

Cover Rating	
Covering 51 – 75%	5
Covering > 75%	6

3.2 Limitations

3.2.1 Flora

At the time the survey was undertaken, not all plant species may have been visibly present (given it was undertaken within the summer months of December-January). Some species such as native orchids and lilies are particularly hard to detect when not in flower.

3.2.2 4.3.3 Spatial data limitations

All spatial data has been captured or converted to the following coordinate reference system:

Datum: Geocentric Datum of Australia 2020 (GDA2020).

Projection: Map Grid of Australia 2020 (MGA2020), Zone 53H.

All location coordinates listed in this report, are expressed using this system. Spatial data converted from other coordinate reference systems may have accuracy limitations.

4 LEGISLATIVE REQUIREMENTS

4.1 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and the *Environment Protection and Biodiversity Conservation Regulations 2000* provide a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities, and heritage places – defined in the Act as ‘matters of national environmental significance’ (MNES). The nine matters of national environmental significance protected under the Act are:

1. World Heritage properties
2. National Heritage places
3. Wetlands of international importance (listed under the RAMSAR Convention)
4. Listed threatened species and ecological communities
5. Migratory species protected under international agreements
6. Commonwealth marine areas
7. The Great Barrier Reef Marine Park
8. Nuclear actions (including uranium mines)
9. A water resource, in relation to coal seam gas development and large coal mining development

Any action that has, will have, or is likely to have a significant impact on matters of national environmental significance requires referral under the EPBC Act. Substantial penalties apply for undertaking an action that has, will have or is likely to have significant impact on a matter of national environmental significance without approval.

The EPBC Act Significant Impact Guidelines provide overarching guidance on determining whether an action is likely to have a significant impact on a matter of national environmental significance. In terms of nationally threatened species, the guidelines define an action as likely to have a significant impact if there is a real chance or possibility that it will:

- Lead to a long-term decrease in the population
- Reduce the area of occupancy of the species
- Fragment an existing population
- Adversely affect critical habitat
- Disrupt breeding cycles
- Modify, destroy, remove, isolate, or decrease the availability or quality of habitat to the extent that the species is likely to decline
- Result in the establishment of invasive species that are harmful to the species
- Introduce disease that may cause the species to decline
- Interfere with the recovery of the species.

4.2 Native Vegetation Act 1991

The Project Area is in the district council of the Adelaide Plains, which is currently subject to the *Native Vegetation Act 1991* (NV Act). Native vegetation within the Project Area is protected under the NV Act and *Native Vegetation Regulations 2017*. Any proposed clearance of native vegetation in South Australia (unless exempt under the *Native Vegetation Regulations 2017*) is to be assessed against the NV Act Principles of Clearance and requires approval from the Native Vegetation Council (NVC).

Native vegetation refers to any naturally occurring local plant species that are indigenous to South Australia, from small ground covers and native grasses to large trees and water plants.

"Clearance", in relation to native vegetation, means:

- 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 of native vegetation.
- Any other substantial damage to native vegetation, and includes the draining or flooding of land, or any other act or activity, that causes the killing or destruction of native vegetation, the severing of branches, limbs, stems or trunks of native vegetation or any other substantial damage to native vegetation.

Approval must be obtained before performing any activity that could cause substantial damage to native plants. This also applies to dead trees that may provide habitat for animals. These activities include but are not limited to:

- The cutting down, destruction or removal of whole plants.
- The removal of branches, limbs, stems, or trunks (including brush cutting and woodcutting).
- Burning.
- Poisoning.
- Slashing of understorey.
- Drainage and reclamation of wetlands.
- Grazing by animals (in some circumstances).
- Change of land use.

Under the NV Act, the NVC considers applications to clear native vegetation under ten principles. Native vegetation should not be cleared if it is significantly at odds with these principles:

- It contains a high level of diversity of plant species.
- It is an important wildlife habitat.
- It includes rare, vulnerable, or endangered plant species.
- The vegetation comprises a plant community that is rare, vulnerable, or endangered.
- It is a remnant of vegetation in an area which has been extensively cleared.
- It is growing in, or association with, a wetland environment.

- It contributes to the amenity of the area.
- The clearance of vegetation is likely to contribute to soil erosion, salinity, or flooding.
- The clearance of vegetation is likely to cause deterioration in the quality of surface or underground water.
- After clearance, the land is to be used for a purpose which is unsustainable.

4.3 National Parks and Wildlife Act 1972

Native plants and animals in South Australia are protected under the *National Parks and Wildlife Act 1972* (NPW Act). It is an offence to take a native plant or protected animal without approval. Threatened plant and animal species are listed in Schedules 7 (Endangered species), 8 (Vulnerable species) and 9 (Rare species) of the Act. Persons must not:

- Take a native plant on a reserve, wilderness protection area, wilderness protection zone, land reserved for public purposes, a forest reserve, or any other Crown land
- Take a native plant of a prescribed species on private land
- Take a native plant on private land without the consent of the owner (such plants may also be covered by the NV Act)
- Take a protected animal or the eggs of a protected animal without approval
- Keep protected animals unless authorised to do so
- Use poison to kill a protected animal without approval

4.4 Landscape of South Australia Act 2019

Under the *Landscape South Australia Act 2019* (LSA Act), new regional landscape boards have been established. The aim is to deliver landscape related services to regional communities, including effective water management, pest plant and animal control, soil and land management and support for broader sustainable primary production programs. Under the LSA Act, landholders have a legal responsibility to manage declared pest plants and animals and prevent land and water degradation.

4.5 Local Government Act 1999

All work within the road reserve requires written authority from the Council under Section 221 of the *Local Government Act 1999*. This includes removal and disturbance of vegetation and the control of pest plants and animals. Council can issue permits to property owners allowing them to use Unmade Public Road for business purposes for activities such as grazing or cropping or for access to their property.

Temporary and permanent alterations to a public road carried out by an applicant under Section 221 of the *Local Government Act 1999* are managed by the Construction or Modification to Council Land Process. Business activity on a public road – also known as “road rentals” under Section 222 of the Act, is managed by the Use an Unmade Public Road Process.

5 FIELD SURVEY RESULTS

The 99 Roadside Marker Sites are discussed below and are divided into their associated suburb (section 5.1 to 5.19).

5.1 Barabba

A total of 12 Roadside Marker Sites are present within the Barabba suburb (Figure 6).

5.1.1 Roadside Marker Site 001 (Hamley Bridge and Edward Road (Rd))

One post was present at Site 1, which was located at the T-junction of Hamley Bridge and Edward Rd (Table 6). A total of 12 native species were identified with four species showing signs of natural regeneration. No species were listed as threatened under the NPW Act or the EPBC Act. A total of seven introduced species were observed, this includes two declared weeds, one of which is listed as a Weed on National Significance (WoNS) and four environmental weeds (Table 7). This Site received a low Vegetation Condition Score (VCS) of 17.10 out of 80 (Table 8).

Table 6. Summary of Roadside Marker Site 001.

Site	001
Road	Hamley Bridge Rd and Edward Rd.
Suburb	Barabba
IBRA Association	Mallala
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.6192 - 34.3746 (E end of Hamley Bridge Rd) 138.6171 -34.376 (RMS post) 138.6171 -34.3831 (S end of Edwards Rd) End: 138.6098 -34.3799 (W end of Hamley Bridge Rd)
Post present?	One
Threats	Weed invasion, crop drift, dieback, mowing or slashing of roadside vegetation, tree guards.
Vegetation Condition Score	Low – 17.10
Adjacent land use	Cropping/pasture
Vegetation association	<i>Eucalyptus socialis</i> and <i>E. gracilis</i> Mallee over <i>Melaleuca lanceolata</i> and <i>Acacia ligulata</i> .
Benchmark Community	Northern Agricultural (NA) 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory
Photo points	T-junction of Hamley Bridge Rd and Edward Rd looking S



S end of Edward Rd (looking N)



W end of Hamley Bridge Rd (looking E)



E end of Hamley Bridge Rd (looking W)



Table 7. Flora Species List at Roadside Marker Site 001.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Chloris truncata</i>	Windmill Grass			
<i>Dodonaea viscosa</i> ssp.	Sticky Hop-bush			
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush			
<i>Eremophila longifolia</i>	Weeping Emubush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus socialis</i>	Beaked Red Mallee			
<i>Grevillea huegelii</i>	Comb Grevillea			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Brassica</i> sp.				
<i>Cenchrus clandestinus</i>	Kikuyu			Yes
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Lolium perenne</i>	Perennial Rye-grass			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 8. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 1.


Attribute	Score
Native Plant Species Diversity	15/30
Weeds	5/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	1/5
Tree Canopy cover	1/5
Hollow-bearing tree	4/5
Fallen Timber/debris	4/5

Attribute	Score
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	17.10/80

5.1.2 Roadside Marker Site 002 (Brady Rd)

One post was present at Site 2, which was located at the western side on the southern end of Brady Rd (Table 9). A total of 17 native species were identified, with one species naturally regenerating (*Eucalyptus socialis*). No species were listed as threatened under the NPW Act or the EPBC ACT. Nine introduced species were observed, this included three declared (all WoNS) and four environmental weeds (Table 10). This Site received a low-medium VCS of 34.53 out of 80 (Table 11).

Table 9. Summary of Roadside Marker Site 002.

Site	002
Road	Fidge Rd and Brady Rd
Suburb	Barabba
IBRA Association	Mallala
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.5921 -34.3851 (S end on the W side of Brady Rd).
	End: 138.5823 -34.3584 (W end of Fidge Rd).
Post present?	One (S end on the W side of Brady Rd).
Threats	Weed invasion, crop drift, dieback.
Vegetation Condition Score	Medium - 34.53
Adjacent land use	Cropping/pasture
Vegetation association	<i>Eucalyptus odorata</i> Mallee over <i>Acacia ligulata</i> and +/- <i>Myoporum platycarpum</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory
Photo points	<p>W side on the S end of Brady Rd (looking N)</p> 

N end of Brady Rd



W end of Fidge Rd on the S side



W end of Fidge Rd on the N side



Table 10. Flora Species List at Roadside Marker Site 002.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Dianella</i> sp.	Flax-lily			
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Grevillea huegelii</i>	Comb Grevillea			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum platycarpum</i> ssp.	False Sandalwood			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i> x ssp. <i>sturtii</i>	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aira</i> sp.	Hair-grass			
<i>Asparagus asparagoides</i> f.	Bridal Creeper	Yes	Yes	
<i>Echium plantagineum</i>	Salvation Jane	Yes	Yes	
<i>Ehrharta calycina</i>	Perennial Veldt Grass			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Malva</i> sp.	Mallow			
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.


Table 11. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 002.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	8/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing tree	3/5
Fallen Timber/debris	3.5/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	34.53/80

5.1.3 Roadside Marker Site 003 (Fidge Rd)

One post was present at Site 3, which was located at the T-junction of Hamley Bridge and Edward Rd (Table 12). A total of 14 native species were identified, with one species regenerating (*Eucalyptus socialis*). No species are listed as threatened under the NPW Act or the EPBC Act. A total of 11 introduced species, three of these species are declared and six are environmental weeds (Table 7). This Site received a Vegetation Condition Score (VCS) of 35.20 out of 80, reflecting a low VCS.

Table 12. Summary of Roadside Marker Site 003.

Site	003
Road	Fidge Rd
Suburb	Barabba
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.5852 -34.3577 (W end on the) End: 138.5414 -34.363 (W end of Fidge Rd)
Post present?	One
Threats	Weed invasion, crop drift.
Vegetation Condition Score	Medium - 35.20
Adjacent land use	Cropping/pasture
Vegetation association	<i>Eucalyptus odorata</i> Mallee over <i>Acacia notabilis</i> and <i>Senna artemisioides</i> ssp. <i>X coriacea</i> .
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory
Photo points	<p>E side of Fidge Road on the W End (looking south)</p>  <p>W End (looking east) of Fidge Rd on the N side</p>



W End (looking east) of Fidge Rd on the S side



Table 13. Flora Species List at Roadside Marker Site 003.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Bursaria spinosa</i> ssp. <i>spinosa</i>	Sweet Bursaria			
<i>Dianella</i> sp.	Flax-lily			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus socialis</i> ssp. <i>socialis</i>	Beaked Red Mallee			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Vittadinia</i> sp.	New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asparagus asparagoides</i> f.	Bridal Creeper	Yes	Yes	
<i>Avena barbata</i>	Bearded Oat			Yes

<i>Heliotropium europaeum</i>	Common Heliotrope			Yes
<i>Malva sp.</i>	Mallow			
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 14. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 003.




Attribute	Score
Native Plant Species Diversity	18/30
Weeds	7/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing tree	3/5
Fallen Timber/debris	3/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	35.20/80

5.1.4 Roadside Marker Site 005 (March and Davies Rd Intersection)

No posts were present at Site 5 (Table 15). A total of 14 native species were identified, with one species showing natural regeneration (*Eucalyptus socialis*). No species are listed as threatened under the NPW Act or the EPBC Act. A total of 13 introduced species were observed with presence of both Environmental and Declared weeds (Table 7). This Site received a VCS of 31.63 out of 80, reflecting a low-medium VCS (Table 17).

Table 15. Summary of Roadside Marker Site 005.

Site	005
Road	March Rd and Davies Rd
Suburb	Barabba
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.5392 -34.374 (E end of March Rd) 138.5277 -34.3736 (W end of March Rd) 138.532 -34.3686 (N end of Davies Rd) End: 138.5325 -34.3789 (S end of Davies Rd)
Posts present?	No
Threats	Weed invasion, crop drift, stockpiles of dirt.
Vegetation Condition Score	Medium - 31.63
Adjacent land use	Cropping/pasture

Vegetation association	<i>Eucalyptus porosa</i> Open Mallee over <i>Acacia ligulata</i> and <i>A. notabilis</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory
Photo points	<p>E end of March Rd (E side)</p>
	
	<p>W end of March Rd (N side)</p>
	
Photo points	<p>N end of Davies Rd (E side)</p>
Photo points	
	<p>N end of Davies Rd (W side)</p>



S end of Davies Rd (W side)



S end of Davies Rd (E side)



Table 16. Flora Species List at Roadside Marker Site 005.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Adriana quadripartita</i>	Coast Bitter-bush		
<i>Austrostipa elegantissima</i>	Feather Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Eremophila longifolia</i>	Weeping Emubush		

Native				
Species Name	Common Name	AUS	SA	
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus oleosa ssp. ampliata</i>				
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Phragmites australis</i>	Common Reed			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Senna artemisioides ssp. petiolaris</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Brassica tournefortii</i>	Wild Turnip			Yes
<i>Bromus sp.</i>	Brome			
<i>Carthamus sp.</i>				
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum crystallinum</i>	Common Iceplant			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.



Table 17. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 005.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	5/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	3/5
Hollow-bearing tree	3/5
Fallen Timber/debris	4/5
Mature Tree	1/8
TOTAL VEGETATION CONDITION SCORE	31.63/80

5.1.5 Roadside Marker Site 006 (Wilson Rd)

Only stakes with no signs were present at Site 6 (Table 18). A total of 12 native species were identified at Site 6, with numerous species showing natural regeneration. No species are listed as threatened under the NPW Act or the EPBC Act. A total of 11 introduced species were observed, this includes four declared weeds (one WoNS) weeds and five environmental (Table 19). This Site received a VCS of 41.10 out of 80, reflecting a medium VCS (Table 20).

Table 18. Summary of Roadside Marker Site 006.

Site	006
Road	Wilson Rd
Suburb	Barabba
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.5901 -34.3504 (E end of Wilson Rd) End: 138.5793 -34.3503 (W end of Wilson Rd)
Posts present?	No, only stakes.
Threats	Weed invasion, crop drift, non-indigenous eucalyptus plantings and fire scar.
Vegetation Condition Score	Medium - 41.10
Adjacent land use	Cropping/pasture, residential.
Vegetation association	<i>Eucalyptus porosa</i> and <i>E.odorata</i> over <i>Acacia notabilis</i> and <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory
Photo points	<p>W end of Wilson Rd (S side)</p>  <p>W end of Wilson Rd (N side)</p> 

E End of Wilson Rd (N side)



E End of Wilson Rd (S side)



Table 19. Flora Species List at Roadside Marker Site 006.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Eucalyptus brachycalyx</i>	Gilja			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Lomandra multiflora</i> ssp.	Many-flower Mat-rush			
<i>Myoporum platycarpum</i> ssp.	False Sandalwood			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asparagus asparagoides</i> f.	Bridal Creeper	Yes	Yes	
<i>Asphodelus fistulosus</i>	Onion Weed			Yes

<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				Yes
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Malva sp.</i>	Mallow			
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Solanum nigrum</i>	Black Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 20. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 006.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	8/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	4/5
Hollow-bearing tree	2/5
Fallen Timber/debris	4/5
Mature Tree	4/5
TOTAL VEGETATION CONDITION SCORE	41.10/80

5.1.6 Roadside Marker Site 007 (Off Brady Rd)

One posts was present at this the start of this Site. However, survey only extended to about 100 meters in (Table 21). A total of 10 native species were identified at Site 7, with numerous species showing natural regeneration. No species are listed as threatened under the NPW Act or the EPBC Act. A total of nine introduced species were observed, this included two declared weeds (both WoNS) and four environmental weeds (Table 22). This Site received a VCS of 18.03 out of 80, reflecting a low VCS.

Table 21. Summary of Roadside Marker Site 007.

Site	007
Road	Off Brady Rd – only went about 100 meters in.
Suburb	Barabba
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.5913 -34.3686 (RMS post) End: NA
Posts present?	One
Threats	Weed invasion.
Vegetation Condition Score	Low- 18.03
Adjacent land use	Cropping/pasture
Vegetation association	<i>Eucalyptus socialis</i> Mallee over <i>Senna artemisioides ssp. petiolaris</i> .


Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
	<p>W end off Brady Track (N side)</p>  <p>Photo points</p>

Table 22. Flora Species List at Roadside Marker Site 007.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus socialis</i> ssp. <i>socialis</i>	Beaked Red Mallee			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Dianella revoluta</i> var.				
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asparagus asparagoides</i> f.	Bridal Creeper	Yes	Yes	
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Echium plantagineum</i>	Salvation Jane			
<i>Ehrharta calycina</i>	Perennial Veldt Grass			
<i>Hordeum vulgare</i>	Barley			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes
<i>Trifolium arvense</i> var. <i>arvense</i>	Hare's-foot Clover			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 23. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 007.

Attribute	Score
Native Plant Species Diversity	12/30
Weeds	4.5/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	1/5

Attribute	Score
Tree Canopy cover	4/5
Hollow-bearing tree	2/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	18.03/80

5.1.7 Roadside Marker Site 008 (Tank Rd, Fidge Rd and Murphy Rd)

No posts were observed during the assessment (Table 24). A total of 15 native species were identified at Site 8, with numerous species showing natural regeneration (Table 25). No species are listed as threatened under the NPW Act or the EPBC Act. A total of 11 introduced species were observed with presence, this includes four declared weeds (two WoNS) and six environmental weeds. Large infestations of the WoNS *Asparagus asparagoides* (Bridal Creeper) was observed under the canopy of trees. This Site received a VCS of 39.60 out of 80, reflecting a medium VCS (Table 26).

Table 24. Summary of Roadside Marker Site 008.

Site	008
Road	Tank Rd, Fidge Rd and Murphy Rd.
Suburb	Barabba
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.6048 -34.3448 (W end of Tank Rd) End: 138.598 -34.3536 (W end of Fidge Rd)
Posts present?	No
Threats	Weed invasion, drainage issues.
Vegetation Condition Score	Medium - 39.60
Adjacent land use	Cropping/pasture.
Vegetation association	<i>Eucalyptus socialis</i> Mallee over <i>Maireana brevifolia</i> and <i>Senna artemisioides</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	W end on the N side of Tank Rd (looking east)



W end of Fidge Rd (looking east)



Table 25. Flora Species List at Roadside Marker Site 008.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Austrostipa elegantissima</i>	Feather Spear-grass			
<i>Austrostipa nodosa</i>	Tall Spear-grass			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Dianella</i> sp.	Flax-lily			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus socialis</i> ssp. <i>socialis</i>	Beaked Red Mallee			
<i>Grevillea huegelii</i>	Comb Grevillea			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Zygophyllum aurantiacum/eremaeum</i>	Shrubby Twinleaf			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asparagus asparagoides</i> f.	Bridal Creeper	Yes	Yes	
<i>Avena barbata</i>	Bearded Oat			Yes

<i>Centaurea calcitrapa</i>	Star Thistle			Yes
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Hordeum marinum</i>	Sea Barley-grass			Yes
<i>Lythrum hyssopifolia</i>	Lesser Loosestrife			
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 26. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 008.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	5.5/15
Native Plant Life forms	12/30
Regenerating	9/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	4/5
Hollow-bearing tree	3/5
Fallen Timber/debris	3/5
Mature Tree	3/5
TOTAL VEGETATION CONDITION SCORE	39.60/80

5.1.8 Roadside Marker Site 033 (Tank Rd)

Both post was observed along the W end and the E end of Tank Rd (Table 27). A total of nine native species were identified at Site 33, with numerous species showing natural regeneration. No species are listed as threatened under the NPW Act or the EPBC Act. A total of 20 introduced species were observed with presence of both Environmental and Declared weeds (Table 28). Infestations of the *Mesembryanthemum crystallinum* (Common Iceplant) was observed throughout this Site. This Site received a VCS of 29.21 out of 80, reflecting a low-medium VCS (Table 29).

Table 27. Summary of Roadside Marker Site 033.

Site	033
Road	Tank Rd
Suburb	Barabba
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.51 -34.3449 (W end of Tank Rd) End: 138.5379 -34.3449 (E end of Tank Rd)
Posts present?	Yes
Threats	Weed invasions
Vegetation Condition Score	Medium - 29.21

Adjacent land use	Cropping/pasture.
Vegetation association	<i>Eucalyptus brachycalyx</i> Open Mallee over <i>Maireana brevifolia</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end of Tank Rd on the N side</p> 
	<p>E end of Tank Rd of the S side</p> 

Table 28. Flora Species List at Roadside Marker Site 033.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush			
<i>Eucalyptus brachycalyx</i>	Gilja			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca acuminata</i> ssp. <i>acuminata</i>	Mallee Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aira</i> sp.	Hair-grass			
<i>Arctotheca calendula</i>	Cape Weed			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Brassica</i> sp.				

Introduced				
Common Name	Common Name	Declared	WoNS	Environmental Weed
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Cynara cardunculus ssp. flavescent</i>	Artichoke Thistle	Yes		
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Heliotropium europaeum</i>	Common Heliotrope			Yes
<i>Hordeum distichon</i>				
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Malva sp.</i>	Mallow			
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum crystallinum</i>	Common Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 29. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 033.



Attribute	Score
Native Plant Species Diversity	18/30
Weeds	4.5/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing tree	3/5
Fallen Timber/debris	4/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	29.21

5.1.9 Roadside Marker Site 034 (Fidge Rd)

No posts were present at this Site (Table 30). A total of 20 native species were identified at Site 34, with numerous species showing natural regeneration. No species are listed as threatened under the NPW Act or the EPBC Act. A total of seven introduced species were observed this includes two declared weeds (one WoNS) and two environmental weeds (Table 31). Signs of native vegetation clearance was observed around the entrance of a property located long this road. The cleared remains have been stockpiled within the road reserve at this Site. This Site received a VCS 36.80 out of 80, reflecting a medium VCS (Table 32).

Table 30. Summary of Roadside Marker Site 034.

Site	034
Road	Fidge Rd
Suburb	Barabba

Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.5124 -34.3596 (W end of Fidge Rd) End: 138.5325 -34.3623 (E end of Fidge Rd)
Posts present?	No
Threats	Weed invasions, clearance of native vegetation and creation of stock piles.
Vegetation Condition Score	Medium - 36.80
Adjacent land use	Cropping/pasture.
Vegetation association	<i>Eucalyptus odorata</i> , <i>E. gracilis</i> Mixed Open Mallee over <i>Acacia ligulata</i> .
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end of Fidge Rd on S side</p> 
	<p>W end of Fidge Rd on N side</p> 

E end of Fidge Rd on S side



E end of Fidge Rd on N side



Table 31. Flora Species List at Roadside Marker Site 034.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia acinacea</i>	Wreath Wattle		
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Adriana quadripartita</i>	Coast Bitter-bush		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		
<i>Austrostipa nodosa</i>	Tall Spear-grass		
<i>Dianella revoluta</i> var. <i>revoluta</i>	Black-anther Flax-lily		
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush		
<i>Enneapogon avenaceus</i>	Common Bottle-washers		
<i>Eucalyptus gracilis</i>	Yorrell		
<i>Eucalyptus odorata</i>	Peppermint Box		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Maireana brevifolia</i>	Short-leaf Bluebush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass		
<i>Salsola australis</i>	Buckbush		

Native				
Species Name	Common Name	AUS	SA	
<i>Senna artemisioides ssp. petiolaris</i>				
<i>Senna artemisioides ssp. X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Carthamus sp.</i>				
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 32. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 034.



Attribute	Score
Native Plant Species Diversity	21/30
Weeds	7/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing tree	3/5
Fallen Timber/debris	1/5
Mature Tree	3/5
TOTAL VEGETATION CONDITION SCORE	36.80

5.1.10 Roadside Marker Site 097 (Hamley Bridge Rd)

No posts were observed during the field survey (Table 33). A total of 12 native species were identified at Site 97, with numerous species showing natural regeneration. One species is listed as threatened under the NPW Act, the State Rare *Acacia iteaphylla* (Flinders Ranges Wattle). No species threatened under the EPBC Act were identified during the field survey. A total of nine introduced species were observed, this includes two declared weeds (one WoNS) and six environmental weeds (Table 34). The northern side of this Site was weedier than the southern side, with large infestations of declared weeds *Marrubium vulgare* (Horehound) and *Lycium ferocissimum* (African Boxthorn). This Site received a VCS of 22.29 out of 80, reflecting a low VCS (Table 35).

Table 33. Summary of Roadside Marker Site 097.

Site	097
Road	Hamley Bridge Rd.
Suburb	Barabba
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.577 -34.3895 (W end of Hamley Bridge Rd)

	End: 138.5842 -34.3896 (E end of Hamley Bridge Rd)
	Posts present? No
	Threats Weed invasions, crop drift, clearance around gates.
	Vegetation Condition Score Low to Medium - 22.29
	Adjacent land use Cropping/pasture and residential properties.
	Vegetation association <i>Eucalyptus oleosa</i> Mallee over <i>Eremophila longifolia</i>
	Benchmark Community NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end of Hamley Bridge Rd (N side)</p> 
	<p>W end of Hamley Bridge Rd (S side)</p> 
	<p>E end of Hamley Bridge Rd (S side)</p>



E end of Hamley Bridge Rd (N side)



Table 34. Flora Species List at Roadside Marker Site 097.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia iteaphylla</i>	Flinders Ranges Wattle		R	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Allocasuarina verticillata</i>	Drooping Sheoak			
<i>Bursaria spinosa</i> ssp. <i>spinosa</i>	Sweet Bursaria			
<i>Distichlis distichophylla</i>	Emu-grass			
<i>Enchylaena tomentosa</i> var. <i>glabra</i>	Smooth Ruby Saltbush			
<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i>				
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Senna</i> sp.	Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Cynodon dactylon</i> var. <i>dactylon</i>	Couch			Yes
<i>Lactuca serriola</i> f. <i>serriola</i>	Prickly Lettuce			Yes
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 35. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 097.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	9/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	3/5
Hollow-bearing tree	0/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	22.29/80

5.1.11 Roadside Marker Site 098 (Collins Rd)

No posts were observed during the field survey (Table 36). A total of 19 native species were identified at Site 98, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 13 introduced species were observed, which includes four declared weeds (two WoNS) with presence and five environmental weeds (Table 37). This Site received a VCS of 27.90 out of 80, reflecting a low to medium VCS (Table 38).

Table 36. Summary of Roadside Marker Site 098.

Site	098
Road	Collins Rd.
Suburb	Barabba
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.549 -34.389 (S end)
	End: 138.5471 -34.381 (N end)
Posts present?	No
Threats	Weed invasions, crop drift, clearance around gates.
Vegetation Condition Score	Low to Medium - 27.90
Adjacent land use	Cropping/pasture and residential properties.
Vegetation association	<i>Eucalyptus porosa</i> , <i>E.odorata</i> and <i>E. phenax</i> Mixed Mallee over <i>Acacia ligulata</i> and <i>A. notabilis</i>

Benchmark Community

NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.

N end of Collins Rd (W side)



N end of Collins Rd (E side)



S end of Collins Rd (W side)



S end of Collins Rd (E side)

Photo points



Table 37. Flora Species List at Roadside Marker Site 098.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Allocasuarina verticillata</i>	Drooping Sheoak			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Bursaria spinosa</i> ssp. <i>spinosa</i>	Sweet Bursaria			
<i>Distichlis distichophylla</i>	Emu-grass			
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus oleosa</i>				
<i>Eucalyptus phenax</i> ssp.				
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Salsola australis</i>	Buckbush			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Bromus diandrus</i>	Great Brome			
<i>Cucumis myriocarpus</i> ssp. <i>myriocarpus</i>	Paddy Melon			
<i>Hordeum vulgare</i>	Barley			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Malva</i> sp.	Mallow			
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Olea europaea</i> ssp.	Olive	Yes		
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 38. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 098.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	4/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	1/5
Tree Canopy cover	3/5
Hollow-bearing tree	4/5
Fallen Timber/debris	3.5/5
Mature Tree	2/5
TOTAL VEGETATION CONDITION SCORE	27.09/80

5.1.12 Roadside Marker Site 102 (Light River)

No posts were observed during the field survey (Table 39). A total of 11 native species were identified at Site 102, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 12 introduced species were observed, this includes three declared weeds (WoNS) and seven environmental weeds (Table 40). This Site received a VCS of 30.80 out of 80, reflecting a medium VCS (Table 41).

Table 39. Summary of Roadside Marker Site 102.

Site	102
Road	Light River
Suburb	Barabba
Date surveyed	13/12/2022
Longitude and Latitude	Start: 138.5989 -34.3916 (SW end)
	End: 138.6023 -34.3897 (NE end)
Posts present?	No
Threats	Weed invasions, litter.
Vegetation Condition Score	Medium - 30.80
Adjacent land use	Bushland, residential properties.
Vegetation association	<i>Eucalyptus camaldulensis</i> Open Woodland over <i>Phragmites australis</i>
Benchmark Community	NA 7.1 Riparian Woodlands
Photo points	W end (looking S of Light River)



E end (looking SW of Light River)



Table 40. Flora Species List at Roadside Marker Site 102.

Native				
Species Name	Common Name	AUS	SA	
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Bursaria spinosa</i> ssp. <i>spinosa</i>	Sweet Bursaria			
<i>Cyperus gymnocaulos</i>	Spiny Flat-sedge			
<i>Distichlis distichophylla</i>	Emu-grass			
<i>Duma florulenta</i>	Lignum			
<i>Eucalyptus camaldulensis</i> ssp.	River Red Gum			
<i>Juncus kraussii</i>	Sea Rush			
<i>Phragmites australis</i>	Common Reed			
<i>Samolus repens</i>	Creeping Brookweed			
<i>Tecticornia</i> sp.	Samphire			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Cynara cardunculus</i> ssp. <i>flavescens</i>	Artichoke Thistle	Yes		
<i>Echium plantagineum</i>	Salvation Jane	Yes		

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Foeniculum vulgare</i>	Fennel			Yes
<i>Hordeum vulgare</i>	Barley			Yes
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Opuntia spp.</i>	Prickly Pear	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes
<i>Trifolium arvense var. arvense</i>	Hare's-foot Clover			
<i>Vulpia sp.</i>	Fescue			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 41. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 102.

Attribute	Score
Native Plant Species Diversity	14/30
Weeds	7/15
Native Plant Life forms	16/20
Regenerating	4.5/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	2/5
Hollow-bearing tree	1/5
Fallen Timber/debris	1/5
Mature Tree	2/5
TOTAL VEGETATION CONDITION SCORE	30.80/80

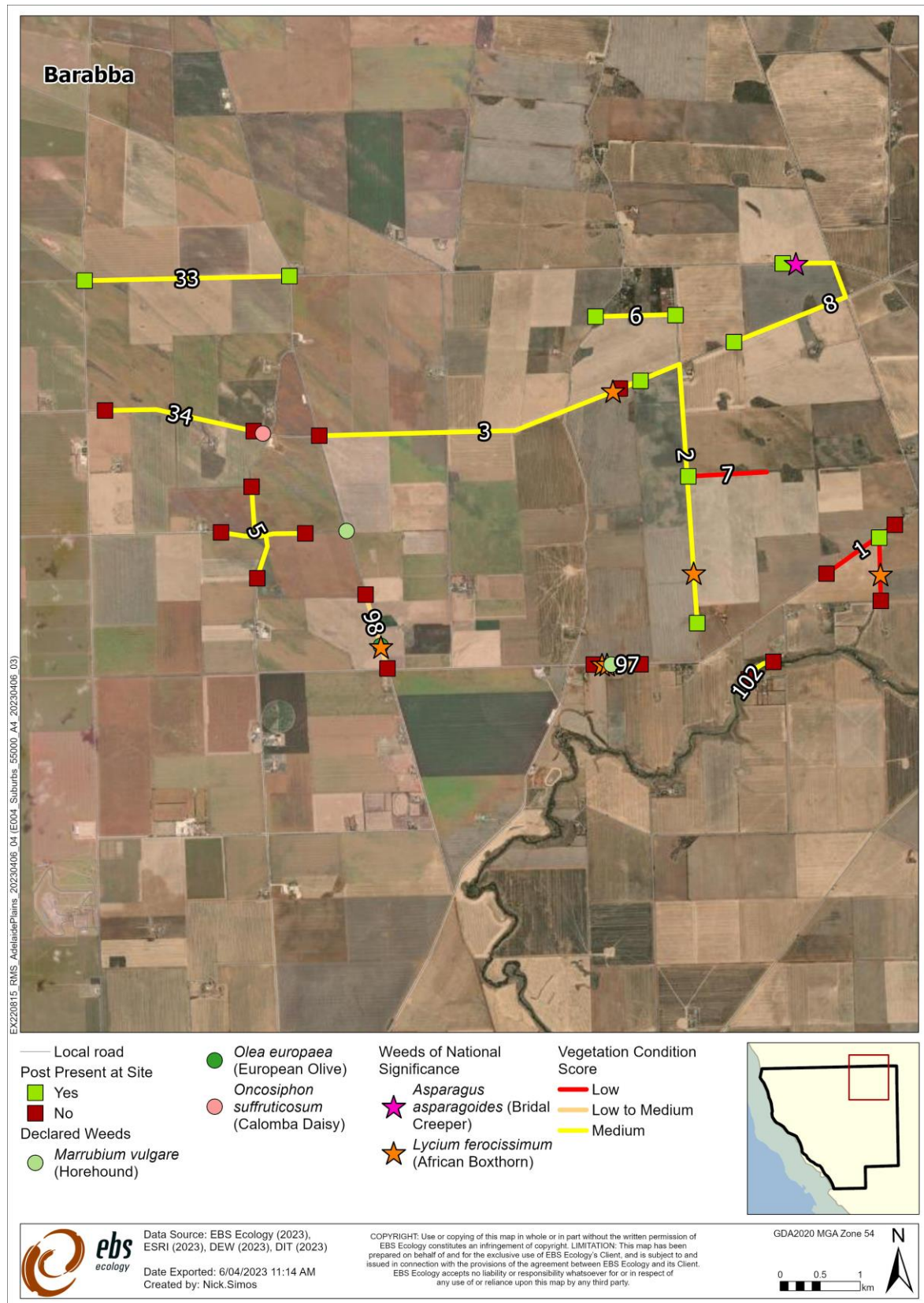


Figure 6. Roadside Marker Sites located on Barabba.


5.2 Pinkerton Plains

A total of two roadside marker Sites was assessed across Pinkerton Plains (Figure 7).

5.2.1 Roadside Marker Site 004 (Pinkerton Rd)

One post was present on the northern end of Pinkerton Plains Rd (Table 42). This Site had a large number of hares present within the area. A total of 17 native species were identified at Site 004, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 10 introduced species were observed, this includes three declared weeds (all WoNS) and three Environmental weeds (Table 43). This Site received a VCS of 26.68 out of 80, reflecting a low- medium VCS (Table 44).

Table 42. Summary of Roadside Marker Site 004.

Site	004
Road	Pinkerton Rd
Suburb	Pinkerton Plains
Date surveyed	11/01/2023
Longitude and Latitude	Start: 138.6249 -34.4513 (N end of Pinkerton Rd, E side) End: 138.6181 -34.4699 (S end of Pinkerton Rd – no post).
Posts present?	One (N end of Pinkerton Rd, E side)
Threats	Weed invasions, pests, dieback, old tree guards.
Vegetation Condition Score	Low to medium - 26.68
Adjacent land use	Cropping/pasture
Vegetation association	<i>Senna spp.</i> Shrubland
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end of Pinkerton Rd (E side)</p>  <p>N end of Pinkerton Rd</p>



S end of Pinkerton Rd



Table 43. Flora Species List at Roadside Marker Site 004.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Bursaria spinosa</i> ssp.	Bursaria		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Dianella revoluta</i> var.			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eremophila longifolia</i>	Weeping Emubush		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Eucalyptus</i> sp.			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia parabolica</i>	Mealy Saltbush		
<i>Rytidosperma</i> sp.	Wallaby-grass		
<i>Senna artemisioides</i> ssp.	Desert Senna		
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		
Introduced			

Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aira sp.</i>	Hair-grass			
<i>Asparagus asparagoides f.</i>	Bridal Creeper	Yes	Yes	
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Heliotropium sp.</i>	Heliotrope			
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Sisymbrium sp.</i>	Wild Mustard			
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 44. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 004.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	8/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	1/5
Hollow-bearing tree	2/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	26.68/80

5.2.2 Roadside Marker Site 009 (Woolsheds Rd)

Only one post was observed during the field survey on the southern end of Woolsheds Rd (Table 45). A total of 22 native species were identified at Site 9, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 10 introduced species were observed, this included six environmental weeds, no Declared weeds were observed (Table 46). This Site received a Vegetation Condition Score (VCS) of 31.52 out of 80, reflecting a medium VCS (Table 47).

Table 45. Summary of Roadside Marker Site 009.

Site	009
Road	Woolsheds
Suburb	Pinkerton Plains
Date surveyed	11/01/2023
Longitude and Latitude	Start: 138.6297 -34.4738 (S end) End: 138.6298 -34.4381 (N end)
Posts present?	One (S end).
Threats	Hard rubbish, crop drift, death of Callitris species, dust.


Vegetation Condition Score	Medium - 31.52
Adjacent land use	Cropping/pasture and residential.
Vegetation association	<i>Senna artemisioides</i> ssp. <i>X coriacea</i> with <i>Acacia</i> spp. Shrubland
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>S end of Woolsheds Rd (W side)</p> 
	<p>N end of Woolsheds Rd</p> 

Table 46. Flora Species List at Roadside Marker Site 009.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia</i> sp.	Wattle		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		
<i>Allocasuarina verticillata</i>	Drooping Sheoak		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		

Native				
Species Name	Common Name	AUS	SA	
<i>Bursaria spinosa</i> ssp.	Bursaria			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Dianella revoluta</i> var.				
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eremophila longifolia</i>	Weeping Emubush			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Lomandra effusa</i>	Scented Mat-rush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aira</i> sp.	Hair-grass			
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Pinus</i> sp.	Pine			
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 47. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 009.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	2/5
Hollow-bearing tree	2/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	31.52/80

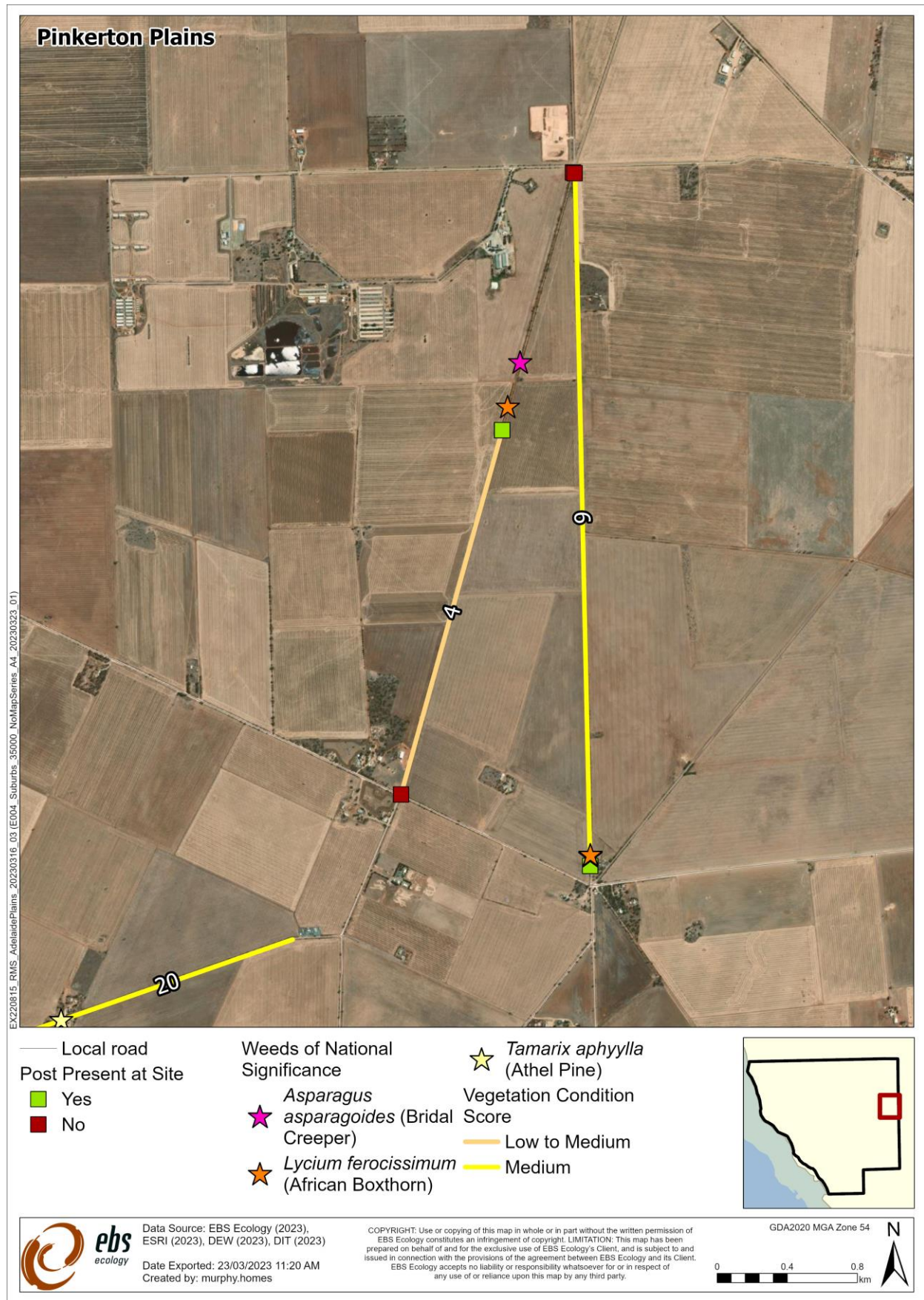


Figure 7. Roadside Marker Sites across Pinkerton Plains.

5.3 Reeves Plains

A total of 10 Sites were assessed across Reeves Plains (Figure 8).

5.3.1 Roadside Marker Site 010 (Boundary Rd)

Only one post was observed during the field survey on the southern end of Boundary Rd (Table 48). A total of 16 native species were identified at Site 10, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of eight introduced species were observed with presence of one declared weed African Boxthorn (*Lycium ferocissimum*) (Table 49). This Site received a VCS of 46.20 out of 80, reflecting vegetation of a medium quality (Table 50).

Table 48. Summary of Roadside Marker Site 010.


Site	010
Road	Boundary Rd
Suburb	Reeves Plains
Date surveyed	11/01/2023
Longitude and Latitude	Start: 138.6298 -34.5126 (N end)
	End: 138.6298 -34.5345 (S end)
Posts present?	One (S end)
Threats	Weed invasion and illegal dumping.
Vegetation Condition Score	Medium - 46.20
Adjacent land use	Cropping/pasture and residential.
Vegetation association	<i>Eucalyptus odorata</i> Mallee over <i>Senna spp.</i> and <i>Acacia oswaldii</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	N end of Boundary Rd
	
	S end of Boundary Rd



Table 49. Flora Species List at Roadside Marker Site 010

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Alyxia buxifolia</i>	Sea Box			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Dianella revoluta</i> var.				
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Melaleuca acuminata</i> ssp. <i>acuminata</i>	Mallee Honey-myrtle			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reseda luteola</i>	Wild Mignonette			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 50. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 010.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	9/15
Native Plant Life forms	16/20

Attribute	Score
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing tree	3/5
Fallen Timber/debris	3/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	46.20/80

5.3.2 Roadside Marker Site 011 (Gawler Rd)

Both posts were observed during the field survey on the western and eastern end of Gawler Rd (Table 51). A total of 32 native species were identified at Site 011, with numerous species naturally regenerating. The State Rare *Acacia iteaphylla* (Flinders Ranges Wattle) was observed on the southern side of Gawler Rd. No other species threatened under the EPBC Act or NPW Act were identified at this Site. A total of 20 introduced species were observed with presence of 12 environmental weeds, and two declared weed (Table 49). Garden escapes were common within this Site due to the close proximity to residential properties. This Site received a VCS of 31.30 out of 80, reflecting vegetation of a medium quality (Table 53). Due to the large difference between the northern and the southern sides of Gawler road, each side was assessed separately. The scores have then been averaged to get an overall VCS of the whole Site.

Table 51. Summary of Roadside Marker Site 011.

Site	011
Road	Gawler Rd
Suburb	Reeves Plains
Date surveyed	13/01/2023
Longitude and Latitude	Start: 138.5938 -34.591 (W end)
	End: 138.6233 -34.5904 (E end)
Posts present?	Yes
Threats	Garden escapes, weed invasion, native vegetation clearance, mowing.
Vegetation Condition Score	Medium - 31.30
Adjacent land use	Cropping/pasture and residential.
Vegetation association	<i>Eucalyptus porosa</i> +/- <i>E. largiflorens</i> Mallee over <i>Acacia spp.</i> and <i>Rhagodia parabolica</i> .
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.

W end of Gawler Rd (N side)



E end of Gawler Rd (S side)



Photo points

Table 52. Flora Species List at Roadside Marker Site 011.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia iteaphylla</i>	Flinders Ranges Wattle		R
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia salicina</i>	Willow Wattle		
<i>Alyxia buxifolia</i>	Sea Box		
<i>Atriplex nummularia</i> ssp.	Old-man Saltbush		
<i>Austrostipa elegantissima</i>	Feather Spear-grass		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Beyeria lechenaultii</i>	Pale Turpentine Bush		
<i>Bursaria spinosa</i> ssp. <i>spinosa</i>	Sweet Bursaria		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Chloris truncata</i>	Windmill Grass		
<i>Dianella revoluta</i> var.			
<i>Dodonaea</i> sp.	Hop-bush		
<i>Duma florulenta</i>	Lignum		
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush		

Native				
Species Name	Common Name	AUS	SA	
<i>Enneapogon nigricans</i>	Black-head Grass			
<i>Enneapogon sp.</i>				
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Eucalyptus largiflorens</i>	River Box			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Lomandra effusa</i>	Scented Mat-rush			
<i>Lomandra multiflora ssp.</i>	Many-flower Mat-rush			
<i>Maireana aphylla</i>	Cotton-bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides ssp.</i>	Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aira sp.</i>	Hair-grass			
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Aptenia cordifolia</i>	Heart-leaf Ice Plant			
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Cenchrus clandestinus</i>	Kikuyu			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Ehrharta calycina</i>	Perennial Veldt Grass			Yes
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Melia azedarach</i>				
<i>Olea europaea ssp.</i>	Olive	Yes		
<i>Paspalum dilatatum</i>	Paspalum			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Punica granatum</i>	Pomegranate			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Sisymbrium sp.</i>	Wild Mustard			
<i>Solanum nigrum</i>	Black Nightshade			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 53. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 011.

Attribute	Score
Native Plant Species Diversity	18
Weeds	7.25
Native Plant Life forms	10
Regenerating	4.5
Native: Exotic Understorey Biomass	2.5/5
Tree Canopy cover	3/5
Hollow-bearing tree	3/5
Fallen Timber/debris	1.5/5
Mature Tree	3/5
TOTAL VEGETATION CONDITION SCORE	31.30/80

5.3.3 Roadside Marker Site 013 (Humphrey Rd / Conroy Rd)

Both posts were observed at this Site, one at the start of Humphrey Rd and another at the start of Conroy Rd (Table 54). A total of 22 native species were identified at Site 013, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 11 introduced species were observed with presence of five environmental weeds and two declared weed (one WoNS) (Table 55). This Site received a VCS of 30.32 out of 80, reflecting vegetation of a medium quality (Table 56).

Table 54. Summary of Roadside Marker Site 013.


Site	013
Road	Humphrey Rd / Conroy Rd
Suburb	Reeves Plains
Date surveyed	12/01/2023
Longitude and Latitude	Start: 138.5732 -34.5437 (N end on the W side) End: 138.5651 -34.5539 (W end on N side)
Posts present?	Yes
Threats	Hard rubbish/illegal dumping, weed invasion.
Vegetation Condition Score	Medium - 30.32
Adjacent land use	Cropping/pasture and residential.
Vegetation association	<i>Eucalyptus socialis</i> & <i>E. odorata</i> over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end of Humphrey Rd on the W side</p>  <p>W end of Conroy Rd on the N side</p>



Table 55. Flora Species List at Roadside Marker Site 013.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Alyxia buxifolia</i>	Sea Box			
<i>Austrostipa nodosa</i>	Tall Spear-grass			
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass			
<i>Beyeria lechenaultii</i>	Pale Turpentine Bush			
<i>Bursaria spinosa</i> ssp.	Bursaria			
<i>Dianella revoluta</i> var. <i>revoluta</i>	Black-anther Flax-lily			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum platycarpum</i> ssp.	False Sandalwood			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.				
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 56. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 013.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	7.5/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	1/5
Hollow-bearing tree	2/5
Fallen Timber/debris	1.5/5
Mature Tree	2/5
TOTAL VEGETATION CONDITION SCORE	30.32/80

5.3.4 Roadside Marker Site 015 (Sandpit Rd)

Only one post was observed during the field survey on the N end of Sandpit Rd (Table 57). A total of 30 native species were identified across Site 15, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 18 introduced species were observed with presence of 11 environmental weeds, and two declared weed (one WoNS, Table 58). Site 15a and 15b received a VCS of 43.59 out of 80 and 38.19 out of 80, respectively. Reflecting vegetation of a medium quality (Table 59). Due to the large difference between the N (15a) and the S end (15b) of Sandpit Rd, each section was assessed separately. The scores have not been averaged as they have a different bench mark community (Table 57).

Table 57. Summary of Roadside Marker Site 015.

Site	015
Road	Sandpit Rd
Suburb	Reeves Plains
Date surveyed	12/01/2023
Longitude and Latitude	Start: 138.5822 -34.5382 (N end of Sandpit Rd – post location) End: 138.5918 -34.5536 (S end of Sandpit Rd)
Posts present?	One at the N end.
Threats	Weed invasions, old tree guards.
Vegetation Condition Score	15a: Medium - 43.59 15b: Medium - 38.19
Adjacent land use	Cropping/pasture and residential.
Vegetation association	15a: <i>Eucalyptus porosa</i> and <i>Eucalyptus brachycalyx mallee</i> over <i>Senna spp.</i>

Benchmark Community

15b: *Eucalyptus incrassata* over *Rhagodia parabolica* +/- *Triodia scariosa*.

15a: NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.

15b: NA 4 Low Woodlands & Open Mallee with Dense to Mid dense Shrub & / or Spinifex and Sedge Understorey.

N end of Sandpit Rd W side**S end of Sandpit Rd****Photo points****Table 58. Flora Species List at Roadside Marker Site 015.**

Native			
Species Name	Common Name	AUS	SA
<i>Acacia notabilis</i>	Notable Wattle		
<i>Austrostipa nodosa</i>	Tall Spear-grass		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Bursaria spinosa</i> ssp.	Bursaria		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Clematis microphylla</i>	Old Man's Beard		
<i>Dampiera rosmarinifolia</i>	Rosemary Dampiera		
<i>Dianella revoluta</i> var.			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		

Native				
Species Name	Common Name	AUS	SA	
<i>Enneapogon nigricans</i>				
<i>Enneapogon sp.</i>	Bottle-washers/Nineawn			
<i>Eucalyptus brachycalyx</i>	Gilja			
<i>Eucalyptus incrassata</i>	Ridge-fruited Mallee			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Hibbertia sp.</i>	Guinea-flower			
<i>Kunzea pomifera</i>	Muntries			
<i>Melaleuca acuminata ssp. acuminata</i>	Mallee Honey-myrtle			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum platycarpum ssp.</i>	False Sandalwood			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Pittosporum angustifolium</i>				
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass			
<i>Rytidosperma sp.</i>	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides ssp.</i>	Desert Senna			
<i>Teucrium racemosum</i>	Grey Germander			
<i>Triodia scariosa</i>	Spinifex			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Cenchrus clandestinus</i>	Kikuyu			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Cucumis myriocarpus ssp. myriocarpus</i>	Paddy Melon			
<i>Ehrharta longiflora</i>	Annual Veldt Grass			Yes
<i>Ehrharta sp.</i>	Veldt Grass			
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes
<i>Trifolium arvense var. arvense</i>	Hare's-foot Clover			
<i>Trifolium sp.</i>	Clover			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 59. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 015.

Attribute	Score 15a	Score 15b
Native Plant Species Diversity	21/30	10/30
Weeds	12/15	2/15
Native Plant Life forms	12/20	20/20
Regenerating	3/12	3/12
Native: Exotic Understorey Biomass	3/5	4/5

Attribute	Score 15a	Score 15b
Tree Canopy cover	5/5	4/5
Hollow-bearing tree	4/5	4/5
Fallen Timber/debris	0.5	4/5
Mature Tree	6/8	6/8
TOTAL VEGETATION CONDITION SCORE	43.59/80	38.19/80

5.3.5 Roadside Marker Site 016 (Richter Rd)

one post with a sign was observed on the E end of Richter Rd, at the W end only a stake (no sign) was observed. A total of 18 native species were identified at Site 016, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 11 introduced species were observed, this includes seven environmental weeds and three declared weeds (Table 61 Table 64). This Site received a VCS of 29.98 out of 80, reflecting vegetation of a low-medium quality (Table 62).

Table 60. Summary of Roadside Marker Site 016.

Site	016
Road	Richter Rd
Suburb	Reeves Plains
Date surveyed	11/01/2023
Longitude and Latitude	Start: 138.5943 -34.5258 (W end of Richter Rd) End: 138.5708 -34.5217 (E end of Richter Rd)
Posts present?	Yes, W end had a stake but no sign.
Threats	Weed invasion, cleared areas near gates, rubbish.
Vegetation Condition Score	Low to Medium - 29.98
Adjacent land use	Cropping/pasture and residential.
Vegetation association	<i>Eucalyptus porosa</i> Mallee over <i>Senna artesimoides</i> and <i>Acacia notabilis</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	E end of Richter Rd on the S side



W end of Richter Rd on the S side



Table 61. Flora Species List at Roadside Marker Site 016.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Bursaria spinosa</i> ssp.	Bursaria		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Lomandra effusa</i>	Scented Mat-rush		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush		
<i>Santalum acuminatum</i>	Quandong		
<i>Sclerolaena diacantha</i>	Grey Bindyi		
<i>Senna artemisioides</i> ssp.	Desert Senna		
<i>Vittadinia cuneata</i> var.	Fuzzy New Holland Daisy		
Introduced			

Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aira sp.</i>	Hair-grass			
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 62. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 016.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	3/5
Hollow-bearing trees	2/5
Fallen Timber/debris	1/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	29.98/80

5.3.6 Roadside Marker Site 018 (Fischer Rd)

No posts were observed at either ends of Fischer Rd (Table 63). A total of 16 native species were identified at Site 18, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of five introduced species were observed with presence of three environmental weeds, and one declared weed, (Table 64). This Site VCS of 27.17 out of 80, reflecting vegetation of a low to medium quality (Table 65).

Table 63. Summary of Roadside Marker Site 018.

Site	018
Road	Fischer Rd
Suburb	Reeves Plains
Date surveyed	11/01/2023
Longitude and Latitude	Start: 138.5841 -34.5226 (N end of Fischer Rd) End: 138.5843 -34.5261(S end of Fischer Rd)
Posts present?	No
Threats	Rubbish/illegal dumping, plantings.
Vegetation Condition Score	Low to Medium-27.17



Adjacent land use	Cropping/pasture and residential.
Vegetation association	<i>Eucalyptus socialis</i> Mallee over <i>Senna artemisioides</i> ssp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end of Fischer Rd</p> 
	<p>S end of Fischer Rd</p> 

Table 64. Flora Species List at Roadside Marker Site 018.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Myoporum platycarpum</i> ssp.	False Sandalwood		
<i>Pittosporum angustifolium</i>	Native Apricot		

Native				
Species Name	Common Name	AUS	SA	
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Salsola australis</i>	Buckbush			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Heliotropium</i> sp.	Heliotrope			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 65. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 018.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	10.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	3/5
Hollow-bearing trees	0/5
Fallen Timber/debris	1.5/5
Mature Tree	3/5
TOTAL VEGETATION CONDITION SCORE	27.17/80

5.3.7 Roadside Marker Site 024 (Oliver Rd)

No posts were observed at either ends of Fischer Rd (Table 66). A total of 24 native species were identified at Site 24, with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 15 introduced species were observed with presence of nine environmental weeds, and three declared weed, (Table 67). Numerous garden escapes were observed near gates of private property. This Site received a VCS of 37.68 out of 80, reflecting vegetation of a medium quality (Table 68).

Table 66. Summary of Roadside Marker Site 024.

Site	024
Road	Oliver Rd
Suburb	Reeves Plains
Date surveyed	12/01/2023
Longitude and Latitude	Start: 138.575 -34.5666 (W end on the S side)
	End: 138.6059 -34.5661 (E end on the S side)



Posts present?	Yes
Threats	Garden escapes and rubbish.
Vegetation Condition Score	Medium - 37.68
Adjacent land use	Cropping/pasture and residential.
Vegetation association	<i>Eucalyptus socialis</i> Mallee over <i>Senna artemisioides</i> ssp.
Benchmark Community	NA 4 – Low Woodlands & Open Mallee with dense to mid-dense shrub &/or Spinifex and sedge understorey
Photo points	<p>W end on the S side of Oliver Rd</p> 
	<p>E end on the S side of Oliver Rd</p> 

Table 67. Flora Species List at Roadside Marker Site 024.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia pycnantha</i>	Golden Wattle		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		

Native				
Species Name	Common Name	AUS	SA	
<i>Bursaria spinosa</i> ssp.	Bursaria			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Dianella revoluta</i> var.				
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Enneapogon</i> sp.	Bottle-washers/Nineawn			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Eucalyptus incrassata</i>	Ridge-fruited Mallee			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Grevillea huegelii</i>	Comb Grevillea			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Triodia scariosa</i>	Spinifex			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Aloe</i> sp.	Aloe			
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Cenchrus clandestinus</i>	Kikuyu			Yes
<i>Fraxinus</i> sp.	Ash			
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Lycium ferocissimum</i>		Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Olea europaea</i> ssp.	Olive	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.


Table 68. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 024.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	8/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	4/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	37.68/80

5.3.8 Roadside Marker Site 025 (Oliver Rd)

One post was observed at the western end of the Site, a stake but no sign was present at the eastern end of the Site (Table 69). A total of 23 native species were identified at Site 25, with four species showing signs of natural regeneration. A total of 19 introduced species were observed with presence of 10 environmental weeds, and six declared weed, four are listed as WoNS (Table 70). No species threatened under the EPBC Act or NPW Act were identified. Site 25 received a VCS of 45.64 out of 80, reflecting vegetation of a medium quality (Table 71).

Table 69. Summary of Roadside Marker Site 025.

Site	025
Road	Oliver Rd
Suburb	Reeves Plains
Date surveyed	11/01/2023
Longitude and Latitude	Start: 138.6289 -34.5665 (E end on the S side of Oliver Rd)
	End: 138.611 -34.5661 (W end on the S side of Oliver Rd)
Posts present?	One
Threats	Weed invasion, illegal dumping, pests (rabbits), garden escapes and rubbish
Vegetation Condition Score	Medium – 45.64
Adjacent land use	Cropping/pasture and residential.
Vegetation association	<i>Eucalyptus incrassata</i> mixed Mallee over chenopod shrubs
Benchmark Community	NA 4 – Low Woodlands & Open Mallee with dense to mid-dense shrub &/or Spinifex and sedge understorey
Photo points	<p>E end on the S side of Oliver Rd</p> 

W end on the S side of Oliver Rd



Table 70. Flora Species List at Roadside Marker Site 025.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia wilhelmiana</i>	Dwarf Nealie			
<i>Austrostipa elegantissima</i>	Feather Spear-grass			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Cassytha</i> sp.	Dodder-laurel			
<i>Dianella revoluta</i> var.				
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Enneapogon nigricans</i>	Black-head Grass			
<i>Eucalyptus brachycalyx</i>	Gilja			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus incrassata</i>	Ridge-fruited Mallee			
<i>Lomandra leucocephala</i> ssp. <i>robusta</i>	Wolly Mat-rush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Triodia scariosa</i>	Spinifex			
<i>Vittadinia cuneata</i> var.	Fuzzy New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Asparagus asparagoides</i> f.	Bridal Creeper	Yes	Yes	
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Brassica</i> sp.				
<i>Cenchrus clandestinus</i>	Kikuyu			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Olea europaea</i> ssp.	European Olive	Yes		
<i>Opuntia</i> spp.	Prickly Pear	Yes	Yes	

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Paspalum sp.</i>				
<i>Phalaris aquatica</i>	Phalaris			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Plantago lanceolata</i> var.	Ribwort			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 71. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 025.

Attribute	Score
Native Plant Species Diversity	27/30
Weeds	6.5/15
Native Plant Life forms	16/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	4/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1.5/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	45.64/80

5.3.9 Roadside Marker Site 026 (Boundary Rd)

No posts were observed at Site 26, however, a stake with no sign was observed at the S end, with clearance of native vegetation prominent at this Site (Table 72). A total of 22 native species with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 19 introduced species were observed with presence of 10 environmental weeds, and five declared weed, three of which are also listed as WoNS (Table 73). This Site received a VCS of 29.00 out of 80, reflecting vegetation of a low to medium quality (Table 74).

Table 72. Summary of Roadside Marker Site 026.

Site	026
Road	Boundary Rd
Suburb	Reeves Plains
Date surveyed	11/01/2023
Longitude and Latitude	Start: 138.6299 -34.5349 (N end of Boundary Rd)
	End: 138.6299 -34.5784 (S end of Boundary Rd)
Posts present?	No
Threats	Track construction, native vegetation clearance, rubbish.
Vegetation Condition Score	Low to Medium - 29.00



Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
	<i>Eucalyptus odorata</i> and <i>E. incrassata</i> Mallee over <i>Melaleuca acuminata</i> , <i>Acacia oswaldii</i> and <i>Rhagodia parabolica</i> .
	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Vegetation association	
Benchmark Community	
N end of Boundary Rd	
	
S end of Boundary Rd	
	
Photo points	

Table 73. Flora Species List at Roadside Marker Site 026.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Alyxia buxifolia</i>	Sea Box		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Cassytha</i> sp.	Dodder-laurel		
<i>Clematis microphylla</i>	Old Man's Beard		
<i>Dianella revoluta</i> var. <i>revoluta</i>	Black-anther Flax-lily		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus dumosa</i>	White Mallee		
<i>Eucalyptus incrassata</i>	Ridge-fruited Mallee		
<i>Eucalyptus odorata</i>	Peppermint Box		

Native				
Species Name	Common Name	AUS	SA	
<i>Melaleuca acuminata</i> ssp. <i>acuminata</i>	Mallee Honey-myrtle			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Salsola australis</i>	Buckbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp.	Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aloe</i> sp.	Aloe			
<i>Arundo donax</i>	Giant Reed	Yes		
<i>Asparagus asparagoides</i> f.	Bridal Creeper	Yes	Yes	
<i>Asphodelus fistulosus</i>				Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Cenchrus clandestinus</i>	Kikuyu			
<i>Cucumis myriocarpus</i> ssp. <i>myriocarpus</i>	Paddy Melon			
<i>Cynodon dactylon</i>	Bermuda Grass			Yes
<i>Ehrharta calycina</i>	Perennial Veldt Grass			Yes
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Lycium ferrocereum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Olea europaea</i>	European Olive	Yes		
<i>Palmae</i> sp.				
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Schinus molle</i>				Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 74. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 026.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	5.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	3/5
TOTAL VEGETATION CONDITION SCORE	29.00/80

5.3.10 Roadside Marker Site 095 (Day Rd)

No posts were observed at Site 95 (Table 75). A total of 13 native species with numerous species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of six introduced species were observed with presence of five environmental weeds and no Declared weeds (Table 76). This Site received a VCS of 20.63 out of 80, reflecting vegetation of low quality (Table 77).

Table 75. Summary of Roadside Marker Site 095.


Site	095
Road	Day Rd
Suburb	Reeves Plains
Date surveyed	12/01/2023
Longitude and Latitude	Start: 138.571 -34.545 (NE end of Day Rd) End: 138.5685 -34.5467 (SW end of Day Rd)
Posts present?	No
Threats	Weed invasion
Vegetation Condition Score	Low - 20.63
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus gracilis</i> Open Mallee over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p style="text-align: center;">NE end of Day Rd</p>  <p style="text-align: center;">SW end of Day Rd</p>



Table 76. Flora Species List at Roadside Marker Site 095.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Dianella revoluta</i> var.				
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Lomandra effusa</i>	Scented Mat-rush			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Dactylis glomerata</i>	Cocksfoot			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reseda</i> sp.	Mignonette			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; NA= Northern Agricultural threatened species status. RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 77. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 095.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	8/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	1/5
Hollow-bearing trees	1/5
Fallen Timber/debris	1/5
Mature Tree	2/8

Attribute	Score
TOTAL VEGETATION CONDITION SCORE	20.63/80

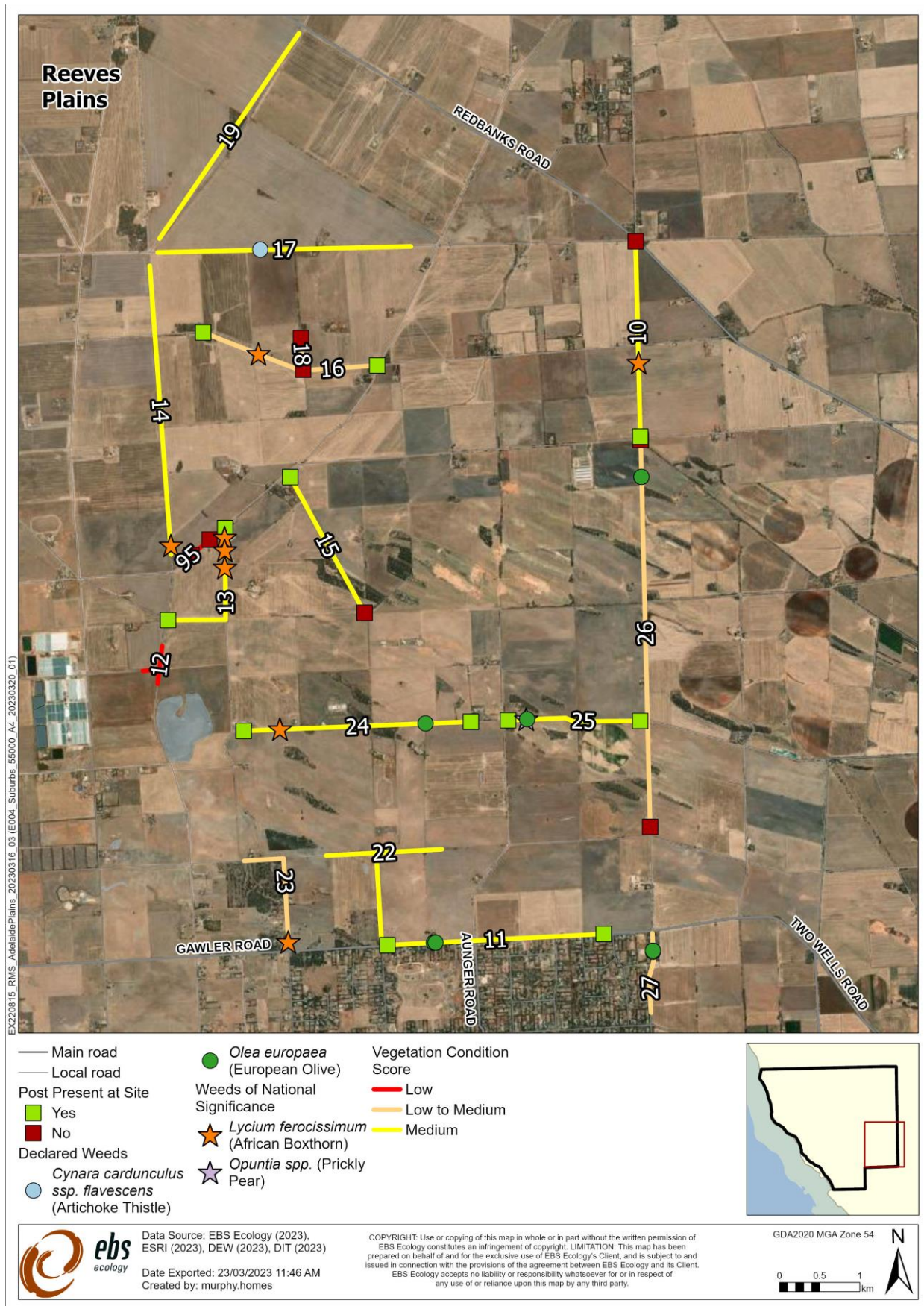


Figure 8. Roadside Marker Sites across Reeves Plains.


5.4 Korunye

A total of two Sites were assessed across Korunye (Figure 9).

5.4.1 Roadside Marker Site 012 (Hall Rd)

One post was observed at the end of Kenner Rd, no other posts were observed at this Site. Illegal dumping of rubbish was prominent (Table 78). A total of 10 native species were identified at Site 12, with two species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 13 introduced species were observed with presence of four environmental weeds and three declared weeds, two of which are WoNS (Table 79). This Site received a VCS of 9.88 out of 80, reflecting vegetation of a low quality (Table 80).

Table 78. Summary of Roadside Marker Site 012.

Site	012
Road	Hall Rd
Suburb	Korunye
Date surveyed	12/01/2023
Longitude and Latitude	Start: 138.5615 -34.5595 (W end of Kenner Rd) End: 138.5635 -34.561 (S end of Hall Rd)
Posts present?	One post (Kenner Rd)
Threats	Illegal dumping and weed invasion.
Vegetation Condition Score	Low - 9.88
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus gracilis</i> Open Mallee over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end on the S side of Kenner Rd</p>  <p>S end of Hall Rd</p>



N end of Hall Rd



Table 79. Flora Species List at Roadside Marker Site 012.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Austrostipa nodosa</i>	Tall Spear-grass			
<i>Dianella sp.</i>	Flax-lily			
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass			
<i>Senna artemisioides ssp.</i>	Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Agave sp.</i>				
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Bromus diandrus</i>	Great Brome			
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		

<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 80. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 012.

Attribute	Score
Native Plant Species Diversity	9/30
Weeds	6.5/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	0/5
Hollow-bearing trees	0/5
Fallen Timber/debris	0/5
Mature Tree	0/8
TOTAL VEGETATION CONDITION SCORE	9.88/80

5.4.2 Roadside Marker Site 014 (Hall Rd)

Both post was observed at this Site (Table 81). A total of 27 native species were identified at Site 14, with six species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 11 introduced species were observed with presence of seven environmental weeds and one declared WoNS (Table 82). This Site received a VCS of 37.80 out of 80, reflecting vegetation of medium quality (Table 83).

Table 81. Summary of Roadside Marker Site 014.

Site	014
Road	Hall Rd
Suburb	Korunye
Date surveyed	11/01/2023
Longitude and Latitude	Start: 138.5638 -34.514 (N end of Hall Rd, E side) End: 138.5657 -34.5465 (S end of Hall Rd, W side)
Posts present?	Yes
Threats	Illegal dumping, rubbish and weed invasion.
Vegetation Condition Score	Medium - 37.80
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus socialis</i> , <i>E. odorata</i> , <i>E. gracilis</i> Mallee over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey.
Photo points	N end of Hall Rd (E side)



S end of Hall Rd (W side)



Table 82. Flora Species List at Roadside Marker Site 014.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Beyeria lechenaultii</i>	Pale Turpentine Bush		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Dianella revoluta</i> var. <i>revoluta</i>	Black-anther Flax-lily		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eremophila longifolia</i>	Weeping Emubush		
<i>Eucalyptus gracilis</i>	Yorrell		
<i>Eucalyptus odorata</i>	Peppermint Box		
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Lomandra effusa</i>	Scented Mat-rush		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Nitraria billardiarei</i>	Nitre-bush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia parabolica</i>	Mealy Saltbush		
<i>Rytidosperma</i> sp.	Wallaby-grass		

Native				
Species Name	Common Name	AUS	SA	
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides ssp.</i>	Desert Senna			
<i>Senna artemisioides ssp. petiolaris</i>				
<i>Senna artemisioides ssp. X coriacea</i>	Broad-leaf Desert Senna			
<i>Vittadinia cuneata var.</i>	Fuzzy New Holland Daisy			
<i>Zygophyllum sp.</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Marrubium vulgare</i>	Horehound			
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reseda sp.</i>				
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 83. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 014.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	9/15
Native Plant Life forms	16/20
Regenerating	6/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2/5
Hollow-bearing trees	3/5
Fallen Timber/debris	3/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	37.80/80

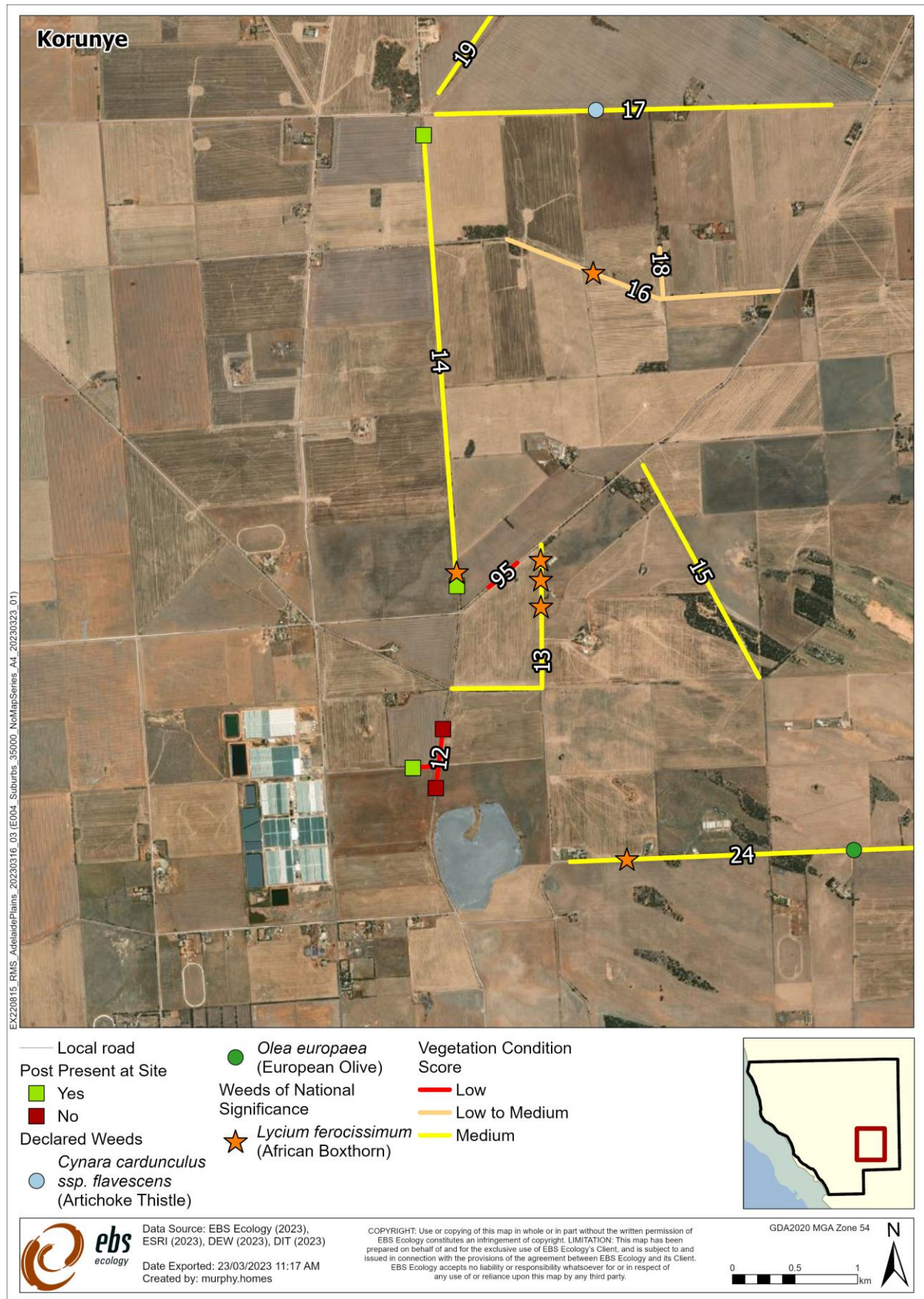


Figure 9. Roadside Marker Sites across Korunye.

5.5 Redbanks

A total of four Sites were surveyed across Redbanks (Figure 10).

5.5.1 Roadside Marker Site 017 (Verner Rd)

Both post was observed at this 17 (Table 84). A total of 22 native species were identified, with three species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 12 introduced species were observed with presence of eight environmental weeds and two declared weed, one of those also listed as a WoNS (Table 85). This Site received a VCS of 40.43 out of 80, reflecting vegetation of medium quality (Table 86).

Table 84. Summary of Roadside Marker Site 017.

Site	017
Road	Verner Rd
Suburb	Redbanks
Date surveyed	11/01/2023
Longitude and Latitude	Start: 138.5649 -34.5125 (W end of Verner Rd)
	End: 138.5993 -34.5125 (E end of Verner Rd)
Posts present?	Yes
Threats	Clearance, rubbish, drift spray from surrounding cropping.
Vegetation Condition Score	Medium - 40.43
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus socialis</i> +/- Mixed Mallee over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end of Verner Rd (S side)</p>  <p>E end of Verner Rd (S side)</p>



Table 85. Flora Species List at Roadside Marker Site 017.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Dianella revoluta</i> var.				
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Enneapogon nigricans</i>	Black-head Grass			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Lomandra effusa</i>	Scented Mat-rush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum platycarpum</i> ssp.	False Sandalwood			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Roepera aurantiaca</i> ssp. <i>aurantiaca</i>	Shrubby Twinleaf			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Vittadinia cuneata</i> var.	Fuzzy New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aira</i> sp.	Hair-grass			
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Cynara cardunculus</i> ssp. <i>flavescens</i>	Artichoke Thistle	Yes		
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Solanum nigrum</i>	Black Nightshade			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 86. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 017.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	9/15
Native Plant Life forms	16/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	2/5
Fallen Timber/debris	1/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	40.43/80

5.5.2 Roadside Marker Site 019 (Lynch Rd)

Both post was observed at this 19 (Table 87). A total of 16 native species were identified, with four species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 15 introduced species were observed with presence of eight environmental weeds and one declared weed, also listed as a WoNS (Table 88). This Site received a VCS of 41.34 out of 80, reflecting vegetation of medium quality (Table 89).

Table 87. Summary of Roadside Marker Site 019.

Site	019
Road	Lynch Rd
Suburb	Redbanks
Date surveyed	11/1/2023
Longitude and Latitude	Start: 138.5848 -34.4883 (N end of Lynch Rd, W side) End: 138.5652-34.511(S end of Lynch Rd, W side)
Posts present?	Yes
Threats	Rubbish
Vegetation Condition Score	Medium - 41.34
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus porosa</i> +/- Mixed <i>Eucalyptus</i> spp. Mallee over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey.
Photo points	N end of Lynch Rd, W side



S end of Lynch Rd, W side



Table 88. Flora Species List at Roadside Marker Site 019.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Alyxia buxifolia</i>	Sea Box			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus largiflorens</i>	River Box			
<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i>				
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Senna</i> sp.	Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aira</i> sp.	Hair-grass			
<i>Asphodelus fistulosus</i>	Onion Weed			Yes

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Cucumis myriocarpus ssp. myriocarpus</i>	Paddy Melon			
<i>Heliotropium sp.</i>	Heliotrope			Yes
<i>Hordeum distichon</i>				
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Reseda sp.</i>	Mignonette			
<i>Sisymbrium sp.</i>	Wild Mustard			
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 89. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 019.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	10.5/15
Native Plant Life forms	12/30
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	4/5
Hollow-bearing trees	4/5
Fallen Timber/debris	3/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	41.34/80

5.5.3 Roadside Marker Site 020 (Helps Rd)

Both post was observed at Site 20 (Table 90). A total of 25 native species were identified, with six species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of nine introduced species were observed with presence of seven environmental weeds and one declared weed, *Tamarix aphylla* (Athel Pine) also listed as a WoNS (Table 91). This Site received a VCS of 38.70 out of 80, reflecting vegetation of medium quality (Table 92).

Table 90. Summary of Roadside Marker Site 020.

Site	020
Road	Helps Rd
Suburb	Redbanks
Date surveyed	11/1/2023
Longitude and Latitude	Start: 138.6112 -34.4772 (E end of Helps Rd, S side) End: 138.5883 -34.4833 (W end of Helps Rd, S side)
Posts present?	Yes
Threats	Introduced pests, native vegetation clearance, plantings of non-local species.



Vegetation Condition Score	Medium – 38.70
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus phenax</i> +/- Mixed <i>Eucalyptus</i> spp. Mallee over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>E end of Helps Rd, S side</p> 
	<p>W end of Helps Rd, S side</p> 

Table 91. Flora Species List at Roadside Marker Site 020.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Bursaria spinosa</i> ssp.	Bursaria		
<i>Callitris gracilis</i>	Southern Cypress Pine		

Native				
Species Name	Common Name	AUS	SA	
<i>Dianella sp.</i>	Flax-lily			
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus phenax ssp. phenax</i>	White Mallee			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis ssp.</i>	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum platycarpum ssp.</i>	False Sandalwood			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Roepera apiculata</i>	Pointed Twinleaf			
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides ssp.</i>	Desert Senna			
<i>Senna artemisioides ssp. petiolaris</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes
<i>Tamarix aphylla</i>	Athel Pine	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 92. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 020.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	12/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	2/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	38.70/80

5.5.4 Roadside Marker Site 021 (Hancock Rd)

Both post was observed at this Site 21 (Table 93). A total of 19 native species were, with five species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 11 introduced species were observed with presence of eight environmental weeds

and two declared weeds, one of which is listed as a WoNS (Table 94). This Site received a VCS of 36.30 out of 80, reflecting vegetation of medium quality (Table 95).

Table 93. Summary of Roadside Marker Site 021.


Site	021
Road	Hancock Rd
Suburb	Redbanks
Date surveyed	11/1/2023
Longitude and Latitude	Start: 138.588 -34.4831 (S end of Hancock Rd) End: 138.5838 -34.4713 (N end of Hancock Rd)
Posts present?	Yes
Threats	Introduced pests, native vegetation clearance, plantings of non-local species.
Vegetation Condition Score	Medium – 36.30
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus socilais</i> +/- Mixed <i>Eucalyptus</i> spp. Mallee over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>S end of Hancock Rd (W side)</p>  <p>N end of Hancock Rd (W side)</p>



Table 94. Flora Species List at Roadside Marker Site 021.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia wilhelmiana</i>	Dwarf Nealie			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus socialis</i> ssp.				
<i>Lomandra effusa</i>	Scented Mat-rush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 95. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 021.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	2/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	36.30/80

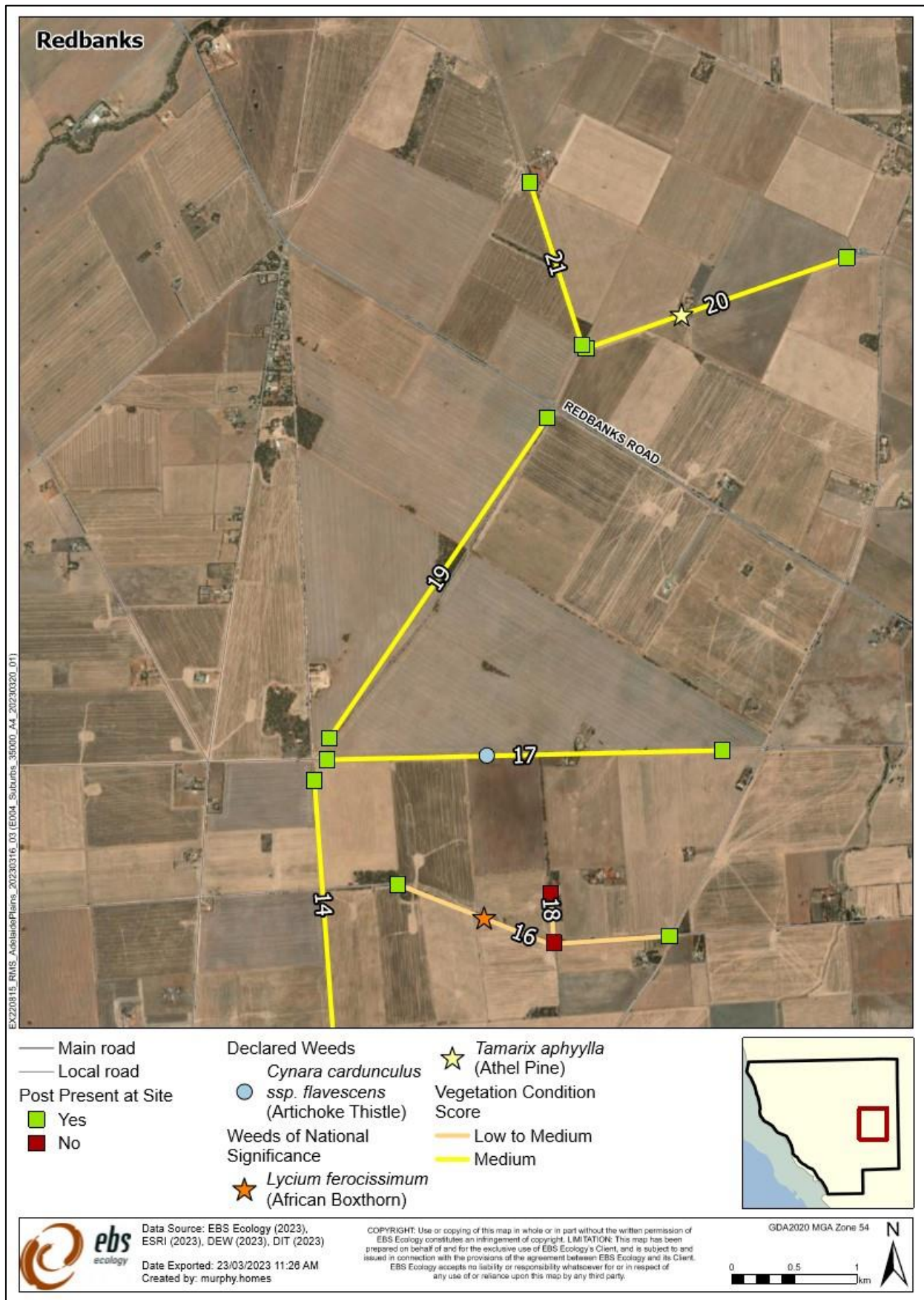


Figure 10. Roadside Marker Sites across Redbanks.

5.6 Lewiston

A total of three roadside marker Sites were assessed across Lewiston (Figure 11).

5.6.1 Roadside Marker Site 022 (Sharpe Rd and McPharlin Rd)

Both post was observed at Site 72. A total of 18 native species were identified, with three species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 20 introduced species were observed with presence of Environmental weeds and two Declared weeds (Table 97). This Site received a VCS of 33.34 out of 80, reflecting vegetation of medium quality (Table 98)

Table 96. Summary of Roadside Marker Site 022.


Site	022
Road	Sharpe and McPharlin Rd
Suburb	Lewiston
Date surveyed	12/1/2023
Longitude and Latitude	Start: 138.5804 -34.5906 (S end of McPharlin Rd)
	End: 138.5747 -34.5812 (W end of Sharpe Rd)
Posts present?	Yes
Threats	Native vegetation clearance, rubbish, illegal dumping.
Vegetation Condition Score	Medium – 33.34
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus odorata</i> Mallee over <i>Callitris gracilis</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>S end of McPharlin Rd (E side)</p> 
	<p>W end of Sharpe Rd (S side)</p>



Table 97. Flora Species List at Roadside Marker Site 022.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia pycnantha</i>	Golden Wattle			
<i>Austrostipa nodosa</i>	Tall Spear-grass			
<i>Austrostipa sp.</i>	Spear-grass			
<i>Austrostipa sp.</i>	Spear-grass			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Enneapogon nigricans</i>	Black-head Grass			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma sp.</i>	Wallaby-grass			
<i>Senna artemisioides ssp.</i>	Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aira sp.</i>				
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asparagus asparagoides f.</i>	Bridal Creeper	Yes	Yes	
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Ehrharta longiflora</i>	Annual Veldt Grass			Yes
<i>Euphorbia sp.</i>				
<i>Fraxinus sp.</i>	Ash			
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reseda sp.</i>	Mignonette			

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushions			Yes
<i>Schinus molle</i>	Pepper-tree			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 98. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 022.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	6.5/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	2/5
TOTAL VEGETATION CONDITION SCORE	33.34/80

5.6.2 Roadside Marker Site 023 (Sharpe Rd and Pederick Rd)

Only one post was observed at Site 23 and illegal dumping of hard rubbish is prolific (Table 99). A total of 19 native species were identified at Site 23, with three species naturally regenerating. No species threatened under the EPBC Act or NPW Act were identified during the field survey. A total of 19 introduced species were observed with presence of eight environmental weeds and three declared weeds, two of those species listed as WoNS (Table 100). The Site underwent two assessments (23a and 23b) due to the large variation in the vegetation across this Site. The scores for each assessment were then averaged. Overall, Site 23 received a VCS of 24.34 out of 80, reflecting vegetation of low to medium quality (Table 101).

Table 99. Summary of Roadside Marker Site 023.

Site	023
Road	Sharpe and McPharlin Rd
Suburb	Lewiston
Date surveyed	12/1/2023
Longitude and Latitude	Start: 138.6016 -34.5804 (W end of Sharpe Rd, RMS post)
	End: 138.5931 -34.5907 (S end of Pederick Rd, no post)
Posts present?	One post (Sharpe Rd)
Threats	Illegal dumping, rubbish, weed invasion
Vegetation Condition Score	Low to Medium - 24.34
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus porosa</i> and <i>E.oleosa</i> Mixed Mallee Mallee over <i>Callitris gracilis</i>

Benchmark Community

NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.

E end of Sharpe Rd



W end of Sharpe Rd (N Side)



S end of Pederick Rd



Photo points

Table 100. Flora Species List at Roadside Marker Site 023.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia pycnantha</i>	Golden Wattle			
<i>Allocasuarina sp.</i>	Sheoak/Oak-bush			
<i>Austrostipa sp.</i>	Spear-grass			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Dampiera rosmarinifolia</i>	Rosemary Dampiera			
<i>Dianella revoluta var.</i>				
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush			
<i>Enneapogon nigricans</i>				
<i>Eucalyptus oleosa ssp. ampliata</i>				
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus largiflorens</i>	River box			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Maireana brevifolia</i>				
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>				
<i>Salsola australis</i>	Buckbush			
<i>Duma florulenta</i>	Lignum			
<i>Senna artemisioides ssp.</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aira sp.</i>	Hair-grass			
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			
<i>Brassica sp.</i>				
<i>Bromus diandrus</i>	Great Brome			
<i>Cenchrus clandestinus</i>	Kikuyu			Yes
<i>Cucumis myriocarpus ssp. myriocarpus</i>	Paddy Melon			
<i>Ehrharta sp.</i>	Veldt Grass			
<i>Lactuca serriola</i>				Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum sp.</i>	Iceplant			Yes
<i>Palmae sp.</i>	Palm Family			
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var.</i>				Yes
<i>Sisymbrium sp.</i>	Wild Mustard			
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 101. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 023.

Attribute	Score
Native Plant Species Diversity	12/30
Weeds	7/15
Native Plant Life forms	10/20
Regenerating	4.5/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2.5/5
Hollow-bearing trees	3/5

Attribute	Score
Fallen Timber/debris	1/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	24.34/80

5.6.3 Roadside Marker Site 027 (Boundary Rd)

Both post was observed at Site 27, mowing of the roadside vegetation was common along this Site as well as verge plantings (Table 102). A total of 21 native species were identified at Site 27, with three species naturally regenerating. One state Rare species. *Acacia iteaphylla* (Flinders Ranges Wattle) threatened under the NPW Act was identified during the field survey. A total of 13 introduced species were observed with presence of six environmental weeds and two declared weeds (Table 103). Overall, Site 27 received a VCS of 26 out of 80, reflecting vegetation of low to medium quality (Table 104).

Table 102. Summary of Roadside Marker Site 027.

Site	027
Road	Boundary Rd
Suburb	Lewiston
Date surveyed	12/1/2023
Longitude and Latitude	Start: 138.6299 -34.5904 (N end of Boundary Rd)
	End: 138.6294 -34.5993 (S end of Boundary Rd)
Posts present?	Yes
Threats	Mowing on roadside, rubbish and illegal dumping
Vegetation Condition Score	Low to medium – 26.00
Adjacent land use	Cropping/pasture and residential and remnant native vegetation.
Vegetation association	<i>Eucalyptus porosa</i> and <i>E.socialis</i> Mixed Mallee Mallee over <i>Callitris gracilis</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	N end of Boundary Rd (W side)



S end of Boundary Rd (E side)



Table 103. Flora Species List at Roadside Marker Site 027.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia iteaphylla</i>	Flinders Ranges Wattle		R
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia pycnantha</i>	Golden Wattle		
<i>Acacia</i> sp.	Wattle		
<i>Austrostipa elegantissima</i>	Feather Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Chloris truncata</i>	Windmill Grass		
<i>Dianella revoluta</i> var.			
<i>Dianella</i> sp.	Flax-lily		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Enneapogon nigricans</i>	Black-head Grass		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia parabolica</i>	Mealy Saltbush		
<i>Rytidosperma</i> sp.	Wallaby-grass		
<i>Salsola australis</i>	Buckbush		

Native				
Species Name	Common Name	AUS	SA	
<i>Senna artemisioides ssp.</i>	Desert Senna			
<i>Vittadinia sp.</i>	New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Ehrharta sp.</i>	Veldt Grass			
<i>Fraxinus sp.</i>				
<i>Heliotropium sp.</i>	Heliotrope			
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Malva sp.</i>	Mallow			
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Olea europaea ssp.</i>	Olive	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 104. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 027.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	7/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	2/5
Fallen Timber/debris	0.5/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	26.00/80

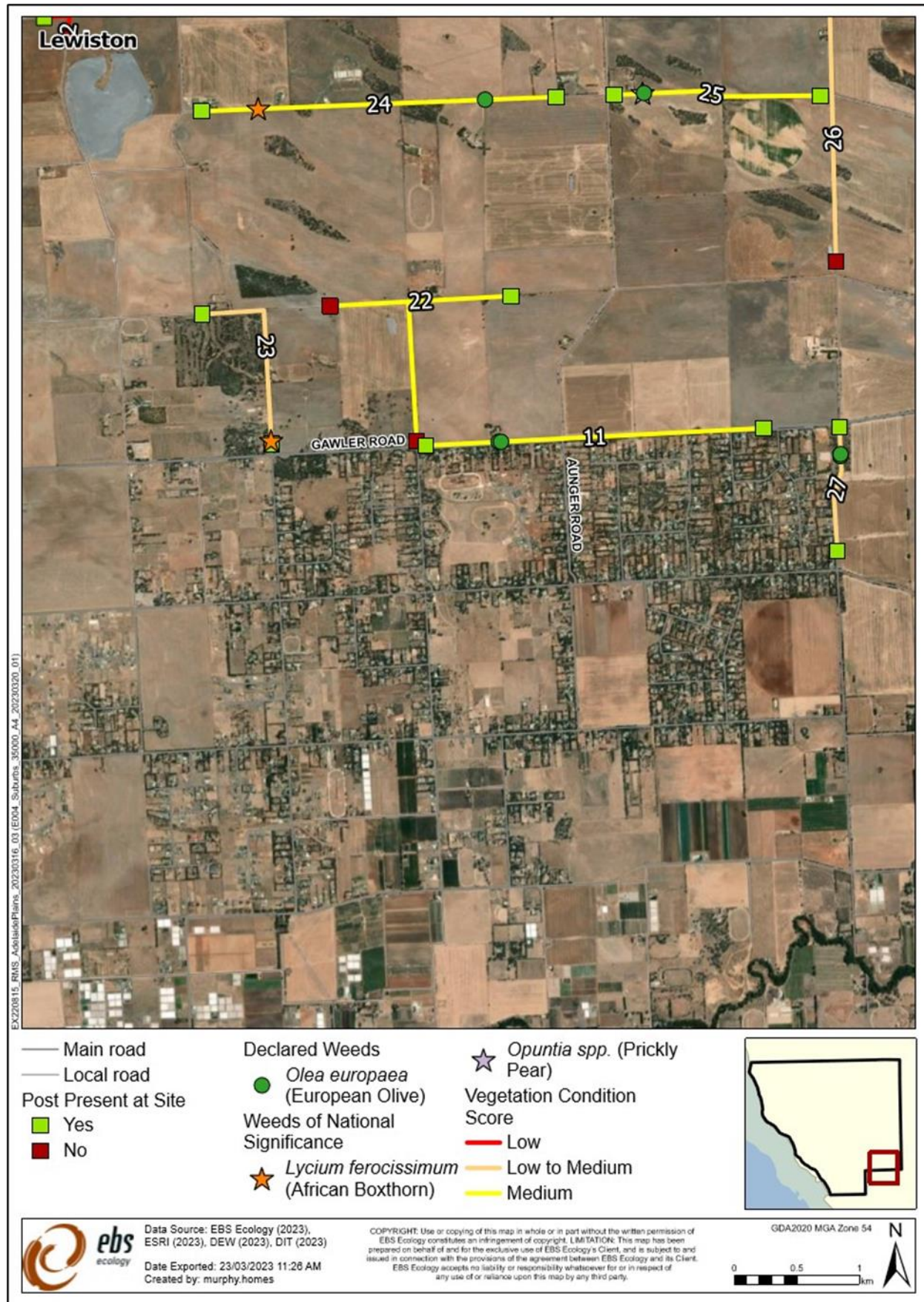


Figure 11. Roadside Marker Sites surveyed across Lewiston.

5.7 Mallala

A total of 11 Site were surveyed across Mallala (Figure 12).

5.7.1 Roadside Marker Site 028 (Cawrse Rd)

No post was observed at Site 28 A total of 10 native species were identified, with two species naturally regenerating (Table 105). A total of six introduced species were observed with presence of three environmental weeds and two declared weeds both listed as WoNs. No species threatened under the NPW Act or the EPBC Act was observed (Table 106). Overall, Site 28 received a VCS of 23.77 out of 80, reflecting vegetation of low to medium quality (Table 107).

Table 105. Summary of Roadside Marker Site 028.


Site	028
Road	Cawrse Rd
Suburb	Mallala
Date surveyed	09/01/2023
Longitude and Latitude	Start: 138.4799 -34.474 (W end of Cawrse Rd) End: 138.4905 -34.474 (E end of Cawrse Rd)
Posts present?	No
Threats	Weed invasion
Vegetation Condition Score	Low to medium - 23.77
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Senna artemisioides</i> ssp. <i>X coriacea</i> Shrubland
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end of Cawrse Rd</p>  <p>E end of Cawrse Rd</p>



Table 106. Flora Species List at Roadside Marker Site 028.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia saligna</i>	Golden Wreath Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Enneapogon nigricans</i>	Black-head Grass			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Brassica</i> sp.				
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 107. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 028.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	11.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	1/5
Hollow-bearing trees	1/5
Fallen Timber/debris	0.5/5

Attribute	Score
Mature Tree	1/5
TOTAL VEGETATION CONDITION SCORE	23.77/80

5.7.2 Roadside Marker Site 029 (Limerock Rd)

No post was observed at Site 29 (Table 108). A total of 18 native species were identified, with four species naturally regenerating. A total of 13 introduced species were observed with presence of Environmental weeds and one Declared weed (Table 109). No species threatened under the NPW Act or the EPBC Act was observed. Overall, Site 29 received a VCS of 40.40 out of 80, reflecting vegetation of medium quality (Table 110).

Table 108. Summary of Roadside Marker Site 029.


Site	029
Road	Limerock Rd
Suburb	Mallala
Date surveyed	12/01/2023
Longitude and Latitude	Start: 138.457 -34.4874 (E end of Limerock Rd) End: 138.4384 -34.4874 (W end of Limerock Rd)
Posts present?	No
Threats	Weed invasion and rubbish
Vegetation Condition Score	Medium - 40.40
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus odorata</i> +/- <i>E. socialis</i> Mixed Mallee over <i>Nitraria billardierei</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>E end of Limerock Rd</p>  <p>W end of Limerock Rd</p>



Table 109. Flora Species List at Roadside Marker Site 029.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia acinacea</i>	Wreath Wattle			
<i>Acacia cyclops</i>	Western Coastal Wattle			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Allocasuarina verticillata</i>	Drooping Sheoak			
<i>Austrostipa nodosa</i>	Tall Spear-grass			
<i>Austrostipa sp.</i>	Spear-grass			
<i>Dianella revoluta</i> var.				
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus socialis</i>	Beaked Mallee			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Zygophyllum aurantiacum/eremaeum</i>	Shrubby Twinleaf			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Aira sp.</i>	Hair-grass			
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Gazania linearis</i>	Gazania			
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Sisymbrium sp.</i>	Wild Mustard			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 110. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 029.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	4/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1.5/5
Mature Tree	6/8
TOTAL VEGETATION CONDITION SCORE	40.40/80

5.7.3 Roadside Marker Site 030 (Frost Rd)

No post was observed at Site 30, with large, degraded patch of native vegetation degraded (Table 111). A total of 17 native species were identified, with two species naturally regenerating. A total of 17 introduced species were observed with presence of eight environmental weeds and three declared weed (

Table 112) two of which are listed as WoNS. No species threatened under the NPW Act or the EPBC Act was observed. Overall, Site 30 received a VCS of 18.38 out of 80, reflecting vegetation of low quality (Table 113).

Table 111. Summary of Roadside Marker Site 030.

Site	030
Road	Frost Rd
Suburb	Mallala
Date surveyed	09/01/2023
Longitude and Latitude	Start: 138.4367 -34.4598 (N end of Frost Rd) End: 138.4367 -34.4851 (E end of Frost Rd)
Posts present?	No
Threats	Weed invasion, cleared vegetation around gates, pest invasions (hare)
Vegetation Condition Score	Low – 18.38
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus socialis</i> Mallee over <i>Acacia hakeoides</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	N end of Frost Rd



S end of Frost Rd



Table 112. Flora Species List at Roadside Marker Site 030.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Dianella sp.</i>	Flax-lily		
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush		
<i>Eucalyptus oleosa ssp. ampliata</i>			
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Eucalyptus socialis ssp.</i>	Beaked Red Mallee		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Nitraria billardiarei</i>	Nitre-bush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rytidosperma sp.</i>	Wallaby-grass		
<i>Salsola australis</i>	Buckbush		
<i>Santalum acuminatum</i>	Quandong		
<i>Senna artemisioides ssp. petiolaris</i>			
<i>Senna artemisioides ssp. X coriacea</i>	Broad-leaf Desert Senna		
Introduced			

Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Cenchrus longisetus</i>				
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum sp.</i>				Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Prunus sp.</i>	Plum			
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Sisymbrium sp.</i>	Wild Mustard			
<i>Tamarix aphylla</i>	Athel Pine	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 113. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 030.

Attribute	Score
Native Plant Species Diversity	9/30
Weeds	5.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2/5
Hollow-bearing trees	1/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	18.38/80

5.7.4 Roadside Marker Site 031 (Franks Rd)

No post was observed at Site 31 (Table 114). A total of 15 native species were identified, with one species showing natural regeneration. A total of four introduced species were observed with presence of only environmental weeds (Table 115). The State Rare *Acacia iteaphylla* (Flinders Ranges Wattle) threatened under the NPW Act was observed on Site. Overall, Site 31 received a VCS of 39.68 out of 80, reflecting vegetation of medium quality (Table 116).

Table 114. Summary of Roadside Marker Site 031.

Site	031
Road	Franks Rd
Suburb	Mallala
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.4744 -34.4214 End: 138.4753 -34.4362
Posts present?	No

Threats	Weed invasion and illegal dumping (tyres)
Vegetation Condition Score	Medium – 39.68
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus socialis</i> Mallee over <i>Senna artemisioides</i> ssp. <i>X coriacea</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end of Franks Rd</p> 
	<p>S end, W side of Franks Rd</p> 

Table 115. Flora Species List at Roadside Marker Site 031.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia iteaphylla</i>	Flinders Ranges Wattle		R
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus odorata</i>	Peppermint Box		

Native				
Species Name	Common Name	AUS	SA	
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Vittadinia cuneata</i> var.	Fuzzy New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 116. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 031.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	12/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	1/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	39.68/80

5.7.5 Roadside Marker Site 032 (Ross Rd)

Both posts were observed at Site 32 (Table 117). A total of seven native species were identified, with no natural regeneration observed. A total of five introduced species were observed with the presence of only environmental weeds (Table 118). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 32 received a VCS of 23.33 out of 80, reflecting vegetation of low quality (Table 119).

Table 117. Summary of Roadside Marker Site 032.

Site	032
Road	Ross Rd
Suburb	Mallala
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.4813 -34.4077 (W end of Ross Rd) End: 138.4836 -34.4078 (E end of Ross Rd)
Posts present?	Yes

Threats	Weed invasion
Vegetation Condition Score	Low – 23.33
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus socialis</i> over <i>Senna artemisioides</i> ssp. <i>X coriacea</i> and <i>Acacia oswaldii</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end of Ross Rd on the N side</p> 
	<p>E end of Ross Rd on the S side</p> 

Table 118. Flora Species List at Roadside Marker Site 032.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Rhagodia parabolica</i>	Mealy Saltbush		
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna		

Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Sisymbrium sp.</i>	Wild Mustard			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 119. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 032.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	13/15
Native Plant Life forms	8/20
Regenerating	0/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	0.5/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	23.33/80

5.7.6 Roadside Marker Site 035 (Hill Rd)

No posts were observed at Site 35 (Table 120). A total of 20 native species were identified, with four species naturally regenerating. A total of 16 introduced species were observed with the presence 12 environmental weeds and four declared weeds, all of which are listed as WoNS (Table 121). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 35 received a VCS of 30.37 out of 80, reflecting vegetation of a low to medium quality (Table 122).

Table 120. Summary of Roadside Marker Site 035.

Site	035
Road	Hill Rd
Suburb	Mallala
Date surveyed	9/01/2023
Longitude and Latitude	Start: 138.4909 - 34.4563 (S end of Hall Rd) End: 138.4922 -34.4387 (N end of Hall Rd)
Posts present?	No
Threats	Weed invasion, rubbish, native vegetation clearance
Vegetation Condition Score	Low to Medium – 30.37
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus socialis</i> Mallee over <i>Senna spp.</i>

Benchmark Community

NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.

S end of Hill Rd



N end of Hill Rd



Photo points

Table 121. Flora Species List at Roadside Marker Site 035.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Dianella</i> sp.	Flax-lily		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Enneapogon nigricans</i>	Black-head Grass		
<i>Eucalyptus phenax</i> ssp.			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Nitraria billardiarei</i>	Nitre-bush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush		

Native				
Species Name	Common Name	AUS	SA	
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma sp.</i>	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena sp.</i>	Bindyi			
<i>Senna artemisioides ssp. X coriacea</i>	Broad-leaf Desert Senna			
<i>Senna sp.</i>	Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asparagus asparagoides f.</i>		Yes	Yes	
<i>Asphodelus fistulosus</i>				Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Sisymbrium sp.</i>	Wild Mustard			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Tamarix aphylla</i>	Athel Pine	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 122. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 035.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	2/5
Hollow-bearing trees	1/5
Fallen Timber/debris	0.5/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	30.37/80

5.7.7 Roadside Marker Site 036 (Earl Rd)

No posts were observed at Site 36. A total of 15 native species were identified, with two species naturally regenerating. A total of 10 introduced species were observed with the presence six environmental weeds and three declared weed all of which are listed as WoNS (Table 124). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 36 received a VCS of 26.13 out of 80, reflecting vegetation of low to medium quality (Table 125).

Table 123. Summary of Roadside Marker Site 036.



Site	036
Road	Earl Rd
Suburb	Mallala
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.4753 -34.4567 (S end of (Earl Rd) End: 138.4752 -34.44 (N end of Earl Rd)
Posts present?	No
Threats	Weed invasion
Vegetation Condition Score	Low to Medium – 26.13
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> Mallee over <i>Senna artemisioides</i> ssp. <i>X coriacea</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>S end of Earl Rd</p>  <p>N end of Earl Rd</p> 

Table 124. Flora Species List at Roadside Marker Site 036.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Atriplex semibaccata</i>	Berry Saltbush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Opuntia stricta</i>	Erect Prickly Pear	Yes	Yes	
<i>Reseda lutea</i>	Cut-leaf Mignonette			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes
<i>Tamarix aphylla</i>	Athel Pine	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 125. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 036.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	9.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2/5
Hollow-bearing trees	1/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	26.13/80

5.7.8 Roadside Marker Site 037 (Hall Rd)

No posts were observed at Site 37 (Table 126). A total of 16 native species were identified, with only one species showing signs of natural regenerating. A total of 11 introduced species were observed with the

presence 10 Environmental weeds, no declared weeds were observed at Site (Table 127). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 37 received a VCS of 27.29 out of 80, reflecting vegetation of low to medium quality (Table 128).

Table 126. Summary of Roadside Marker Site 037.


Site	037
Road	Hall Rd
Suburb	Mallala
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.4566 -34.4365 (S end of Hall Rd, W side)
	End: 138.4567 -34.4131 (N end of Hall Rd)
Posts present?	One
Threats	Weed invasion, mowing on road verge.
Vegetation Condition Score	Low to Medium – 27.29
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Acacia ligulata</i> shrubland +/- <i>Eucalyptus socialis</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>S end of Hall Rd, W side</p> 
	N end of Hall Rd



Table 127. Flora Species List at Roadside Marker Site 037.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia nyssophylla</i>	Spine Bush			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Cassytha</i> sp.	Dodder-laurel			
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush			
<i>Eremophila longifolia</i>	Weeping Emubush			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Senna artemisioides</i> ssp. <i>X artemisioides</i>	Silver Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Cenchrus clandestinus</i>	Kikuyu			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Cynodon dactylon</i> var.	Couch			Yes
<i>Heliotropium europaeum</i>	Common Heliotrope			Yes
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 128. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 037.

Attribute	Score
Native Plant Species Diversity	18/30

Attribute	Score
Weeds	12/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	1/5
Hollow-bearing trees	1/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	27.29/80

5.7.9 Roadside Marker Site 038 (Hall Rd and Ross Road)

One post was observed at the Hall Rd and the Calomba Rd intersection of the E side of the Rd (Table 129). A total of 26 native species were identified at Site 38, with four species naturally regenerating. A total of 13 introduced species were observed with the presence of three declared weeds, which included *Fraxinus angustifolia* (Narrowed-leaved Ash), *Lycium ferocissimum* (African Boxthorn), *Solanum elaeagnifolium* (Silver-leaf Nightshade) (Table 130). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. A majority of Calomba Rd showed signs of disturbance. Therefore, this section of the road was assessed separately from the rest of the Site. Therefore, the VCS have been averaged to get a condition of the whole Site. Overall, Site 38 received a VCS of 30.39 out of 80, reflecting vegetation of a low to medium quality (Table 131).

Table 129. Summary of Roadside Marker Site 038.

Site	038
Road	Hall Rd and Ross Rd
Suburb	Mallala
Date surveyed	16/12/2023
Longitude and Latitude	Start: 138.4568 -34.4124 (S end of Hall Rd and Calomba intersection, E side) 138.4567 -34.406 (N end of Hall Rd, E side) 138.4612 -34.4077 (E end Ross Rd, N side) End: 138.4471 -34.4077 (W end of Ross Rd, N side)
Posts present?	One
Threats	Weed invasion
Vegetation Condition Score	Low to Medium – 30.39
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus socialis</i> and <i>E. porosa</i> Mallee over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	S end of Hall Rd and Calomba intersection, E side



N end of Hall Rd, E side



E end Ross Rd, N side



W end of Ross Rd, N side



Table 130. Flora Species List at Roadside Marker Site 038.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Allocasuarina verticillata</i>	Drooping Sheoak			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Chloris truncata</i>	Windmill Grass			
<i>Dianella revoluta</i> var.				
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Lomandra effusa</i>	Scented Mat-rush			
<i>Lomandra multiflora</i> ssp.	Many-flower Mat-rush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Olearia teretifolia</i>	Cypress Daisy-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Roepera aurantiaca</i> ssp. <i>aurantiaca</i>	Shrubby Twinleaf			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Solanum esuriale</i>	Quena			
<i>Vittadinia cuneata</i> var.	Fuzzy New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Fraxinus angustifolia</i> ssp.	Narrow-leaved Ash	Yes		
<i>Hordeum vulgare</i>	Barley			Yes
<i>Lactuca serriola</i> f. <i>serriola</i>	Prickly Lettuce			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	

Native				
Species Name	Common Name	AUS	SA	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Sisymbrium officinale</i>	Hedge Mustard			
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 131. Averaged scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 038.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	8.75/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2.5/5
Tree Canopy cover	3/5
Hollow-bearing trees	1.5/5
Fallen Timber/debris	21.255
Mature Tree	2.5/8
TOTAL VEGETATION CONDITION SCORE	30.39/80

5.7.10 Roadside Marker Site 049 (Turner Rd and Old Dublin Rd)

No post was observed at Site 49 (Table 132). A total of 22 native species were identified, with three species naturally regenerating. A total of 14 introduced species were observed with the presence of three declared weeds, which includes *Lycium ferocissimum* (African Boxthorn) and *Tamarix aphylla* (Athel Pine) (Table 133). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 49 received a VCS of 38.78 out of 80, reflecting medium quality vegetation (Table 134).

Table 132. Summary of Roadside Marker Site 049.

Site	049
Road	Turner Rd and Old Dublin Rd
Suburb	Mallala
Date surveyed	9/01/2023
Longitude and Latitude	Start: 138.4567 -34.4444 (N end of Turner Rd)
	End: 138.4944 -34.457 (E end of Old Dublin Rd on S side)
Posts present?	No
Threats	Weed invasion, native vegetation clearance (mowing), roadside trash.
Vegetation Condition Score	Medium – 38.78
Adjacent land use	Cropping/agriculture



Vegetation association	<i>Eucalyptus leptophylla</i> and <i>E. socialis</i> and <i>E. odorata</i> Mallee over <i>Pittosporum angustifolium</i> .
	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
	<p>N end of Turner Rd</p>  <p>E end of Old Dublin Rd</p>  <p>Photo points</p>

Table 133. Flora Species List at Roadside Marker Site 049.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		
<i>Allocasuarina verticillata</i>	Drooping Sheoak		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Dianella revoluta</i> var.			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Enneapogon nigricans</i>	Black-head Grass		
<i>Eucalyptus leptophylla</i>	Narrow-leaf Red Mallee		
<i>Eucalyptus odorata</i>	Peppermint Box		
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Grevillea huegelii</i>	Comb Grevillea		

<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Nitraria billardi</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Reseda lutea</i>	Cut leaf mignonette			
<i>Schinus molle</i>	Pepper-tree			Yes
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Tamarix aphylla</i>	Athel Pine	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 134. Averaged scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 049.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	38.78/80

5.7.11 Roadside Marker Site 055 (Cawrse Rd)

No post was observed at Site 55 (Table 135). A total of 16 native species were identified, with two species naturally regenerating. A total of 14 introduced species were observed with the presence of four declared weeds and eight environmental weeds (Table 136Table 135). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 55 received a VCS of 24.87 out of 80, reflecting low quality vegetation (Table 137).

Table 135. Summary of Roadside Marker Site 055.



Site	055
Road	Cawrse Rd
Suburb	Mallala
Date surveyed	9/01/2023
Longitude and Latitude	Start: 138.4434 -34.474 (W end of Cawrse Rd) End: 138.4581 -34.474 (W end of Cawrse Rd)
Posts present?	No
Threats	Clearance near gates, weed invasions and garden escapes.
Vegetation Condition Score	Low – 24.87
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus</i> spp. Mixed Mallee over <i>Pittosporum angustifolium</i> and Chenopod shrubs.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end of Cawrse Rd</p>  <p>E end of Cawrse Rd</p> 

Table 136. Flora Species List at Roadside Marker Site 055.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia wilhelmiana</i>	Dwarf Nealie			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Dianella brevicaulis</i>	Short-stem Flax-lily			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Tetragonia</i> sp.	False Spinach			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Gazania</i> sp.	Gazania	Yes		
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Opuntia puberula</i>	Prickly Pear	Yes	Yes	
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Tamarix aphylla</i>	Athel Pine	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 137. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 055.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	7.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2/5
Hollow-bearing trees	1/5
Fallen Timber/debris	0.5/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	24.87/80

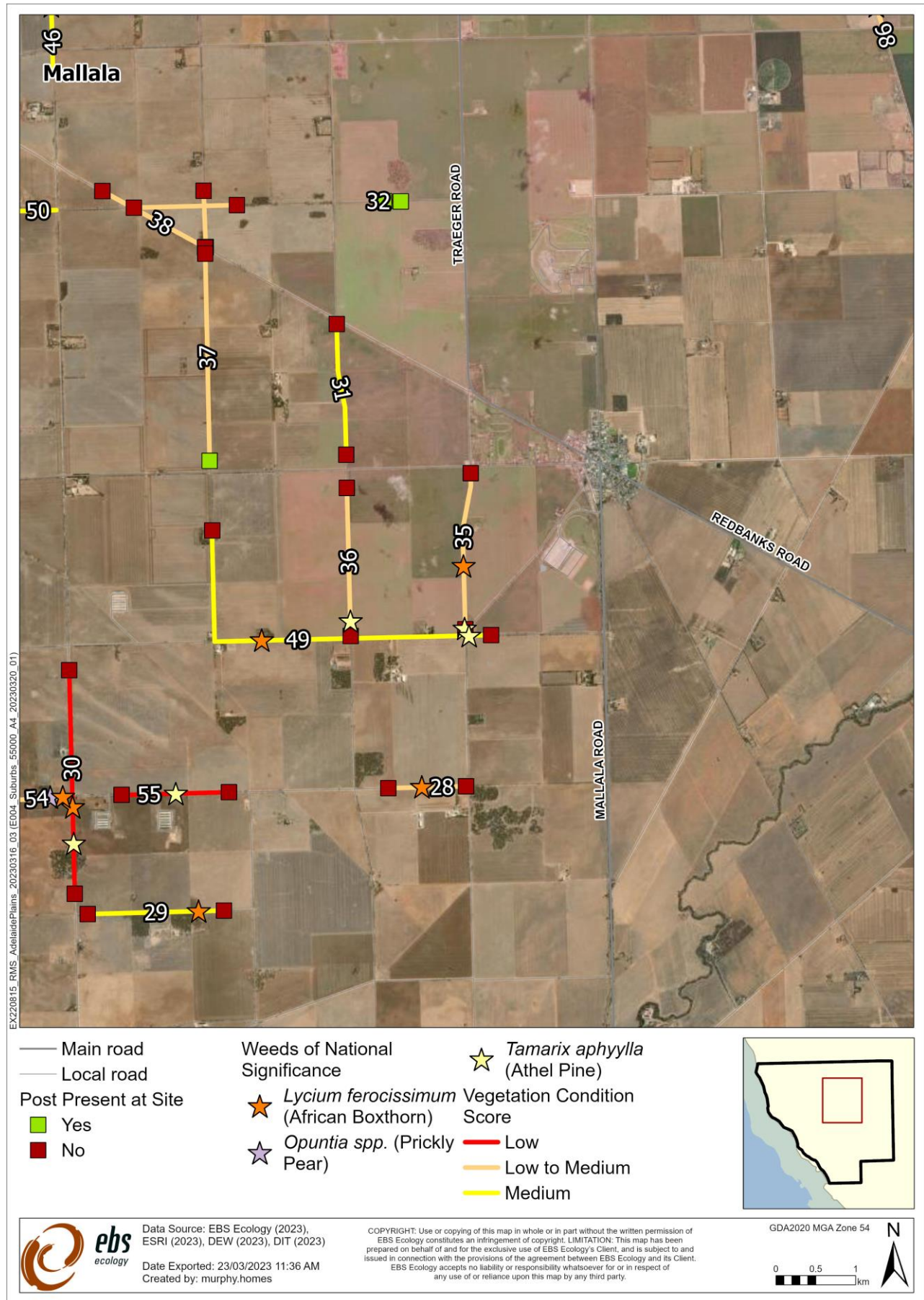


Figure 12. Roadside Marker Sites across Mallala.

5.8 Grace Plains

A total of six Sites were assessed across Grace Plains (Figure 13).

5.8.1 Roadside Marker Site 039 (Hallion Rd and Hall Rd)

The previous survey included a small section of non-native vegetation at the southern end of Hall Rd (WP 290). This section was not included in the scoring of this Site for this survey and the start was moved further north to where the native vegetation begins (WP 291). Only one post was observed at the northern end of Hall Rd at Site 39 (Table 138). A total of 13 native species were identified, with four species naturally regenerating. A total of 10 introduced species were observed with the presence of two declared weeds and five environmental weeds (Table 139). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 39 received a VCS of 28.70 out of 80, reflecting low to medium quality vegetation (Table 140).

Table 138. Summary of Roadside Marker Site 039.

Site	039
Road	Hallion Rd and Hall Rd
Suburb	Grace Plains
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.4567 -34.3637(S end of Hall Rd) 138.4568 -34.3556 (S end of Hall Rd) End: 138.4614 -34.3595 (E end if Hallion Rd)
Posts present?	One (S end of Hall Rd)
Threats	Weed invasion, dieback of established trees.
Vegetation Condition Score	Low to Medium – 28.70
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> Mallee over <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	S end of Hall Rd



N end of Hall Rd



E end of Hallion Rd



Table 139. Flora Species List at Roadside Marker Site 039.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		

Native				
Species Name	Common Name	AUS	SA	
<i>Austrostipa</i> sp.	Spear-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Myoporum platycarpum</i> ssp.	False Sandalwood			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Roepera aurantiaca</i> ssp. <i>aurantiaca</i>	Shrubby Twinleaf			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Carthamus</i> sp.				
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Ficus carica</i>	Edible Fig			
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.



Table 140. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 039.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	1/8
TOTAL VEGETATION CONDITION SCORE	28.70/80

5.8.2 Roadside Marker Site 040 (Tiller Rd)

No posts were observed at Site 40 (Table 141). A total of 13 native species were identified, with three species naturally regenerating. A total of five introduced species were observed with the presence of one declared weed, *Oncosiphon suffruticosum* (Calomba Daisy) and one environmental weed, *Avena barbata* (Bearded Oat) (Table 142). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 40 received a VCS of 33.06 out of 80, reflecting medium quality vegetation (Table 143).

Table 141. Summary of Roadside Marker Site 040.

Site	040
Road	Tiller Rd
Suburb	Grace Plains
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.4606 -34.3449 (E end of Tiller Rd) End: 138.4505 -34.3449 (W end of Tiller Rd)
Posts present?	No
Threats	Weed invasion and native vegetation clearance.
Vegetation Condition Score	Medium – 33.06
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus leptophylla</i> Mallee over <i>Acacia</i> spp. and <i>Senna artemisioides</i> ssp. <i>petiolaris</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>E end on the N side of Tiller Rd</p>  <p>E end on the S side of Tiller Rd</p> 

W end on the N side of Tiller Rd



W end on the S side of Tiller Rd



Table 142. Flora Species List at Roadside Marker Site 040.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus leptophylla</i>	Narrow-leaf Red Mallee			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Salsola australis</i>	Buckbush			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Reseda alba</i>	White Mignonette			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 143. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 040.

Attribute	Score
Native Plant Species Diversity	14/30
Weeds	4/15
Native Plant Life forms	14/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	4/5
Hollow-bearing trees	0/5
Fallen Timber/debris	1/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	33.06/80

5.8.3 Roadside Marker Site 041 (Tiller Rd and Franks Rd)

One post was observed on the S side on the E end of Tiller Rd at Site 41 (Table 144). A total of 23 native species were identified, with four species naturally regenerating. A total of nine introduced species were observed with the presence of one WoNS and three environmental weeds (Table 145). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 41 received a VCS of 34.21 out of 80, reflecting medium quality vegetation (Table 146).

Table 144. Summary of Roadside Marker Site 041.

Site	041
Road	Tiller Rd and Franks Rd
Suburb	Grace Plains
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.485 -34.3449 (E end of Tiller Rd) End: 138.4745 -34.3504 (south end of Franks Rd)
Posts present?	One (138.479 -34.345)
Threats	Weed invasion
Vegetation Condition Score	Medium - 34.21
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus leptophylla</i> with <i>E. porosa</i> Mallee over <i>Acacia ligulata</i> and <i>A. notabilis</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	N side of Tiller Rd, E end



S side of Tiller Rd, E end



E end and S side of Tiller Rd



N end, E side of Franks Rd



S end, E side of Franks Rd



Table 145. Flora Species List at Roadside Marker Site 041.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia argyrophylla</i>	Silver Mulga-bush		
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia pycnantha</i>	Golden Wattle		
<i>Acacia sp.</i>	Wattle		
<i>Allocasuarina verticillata</i>	Drooping Sheoak		
<i>Atriplex nummularia ssp.</i>	Old-man Saltbush		
<i>Austrostipa sp.</i>	Spear-grass		
<i>Bursaria spinosa ssp.</i>	Bursaria		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Dianella sp.</i>	Flax-lily		
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush		
<i>Eremophila longifolia</i>	Weeping Emubush		
<i>Eucalyptus dumosa</i>	White Mallee		
<i>Eucalyptus leptophylla</i>	Narrow-leaf Red Mallee		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Lomandra effusa</i>	Scented Mat-rush		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Rytidosperma sp.</i>	Wallaby-grass		

Native				
Species Name	Common Name	AUS	SA	
<i>Senna artemisioides ssp. petiolaris</i>				
<i>Vittadinia gracilis</i>	Woolly New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environment al Weed
<i>Asparagus asparagoides f.</i>	Bridal Creeper	Yes	Yes	
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus sp.</i>	Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Helminthotheca echioides</i>	Ox-tongue			
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Sisymbrium sp.</i>	Wild Mustard			
<i>Sonchus sp.</i>	Sow-thistle			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 146. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 041.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	7/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	35
Tree Canopy cover	2/5
Hollow-bearing trees	1/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	34.21/80

5.8.4 Roadside Marker Site 042 (Tiller Rd)

Both posts were observed at Site 42 (Table 147). A total of 18 native species were identified at, with six species naturally regenerating. A total of nine introduced species were observed with the presence of one declared weed and eight environmental weeds (Table 148). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 42 received a VCS of 45.90 out of 80, reflecting vegetation of medium quality (Table 149).

Table 147. Summary of Roadside Marker Site 042.

Site	042
Road	Tiller Rd
Suburb	Grace Plains
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.4361 -34.3449 (E end of Tiller Rd)
	End: 138.4063-34.345 (W end of Tiller Rd)
Posts present?	Yes

Threats	Weed invasion
Vegetation Condition Score	Medium – 45.90
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus leptophylla</i> over <i>Senna artemisioides</i> ssp. <i>petiolaris</i> and chenopod shrubs
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>E end on the S side of Tiller Rd</p> 
	<p>W end on the N side of Tiller Rd</p> 
	<p>W end on the S side of Tiller Rd</p>



Table 148. Flora Species List at Roadside Marker Site 042.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Austrostipa nodosa</i>	Tall Spear-grass			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Cassytha</i> sp.	Dodder-laurel			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus leptophylla</i>	Narrow-leaf Red Mallee			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Zygophyllum aurantiacum/eremaeum</i>	Shrubby Twinleaf			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 149. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 042.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	9/15
Native Plant Life forms	16/20
Regenerating	6/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	4/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	45.90/80

5.8.5 Roadside Marker Site 045 (Hallion Rd)

Both posts were observed at Site 45 (Table 150). A total of 12 native species were identified, with two species naturally regenerating. A total of six introduced species were observed with the presence of two declared weed and one environmental weed (Table 151). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 45 received a VCS of 35.48 out of 80, reflecting vegetation of medium quality (Table 152).

Table 150. Summary of Roadside Marker Site 045.

Site	045
Road	Hallion Rd
Suburb	Grace Plains
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.4367 -34.3596 (W end on the S side of Hallion Rd)
	End: 138.445 -34.3596 (E end on the S side of Hallion Rd)
Posts present?	Yes
Threats	Weed invasion, garden escapes and roadside private plantings.
Vegetation Condition Score	Medium – 35.48
Adjacent land use	Cropping/agriculture



Vegetation association	<i>Eucalyptus porosa</i> Mallee over <i>Acacia hakeoides</i>
	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
	<p>Benchmark Community</p> <p>W end on the S side of Hallion Rd</p>  <p>E end on the S side of Hallion Rd</p>  <p>Photo points</p>

Table 151. Flora Species List at Roadside Marker Site 045.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Dianella revoluta</i> var.			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus gracilis</i>	Yorrell		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Maireana brevifolia</i>	Short-leaf Bluebush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Sclerolaena diacantha</i>	Grey Bindyi		
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna		
<i>Vittadinia gracilis</i>	Woolly New Holland Daisy		

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aira sp.</i>	Hair-grass			
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Pinus halepensis</i>	Aleppo Pine	Yes		
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 152. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 045.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	9/15
Native Plant Life forms	16/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	35.48/80

5.8.6 Roadside Marker Site 046 (Powerline Rd)

Both posts were observed at the start and end of Site 46 (Table 153). A total of 20 native species were identified, with three species naturally regenerating. A total of nine introduced species were observed with the presence of one declared weed and four environmental weeds (Table 154). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 46 received a VCS of 37.95 out of 80, reflecting vegetation of medium quality (Table 155).

Table 153. Summary of Roadside Marker Site 046.

Site	046
Road	Powerline Rd
Suburb	Grace Plains
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.4365 -34.3451 (N end on the W side of Powerline Rd)
	End: 138.4366 -34.3918 (S end on the W side of Powerline Rd)
Posts present?	Yes
Threats	Illegal dumping and weed invasion
Vegetation Condition Score	Medium – 37.95
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> Mallee over <i>Senna artemisioides</i> ssp. <i>petiolaris</i>

Benchmark Community

NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.

N end on the W side of Powerline Rd



S end on the W side of Powerline Rd



Photo points

Table 154. Flora Species List at Roadside Marker Site 046.

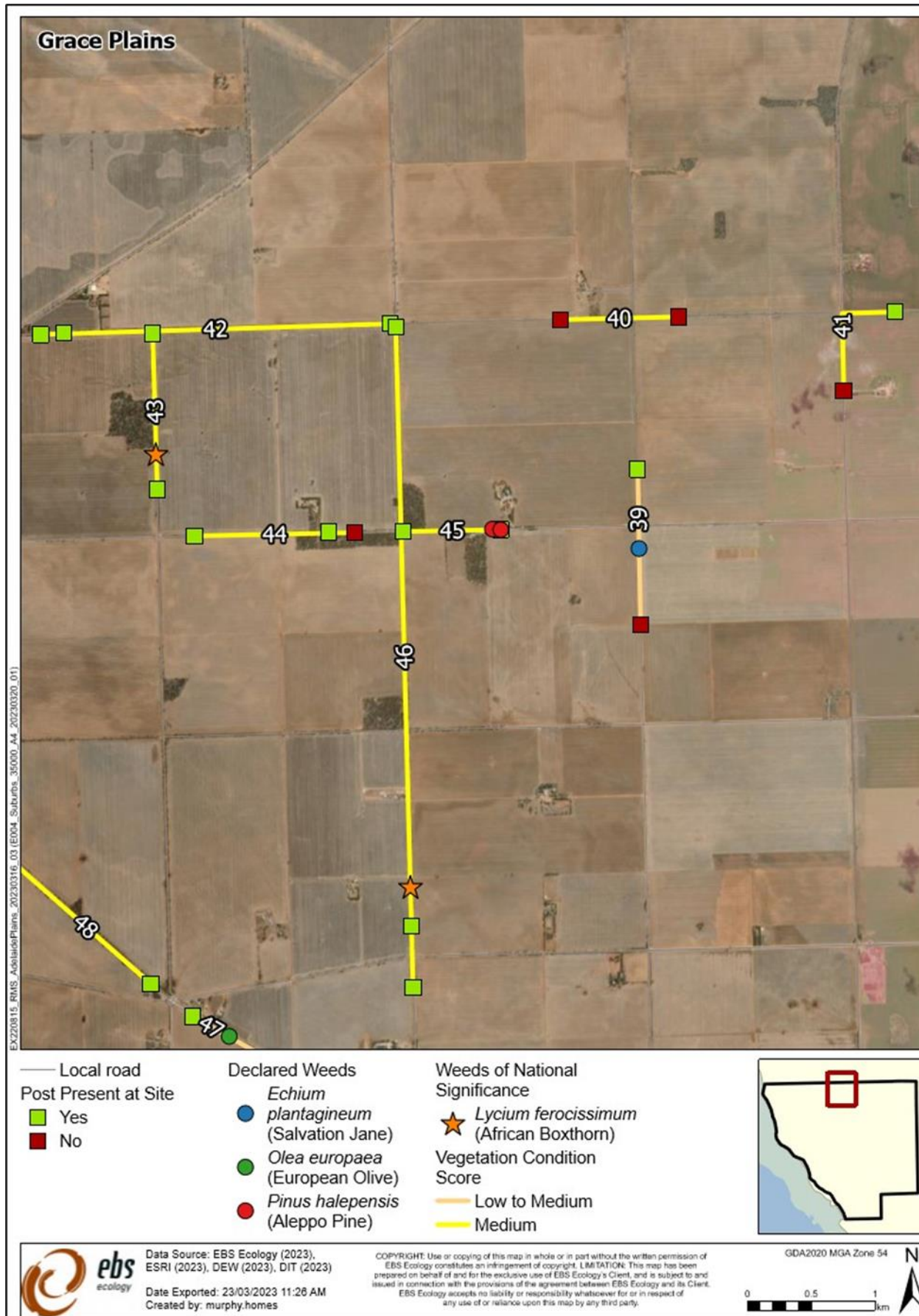
Native			
Species Name	Common Name	AUS	SA
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Vittadinia gracilis</i>	Woolly New Holland Daisy		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Rytidosperma</i> sp.	Wallaby-grass		
<i>Sclerolaena diacantha</i>	Grey Bindyi		
<i>Austrostipa elegantissima</i>	Feather Spear-grass		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Zygophyllum aurantiacum/eremaeum</i>	Shrubby Twinleaf		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Maireana brevifolia</i>	Short-leaf Bluebush		

Native				
Species Name	Common Name	AUS	SA	
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Santalum acuminatum</i>	Quandong			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Bromus diandrus</i>	Great Brome			
<i>Carthamus</i> sp.				
<i>Cynodon dactylon</i> var.	Couch			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 155. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 046.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	37.95/80




5.9 Calomba

A total of 11 roadside marker Sites were surveyed across Calomba (Figure 14).

5.9.1 Roadside Marker Site 043 (Young Rd)

Both posts were observed at the start and end of Site 43 (Table 156). A total of 18 native species were identified, with one species showing signs of natural regeneration. A total of four introduced species were observed with the presence of one declared weed and three environmental weeds (Table 157). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 43 received a VCS of 47.93 out of 80, reflecting vegetation of medium quality (Table 158).

Table 156. Summary of Roadside Marker Site 043.

Site	043
Road	Young Rd
Suburb	Calomba
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.4158 -34.3451 (N end on the E side of Young) End: 138.4159 -34.3562 (S end on the E side of Young)
Posts present?	Yes
Threats	Weed invasion
Vegetation Condition Score	Medium – 47.93
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> Mallee over <i>Acacia oswaldii</i> and <i>Pittosporum angustifolium</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end on the E side of Young Rd</p>  <p>S end on the E side of Young Rd</p>



S end on the W side of Young Rd



Table 157. Flora Species List at Roadside Marker Site 043.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		
<i>Arthropodium fimbriatum</i>	Nodding Vanilla-lily		
<i>Atriplex semibaccata</i>	Berry Saltbush		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eremophila longifolia</i>	Weeping Emubush		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Maireana brevifolia</i>	Short-leaf Bluebush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia parabolica</i>	Mealy Saltbush		
<i>Santalum acuminatum</i>	Quandong		
<i>Sclerolaena diacantha</i>	Grey Bindyi		
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna		

Native				
Species Name	Common Name	AUS	SA	
<i>Zygophyllum aurantiacum/eremaeum</i>	Shrubby Twinleaf			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum sp.</i>	Iceplant			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 158. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 043.

Attribute	Score
Native Plant Species Diversity	27/30
Weeds	10.5/15
Native Plant Life forms	16/20
Regenerating	3/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	47.93/80

5.9.2 Roadside Marker Site 044 (Hallion Rd)

Only one post was observed at the western end on the northern side of Hallion Rd at Site 44 (Table 159). A total of 10 native species were identified at Site 44, with one species naturally regenerating. A total of three introduced species were observed, which were all listed as environmental weeds (Table 160). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 44 received a VCS of 36.23 out of 80, reflecting vegetation of medium quality (Table 161).

Table 159. Summary of Roadside Marker Site 044.

Site	044
Road	Hallion Rd
Suburb	Calomba
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.419 -34.3595 (W end of Hallion Rd) End: 138.4326 -34.3596 (E end of Hallion Rd)
Posts present?	One
Threats	Weed invasion
Vegetation Condition Score	Medium – 36.23


<p>Adjacent land use</p> <p>Vegetation association</p> <p>Benchmark Community</p> <p>Photo points</p>	<p>Cropping/agriculture</p>
	<p><i>Eucalyptus porosa</i> Mallee over <i>Acacia</i> spp.</p>
	<p>NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.</p>
	<p>W end on the N side of Hallion Rd</p>  <p>E nd on the N side of Hallion Rd</p>  <p>W nd on the N side of Hallion Rd</p> 

Table 160. Flora Species List at Roadside Marker Site 044.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia argyrophylla</i>	Silver Mulga-bush			
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Allocasuarina verticillata</i>	Drooping Sheoak			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Vittadinia condyloides</i>	Club-hair New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Wards Weed			Yes
<i>Vicia sativa</i> ssp. <i>sativa</i>	Common Vetch			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 161. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 044.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	12/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	36.32/80

5.9.3 Roadside Marker Site 047 (Calomba Rd)

Both posts were observed at Site 47 (Table 162). A total of 11 native species were identified at Site 47, with no signs of regeneration. A total of 11 introduced species were observed with the presence of two declared weeds and eight environmental weeds (Table 163). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 47 received a VCS of 25.81 out of 80, reflecting vegetation of low to medium quality (Table 164).

Table 162. Summary of Roadside Marker Site 047.

Site	047
Road	Calomba Rd
Suburb	Calomba
Date surveyed	14/12/2022



Longitude and Latitude	Start: 138.4178 -34.3934 (N end of Calomba Rd) End: 138.4276 -34.3983 (S end of Calomba Rd)
Posts present?	Yes
Threats	Weed invasion
Vegetation Condition Score	Low to Medium – 25.81
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> Mallee over <i>Pittosporum angustifolium</i> and <i>Eremophila longifolia</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end on the E side of Calomba Rd</p>  <p>S end on the E side of Calomba Rd</p> 

Table 163. Flora Species List at Roadside Marker Site 047.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		

<i>Austrostipa</i> sp.	Spear-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eremophila longifolia</i>	Weeping Emubush			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Vittadinia condyloides</i>	Club-hair New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Carthamus</i> sp.				
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Olea europaea</i> ssp.	Olive	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 164. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 047.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	6.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	3/5
Hollow-bearing trees	2/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	25.81/80

5.9.4 Roadside Marker Site 048 (Daniel Rd)

Both posts were observed at Site 48 (Table 165). A total of 16 native species were identified, with four species naturally regenerating. A total of 11 introduced species were observed with the presence of one declared weed and seven environmental weeds (Table 166). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 48 received a VCS of 37.13 out of 80, reflecting vegetation of medium quality (Table 167).

Table 165. Summary of Roadside Marker Site 048.

Site	048
Road	Daniel Rd



Suburb	Calomba
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.3938 -34.3753 (NW end of Daniel Rd) End: 138.4143 -34.391 (SW end of Daniel Rd)
Posts present?	Yes
Threats	Degradation of native vegetation from Rail corridor and weed invasion.
Vegetation Condition Score	Medium – 37.13
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus brachycalyx</i> Mallee over <i>Senna artemisioides</i> ssp. <i>X. coriacea</i> and <i>Pittosporum angustifolium</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>NW end on the N side of Daniel Rd</p>  <p>SW end on the N side of Daniel Rd</p> 

Table 166. Flora Species List at Roadside Marker Site 048.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus brachycalyx</i>	Gilja			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Roepera aurantiaca</i> ssp. <i>aurantiaca</i>	Shrubby Twinleaf			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carthamus lanatus</i>	Saffron Thistle			Yes
<i>Centaurea solstitialis</i>	St Barnaby's Thistle			
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes
<i>Yucca gloriosa</i>	Yucca			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 167. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 048.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	10.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	37.13/80

5.9.5 Roadside Marker Site 050 (Johnsons Rd)

One post was located at the W end of Johnson Rd at Site 50 (Table 168). This Site is severely impacted by garden escapes, which are also listed as declared weeds and WoNS, this includes species such as *Opuntia spp.* and *Asparagus scandens* (Asparagus Fern). Overall, a total of 20 native species were identified at Site 50, with three species naturally regenerating. A total of 14 introduced species were observed with the presence of three declared weeds, all of which are classified as WoNS and seven environmental weeds (Table 169). No threatened species protected under the NPW Act and the EPBC Act were observed. Site 50 received a VCS of 38.89 out of 80, reflecting vegetation of medium quality (Table 170).

Table 168. Summary of Roadside Marker Site 050.


Site	050
Road	Johnson Rd
Suburb	Calomba
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.3575 -34.4077 (W end of Johnson Rd, S side) End: 138.4365 -34.4078 (E end of Johnson Rd, S side)
Posts present?	One
Threats	Weed invasion, garden escapes and mowing of native vegetation
Vegetation Condition Score	Medium – 38.89
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus socialis</i> Mallee over <i>Senna spp.</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end of Johnson Rd, S side</p>  <p>E end of Johnson Rd, S side</p>



Table 169. Flora Species List at Roadside Marker Site 050.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia wilhelmiana</i>	Dwarf Nealie			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush			
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Myoporum platycarpum</i> ssp.	False Sandalwood			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Salsola australis</i>	Buckbush			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Cactaceae</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Opuntia puberula</i>		Yes	Yes	
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus</i> sp.	Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 170. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 050.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	6.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	5/5
Fallen Timber/debris	1/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	38.89/80

5.9.6 Roadside Marker Site 059 (Shannon Rd)

Both posts were observed at Site 59 (Table 171). A total of 18 native species were identified at, with three species naturally regenerating. A total of 14 introduced species were observed with the presence of two declared weeds and nine environmental weeds (Table 172). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 59 received a VCS of 39.81 out of 80, reflecting vegetation of medium quality (Table 173).

Table 171. Summary of Roadside Marker Site 059.

Site	059
Road	Shannon Rd
Suburb	Calomba
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.4158 -34.4111 (N end on the W side of Shannon Rd)
	End: 138.4159 -34.4228 (S end on the W side of Shannon Rd)
Posts present?	Yes
Threats	Weed invasion and rubbish
Vegetation Condition Score	Medium – 39.81
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus socialis</i> and <i>E. gracilis</i> Mixed Mallee over <i>Acacia oswaldii</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	N end on the W side of Shannon Rd



S end on the W side of Shannon Rd



Table 172. Flora Species List at Roadside Marker Site 059.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Atriplex semibaccata</i>	Berry Saltbush		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Cassytha</i> sp.	Dodder-laurel		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus gracilis</i>	Yorrell		
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Eucalyptus</i> sp.			
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Lomandra effusa</i>	Scented Mat-rush		
<i>Maireana brevifolia</i>	Short-leaf Bluebush		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Nitraria billardiarei</i>	Nitre-bush		
<i>Olearia teretifolia</i>	Cypress Daisy-bush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rytidosperma</i> sp.	Wallaby-grass		
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna		
Introduced			

Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum sp.</i>	Iceplant			Yes
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Sisymbrium officinale</i>	Hedge Mustard			
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus sp.</i>	Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 173. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 059.

Attribute	Score
Native Plant Species Diversity	27/30
Weeds	8/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	39.81/80

5.9.7 Roadside Marker Site 060 (Jenkin Rd)

Both posts were observed at Site 60 (Table 174). A total of 22 native species were identified at Site 60, with three species naturally regenerating. A total of 10 introduced species were observed with the presence of two declared weeds and six environmental weeds (

Table 175). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 60 received a VCS of 45.81 out of 80, reflecting vegetation of medium quality (Table 176).

Table 174. Summary of Roadside Marker Site 060.

Site	060
Road	Jenkin Rd
Suburb	Calomba
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.3807 -34.4174 (W end on the S side of Jenkins Rd) End: 138.4057 -34.4177 (E end on the S side of Jenkins Rd)
Posts present?	Yes



Threats	Weed invasion
Vegetation Condition Score	Medium – 45.81
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> and <i>E. socilais</i> mixed mallee over <i>Senna spp.</i> and <i>Acacia oswaldii</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end on the S side of Jenkins Rd</p> 
	<p>E end on the S side of Jenkins Rd</p> 

Table 175. Flora Species List at Roadside Marker Site 060.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Atriplex paludosa ssp.</i>	Marsh Saltbush		
<i>Austrostipa elegantissima</i>	Feather Spear-grass		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Austrostipa sp.</i>	Spear-grass		

Native				
Species Name	Common Name	AUS	SA	
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Lomandra effusa</i>	Scented Mat-rush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Salsola australis</i>	Buckbush			
<i>Sclerolaena</i> sp.	Bindyi			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Zygophyllum aurantiacum/eremaeum</i>	Shrubby Twinleaf			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Cynodon dactylon</i> var.	Couch			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Pinus halepensis</i>	Aleppo Pine	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 176. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 060.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	8/15
Native Plant Life forms	16/20
Regenerating	6/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1.5/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	45.81/80

5.9.8 Roadside Marker Site 061 (Long Plains Rd)

Both posts were observed at Site 61 (Table 177). A total of 14 native species were identified, with three species naturally regenerating. A total of nine introduced species were observed with the presence of one

declared weed and six environmental weeds (Table 178). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 61 received a VCS of 30.63 out of 80, reflecting vegetation of low to medium quality (Table 179).

Table 177. Summary of Roadside Marker Site 061.


Site	061
Road	Long Plains Rd
Suburb	Calomba
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.3814 -34.4033 (N end on the E side of Jenkins Rd)
	End: 138.3804 -34.4132 (S end on the E side of Jenkins Rd)
Posts present?	Yes
Threats	Weed invasion
Vegetation Condition Score	Low to Medium – 30.63
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus socialis</i> and <i>E. gracilis</i> Mixed Mallee over <i>Acacia</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end on the E side of Jenkins Rd</p>  <p>S end on the E side of Jenkins Rd</p>



Table 178. Flora Species List at Roadside Marker Site 061.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum platycarpum</i> ssp.	False Sandalwood			
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 179. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 061.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	8/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5

Attribute	Score
Tree Canopy cover	3/5
Hollow-bearing trees	2/5
Fallen Timber/debris	0.5/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	30.63/80

5.9.9 Roadside Marker Site 062 (Long Plains Rd)

Site 62 consisted mainly of *Eucalyptus porosa* and *E. socialis* mixed Mallee (62a). However, at the intersection of Daniel and Long Plains Rd, a small patch of *E. largiflorens* with planted *E. cladocalyx* woodland exists (62b). This section was assessed separately from the rest of Site 62 due to the condition of this Site. However, these Sites were then averaged to get an overarching score for Site 62. Both posts were observed at this Site (Table 180). Overall, a total of 18 native species were identified at Site 62, with no signs of natural regeneration. A total of seven introduced species were observed, this includes five environmental weeds and no declared weeds (Table 181). One threatened species protected under the NPW Act was observed on Site, this includes the State Rare *Acacia iteaphylla* (Finders Ranges Wattle). Overall, Site 62 received a VCS of 40.02 out of 80, reflecting vegetation of medium quality (Table 182).

Table 180. Summary of Roadside Marker Site 062.

Site	062
Road	Long Plains Rd
Suburb	Calomba
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.3852 -34.3663 (N end on the E side of Long Plains Rd) End: 138.3832 -34.3861 (S end on the E side of Long Plains Rd)
Posts present?	Yes
Threats	Garden plantings, garden escapes and weed invasion
Vegetation Condition Score	Medium – 40.02
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> +/- <i>E. largiflorens</i> Mixed Mallee over <i>Acacia</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	N end on the E side of Long Plains Rd



S end on the E side of Long Plains Rd

Revegetated/remnant *E. largiflorens* Mallee (62b)

Table 181. Flora Species List at Roadside Marker Site 062.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia iteaphylla</i>	Flinders Ranges Wattle		R
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Callistemon</i> sp.	Bottlebrush		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus largiflorens</i>	River Box		
<i>Eucalyptus porosa</i>	Mallee Box		

Native				
Species Name	Common Name	AUS	SA	
<i>Eucalyptus socialis</i>	Red Beaked Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Vittadinia condyloides</i>	Club-hair New Holland Daisy			
<i>Zygophyllum aurantiacum/eremaeum</i>	Shrubby Twinleaf			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Agave</i> sp.				
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carthamus lanatus</i>	Saffron Thistle			Yes
<i>Heliotropium europaeum</i>	Common Heliotrope			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 182. Average scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 062.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	12.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2.5/5
Tree Canopy cover	3.5/5
Hollow-bearing trees	2.5/5
Fallen Timber/debris	1.75/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	40.02/80

5.9.10 Roadside Marker Site 063 (Parker Rd)

Both posts were observed at Site 63 (Table 183). A total of 22 native species were identified, with five species naturally regenerating. A total of 10 introduced species were observed with the presence of two declared weeds, both listed as WoNS and seven environmental weeds (Table 184). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 63 received a VCS of 48.69 out of 80, reflecting vegetation of medium quality (Table 185).

Table 183. Summary of Roadside Marker Site 063.



Site	063
Road	Parker Rd
Suburb	Calomba
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.3857 -34.3465 (N end on the W side of Parker Rd) End: 138.3857 -34.3594 (S end on the W side of Parker Rd)
Posts present?	Yes
Threats	Planted vegetation and weed invasion
Vegetation Condition Score	Medium – 48.69
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> Mixed Mallee over <i>Acacia</i> spp. Shrubland
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end on the W side of Parker Rd</p>  <p>S end on the W side of Parker Rd</p> 

Table 184. Flora Species List at Roadside Marker Site 063.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia argyrophylla</i>	Silver Mulga-bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Allocasuarina verticillata</i>	Drooping Sheoak			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eremophila longifolia</i>	Weeping Emubush			
<i>Eucalyptus leptophylla</i>	Narrow-leaf Red Mallee			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca acuminata</i> ssp. <i>acuminata</i>	Mallee Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Vittadinia gracilis</i>	Woolly New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Acacia saligna</i>	Golden Wreath Wattle			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.


Table 185. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 063.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	9/15
Native Plant Life forms	16/20
Regenerating	6/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	5/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	48.69/80

5.9.11 Roadside Marker Site 064 (Lawrie Rd)

Only one post was observed at Site 64 and was located at the southern end of Lawrie road at the Lawrie and Parker Rd intersection (Table 186). A total of 14 native species were identified at Site 64, with one species naturally regenerating. A total of five introduced species were observed, this includes four environmental weeds and no declared weeds (Table 187). No threatened species protected under the NPW Act and the EPBC Act were observed. Overall, Site 64 received a VCS of 45.94 out of 80, reflecting vegetation of medium quality (Table 188).

Table 186. Summary of Roadside Marker Site 064.

Site	064
Road	Lawrie Rd
Suburb	Calomba
Date surveyed	14/12/2022
Longitude and Latitude	Start: 138.3983 -34.3483 (N end on the NW side of Lawrie Rd) End: 138.3861 -34.3556 (S end on the NW side of Lawrie Rd)
Posts present?	One (S end on the NW side of Lawrie Rd)
Threats	Weed invasion and tree trimming
Vegetation Condition Score	Medium – 45.94
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> and <i>E. porosa</i> Mixed Mallee over <i>Acacia</i> spp. and <i>Senna</i> spp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end on the NW side of Lawrie Rd</p>  <p>N end on the SE side of Lawrie Rd</p>



S end on the NW side of Lawrie Rd



S end on the SE side of Lawrie Rd



Table 187. Flora Species List at Roadside Marker Site 064.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia argyrophylla</i>	Silver Mulga-bush		
<i>Acacia calamifolia</i>	Wallowa		
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		

<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma sp.</i>	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides ssp. X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Lactuca serriola f.</i>	Prickly Lettuce			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Sisymbrium sp.</i>	Wild Mustard			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 188. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 064.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	12/15
Native Plant Life forms	16/20
Regenerating	6/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	4/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/8
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	45.94/80

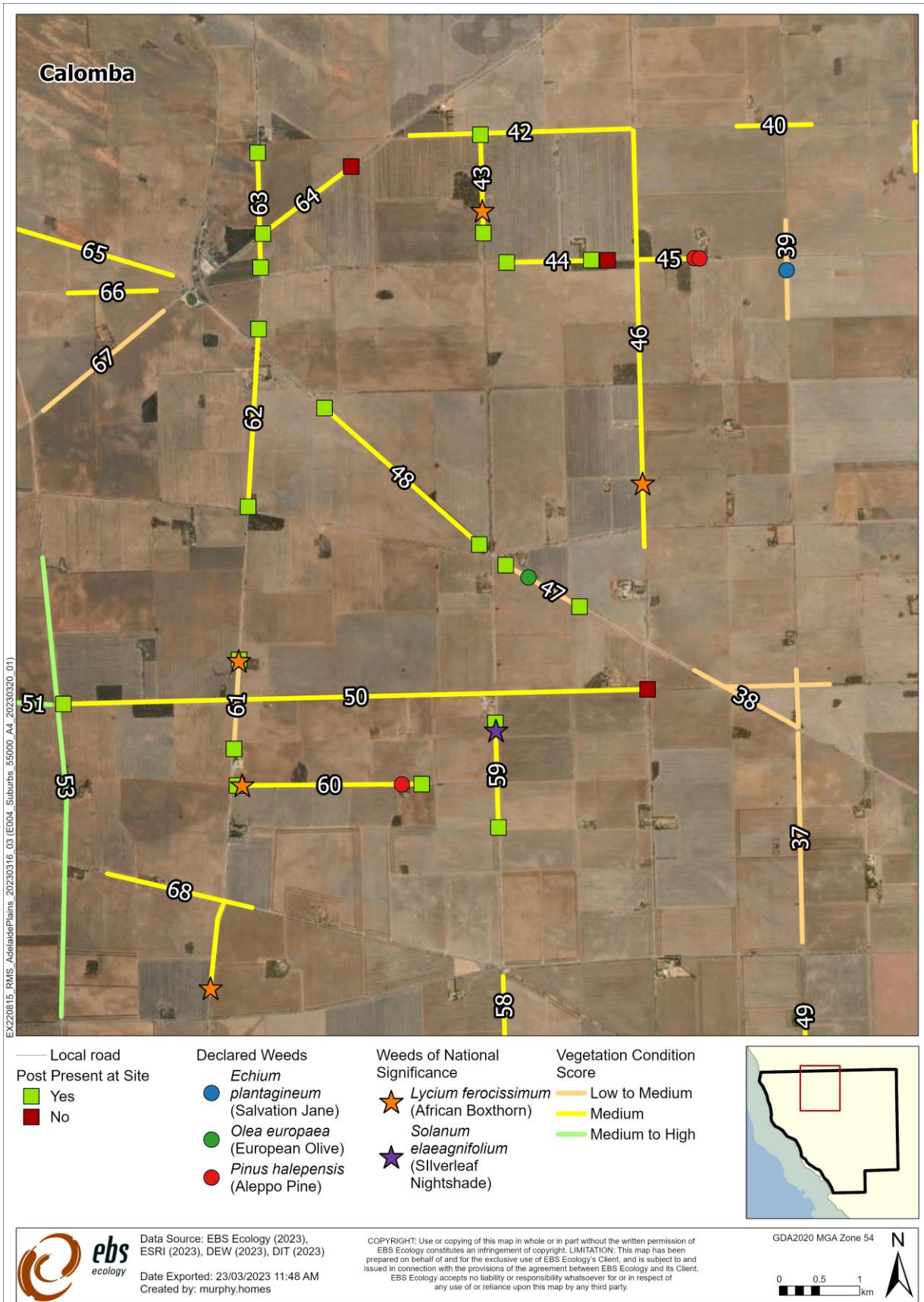


Figure 14. Roadside Marker Sites across Calomba.

5.10 Windsor

A total of nine Sites were assessed across Windsor (Figure 15).

5.10.1 Roadside Marker Site 051 (Pritchard Rd)

Both posts were observed at Site 51 and this Site had a large diversity of species and a mixture of life forms (Table 189). A total of 20 native species were identified, with one species naturally regenerating. A total of 12 introduced species were observed, this includes six environmental weeds and four declared weeds, three of which are listed as WoNS (Table 190). One threatened species protected under the NPW Act was observed on Site, this included *Myoporum parviflorum* (Creeping boobialla). Overall, Site 51 received a VCS of 52.18 out of 80, reflecting vegetation of medium to high quality (Table 191).

Table 189. Summary of Roadside Marker Site 051.

Site	051
Road	Pritchard Rd
Suburb	Windsor
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3247 -34.4055 (W end on the N side of Pritchard Rd) End: 138.3559 -34.4078 (E end on the S side of Pritchard Rd)
Posts present?	Yes
Threats	Mowing of native vegetation, weed invasion, old tree guards, private property signage on roadside verge
Vegetation Condition Score	Medium to High – 52.18
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> Mallee over <i>Senna artemisioides</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end on the N side of Pritchard Rd</p>  <p>E end on the S side of Pritchard Rd</p>



Table 190. Flora Species List at Roadside Marker Site 051.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia nyssophylla</i>	Spine Bush			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia pycnantha</i>	Golden Wattle			
<i>Allocasuarina verticillata</i>	Drooping Sheoak			
<i>Amyema</i> sp.	Mistletoe			
<i>Atriplex nummularia</i> ssp.	Old-man Saltbush			
<i>Dianella</i> sp.	Flax-lily			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Myoporum parvifolium</i>	Creeping Boobialla		R	
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp. <i>candolleana</i>	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Tetragonia implexicoma</i>	Bower Spinach			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Onopordum acanthium</i>	Scotch Thistle			
<i>Opuntia stricta</i>	Erect Prickly Pear	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 191. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 051.

Attribute	Score
Native Plant Species Diversity	27/30
Weeds	12/25
Native Plant Life forms	16/20
Regenerating	9/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1.5/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	52.18/80

5.10.2 Roadside Marker Site 052 (Carter Rd)

Both posts were observed at Site 52. Due to the close proximity to the Pork Wakefield Highway, this Site is being impacted by rubbish and illegal dumping. It was also noticed that a section of this Site was being utilised as a campsite (Table 192). A total of 21 native species were identified at Site 52, with two species naturally regenerating. A total of 13 introduced species were observed with the presence of eight environmental weeds, three declared weeds, one of which is listed as a WoNS *Lycium ferocissimum* (African Boxthorn) (Table 193). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 52 received a VCS of 43.73 out of 80, reflecting vegetation of medium quality (Table 194).

Table 192. Summary of Roadside Marker Site 052.

Site	052
Road	Carter Rd
Suburb	Windsor
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.3447 -34.4074 (N end on the E side of Carter Rd)
	End: 138.3411 -34.4367 (S end on the E side of Carter Rd)
Posts present?	Yes
Threats	Rubbish, old tree guards, garden plantings, weed invasion and squatters.
Vegetation Condition Score	Medium – 43.73
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> Mallee over <i>Senna artemisioides</i> ssp. and <i>Geijera linearifolia</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	N end on the E side of Carter Rd



S end on the E side of Carter Rd



Table 193. Flora Species List at Roadside Marker Site 052.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Allocasuarina verticillata</i>	Drooping Sheoak		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Maireana brevifolia</i>	Short-leaf Bluebush		
<i>Myoporum platycarpum</i> ssp.	False Sandalwood		
<i>Nitraria billardierei</i>	Nitre-bush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush		
<i>Santalum acuminatum</i>	Quandong		
<i>Sclerolaena diacantha</i>	Grey Bindyi		
<i>Senna artemisioides</i> ssp. X <i>coriacea</i>	Broad-leaf Desert Senna		
<i>Zygophyllum aurantiacum/eremaeum</i>	Shrubby Twinleaf		

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum sp.</i>	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 194. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 052.

Attribute	Score
Native Plant Species Diversity	27/30
Weeds	9/15
Native Plant Life forms	16/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	43.73/80

5.10.3 Roadside Marker Site 053 (Avon Rd)

Both posts were observed at Site 53 (Table 195). A total of 25 native species were identified, with four species naturally regenerating. A total of 10 introduced species were observed with the presence of five environmental weeds and no declared weeds (Table 196). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 53 received a VCS of 53.44 out of 80, reflecting vegetation of medium to high quality (Table 197).

Table 195. Summary of Roadside Marker Site 053.

Site	053
Road	Avon Rd
Suburb	Windsor
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.3552 -34.3913 (N end of on the W side of Avon Rd)
	End: 138.3561 -34.4427 (S end of on the W side of Avon Rd)
Posts present?	Yes
Threats	Roadside plantings, weed invasion and rubbish



Vegetation Condition Score	Medium to High – 53.44
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> , <i>E.odorata</i> and <i>E. socialis</i> Mixed Mallee over <i>Senna spp.</i> and <i>Acacia spp.</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	N end of on the W side of Avon Rd
	
	S end of on the W side of Avon Rd
	

Table 196. Flora Species List at Roadside Marker Site 053.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia sp.</i>	Wattle		
<i>Austrostipa elegantissima</i>	Feather Spear-grass		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Austrostipa sp.</i>	Spear-grass		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus odorata</i>	Peppermint Box		
<i>Eucalyptus porosa</i>	Mallee Box		

Native				
Species Name	Common Name	AUS	SA	
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Lomandra multiflora</i> ssp.	Many-flower Mat-rush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Olearia teretifolia</i>	Cypress Daisy-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Roepera aurantiaca</i> ssp. <i>aurantiaca</i>	Shrubby Twinleaf			
<i>Santalum acuminatum</i>	Quandong			
<i>Salsola australis</i>	Buckbush			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Agave</i> sp.				
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Cactaceae</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Mesembryanthemum</i> sp.	Iceplant			
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Salvia verbenaca</i> var.	Wild Sage			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 197. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 053.

Attribute	Score
Native Plant Species Diversity	27/30
Weeds	12/15
Native Plant Life forms	16/20
Regenerating	3/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	4/5
Hollow-bearing trees	4/5
Fallen Timber/debris	3/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	53.44/80

5.10.4 Roadside Marker Site 068 (Windsor Rd and Long Plains Rd)

Only one post was observed at Site 68 (Table 198). A total of 20 native species were identified, with four species naturally regenerating. A total of 11 introduced species were observed with the presence of eight environmental weeds and one declared weed, which was also listed as a WoNS (Table 199). The State

Rare *Acacia iteaphylla* (Finders Ranges Wattle) was observed scattered throughout the Site, no other threatened species was observed. Overall, Site 68 received a VCS of 37.97 out of 80, reflecting vegetation of medium quality (Table 200).

Table 198. Summary of Roadside Marker Site 068.



Site	068
Road	Windsor and Long Plains Rd
Suburb	Windsor
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.3763 -34.4406 (S end of Long Plains Rd on the W side)
	End: 138.3823 -34.4311 (E end of Windsor Rd on the S side)
Posts present?	One (E end of Windsor Rd, S side)
Threats	Pests (rabbits), garden plantings and weed invasion
Vegetation Condition Score	Medium – 37.97
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> Mallee over <i>Acacia oswadii</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>S end of Long Plains Rd on the W side</p> 
	<p>E end of Windsor Rd on the S side</p> 

Table 199. Flora Species List at Roadside Marker Site 068.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia iteaphylla</i>	Flinders Ranges Wattle		R	
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Atriplex nummularia</i> ssp.	Old-man Saltbush			
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Lomandra effusa</i>	Scented Mat-rush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Roepera aurantiaca</i> ssp. <i>aurantiaca</i>	Shrubby Twinleaf			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp.	Desert Senna			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 200. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 068.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	10.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	37.97/80

5.10.5 Roadside Marker Site 072 (Port Wakefield Rd – western side)

Only one post was observed at the start of the Site, on the N end of Port Wakefield Rd (Table 201). A total of 20 native species were identified, with three species naturally regenerating. A total of 10 introduced species were observed with the presence of seven environmental weeds and two declared weeds, both listed as WoNS (Table 202). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 72 received a VCS of 54.25 out of 80, reflecting vegetation of medium to high quality (Table 203).

Table 201. Summary of Roadside Marker Site 072


Site	072
Road	Port Wakefield Rd
Suburb	Windsor
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3375 -34.4311 (N end on the E side of Port Wakefield Rd)
	End: 138.3454 -34.4434 (S end on the E side of Port Wakefield Rd)
Posts present?	One (N end on the E side of Port Wakefield Rd)
Threats	Weed invasion and rubbish
Vegetation Condition Score	Medium to High – 54.25
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus</i> spp. Mixed Mallee over <i>Geijera linearifolia</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end on the E side of Port Wakefield Rd</p>  <p>S end on the E side of Port Wakefield Rd</p>



Table 202. Flora Species List at Roadside Marker Site 072.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia pycnantha</i>	Golden Wattle			
<i>Acacia sp.</i>	Wattle			
<i>Acacia wilhelmiana</i>	Dwarf Nealie			
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus phenax ssp. phenax</i>	White Mallee			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i>	Beaked Red Mallee			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum platycarpum ssp.</i>	False Sandalwood			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rytidosperma sp.</i>	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides ssp.</i>	Desert Senna			
<i>Senna artemisioides ssp. X coriacea</i>	Broad-leaf Desert Senna			
<i>Vittadinia sp.</i>	New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asparagus asparagoides f.</i>	Bridal Creeper	Yes	Yes	
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Brassica sp.</i>				
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum nodiflorum</i>	Slender Iceplant			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var. verbenaca</i>	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 203. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 072.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	5.5/15
Native Plant Life forms	16/20
Regenerating	9/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	5/5
Hollow-bearing trees	3/5
Fallen Timber/debris	4/5
Mature Tree	6/8
TOTAL VEGETATION CONDITION SCORE	54.25/80

5.10.6 Roadside Marker Site 073 (Port Wakefield Rd)

No posts were observed at Site 73 (Table 204). A total of 24 native species were identified, with eight species naturally regenerating. A total of 13 introduced species were observed with the presence of nine environmental weeds and one declared weed (Table 205). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 73 received a VCS of 50.95 out of 80, reflecting vegetation of medium to high quality (Table 206).

Table 204. Summary of Roadside Marker Site 073.

Site	073
Road	Port Wakefield Rd
Suburb	Windsor
Date surveyed	16/12/2022
Longitude and Latitude	Start: 138.3091 -34.3903 (S end of Port Wakefield Rd) End: 138.3025-34.3804 (N end of Port Wakefield Rd)
Posts present?	No
Threats	Weed invasion and rubbish
Vegetation Condition Score	Medium to High – 50.95
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> and <i>E. dumosa</i> Mallee over <i>Nitraria billardiarei</i> and <i>Geijera linearifolia</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey.
Photo points	S end of Port Wakefield Rd



N end of Port Wakefield Rd



Table 205. Flora Species List at Roadside Marker Site 073.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia</i> sp.	Wattle		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Allocasuarina verticillata</i>	Drooping Sheoak		
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Chloris truncata</i>	Windmill Grass		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Enneapogon</i> sp.	Bottle-washers/Nineawn		
<i>Eucalyptus dumosa</i>	White Mallee		
<i>Eucalyptus gracilis</i>	Yorrell		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Maireana brevifolia</i>	Short-leaf Bluebush		
<i>Maireana enchylaenoides</i>	Wingless Fissure-plant		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Myoporum platycarpum</i> ssp.	False Sandalwood		
<i>Nitraria billardiarei</i>	Nitre-bush		
<i>Rytidosperma</i> sp.	Wallaby-grass		
<i>Santalum acuminatum</i>	Quandong		
<i>Sclerolaena diacantha</i>	Grey Bindyi		
<i>Senna artemisioides</i> ssp.	Desert Senna		

Native				
Species Name	Common Name	AUS	SA	
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Solanum esuriale</i>	Quena			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
<i>Vittadinia cuneata</i> var.	Fuzzy New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Avena</i> sp.	Oat			
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Echium plantagineum</i>	Salvation Jane	Yes		
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Schinus molle</i>	Pepper-tree			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 206. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 073.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	5.5/15
Native Plant Life forms	16/20
Regenerating	9/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	4/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1.5/5
Mature Tree	6/8
TOTAL VEGETATION CONDITION SCORE	50.95/80

5.10.7 Roadside Marker Site 074 (Bakers Rd)

Only one post was observed on the W end of Bakers Rd (Table 207). A total of 16 native species were identified at Site 74, with one species naturally regenerating. A total of eight introduced species were observed with the presence of four environmental weeds and one declared weed (Table 208). The State Rare *Acacia iteaphylla* (Flinders Ranges Wattle) was observed on Site. However, it is likely that this individual was planted. Overall, Site 74 received a VCS of 16.09 out of 80, reflecting vegetation of low quality (Table 209).

Table 207. Summary of Roadside Marker Site 074.

Site	074
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Road	Bakers Rd
Suburb	Windsor
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3257 -34.3813 (E end on the N side of Bakers Rd) End: 138.3342 -34.3819 (W end on the N side of Bakers Rd)
Posts present?	One (W end on the N side of Bakers Rd)
Threats	Weed invasion
Vegetation Condition Score	Low – 16.09
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus socialis</i> Mallee over chenopod shrubs
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>E end on the N side of Bakers Rd</p>  <p>W end on the N side of Bakers Rd</p> 

Table 208. Flora Species List at Roadside Marker Site 074.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia brachybotrya</i>	Grey Mulga-bush			
<i>Acacia iteaphylla</i>	Flinders Ranges Wattle		R	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Atriplex semibaccata</i>	Berry Saltbush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Callitris verrucosa</i>	Scrub Cypress Pine			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Salsola australis</i>	Buckbush			
<i>Salsola australis</i>	Buckbush			
<i>Solanum esuriale</i>	Quena			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Cynodon dactylon</i> var.	Couch			
<i>Hordeum vulgare</i>	Barley			
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Reseda alba</i>	White Mignonette			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 209. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 074.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	9/15
Native Plant Life forms	4/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	0/5
Hollow-bearing trees	1/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	16.09/80

5.10.8 Roadside Marker Site 099 (Port Wakefield Rd)

Only one post was observed at the N end of the Site, no post was present at the S end of the Site therefore, the Site assessment ended at the DPTI 746 sign (Table 210). A total of 19 native species were identified at Site 99, with three species naturally regenerating. A total of 11 introduced species were observed with

the presence of five environmental weeds, three declared weeds (one WoNS) (Table 211). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 99 received a VCS 48.13 out of 80, reflecting vegetation of medium quality (Table 212).

Table 210. Summary of Roadside Marker Site 099.


Site	099
Road	Port Wakefield Rd
Suburb	Windsor
Date surveyed	15/12/2022
Longitude and Latitude	Start: (N end on the E side of Port Wakefield Rd)
	End: (S end on the W side of Port Wakefield Rd)
Posts present?	One (N end on the E side of Port Wakefield Rd)
Threats	Weed invasion and rubbish
Vegetation Condition Score	Medium – 48.13
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> and <i>E. dumosa</i> Mixed Mallee over <i>Geijera linearifolia</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end on the E side of Port Wakefield Rd</p>  <p>S end on the W side of Port Wakefield Rd</p>



Table 211. Flora Species List at Roadside Marker Site 099.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia wilhelmiana</i>	Dwarf Nealie			
<i>Atriplex</i> sp.	Saltbush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Callitris</i> sp.	Native Pine			
<i>Dianella</i> sp.	Flax-lily			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Roepera aurantiaca</i> ssp. <i>aurantiaca</i>	Shrubby Twinleaf			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aloe</i> sp.	Aloe			
<i>Arctotheca calendula</i>	Cape Weed			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Gazania</i> sp.	Gazania	Yes		
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Opuntia stricta</i>	Erect Prickly Pear	Yes	Yes	

<i>Pinus sp.</i>	Pine			
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 212. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 099.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	7/15
Native Plant Life forms	16/20
Regenerating	6/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	4/5
Hollow-bearing trees	2/5
Fallen Timber/debris	4/5
Mature Tree	6/8
TOTAL VEGETATION CONDITION SCORE	48.13/80

5.10.9 Roadside Marker Site 100 (Lowey Rd)

No posts were observed at Site 100. However, a stake with no sign was present at the S end of Lowey Rd (Table 213). A total of 16 native species were identified, with four species naturally regenerating. A total of 14 introduced species were observed with the presence of six environmental weeds, four declared weeds, two of which are listed as WoNS (Table 214). This Site had large infestation of garden escapes such as *Aloe sp.* and *Opuntia sp.* No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 100 received a VCS of 14.63 out of 80, reflecting vegetation of low quality (Table 215).

Table 213. Summary of Roadside Marker Site 100.

Site	100
Road	Lowey Rd
Suburb	Windsor
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.314 -34.3974 (N end of Lowey Rd) End: 138.3193 -34.4053 (S end of Lowey Rd)
Posts present?	No
Threats	Weed invasion, garden escapes and illegal dumping
Vegetation Condition Score	Low – 14.63
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Acacia oswaldii</i> shrubland over chenopod shrubs
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey.



Table 214. Flora Species List at Roadside Marker Site 100.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia cyclops</i>	Western Coastal Wattle			
<i>Acacia sp.</i>	Wattle			
<i>Acacia wilhelmiana</i>	Dwarf Nealie			
<i>Atriplex nummularia ssp.</i>	Old-man Saltbush			
<i>Atriplex paludosa ssp.</i>	Marsh Saltbush			
<i>Austrostipa sp.</i>	Spear-grass			
<i>Dianella sp.</i>	Flax-lily			
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush			
<i>Enneapogon sp.</i>	Bottle-washers/Nineawn			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Euphorbia drummondii s.str.</i>				
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Rhagodia candolleana ssp.</i>	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes

<i>Aloe sp.</i>	Aloe			
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum sp.</i>	Iceplant			
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Opuntia stricta</i>	Erect Prickly Pear	Yes	Yes	
<i>Pinus sp.</i>	Pine			
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Schinus molle</i>	Pepper-tree			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 215. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 100.

Attribute	Score
Native Plant Species Diversity	12/30
Weeds	4.5/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	0/5
Hollow-bearing trees	0/5
Fallen Timber/debris	1/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	14.63/80

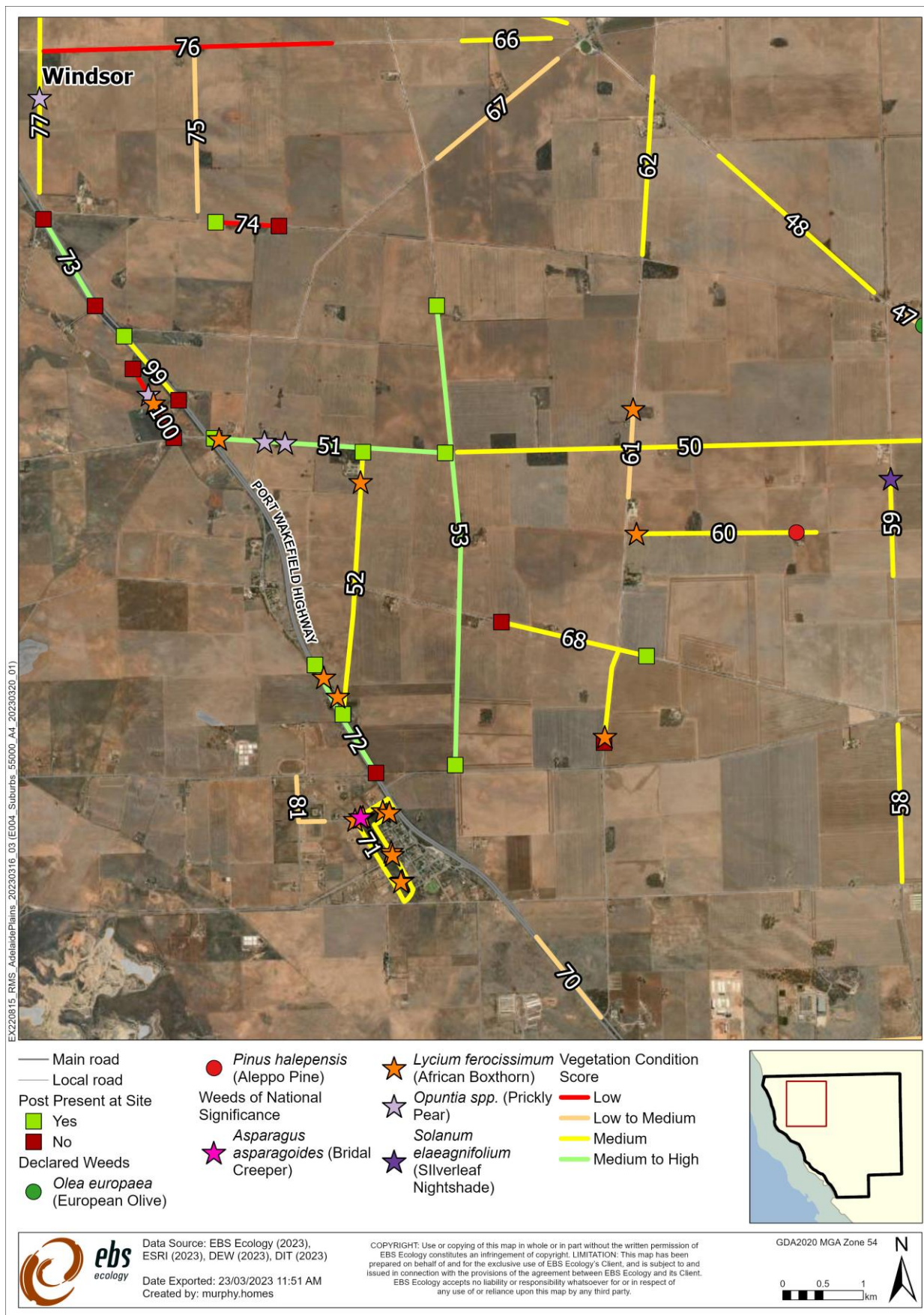


Figure 15. Roadside Marker Sites across Windsor.

5.11 Dublin

A total of 10 Sites were assessed across Dublin (Figure 17), this includes Dublin Heritage Scrub (Figure 16).

5.11.1 Roadside Marker Site 054 (Carslake Rd)

Both posts were observed at Site 54 (Table 216). A total of 17 native species were identified, with no signs of natural regenerating. A total of 18 introduced species were observed with the presence of 10 environmental weeds, three declared weeds, two of which are listed as WoNS (Table 217). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 54 received a VCS of 31.34 out of 80, reflecting vegetation of low to medium quality (Table 218).

Table 216. Summary of Roadside Marker Site 054.


Site	054
Road	Carslake Rd
Suburb	Dublin
Date surveyed	9/1/2023
Longitude and Latitude	Start: 138.4356 -34.4741 (E end on the S side of Carslake Rd) End: 138.4045 -34.4751(W end on the S side of Carslake Rd)
Posts present?	Yes
Threats	Non-indigenous plantings, pests (rabbits) and weed invasions
Vegetation Condition Score	Low to Medium – 31.34
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus</i> spp. Mixed Mallee over chenopod shrubs
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>E end on the S side of Carslake Rd</p>  <p>W end on the S side of Carslake Rd</p>



Table 217. Flora Species List at Roadside Marker Site 054.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia</i> sp.	Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Cassytha</i> sp.	Dodder-laurel			
<i>Dianella revoluta</i> var.				
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Cucumis myriocarpus</i> ssp. <i>myriocarpus</i>	Paddy Melon			
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Opuntia</i> sp.				
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 218. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 054.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	6.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	3/5
Hollow-bearing trees	2/5
Fallen Timber/debris	1.5/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	31.34/80

5.11.2 Roadside Marker Site 056 (Limerock Rd)

No posts were observed at Site 56 (Table 219). A total of 21 native species were identified, with two species naturally regenerating. A total of eight introduced species were observed with the presence of five environmental weeds and two declared weeds (Table 220). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 56 received a VCS of 29.91 out of 80, reflecting vegetation of low to medium quality (Table 221).

Table 219. Summary of Roadside Marker Site 056.

Site	056
Road	Limerock Rd
Suburb	Dublin
Date surveyed	9/1/2023
Longitude and Latitude	Start: 138.3976 -34.4874 (W end on the S side of Limerock Rd) End: 138.4204 -34.4874 (E end on the S side of Limerock Rd)
Posts present?	No
Threats	Rubble, native vegetation clearance and weed invasion
Vegetation Condition Score	Low to Medium – 29.91
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus oleosa</i> and <i>E. socialis</i> Mixed Mallee over <i>Atriplex nummularia</i> ssp.
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey.
Photo points	W end on the S side of Limerock Rd



E end on the S side of Limerock Rd



Table 220. Flora Species List at Roadside Marker Site 056.

Native			
Species Name	Common Name	AUS	SA
<i>Atriplex nummularia</i> ssp.	Old-man Saltbush		
<i>Atriplex stipitata</i>	Bitter Saltbush		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Cassytha</i> sp.	Dodder-laurel		
<i>Dianella brevicaulis</i>	Short-stem Flax-lily		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i>			
<i>Eucalyptus socialis</i> ssp.	Beaked Red Mallee		
<i>Eucalyptus gracilis</i>	Yorrell		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Nitraria billardierei</i>	Nitre-bush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia parabolica</i>	Mealy Saltbush		
<i>Roepera angustifolia</i>	Scrambling Twinleaf		
<i>Roepera aurantiaca</i> ssp. <i>aurantiaca</i>	Shrubby Twinleaf		
<i>Salsola australis</i>	Buckbush		
<i>Santalum acuminatum</i>	Quandong		
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>			

Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum sp.</i>	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 221. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 056.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	8/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2/5
Hollow-bearing trees	2/5
Fallen Timber/debris	0.5/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	29.91/80

5.11.3 Roadside Marker Site 057 (Shannon Rd)

Both posts were observed at Site 57 (Table 222). A total of 18 native species were identified, with three species naturally regenerating. A total of five introduced species were observed with the presence of three environmental weeds and one declared weed (Table 223). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 57 received a VCS of 40.92 out of 80, reflecting vegetation of medium quality (Table 224).

Table 222. Summary of Roadside Marker Site 057.

Site	057
Road	Shannon Rd
Suburb	Dublin
Date surveyed	9/1/2023
Longitude and Latitude	Start: 138.4185 -34.4751 (N end on the E side of Shannon Rd)
	End: 138.422 -34.4925 (S end on the E side of Shannon Rd)
Posts present?	Yes
Threats	Illegal dumping
Vegetation Condition Score	Medium – 40.92
Adjacent land use	Cropping/agriculture



Vegetation association	<i>Eucalyptus brachycalyx</i> and <i>E. dumosa</i> Mixed Mallee over <i>Senna artemisioides</i> ssp. <i>petiolaris</i> with <i>Pittosporum angustifolium</i>
	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
	<p>N end on the E side of Shannon Rd</p>  <p>S end on the E side of Shannon Rd</p>  <p>Photo points</p>

Table 223. Flora Species List at Roadside Marker Site 057.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia argyrophylla</i>	Silver Mulga-bush		
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Atriplex</i> sp.	Saltbush		
<i>Cassytha</i> sp.	Dodder-laurel		
<i>Dianella revoluta</i> var.			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus brachycalyx</i>	Gilja		
<i>Eucalyptus dumosa</i>	White Mallee		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Nitraria billardierei</i>	Nitre-bush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Roepera</i> sp.	Twinleaf		
<i>Santalum acuminatum</i>	Quandong		
<i>Sclerolaena diacantha</i>	Grey Bindyi		

Native				
Species Name	Common Name	AUS	SA	
<i>Senna artemisioides ssp. petiolaris</i>				
<i>Tetragonia sp.</i>	False Spinach			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum sp.</i>	Iceplant			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 224. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 057.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	10.5/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	4/5
Hollow-bearing trees	4/5
Fallen Timber/debris	1.5/5
Mature Tree	4/8
TOTAL VEGETATION CONDITION SCORE	40.92/80

5.11.4 Roadside Marker Site 058 (Shannon Rd)

Both posts were observed at Site 58 (Table 225). A total of 14 native species were identified, with four species naturally regenerating. A total of 11 introduced species were observed with the presence of seven environmental weeds, one declared weed, (Table 226). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 58 received a VCS of 37.95 out of 80, reflecting vegetation of medium quality (Table 227).

Table 225. Summary of Roadside Marker Site 058.

Site	058
Road	Shannon Rd
Suburb	Dublin
Date surveyed	9/1/2023
Longitude and Latitude	Start: 138.416 -34.4571 (S end on the E side of Shannon Rd) End: 138.416 -34.4395 (N end on the E side of Shannon Rd)
Posts present?	Yes
Threats	Weed invasion



Vegetation Condition Score	Medium – 37.95
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus oleosa</i> ssp. <i>ampliata ampliata</i> and <i>E. porosa</i> Mixed Mallee over chenopod shrubs
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	S end on the E side of Shannon Rd
	
	N end on the E side of Shannon Rd
	

Table 226. Flora Species List at Roadside Marker Site 058.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i>	Red Mallee		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Eucalyptus socialis</i>	Beaked Red Mallee		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		

<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Roepera</i> sp.	Twinleaf			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Cynodon dactylon</i> var.	Couch			Yes
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Sisymbrium</i> sp.	Wild Mustard			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 227. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 058.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	9/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	4/5
Hollow-bearing trees	3/5
Fallen Timber/debris	1/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	37.95/80

5.11.5 Roadside Marker Site 069 (Port Wakefield Rd)

Both posts were observed at Site 69 (Table 228). A total of 15 native species were identified, with one species naturally regenerating. A total of nine introduced species were observed with the presence of six environmental weeds, two declared weeds, both of these species are also listed as WoNS (Table 229). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 69 received a VCS of 35.36 out of 80, reflecting vegetation of medium quality (Table 230).

Table 228. Summary of Roadside Marker Site 069.

Site	069
Road	Port Wakefield Rd
Suburb	Dublin
Date surveyed	9/1/2023
Longitude and Latitude	Start: 138.381 -34.4776 (N end of Port Wakefield Rd) End: 138.3961 -34.4937 (S end of Port Wakefield Rd)


Posts present?	Yes
Threats	Rubbish and weed invasion
Vegetation Condition Score	Medium – 35.36
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i> Mallee over <i>Pittosporum angustifolium</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
	<p>N end of Port Wakefield Rd</p>  <p>S end of Port Wakefield Rd</p>  <p>Photo points</p>

Table 229. Flora Species List at Roadside Marker Site 069.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Dianella revoluta</i> var.			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Enneapogon nigricans</i>	Black-head Grass		
<i>Eucalyptus oleosa</i> ssp.			
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		

<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Santalum acuminatum</i>	Quandong			
<i>Tetragonia sp.</i>	False Spinach			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Cynodon dactylon var.</i>	Couch			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Schinus molle</i>	Pepper-tree			Yes
<i>Tamarix aphylla</i>	Athel Pine	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 230. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 069.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	12/30
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	2/5
Fallen Timber/debris	1/5
Mature Tree	2/5
TOTAL VEGETATION CONDITION SCORE	35.36/80

5.11.6 Roadside Marker Site 070 (Port Wakefield Rd)

Both posts were observed at Site 70 (Table 231). A total of 13 native species were identified, with three species naturally regenerating. A total of five introduced species were observed all of which are classified as environmental weeds (Table 232). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 70 received a VCS of 23.20 out of 80, reflecting vegetation of low to medium quality (Table 233).

Table 231. Summary of Roadside Marker Site 070.

Site	070
Road	Port Wakefield Rd
Suburb	Dublin
Date surveyed	9/1/2023
Longitude and Latitude	Start: 138.3665 -34.4622 (N end of Port Wakefield Rd)
	End: 138.3749 -34.4714 (S end of Port Wakefield Rd)
Posts present?	Yes



Threats	Weed invasion
Vegetation Condition Score	Low to medium – 23.20
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i> and <i>E. brachycalyx</i> Mixed Mallee over <i>Pittosporum angustifolium</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
	<p>N end of Port Wakefield Rd</p>  <p>S end of Port Wakefield Rd</p>  <p>Photo points</p>

Table 232. Flora Species List at Roadside Marker Site 070.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Enneapogon nigricans</i>	Black-head Grass		
<i>Eucalyptus brachycalyx</i>	Gilja		
<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i>	Red Mallee		
<i>Geijera linearifolia</i>	Sheep Bush		

<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Phalaris aquatica</i>	Phalaris			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 233. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 070.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	11/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2/5
Hollow-bearing trees	1/5
Fallen Timber/debris	1/5
Mature Tree	1/8
TOTAL VEGETATION CONDITION SCORE	23.20/80

5.11.7 Roadside Marker Site 071 (Dublin Heritage Scrub)

Site 71 underwent an on-ground assessment. The NE side of this Site reflected pre-European vegetation with a diversity of species and life forms and little weed invasion. However, the vegetation begins to degrade as you move west and south throughout the scrub. This Site contains large amounts of general rubbish and hard rubbish. Garden escapes are also present along the eastern boundary where the scrub meets dwellings (Table 234). Across this Site, a total of 40 native species were observed and 11 of these species naturally regenerating. A total of 13 introduced species were observed with the presence of seven environmental weeds, two declared weeds, both of which are listed as WoNS (Table 235). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Due to the large variation in condition throughout this Site, three separate assessment were undertaken. The scores were then averaged to get an overarching score of the entire Site (Table 234, Figure 16). Overall, Site 71 received a VCS of 37.71 out of 80, reflecting vegetation of medium quality. The north east section of the scrub contained vegetation of the highest quality with a VCS of 57.80 (Table 236).

Table 234. Summary of Roadside Marker Site 071.

Site	071
Road	Dublin Scrub
Suburb	Dublin



Date surveyed	12/1/2023
	Start: 138.3461 -34.4481 (NE corner of Dublin Scrub)
	138.3424-34.4486 (NW corner looking E)
	End: 138.3496 -34.456 (West terrace)
	Longitude and Latitude
	Posts present?
	No
	Threats
	Weed invasion, illegal dumping, pests (rabbits and cats) and garden escapes
Vegetation Condition Score	Medium – 37.71
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> and <i>E.dumosa</i> Mixed Mallee over <i>Geijera linearifolia</i> and chenopods shrubs
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	NE corner looking west (VA 71)
	
	NW Corner looking west (VA 71a)
	
	Looking NW (VA 71b)



Table 235. Flora Species List at Roadside Marker Site 071.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia sp.</i>	Wattle		
<i>Acacia wilhelmiana</i>	Dwarf Nealie		
<i>Atriplex paludosa ssp.</i>	Marsh Saltbush		
<i>Austrostipa nodosa</i>	Tall Spear-grass		
<i>Austrostipa platychaeta</i>	Flat-awn Spear-grass		
<i>Austrostipa scabra ssp.</i>	Rough Spear-grass		
<i>Austrostipa sp.</i>	Spear-grass		
<i>Carpobrotus rossii</i>	Native Pigface		
<i>Chloris truncata</i>	Windmill Grass		
<i>Dianella revoluta var.</i>			
<i>Disphyma crassifolium ssp. clavellatum</i>	Round-leaf Pigface		
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush		
<i>Eucalyptus brachycalyx</i>	Gilja		
<i>Eucalyptus gracilis</i>	Yorrell		
<i>Eucalyptus socialis ssp.</i>	Beaked Red Mallee		
<i>Euphorbia dallachyana</i>	Caustic Weed		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Maireana eriantha</i>	Woolly Bluebush		
<i>Maireana erioclada</i>	Rosy Bluebush		
<i>Maireana sp.</i>	Bluebush/Fissure-plant		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Nitraria billardierei</i>	Nitre-bush		
<i>Pimelea sp.</i>	Riceflower		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia parabolica</i>	Mealy Saltbush		
<i>Roepera aurantiaca ssp. aurantiaca</i>	Shrubby Twinleaf		
<i>Roepera sp.</i>	Twinleaf		
<i>Rytidosperma caespitosum</i>	Common Wallaby-grass		
<i>Rytidosperma sp.</i>	Wallaby-grass		
<i>Santalum acuminatum</i>	Quandong		
<i>Senna artemisioides ssp.</i>	Desert Senna		

Native				
Species Name	Common Name	AUS	SA	
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Suaeda australis</i>	Austral Seablite			
<i>Tetragonia</i> sp.	False Spinach			
<i>Vittadinia</i> sp.	New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asparagus asparagoides</i> f.	Bridal Creeper	Yes	Yes	
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Cactaceae</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Gomphocarpus cancellatus</i>	Broad-leaf Cotton-bush			
<i>Lactuca serriola</i> f.	Prickly Lettuce			Yes
<i>Limonium</i> sp.	Sea-lavender			
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 236. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 071.

Attribute	71	71a	71b	Average score
Native Plant Species Diversity	22/30	22/30	16/30	20/30
Weeds	3/15	2/15	1/15	2/15
Native Plant Life forms	20/20	20/20	16/20	18.6/20
Regenerating	12/12	12/12	4.5/12	9.5/12
Native: Exotic Understorey Biomass	5/5	3/5	3/5	3.6/5
Tree Canopy cover	5/5	1/5	0/5	2/5
Hollow-bearing trees	4/5	2/5	0/5	2/5
Fallen Timber/debris	4/5	1/5	0.5/5	1.8/5
Mature Tree	6/8	2/8	0/8	2.6/8
TOTAL VEGETATION CONDITION SCORE	57.80/80	36.14/80	19.19/80	37.71/80

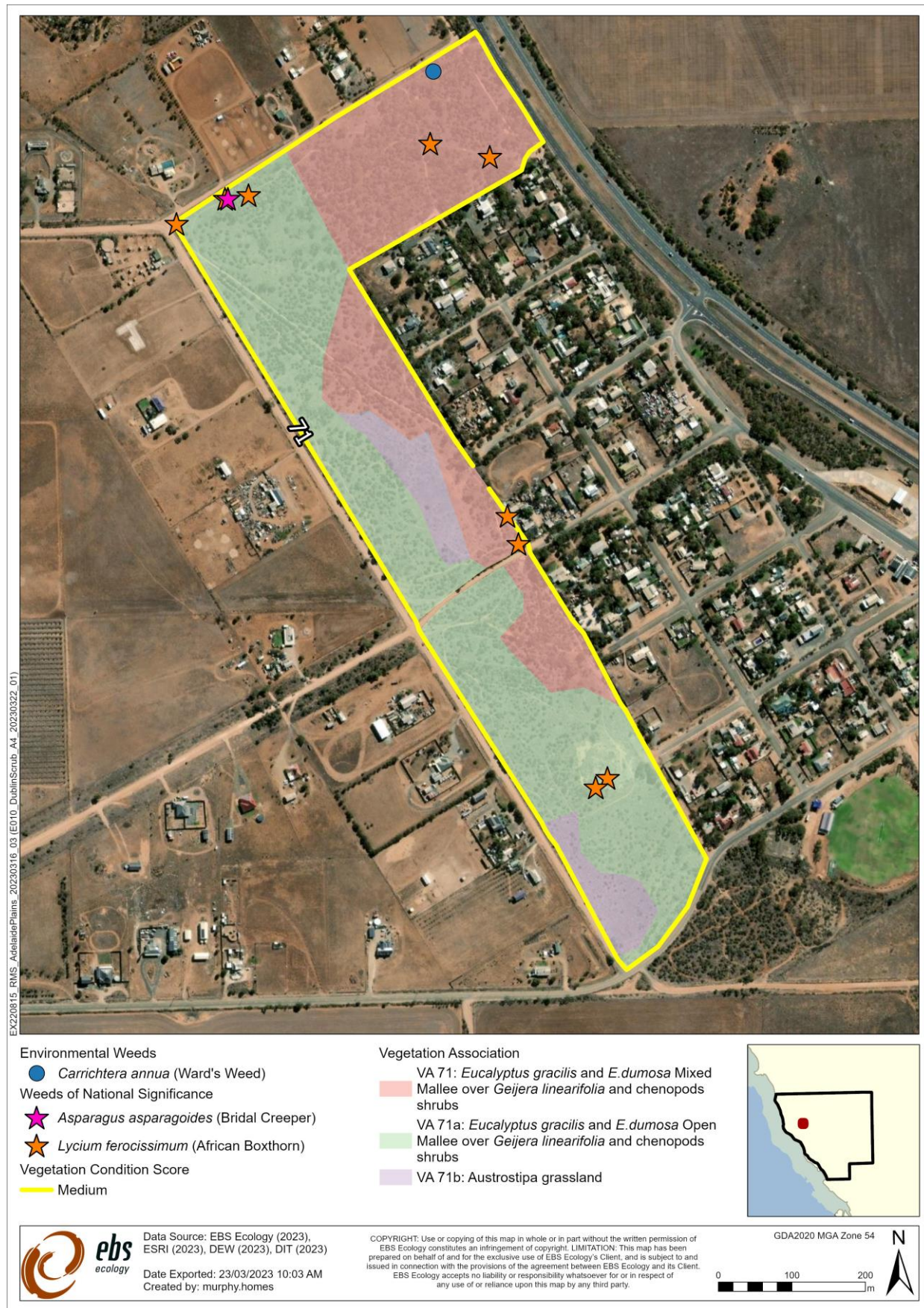


Figure 16. Vegetation association within Dublin Scrub.

5.11.8 Roadside Marker Site 081 (Bubner Rd and Harris Rd)

No posts were observed at Site 81 (Table 237). A total of 18 native species were identified, with three species naturally regenerating. A total of nine introduced species were observed with the presence of seven environmental weeds and one declared weed, which is also listed as WoNS (Table 238). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 81 received a VCS of 26.66 out of 80, reflecting vegetation of low to medium quality (Table 239).

Table 237. Summary of Roadside Marker Site 081.


Site	081
Road	Bubner and Harris Rd
Suburb	Dublin
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3346 -34.4436 (N end on the W side of Bubner Rd) End: 138.3383 -34.4486 (End of Harris Rd)
Posts present?	No
Threats	Weed invasion and mowing of roadside vegetation
Vegetation Condition Score	Low to medium – 26.66
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> and <i>E.dumosa</i> over <i>Geijera linearifolia</i> and <i>Threlkeldia diffusa</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end on the W side of Bubner Rd</p>  <p>E end of Harris Rd</p>



Table 238. Flora Species List at Roadside Marker Site 081.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia sclerophylla</i> var. <i>sclerophylla</i>	Hard-leaf Wattle			
<i>Acacia</i> sp.	Wattle			
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Myoporum platycarpum</i> ssp.	False Sandalwood			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Roepera aurantiaca</i> ssp. <i>aurantiaca</i>	Shrubby Twinleaf			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Tetragonia implexicoma</i>	Bower Spinach			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia</i> sp.	Sage			Yes
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Sonchus</i> sp.	Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 239. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 081.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	7/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	0/5
Hollow-bearing trees	0/5
Fallen Timber/debris	1.5/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	26.66/80

5.11.9 Roadside Marker Site 082 (Thompson Rd)

One posts was observed at the southern end of the Site on shingleback road (Table 240). A total of 17 native species were identified at Site 82, with one species naturally regenerating. A total of 11 introduced species were observed with the presence of five environmental weeds, four declared weeds, one of which are listed as WoNS (Table 241). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 82 received a VCS of 21.92 out of 80, reflecting vegetation of low quality (Table 242).

Table 240. Summary of Roadside Marker Site 082.

Site	082
Road	Thompson Rd
Suburb	Dublin
Date surveyed	9/1/2023
Longitude and Latitude	Start: 138.3748 -34.4758 (E end on Thompson Beach Rd)
	End: 138.3587 -34.4787 (S end on the E side of Shingleback Rd)
Posts present?	One (S end on the E side of Shingleback Rd)
Threats	Illegal dumping and weed invasion
Vegetation Condition Score	Low – 21.92
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Nitraria billardierei</i> and <i>Melaleuca brevifolia</i> shrubland +/- <i>Eucalyptus spp.</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	E end on Thompson Rd



S end on the E side of Shingleback Beach Rd



Table 241. Flora Species List at Roadside Marker Site 082.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Dianella brevicaulis</i>	Short-stem Flax-lily			
<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i>	Red Mallee			
<i>Eucalyptus</i> sp.				
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Sclerolaena diacantha/uniflora</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i> x ssp. <i>sturtii</i>	Desert Senna			
<i>Tetragonia</i> sp.	False Spinach			
<i>Threlkeldia</i> sp.	Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed

<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Casuarina glauca</i>	Grey Bullock	Yes		
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Cynara cardunculus ssp. flavescent</i>	Artichoke Thistle	Yes		
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum sp.</i>	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 242. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 082.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	10.5/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	1/5
Hollow-bearing trees	0/5
Fallen Timber/debris	0.5/5
Mature Tree	1/8
TOTAL VEGETATION CONDITION SCORE	21.92/80

5.11.10 Roadside Marker Site 083 (Shingleback Beach Rd)

Both posts were observed at Site 83 (Table 243). A total of 17 native species were identified at Site 83, with one species naturally regenerating. A total of four introduced species were observed with the presence of one environmental weeds, two declared weeds, one of which are listed as WoNS (Table 243). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 83 received a VCS of 26.95 out of 80, reflecting vegetation of low to medium quality (Table 245).

Table 243. Summary of Roadside Marker Site 083.

Site	083
Road	Shingleback Beach Road
Suburb	Dublin
Date surveyed	9/1/2022
Longitude and Latitude	Start: 138.3586 -34.4843 (N end on the W side of Shingleback Beach Rd)
	End: 138.353 -34.4874 (W end on the N side of Shingleback Beach Rd)
Posts present?	Yes
Threats	Weed invasion and pests (rabbits)
Vegetation Condition Score	Low to Medium – 26.95
Adjacent land use	Cropping/agriculture

Native			
Species Name	Common Name	AUS	SA
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush		
<i>Atriplex paludosa</i> ssp. <i>cordata</i>	Marsh Saltbush		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Dianella brevicaulis</i>	Short-stem Flax-lily		
<i>Eucalyptus dumosa</i>	White Mallee		
<i>Eucalyptus gracilis</i>	Yorrell		
<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i>	Red Mallee		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Maireana brevifolia</i>	Short-leaf Bluebush		
<i>Melaleuca acuminata</i> ssp. <i>acuminata</i>	Mallee Honey-myrtle		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Nitraria billardiarei</i>	Nitre-bush		

Native				
Species Name	Common Name	AUS	SA	
<i>Rytidosperma sp.</i>	Wallaby-grass			
<i>Salicornia blackiana</i>	Thick-head Samphire			
<i>Tecticornia sp.</i>				
<i>Threlkeldia sp.</i>	Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Carthamus lanatus</i>	Saffron Thistle			Yes
<i>Limonium sp.</i>	Sea-lavender			
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Oncosiphon suffruticosum</i>	Calomba Daisv	Yes		

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 245. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 083.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	9/15
Native Plant Life forms	12/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2/5
Hollow-bearing trees	1/5
Fallen Timber/debris	0.5/5
Mature Tree	1/8
TOTAL VEGETATION CONDITION SCORE	26.95/80

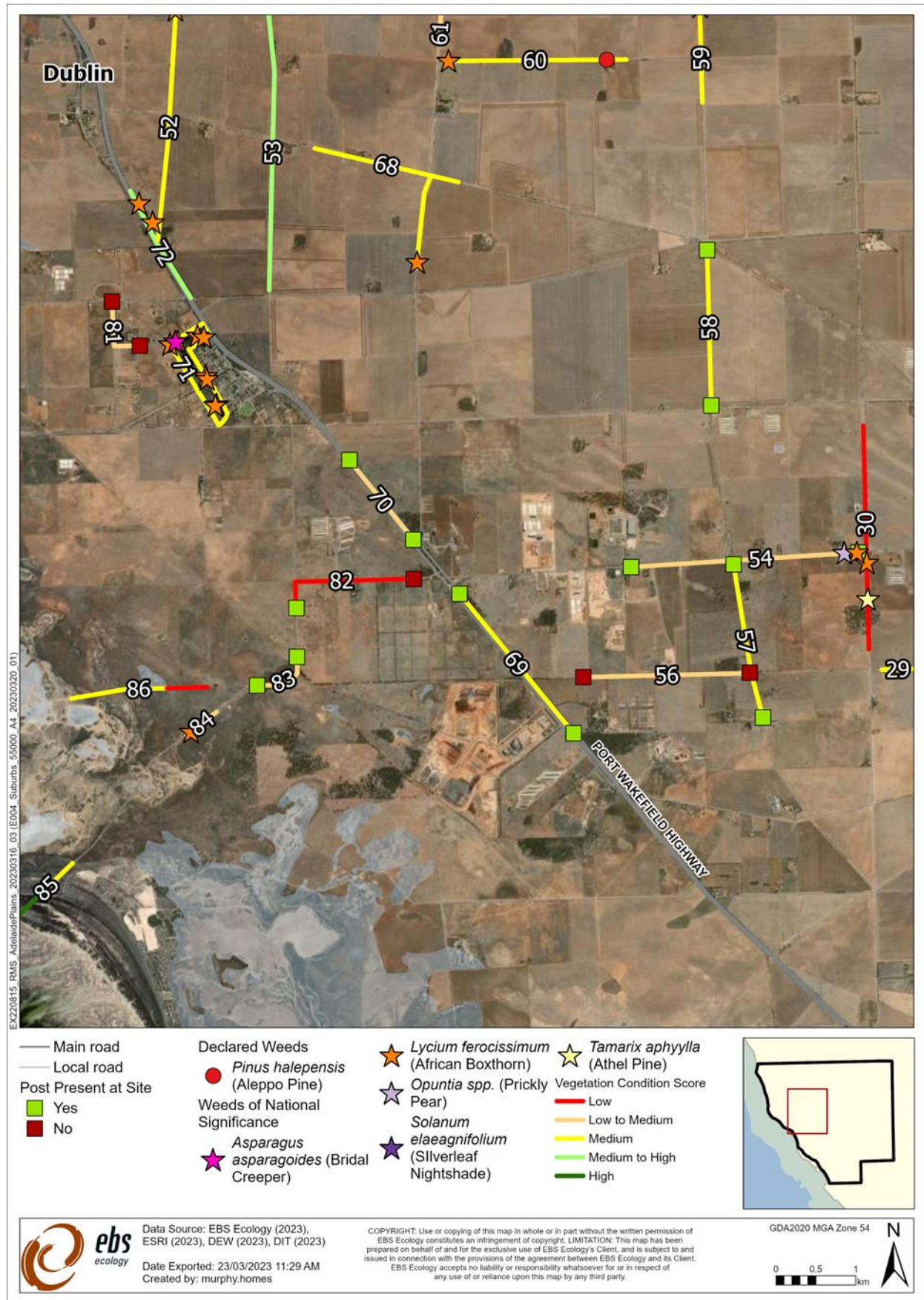


Figure 17. Roadside Marker Sites across Dublin.

5.12 Long Plains

A total of four Sites were assessed across Long Plains (Figure 18).

5.12.1 Roadside Marker Site 065 (Lyons Rd)

Both posts were observed at Site 65 (Table 246). A total of 32 native species were identified, with five species naturally regenerating. A total of 15 introduced species were observed with the presence of eight environmental weeds, five declared weeds, two of which are listed as WoNS (Table 247). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 65 received a VCS of 38.83 out of 80, reflecting vegetation of medium quality (Table 248).

Table 246. Summary of Roadside Marker Site 065.


Site	065
Road	Lyons Rd
Suburb	Long Plains
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3738 -34.36 (E end on the S side of Lyons Rd)
	End: 138.3494 -34.3534 (W end on the S side of Lyons Rd)
Posts present?	Yes
Threats	Weed invasion, illegal dumping and old tree guards
Vegetation Condition Score	Medium – 38.83
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> and <i>E. porosa</i> Mixed Mallee over <i>Pittosporum angustifolium</i> and chenopod shrubs
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>E end on the S side of Lyons Rd</p>  <p>W end on the S side of Lyons Rd</p>



Table 247. Flora Species List at Roadside Marker Site 065.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia calamifolia</i>	Wallowa			
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia notabilis</i>	Notable Wattle			
<i>Acacia nyssophylla</i>	Spine Bush			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia sp.</i>	Wattle			
<i>Allocasuarina verticillata</i>	Drooping Sheoak			
<i>Atriplex semibaccata</i>	Berry Saltbush			
<i>Austrostipa sp.</i>	Spear-grass			
<i>Callitris sp.</i>	Native Pine			
<i>Cassytha sp.</i>	Dodder-laurel			
<i>Dianella sp.</i>	Flax-lily			
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i>	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana ssp.</i>	Sea-berry Saltbush			
<i>Rhagodia spinescens</i>	Spiny Saltbush			
<i>Rytidosperma sp.</i>	Wallaby-grass			
<i>Salsola australis</i>	Buckbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides ssp. petiolaris</i>				
<i>Senna artemisioides ssp. X coriacea</i>	Broad-leaf Desert Senna			
<i>Templetonia retusa</i>	Cockies Tongue			
<i>Vittadinia sp.</i>	New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes

<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Cynara cardunculus ssp. flavesces</i>	Artichoke Thistle	Yes		
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Mesembryanthemum sp.</i>	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Salvia verbenaca var.</i>	Wild Sage			Yes
<i>Schinus molle</i>				Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 248. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 065.

Attribute	Score
Native Plant Species Diversity	27/30
Weeds	4.5/15
Native Plant Life forms	16/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	2/5
Hollow-bearing trees	2/5
Fallen Timber/debris	1.5/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	38.83/80

5.12.2 Roadside Marker Site 066 (Wild Horse Plains Rd)

Only one post was observed at Site 66, at the W end of Wild Horse Plains (Table 249). A total of 24 native species were identified, with five species naturally regenerating. A total of nine introduced species were observed with the presence of six environmental weeds, no declared weeds were observed (Table 250). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 66 received a VCS of 38.50 out of 80, reflecting vegetation of medium quality (Table 251).

Table 249. Summary of Roadside Marker Site 066.

Site	066
Road	Wild Horse Plains
Suburb	Long Plains
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3596 -34.3617 (W end on the S side of Wild Horse Plains Rd) End: 138.3715 -34.3617 (E end on the S side of Wild Horse Plains Rd)
Posts present?	One (W end on the S side of Wild Horse Plains Rd)
Threats	Weed invasion



Vegetation Condition Score	Medium – 38.50
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus porosa</i> , <i>E. gracilis</i> and <i>E. socialis</i> Mixed Mallee over <i>Acacia oswaldii</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end on the S side of Wild Horse Plains Rd</p> 
	<p>E end on the S side of Wild Horse Plains Rd</p> 

Table 250. Flora Species List at Roadside Marker Site 066.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia pycnantha</i>	Golden Wattle		
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Bursaria spinosa</i> ssp.	Bursaria		
<i>Callitris</i> sp.	Native Pine		
<i>Dianella revoluta</i> var.			
<i>Enchylaena</i> sp.			
<i>Eremophila longifolia</i>	Weeping Emubush		
<i>Eucalyptus gracilis</i>	Yorrell		

Native				
Species Name	Common Name	AUS	SA	
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i> ssp.				
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Lomandra multiflora</i> ssp.	Many-flower Mat-rush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Myoporum platycarpum</i> ssp.	False Sandalwood			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Vittadinia</i> sp.	New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Centaurea solstitialis</i>	St Barnaby's Thistle			
<i>Cynodon dactylon</i> var.	Couch			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reseda lutea</i>	Cut-leaf Mignonette			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 251. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 066.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	11/15
Native Plant Life forms	16/20
Regenerating	3/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	2/5
Hollow-bearing trees	2/5
Fallen Timber/debris	1.5/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	38.50/80

5.12.3 Roadside Marker Site 067 (Ridley Rd)

Both posts were observed at Site 67 (Table 252). A total of 20 native species were identified at Site 67, with three species naturally regenerating. A total of 13 introduced species were observed with the presence of eight environmental weeds and no declared (Table 253). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 67 received a VCS of 29.05 out of 80, reflecting vegetation of low to medium quality (Table 254).

Table 252. Summary of Roadside Marker Site 067.



Site	067
Road	Ridley Rd
Suburb	Long Plains
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3724 -34.364 (NE end on the S side of Ridley Rd) End: 138.3558 -34.3748 (SW end on the S side of Ridley Rd)
Posts present?	Yes
Threats	Weed invasion
Vegetation Condition Score	Low to Medium – 29.05
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus odorata</i> over <i>Alectryon oleifolius</i> ssp. <i>canescens</i> and <i>Senna artemisioides</i> ssp. <i>petiolaris</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	(NE end on the S side of Ridley Rd)
	
Photo points	(SW end on the S side of Ridley Rd)
	

Table 253. Flora Species List at Roadside Marker Site 067.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia pycnantha</i>	Golden Wattle			
<i>Alectryon oleifolius</i> ssp. <i>canescens</i>	Bullock Bush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Bursaria spinosa</i> ssp.	Bursaria			
<i>Dianella revoluta</i> var.				
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eremophila longifolia</i>	Weeping Emubush			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Eucalyptus odorata</i>	Peppermint Box			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Lomandra multiflora</i> ssp.	Many-flower Mat-rush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aira</i> sp.	Hair-grass			
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Lolium</i> sp.	Ryegrass			
<i>Reseda lutea</i>	Cut-leaf Mignonette			
<i>Ricinus communis</i>	Castor Oil Plant			Yes
<i>Salvia verbenaca</i> var.				Yes
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 254. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 067.

Attribute	Score
Native Plant Species Diversity	21/30
Weeds	9/15
Native Plant Life forms	8/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	1/5
Hollow-bearing trees	2/5
Fallen Timber/debris	2.5/5
Mature Tree	2/8

Attribute	Score
TOTAL VEGETATION CONDITION SCORE	29.05/80

5.12.4 Roadside Marker Site 076 (Wild Horse Plains Rd)

Both posts were observed at Site 76 (Table 255). A total of 18 native species were identified, with four species naturally regenerating. A total of 13 introduced species were observed with the presence of 10 environmental weeds and no declared weeds (Table 256). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 76 received a VCS of 17.59 out of 80, reflecting vegetation of low quality (Table 257).

Table 255. Summary of Roadside Marker Site 076.


Site	76
Road	Wild Horse Plains
Suburb	Long Plains
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3031 -34.3616 (W end on the S side of Wild Horse Plains Rd) End: 138.342 -34.3617 (E end on the S side of Wild Horse Plains Rd)
Posts present?	Yes
Threats	Weed invasion and old tree guards
Vegetation Condition Score	Low – 17.59
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> Mixed Mallee over <i>Nitraria billardiarei</i> and chenopod shrubland
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end on the S side of Wild Horse Plains Rd</p>  <p>E end on the S side of Wild Horse Plains Rd</p>



Table 256. Flora Species List at Roadside Marker Site 076.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia sp.</i>	Wattle			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Dianella sp.</i>	Flax-lily			
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush			
<i>Eremophila longifolia</i>	Weeping Emubush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i>	Beaked Red Mallee			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Rhagodia candolleana ssp.</i>	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma sp.</i>	Wallaby-grass			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides ssp. petiolaris</i>				
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica sp.</i>				
<i>Bromus diandrus</i>	Great Brome			
<i>Cactaceae sp.</i>				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Carthamus lanatus</i>	Saffron Thistle			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Mesembryanthemum sp.</i>	Iceplant			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Solanum nigrum</i>	Black Nightshade			Yes
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 257. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 076.

Attribute	Score
Native Plant Species Diversity	18/30
Weeds	9/15
Native Plant Life forms	8/20
Regenerating	3/12
Native: Exotic Understorey Biomass	1/5
Tree Canopy cover	1/5
Hollow-bearing trees	2/5
Fallen Timber/debris	1.5/5
Mature Tree	1/8
TOTAL VEGETATION CONDITION SCORE	17.59/80

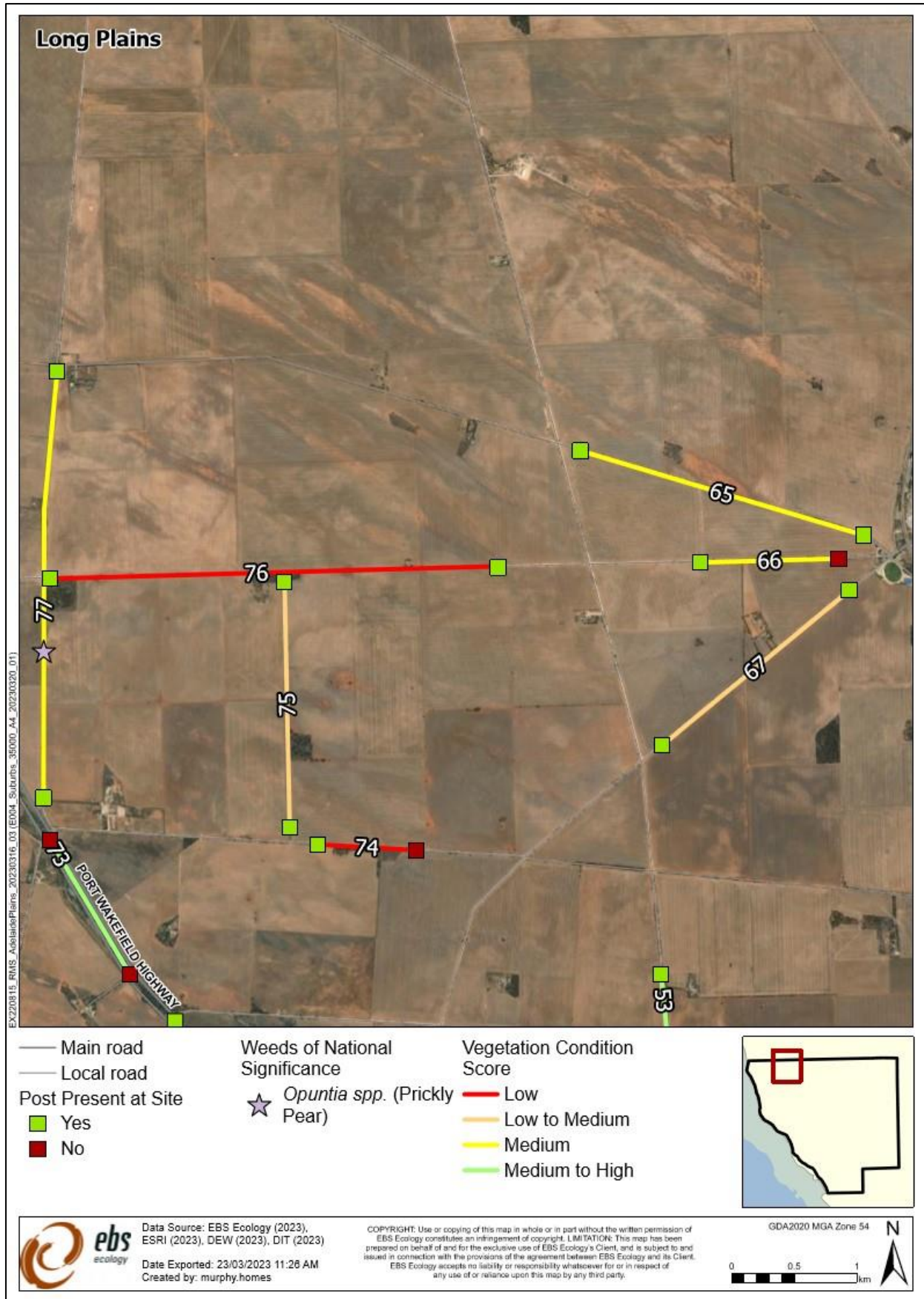


Figure 18. Roadside Marker Sites across Long Plains.

5.13 Wild Horse Plains

A total of three Sites were assessed across Wild Horse Plains (Figure 19).

5.13.1 Roadside Marker Site 075 (Sandy Brae Rd)

Both posts were observed at Site 75 (Table 258). A total of 20 native species were identified, with four species naturally regenerating. A total of 10 introduced species were observed with the presence of five environmental weeds, two declared weeds, one of which are listed as WoNS (Table 259). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 75 received a VCS of 34.09 out of 80, reflecting vegetation of low to medium quality (Table 260).

Table 258. Summary of Roadside Marker Site 075.

Site	075
Road	Sandy Brae Rd
Suburb	Wild Horse Plains
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3233 -34.38 (S end on the E side of Sandy Brae Rd) End: 138.3234 -34.3623 (N end on the E side of Sandy Brae Rd)
Posts present?	Yes
Threats	Weed invasion
Vegetation Condition Score	Low to Medium – 34.09
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> and <i>E. socialis</i> Mixed Mallee over chenopod shrubs
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>S end on the E side of Sandy Brae Rd</p>  <p>N end on the E side of Sandy Brae Rd</p>



Table 259. Flora Species List at Roadside Marker Site 075.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Acacia sclerophylla</i>	Hard-leaf Wattle			
<i>Acacia wilhelmiana</i>	Dwarf Nealie			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eremophila longifolia</i>	Weeping Emubush			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Eucalyptus porosa</i>	Mallee Box			
<i>Eucalyptus socialis</i>	Beaked Red Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Salsola australis</i>	Buckbush			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Bromus diandrus</i>	Great Brome			
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 260. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 075.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	7/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	2/5
Hollow-bearing trees	3/5
Fallen Timber/debris	3.5/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	34.09/80

5.13.2 Roadside Marker Site 077 (Slant Rd)

Both posts were observed at Site 77 (Table 261). A total of 25 native species were identified, with nine species naturally regenerating. A total of 14 introduced species were observed with the presence of seven environmental weeds, three declared weeds, two of which are listed as WoNS. No threatened species protected under the NPW Act and the EPBC Act were observed on Site (Table 262). Overall, Site 77 received a VCS of 48.72 out of 80, reflecting vegetation of medium quality (Table 263).

Table 261. Summary of Roadside Marker Site 077.

Site	077
Road	Slant Rd
Suburb	Wild Horse Plains
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.3042 -34.3467 (N end on the E side of Slant Rd) End: 138.302 -34.3774 (S end on the E side of Slant Rd)
Posts present?	Yes
Threats	Garden escapes, pests (fox), rubbish and weed invasion
Vegetation Condition Score	Medium – 48.72
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus gracilis</i> , <i>E. porosa</i> and <i>E. socialis</i> Mixed Mallee over <i>Acacia</i> spp., chenopod shrubs
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	N end on the E side of Slant Rd



S end on the E side of Slant Rd



Table 262. Flora Species List at Roadside Marker Site 077.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Acacia sp.</i>	Wattle		
<i>Atriplex semibaccata</i>	Berry Saltbush		
<i>Austrostipa sp.</i>	Spear-grass		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Dianella sp.</i>	Flax-lily		
<i>Enchylaena tomentosa var.</i>	Ruby Saltbush		
<i>Eremophila longifolia</i>	Weeping Emubush		
<i>Eucalyptus gracilis</i>	Yorrell		
<i>Eucalyptus socialis</i>	Beaked Red Mallee		
<i>Eucalyptus odorata</i>	Peppermint Box		
<i>Eucalyptus porosa</i>	Mallee Box		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Nitraria billardierei</i>	Nitre-bush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia parabolica</i>	Mealy Saltbush		
<i>Roepera aurantiaca ssp. aurantiaca</i>	Shrubby Twinleaf		

Native				
Species Name	Common Name	AUS	SA	
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Vittadinia</i> sp.	New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Brassica</i> sp.				
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Centaurea calcitrapa</i>	Star Thistle			Yes
<i>Centaurea solstitialis</i>	St Barnaby's Thistle			
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Reseda lutea</i>	Cut-leaf Mignonette			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes
<i>Solanum elaeagnifolium</i>	Silver-leaf Nightshade	Yes	Yes	

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 263. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 077.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	8.5/15
Native Plant Life forms	16/20
Regenerating	9/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	3/5
Hollow-bearing trees	4/5
Fallen Timber/debris	3.5/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	48.72/80

5.13.3 Roadside Marker Site 101 (Port Wakefield Rd)

One post was observed at the northern end of the Site, only a stake with no sign was observed at the southern end of Site 101 (Table 264). A total of 19 native species were identified, with four species naturally regenerating. A total of eight introduced species were observed with the presence of six environmental weeds, two declared weeds, one of which are listed as WoNS (Table 214Table 265). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 101 received a VCS of 45.18 out of 80, reflecting vegetation of medium quality (Table 266).

Table 264. Summary of Roadside Marker Site 101.

Site	101
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Road	Port Wakefield Rd
Suburb	Wild Horse Plains
Date surveyed	15/12/2022
Longitude and Latitude	Start: 138.2936 -34.3638 (N end on the E side of Port Wakefield Rd) End: 138.2979 -34.3735 (S end on the E side of Port Wakefield Rd)
Posts present?	One (N end on the E side of Port Wakefield Rd)
Threats	Garden escapes, weed invasion and roadside rubbish
Vegetation Condition Score	Medium – 45.18
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Eucalyptus brachycalyx</i> and <i>Eucalyptus gracilis</i> mallee over <i>Geijera linearifolia</i>
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end on the E side of Port Wakefield Rd</p>  <p>S end on the E side of Port Wakefield Rd</p> 

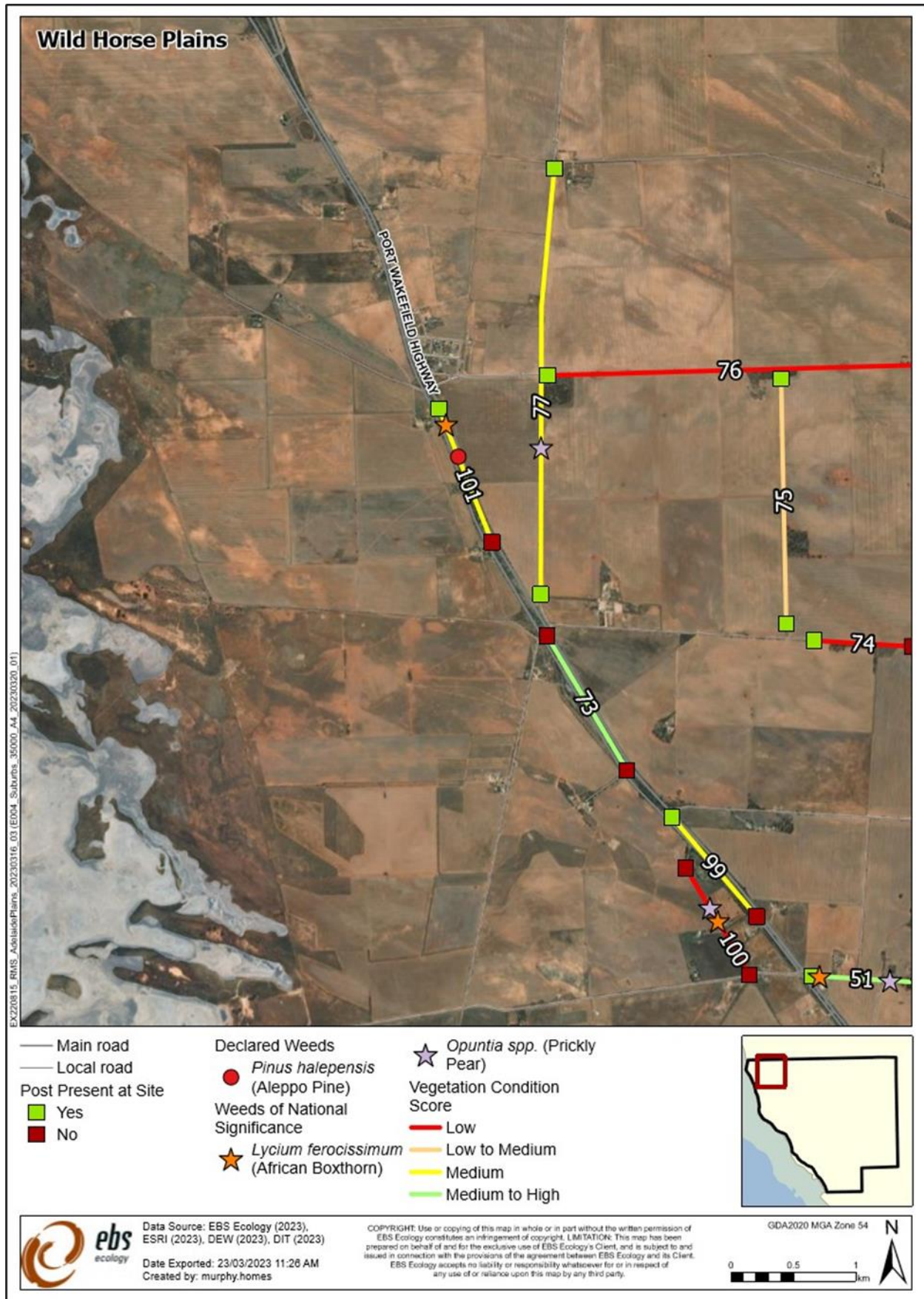
Table 265. Flora Species List at Roadside Marker Site 101.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia oswaldii</i>	Umbrella Wattle			
<i>Atriplex</i> sp.	Saltbush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Carpobrotus</i> sp.	Pigface			
<i>Chloris truncata</i>	Windmill Grass			
<i>Eucalyptus brachycalyx</i>	Gilja			
<i>Eucalyptus gracilis</i>	Yorrell			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Hakea</i> sp.	Hakea/Needlewood			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Nitraria billardi</i> erei	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Senna artemisioides</i> ssp. <i>petiolaris</i>				
<i>Tetragonia implexicoma</i>	Bower Spinach			
<i>Vittadinia</i> sp.	New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Pinus halepensis</i>	Aleppo Pine	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 266. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 101.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	6.5/15
Native Plant Life forms	12/20
Regenerating	6/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	4/5
Hollow-bearing trees	3/5
Fallen Timber/debris	4/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	45.18/80



5.14 Webb Beach

Only one Site was surveyed at Webb Beach (Figure 20).

5.14.1 Roadside Marker Site 078 (Webb Beach)

One post was observed on the S side of George Street (Table 267). A total of 14 native species were identified, with one species naturally regenerating. A total of nine introduced species were observed with the presence of two environmental weeds and no declared weeds (Table 268). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 78 received a VCS of 26.56 out of 80, reflecting vegetation of low to medium quality (Table 269).

Table 267. Summary of Roadside Marker Site 078.

Site	078
Road	Webb Beach
Suburb	Webb Beach
Date surveyed	10/1/2023
Longitude and Latitude	Start: 138.2633 -34.4437 (S side of George Street)
	End: 138.2615 -34.4538 (S end of Webb Beach)
Posts present?	One
Threats	Illegal dumping, garden escapes, road verge plantings and weed invasion
Vegetation Condition Score	Low to Medium – 26.56
Adjacent land use	Residential
Vegetation association	<i>Myoporum insulare</i> and <i>Olearia axillaris</i> shrubland
Benchmark Community	NA 9.2 Low woodlands on coastal dunes and shell-grit ridges
Photo points	E end on the S side of George Street
	
	S end of Webb Beach



Table 268. Flora Species List at Roadside Marker Site 078.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Alyxia buxifolia</i>	Sea Box			
<i>Atriplex cinerea</i>	Coast Saltbush			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Carpobrotus rossii</i>	Native Pigface			
<i>Dianella sp.</i>	Flax-lily			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Myoporum insulare</i>	Common Boobialla			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Olearia axillaris</i>	Coast Daisy-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Spinifex hirsutus</i>	Rolling Spinifex			
<i>Tetragonia sp.</i>	False Spinach			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Agave sp.</i>				
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Cakile maritima</i> ssp. <i>maritima</i>	Two-horned Sea Rocket			
<i>Eucalyptus sp.</i> (WA variety)				
<i>Euphorbia terracina</i>	False Caper			
<i>Lagunaria patersonii</i>	Pyramid Tree			
<i>Lagurus ovatus</i>	Hare's Tail Grass			
<i>Matthiola sp.</i>	Stock			
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Portulacaria afra</i>	Dwarf Jade Plant			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 269. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 078.

Attribute	Score
Native Plant Species Diversity	15/30
Weeds	3/15
Native Plant Life forms	16/20
Regenerating	4.5/12

Attribute	Score
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	0/5
Hollow-bearing trees	0/5
Fallen Timber/debris	0/5
Mature Tree	2/8
TOTAL VEGETATION CONDITION SCORE	26.56/80



Figure 20. Roadside Marker Sites across Webb Beach.

5.15 Parham

A total of two Sites were observed across Parham (Figure 21).

5.15.1 Roadside Marker Site 079 (The Esplanade)

No posts were observed at Site 79 (Table 270). A total of 23 native species were identified, with four species naturally regenerating. A total of 10 introduced species were observed with the presence of four environmental weeds and one declared weeds (Table 271). Overall, Site 79 received a VCS of 62.79 out of 80, reflecting vegetation of Medium to High quality (Table 272). A breeding pair of the nationally threatened State Rare Elegant Parrot was observed foraging within this Site.

Table 270. Summary of Roadside Marker Site 079.


Site	079
Road	The Esplanade
Suburb	Parham
Date surveyed	10/1/2023
Longitude and Latitude	Start: 138.2552 -34.4244 (N end on the W side of the Esplanade)
	End: 138.2577 -34.4309 (S end on the W side of the Esplanade)
Posts present?	No
Threats	Tree guards and weed invasion
Vegetation Condition Score	Medium to High – 62.79
Adjacent land use	Residential and the coastline
Vegetation association	<i>Alyxia buxifolia</i> and <i>Myoporum insulare</i> Shrubland
Benchmark Community	NA 9.1 Shrubs and Low Shrublands on coastal dunes and shell-grit ridges
Photo points	<p>N end on the W side of the Esplanade</p>  <p>S end on the W side of the Esplanade</p>



Table 271. Flora Species List at Roadside Marker Site 079.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia cyclops</i>	Western Coastal Wattle			
<i>Alyxia buxifolia</i>	Sea Box			
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush			
<i>Atriplex</i> sp.	Saltbush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Carpobrotus rossii</i>	Native Pigface			
<i>Dianella</i> sp.	Flax-lily			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum insulare</i>	Common Boobialla			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Olearia axillaris</i>	Coast Daisy-bush			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Salicornia blackiana</i>	Thick-head Samphire			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Suaeda australis</i>	Austral Seablite			
<i>Tecticornia</i> sp.	Samphire			
<i>Tecticornia</i> sp.	Samphire			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Cakile</i> sp.	Sea Rocket			
<i>Gazania linearis</i>	Gazania	Yes		
<i>Lagurus ovatus</i>	Hare's Tail Grass			Yes
<i>Matthiola</i> sp.	Stock			
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Plantago coronopus</i> ssp.	Bucks-horn Plantain			
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Reseda</i> sp.	Mignonette			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 272. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 079.

Attribute	Score
Native Plant Species Diversity	30/30
Weeds	3/15
Native Plant Life forms	20/20
Regenerating	9/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	NA
Hollow-bearing trees	NA
Fallen Timber/debris	NA
Mature Tree	NA
TOTAL VEGETATION CONDITION SCORE	62.79/80

5.15.2 Roadside Marker Site 080 (Tickera Rd)

No posts were observed at Site 80. However, two stakes with no sign were observed at each end of the Site (Table 273). A total of 19 native species were identified, with three species naturally regenerating. A total of four introduced species were observed with the presence of one environmental weed (Table 274). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 80 received a VCS of 43.99 out of 80, reflecting vegetation of medium quality (Table 275).

Table 273. Summary of Roadside Marker Site 080.

Site	080
Road	Tickera Rd
Suburb	Parham
Date surveyed	10/1/2023
Longitude and Latitude	Start: 138.2615 -34.4245 (NW end of Tickera Rd)
	End: 138.2601 -34.4271 (SW end of Tickera Rd)
Posts present?	No
Threats	Rubbish and weed invasion
Vegetation Condition Score	Medium – 43.99
Adjacent land use	Residential and native vegetation
Vegetation association	<i>Melaleuca lanceolata</i> Low Woodland
Benchmark Community	NA 9.2 Low woodlands on coastal dunes and shell-grit ridges
Photo points	NW end of Tickera Rd



SW end of Tickera Rd



Table 274. Flora Species List at Roadside Marker Site 080.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Alyxia buxifolia</i>	Sea Box		
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Beyeria lechenaultii</i>	Pale Turpentine Bush		
<i>Carpobrotus rossii</i>	Native Pigface		
<i>Dianella</i> sp.	Flax-lily		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Maireana erioclada</i>	Rosy Bluebush		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Nitraria billardierei</i>	Nitre-bush		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rytidosperma</i> sp.	Wallaby-grass		

Native				
Species Name	Common Name	AUS	SA	
<i>Santalum acuminatum</i>	Quandong			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senna artemisioides ssp. petiolaris</i>				
<i>Tetragonia sp.</i>	False Spinach			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Lagurus ovatus</i>	Hare's Tail Grass			
<i>Limonium sp.</i>	Sea-lavender			
<i>Pinus sp.</i>	Pine			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 275. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 080.

Attribute	Score
Native Plant Species Diversity	22/30
Weeds	6/15
Native Plant Life forms	18/20
Regenerating	6/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	4/5
Hollow-bearing trees	3/8
Fallen Timber/debris	1/5
Mature Tree	3/8
TOTAL VEGETATION CONDITION SCORE	43.99/80



Figure 21. Roadside Marker Sites across Parham.

5.16 Lower Light

A total of four Sites were surveyed across Lower Light (Figure 22).

5.16.1 Roadside Marker Site 084 (Port Prime Rd)

An on-ground assessment was undertaken at Site 84 and both posts were observed (Table 276). A total of 27 native species were identified, with seven species naturally regenerating. A total of 10 introduced species were observed with the presence of five environmental weeds and one declared weed, which is also listed as WoNS (Table 277). The State Rare *Myoporum parviflorum* (Creeping Boobialla) was observed scattered throughout this Site. Overall, Site 84 received a VCS of 29.87 out of 80, reflecting vegetation of low to medium quality (Table 278).

Table 276. Summary of Roadside Marker Site 084.


Site	084
Road	Port Prime Rd
Suburb	Lower Light
Date surveyed	10/1/2023
Longitude and Latitude	Start: 138.3432 -34.4928 (W end on the S side of Port Prime Rd) End: 138.3475 -34.4902 (E end on the S side of Port Prime Rd)
Posts present?	Yes
Threats	Illegal dumping, rubbish and weed invasion
Vegetation Condition Score	Low to Medium – 29.87
Adjacent land use	Native vegetation
Vegetation association	<i>Acacia</i> spp. and <i>Santalum acuminatum</i> shrubland
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>W end on the S side of Port Prime Rd</p>  <p>E end on the S side of Port Prime Rd</p>



Table 277. Flora Species List at Roadside Marker Site 084.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia hakeoides</i>	Hakea Wattle			
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Acacia wilhelmiana</i>	Dwarf Nealie			
<i>Atriplex cinerea</i>	Coast Saltbush			
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Dianella revoluta</i> var. <i>revoluta</i>	Black-anther Flax-lily			
<i>Disphyma crassifolium</i> ssp. <i>clavellatum</i>	Round-leaf Pigface			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Eucalyptus dumosa</i>	White Mallee			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Lawrencia squamata</i>	Thorny Lawrencia			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum insulare</i>	Common Boobialla			
<i>Myoporum parvifolium</i>	Creeping Boobialla		R	
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Sarcozona</i> sp.				
<i>Scaevola spinescens</i>	Spiny Fanflower			
<i>Sclerolaena diacantha</i>	Grey Bindyi			
<i>Senecio</i> sp.	Groundsel			
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna			
<i>Tetragonia</i> sp.	False Spinach			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
<i>Vittadinia</i> sp.	New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Carrichtera annua</i>	Ward's Weed			Yes
<i>Conyza bonariensis</i>	Flax-leaf Fleabane			Yes
<i>Lagurus ovatus</i>	Hare's Tail Grass			
<i>Limonium</i> sp.				
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	

<i>Plantago coronopus ssp.</i>	Bucks-horn Plantain			
<i>Plantago lanceolata var.</i>	Ribwort			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 278. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 084.

Attribute	Score
Native Plant Species Diversity	24/30
Weeds	8/15
Native Plant Life forms	8/20
Regenerating	6/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	1/5
Hollow-bearing trees	0/5
Fallen Timber/debris	0.5/5
Mature Tree	1/8
TOTAL VEGETATION CONDITION SCORE	29.87/80

5.16.2 Roadside Marker Site 085 (North Terrace and Beach Terrace)

One post was observed at the start of Site 85 (Table 279). A total of 24 native species were identified at Site 85, with four species naturally regenerating. A total of three introduced species were observed with the presence of one environmental weeds, no declared weeds were observed on Site (Table 280). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Site 85 had two different benchmark communities, NA 9.1 and NA 10.2 therefore, this vegetation was assessed separately, and the scores were not averaged. Site 85a (*Olearia axillaris* shrubland) received a VCS of 56.96 out of 80, reflecting vegetation of medium quality. Site 85b (*Salicornia spp.* and *Tecticornia spp.* shrubland) received a VCS of 71.33 out of 80, reflecting vegetation of high quality (Table 281).

Table 279. Summary of Roadside Marker Site 085.

Site	085
Road	North Terrace and Beach Terrace
Suburb	Lower Light
Date surveyed	10/1/2023
Longitude and Latitude	Start: 138.3272 -34.5069 (E end on the N side of Port Prime Rd) End: 138.3124 -34.5102 (W end on the S side of Port Prime Rd)
Posts present?	One (E end on the N side of Port Prime Rd)
Threats	Weed invasion
Vegetation Condition Score	85a: Medium – 56.96 85b: High – 71.33
Adjacent land use	Native vegetation
Vegetation association	85a: <i>Olearia axillaris</i> shrubland

Benchmark Community

85b: *Salicornia* spp. and *Tecticornia* spp. shrubland

NA 9.1 Shrubs and Low Shrublands on coastal dunes and shell-grit ridges

NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity

E end on the N side of Port Prime Rd



W end on the S side of Port Prime Rd



VA 85b samphire shrubland



Photo points

Table 280. Flora Species List at Roadside Marker Site 085.

Native				
Species Name	Common Name	AUS	SA	
<i>Alyxia buxifolia</i>	Sea Box			
<i>Amyema melaleucae</i>	Tea-tree Mistletoe			
<i>Atriplex paludosa</i> ssp. <i>cordata</i>	Marsh Saltbush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Carpobrotus rossii</i>	Native Pigface			
<i>Dianella</i> sp.	Flax-lily			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Frankenia pauciflora</i> var.	Southern Sea-heath			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Lawrenzia squamata</i>				
<i>Maireana erioclada</i>	Rosy Bluebush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Olearia axillaris</i>	Coast Daisy-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Salicornia blackiana</i>	Thick-head Samphire			
<i>Salicornia</i> sp.	Samphire			
<i>Tecticornia arbuscula</i>	Shrubby Samphire			
<i>Tecticornia pergranulata</i> ssp.	Black-seed Samphire			
<i>Tecticornia</i> sp.	Samphire			
<i>Tetragonia</i> sp.	False Spinach			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
<i>Vittadinia cuneata</i> var.	Fuzzy New Holland Daisy			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Lagurus ovatus</i>	Hare's Tail Grass			
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Limonium</i> sp.	Sea-lavender			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 281. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 085.

Attribute	85a	85b
Native Plant Species Diversity	27/30	30/30
Weeds	12/15	13/15
Native Plant Life forms	16/20	20/20
Regenerating	6/12	9/12
Native: Exotic Understorey Biomass	4/5	5/5
Tree Canopy cover	NA	NA
Hollow-bearing trees	NA	NA
Fallen Timber/debris	NA	NA
Mature Tree	NA	NA
TOTAL VEGETATION CONDITION SCORE	56.96/80	71.33/80

5.16.3 Roadside Marker Site 086 (Thompson Beach Rd)

One post was observed at the start of Site 86 (Table 282). A total of 17 native species were identified, with one species naturally regenerating. A total of eight introduced species were observed with the presence of three environmental weeds, two declared weeds, one of which is listed as a WoNS (Table 283). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Site 86 had two different benchmark communities, NA 5 Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory and NA 10.1 Samphire low shrublands with infrequent inundation/Lower salinity. Therefore, this vegetation was assessed separately, and the scores were not averaged. Site 86a (*Senna artemisioides* ssp. *X coriacea* shrubland shrubland) received a VCS of 16.45 out of 80, reflecting vegetation of low quality. Site 86b (*Salicornia* spp. and *Tecticornia* spp. shrubland) received a VCS of 53.48 out of 80, reflecting vegetation of medium quality (Table 284).

Table 282. Summary of Roadside Marker Site 086.

Site	086
Road	Thompson Beach Rd
Suburb	Lower Light
Date surveyed	9/1/2023
Longitude and Latitude	Start: 138.3462 -34.4874 (E end on the S side of Thompson Beach Rd) End: 138.3276 -34.4883 (W end of Thompson Beach Rd)
Posts present?	One (E end on the S side of Thompson Beach Rd)
Threats	Illegal dumping (building supplies), rubbish, weed invasion, pest (rabbit), dieback, burned cars
Vegetation Condition Score	86a: Low - 16.45 86b: Medium – 53.48
Adjacent land use	Native vegetation and clay pans
Vegetation association	86a: <i>Senna artemisioides</i> ssp. <i>X coriacea</i> shrubland 86b: <i>Salicornia</i> spp. and <i>Tecticornia</i> spp. shrubland
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory. NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity
Photo points	E end on the S side of Thompson Beach Rd



W end of Thompson Beach Rd



Table 283. Flora Species List at Roadside Marker Site 086.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia hakeoides</i>	Hakea Wattle		
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Disphyma crassifolium</i> ssp. <i>clavellatum</i>	Round-leaf Pigface		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Eucalyptus dumosa</i>	White Mallee		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Maireana brevifolia</i>	Short-leaf Bluebush		
<i>Melaleuca lanceolata</i>	Dryland Tea-tree		
<i>Nitraria billardierei</i>	Nitre-bush		
<i>Rytidosperma</i> sp.	Wallaby-grass		
<i>Salicornia blackiana</i>	Thick-head Samphire		
<i>Scaevola spinescens</i>	Spiny Fanflower		
<i>Senna artemisioides</i> ssp. <i>X coriacea</i>	Broad-leaf Desert Senna		
<i>Tecticornia indica</i> ssp.	Brown-head Samphire		
<i>Threlkeldia diffusa</i>	Coast Bonefruit		
<i>Vittadinia blackii</i>	Narrow-leaf New Holland Daisy		
Introduced			

Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aloe sp.</i>	Aloe			
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Asteriscus spinosus</i>	Golden Pallensis			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Limonium sp.</i>	Sea-lavender			
<i>Lycium ferocissimum</i>	African Boxthorn	Yes	Yes	
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 284. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 086.

Attribute	86a	86b
Native Plant Species Diversity	15/30	24/30
Weeds	6.5/15	12/15
Native Plant Life forms	8/20	16/20
Regenerating	3/12	6/12
Native: Exotic Understorey Biomass	2/5	4/5
Tree Canopy cover	1/5	NA
Hollow-bearing trees	0/5	NA
Fallen Timber/debris	1/5	NA
Mature Tree	1/8	NA
TOTAL VEGETATION CONDITION SCORE	16.45/80	53.48/80

5.16.4 Roadside Marker Site 093 (Off Light Beach Rd)

No posts were observed at Site 93 (Table 285). A total of 24 native species were identified, with seven species naturally regenerating. A total of nine introduced species were observed with the presence of five environmental weeds and no declared weeds. No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Site 93 had two different benchmark communities, NA 9.2 Low Woodlands on Coastal Dunes and Shell Grit Ridges and NA 10.1 Samphire low shrublands with infrequent inundation/Lower salinity. Therefore, this vegetation was assessed separately, and the scores were not averaged. Site 93a (*Myoporum insulare* and *Olearia axillaris* Shrubland +/- *Tecticornia spp.*) received a VCS of 39.27 out of 80, reflecting vegetation of medium quality. Site 93b (*Salicornia spp.* and *Tecticornia spp.* shrubland) received a VCS of 52.63 out of 80, reflecting vegetation of medium quality (Table 287).

Table 285. Summary of Roadside Marker Site 093.

Site	093
Road	Off Light Beach Rd
Suburb	Lower Light
Date surveyed	13/1/2023
Longitude and Latitude	Start: 138.3472 -34.5442 (S end of Light Beach Rd) End: 138.3437 -34.5359
Posts present?	No
Threats	Old stakes and weed invasion



Vegetation Condition Score	93a: Medium – 39.27 93b: Medium to High – 52.63
Adjacent land use	Native vegetation and clay pans
Vegetation association	93a: <i>Myoporum insulare</i> and <i>Olearia axilaris</i> Shrubland +/- <i>Tecticornia</i> spp. 93b: <i>Sarcornia</i> spp. and <i>Tectocornia</i> spp. Shrubland
Benchmark Community	NA 9.2 – Low Woodlands on Coastal Dunes and Shell Grit Ridges NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity
Photo points	E end on the S side of Thompson Beach Rd 
	W end of Thompson Beach Rd 

Table 286. Flora Species List at Roadside Marker Site 093.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia ligulata</i>	Umbrella Bush		
<i>Adriana quadripartita</i>	Coast Bitter-bush		
<i>Alyxia buxifolia</i>	Sea Box		
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush		
<i>Austrostipa elegantissima</i>	Feather Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Callitris gracilis</i>	Southern Cypress Pine		
<i>Dianella</i> sp.	Flax-lily		

Native				
Species Name	Common Name	AUS	SA	
<i>Disphyma crassifolium</i> ssp. <i>clavellatum</i>	Round-leaf Pigface			
<i>Distichlis distichophylla</i>	Emu-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Frankenia pauciflora</i> var.	Southern Sea-heath			
<i>Lawrenzia spicata</i>	Salt Lawrenzia			
<i>Myoporum insulare</i>	Common Boobialla			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Olearia axillaris</i>	Coast Daisy-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia crassifolia</i>	Fleshy Saltbush			
<i>Salicornia quinqueflora</i> ssp. <i>quinqueflora</i>	Beaded Samphire			
<i>Suaeda australis</i>	Austral Seablite			
<i>Tecticornia</i> sp.	Samphire			
<i>Tetragonia implexicoma</i>	Bower Spinach			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Cakile maritima</i> ssp. <i>maritima</i>	Two-horned Sea Rocket			
<i>Euphorbia terracina</i>	False Caper			Yes
<i>Lagurus ovatus</i>	Hare's Tail Grass			
<i>Limonium companyonis</i>	Sea-lavender			Yes
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Senecio</i> sp.	Groundsel			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 287. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 093.

Attribute	93a	93b
Native Plant Species Diversity	26/30	26/30
Weeds	4/15	3/15
Native Plant Life forms	16/20	16/20
Regenerating	6/12	6/12
Native: Exotic Understorey Biomass	4/5	5/5
Tree Canopy cover	2/5	NA
Hollow-bearing trees	1/5	NA
Fallen Timber/debris	0.5/5	NA
Mature Tree	2/8	NA
TOTAL VEGETATION CONDITION SCORE	39.27/80	52.63/80

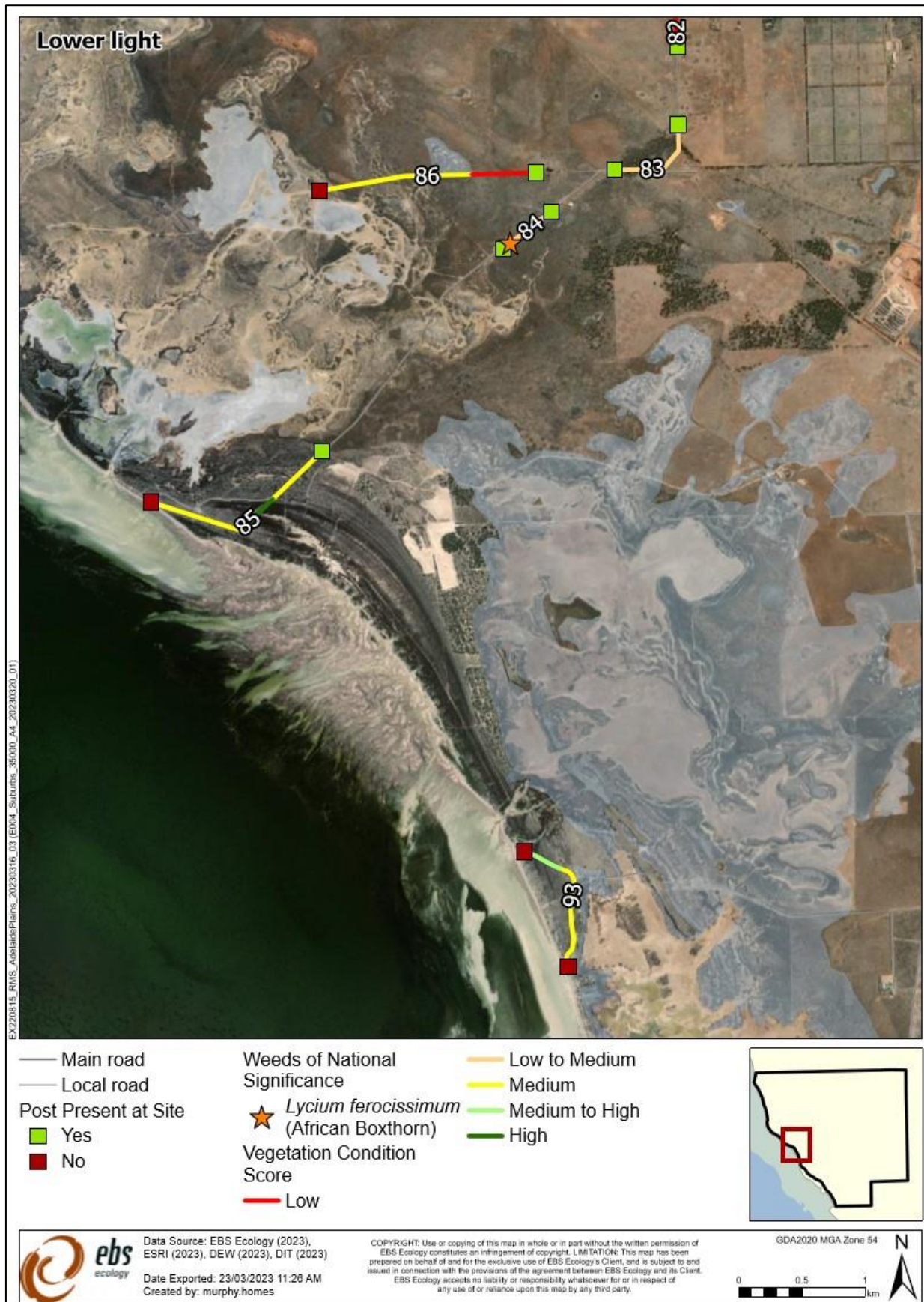


Figure 22. Roadside Marker Sites across Lower Light.

5.17 Thompson Beach

One Site was assessed at Thompson Beach (Figure 23).

5.17.1 Roadside Marker Site 087 (*The Esplanade and Thompson Beach Rd*)

One post was observed on the southern side of Thompson Beach Rd (Table 288). A total of 22 native species were identified, with five species naturally regenerating. A total of seven introduced species were observed with the presence of four environmental weeds and one declared weed (Table 289). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 87 received a VCS of 63.20 out of 80, reflecting vegetation of high quality (Table 290).

Table 288. Summary of Roadside Marker Site 087.


Site	087
Road	The Esplanade and Thompson Beach Rd
Suburb	Thompson Beach
Date surveyed	10/1/2023
Longitude and Latitude	Start: 138.2716 -34.4825 (N end of The Esplanade)
	End: 138.295 -34.4937 (E end on the S side of Thompson Beach Rd)
Posts present?	One (E end of Thompson Beach Rd)
Threats	Old tree guards and weed invasion
Vegetation Condition Score	Medium to High – 63.20
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Myoporum insulare</i> and <i>Alyxia buxifolia</i> Tall shrubland
Benchmark Community	NA 9.1 – Shrublands and Low Shrublands on Coastal Dunes and Shell grit Ridges
Photo points	N end of The Esplanade
	
	E end of Thompson Beach Rd



Table 289. Flora Species List at Roadside Marker Site 087.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Alyxia buxifolia</i>	Sea Box			
<i>Atriplex</i> sp.	Saltbush			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Callitris gracilis</i>	Southern Cypress Pine			
<i>Carpobrotus rossii</i>	Native Pigface			
<i>Clematis microphylla</i>	Old Man's Beard			
<i>Dianella brevicaulis</i>	Short-stem Flax-lily			
<i>Dodonaea viscosa</i> ssp.	Sticky Hop-bush			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Geijera linearifolia</i>	Sheep Bush			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Muehlenbeckia adpressa</i>	Climbing Lignum			
<i>Myoporum insulare</i>	Common Boobialla			
<i>Nitraria billardiarei</i>	Nitre-bush			
<i>Olearia axillaris</i>	Coast Daisy-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Santalum acuminatum</i>	Quandong			
<i>Tecticornia</i> sp.	Samphire			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Brassica</i> sp.				
<i>Gazania linearis</i>	Gazania			Yes
<i>Lagurus ovatus</i>	Hare's Tail Grass			Yes
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Oncosiphon suffruticosum</i>	Calomba Daisy	Yes		
<i>Reichardia tingitana</i>	False Sowthistle			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 290. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 087.

Attribute	Score
Native Plant Species Diversity	28/30

Attribute	Score
Weeds	4/15
Native Plant Life forms	20/20
Regenerating	10.5/12
Native: Exotic Understorey Biomass	4/5
Tree Canopy cover	NA
Hollow-bearing trees	NA
Fallen Timber/debris	NA
Mature Tree	NA
TOTAL VEGETATION CONDITION SCORE	63.20/80

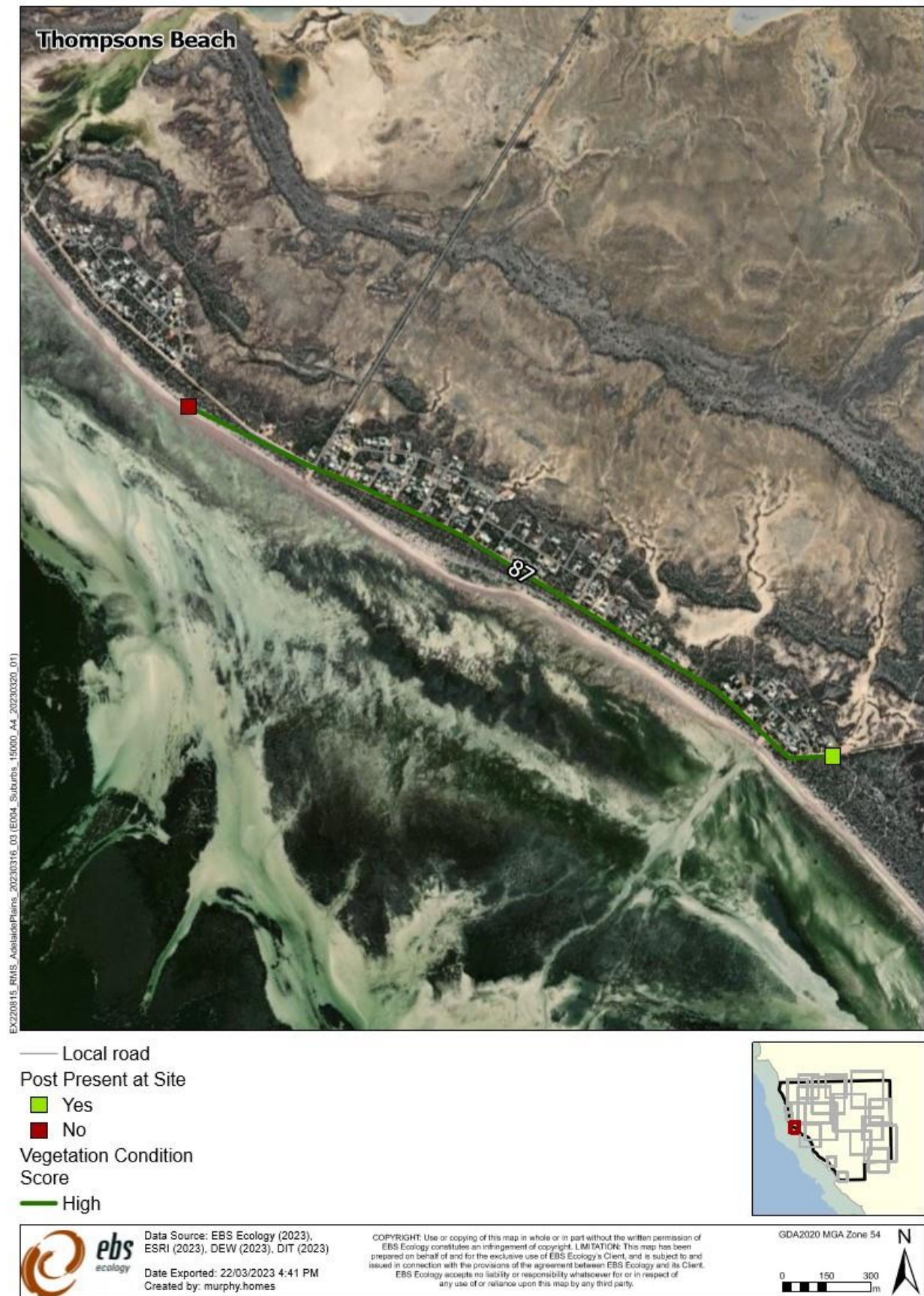


Figure 23. Roadside Marker Sites across Thompson Beach.

5.18 Port Gawler

Two Sites were surveyed across Port Gawler (Figure 24).

5.18.1 Roadside Marker Site 088 (Recreation Drive)

Both posts were observed at Site 88 (Table 291). A total of 19 native species were identified, with two species naturally regenerating. A total of 10 introduced species were observed with the presence of six environmental weeds and one declared weed. No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 88 received a VCS of 49.37 out of 80, reflecting vegetation of medium quality (Table 293).

Table 291. Summary of Roadside Marker Site 088.

Site	088
Road	Recreation Drive
Suburb	Port Gawler
Date surveyed	13/1/2023
Longitude and Latitude	Start: 138.4483 -34.6498 (SE end of Recreation Drive on the S side) End: 138.4447 -34.6486 (NW end of Recreation Drive on the S side)
Posts present?	Yes
Threats	Weed invasion
Vegetation Condition Score	Medium – 49.37
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Olearia axillaris</i> shrubland over <i>Nitraria billardiarei</i> and <i>Atriplex paludosa</i> ssp.
Benchmark Community	NA 9.1 – Shrublands and Low Shrublands on Coastal Dunes and Shell grit Ridges
Photo points	<p>SE end of Recreation Drive on the S side</p>  <p>NW end of Recreation Drive on the S side</p>



Table 292. Flora Species List at Roadside Marker Site 088.

Native				
Species Name	Common Name	AUS	SA	
<i>Acacia ligulata</i>	Umbrella Bush			
<i>Adriana quadripartita</i>	Coast Bitter-bush			
<i>Alyxia buxifolia</i>	Sea Box			
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush			
<i>Austrostipa elegantissima</i>	Feather Spear-grass			
<i>Austrostipa</i> sp.	Spear-grass			
<i>Dianella brevicaulis</i>	Short-stem Flax-lily			
<i>Distichlis distichophylla</i>	Emu-grass			
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush			
<i>Exocarpos aphyllus</i>	Leafless Cherry			
<i>Frankenia pauciflora</i> var.	Southern Sea-heath			
<i>Melaleuca lanceolata</i>	Dryland Tea-tree			
<i>Myoporum insulare</i>	Common Boobialla			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Olearia axillaris</i>	Coast Daisy-bush			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Suaeda australis</i>	Austral Seablite			
<i>Tetragonia implexicoma</i>	Bower Spinach			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Acacia saligna</i>	Golden Wreath Wattle			Yes
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Euphorbia terracina</i>	False Caper	Yes		
<i>Hordeum vulgare</i>	Barley			Yes
<i>Lagurus ovatus</i>	Hare's Tail Grass			
<i>Limonium companyonis</i>	Sea-lavender			
<i>Mesembryanthemum</i> sp.	Iceplant			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Scabiosa atropurpurea</i>	Pincushion			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 293. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 088.

Attribute	Score
Native Plant Species Diversity	27/30
Weeds	8/15
Native Plant Life forms	16/20
Regenerating	6/12
Native: Exotic Understorey Biomass	3/5
Tree Canopy cover	NA
Hollow-bearing trees	NA
Fallen Timber/debris	NA
Mature Tree	NA
TOTAL VEGETATION CONDITION SCORE	49.37/80

5.18.2 Roadside Marker Site 091 (Port Gawler Rd)

No posts were observed at Site 91 (Table 294). A *Eucalyptus largiflorens* Woodland was located alongside a private track (138.4741 -34.6449) off Port Gawler Rd. This vegetation is in better quality compared to Site 91 and should be considered as a Site. A total of four native species were identified at Site 91, with no species naturally regenerating. A total of four introduced species were observed with the presence of four environmental weeds and no declared weeds. No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 91 received a VCS of 3.25 out of 80, reflecting vegetation of low quality (Table 296).

Table 294. Summary of Roadside Marker Site 091.

Site	091
Road	Port Gawler Rd
Suburb	Port Gawler
Date surveyed	13/1/2023
Longitude and Latitude	Start: 138.4746 -34.6405 (W end of Port Gawler Rd) End: 138.476 -34.64 (E end of Port Gawler Rd)
Posts present?	No
Threats	Weed invasion
Vegetation Condition Score	Low – 3.25
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Maireana brevifolia</i> Shrubland over exotic grasses
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	W end of Port Gawler Rd



E end of Port Gawler Rd



Vegetation alongside a private track off Port Gawler Rd

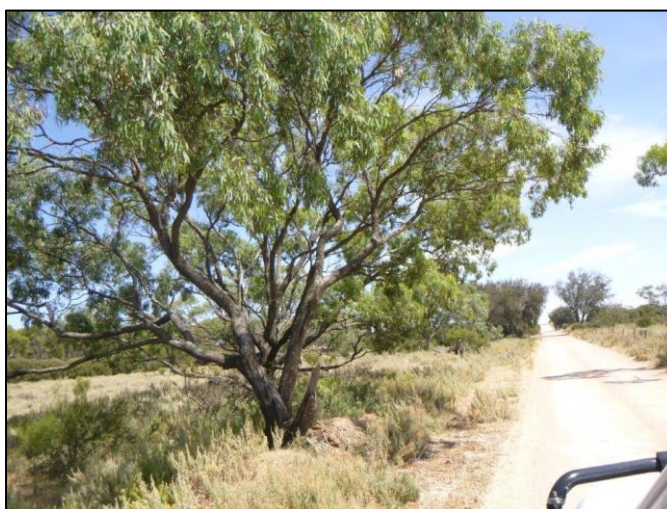


Table 295. Flora Species List at Roadside Marker Site 091.

Native			
Species Name	Common Name	AUS	SA
<i>Austrostipa</i> sp.	Spear-grass		
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush		

Native				
Species Name	Common Name	AUS	SA	
<i>Maireana brevifolia</i>	Short-leaf Bluebush			
<i>Nitraria billardierei</i>	Nitre-bush			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Lactuca serriola f. integrifolia</i>	Prickly Lettuce			Yes
<i>Piptatherum miliaceum</i>	Rice Millet			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 296. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 091.

Attribute	Score
Native Plant Species Diversity	6/30
Weeds	11/15
Native Plant Life forms	4/20
Regenerating	0/12
Native: Exotic Understorey Biomass	0/5
Tree Canopy cover	0/5
Hollow-bearing trees	0/5
Fallen Timber/debris	0/5
Mature Tree	0/5
TOTAL VEGETATION CONDITION SCORE	3.25/80

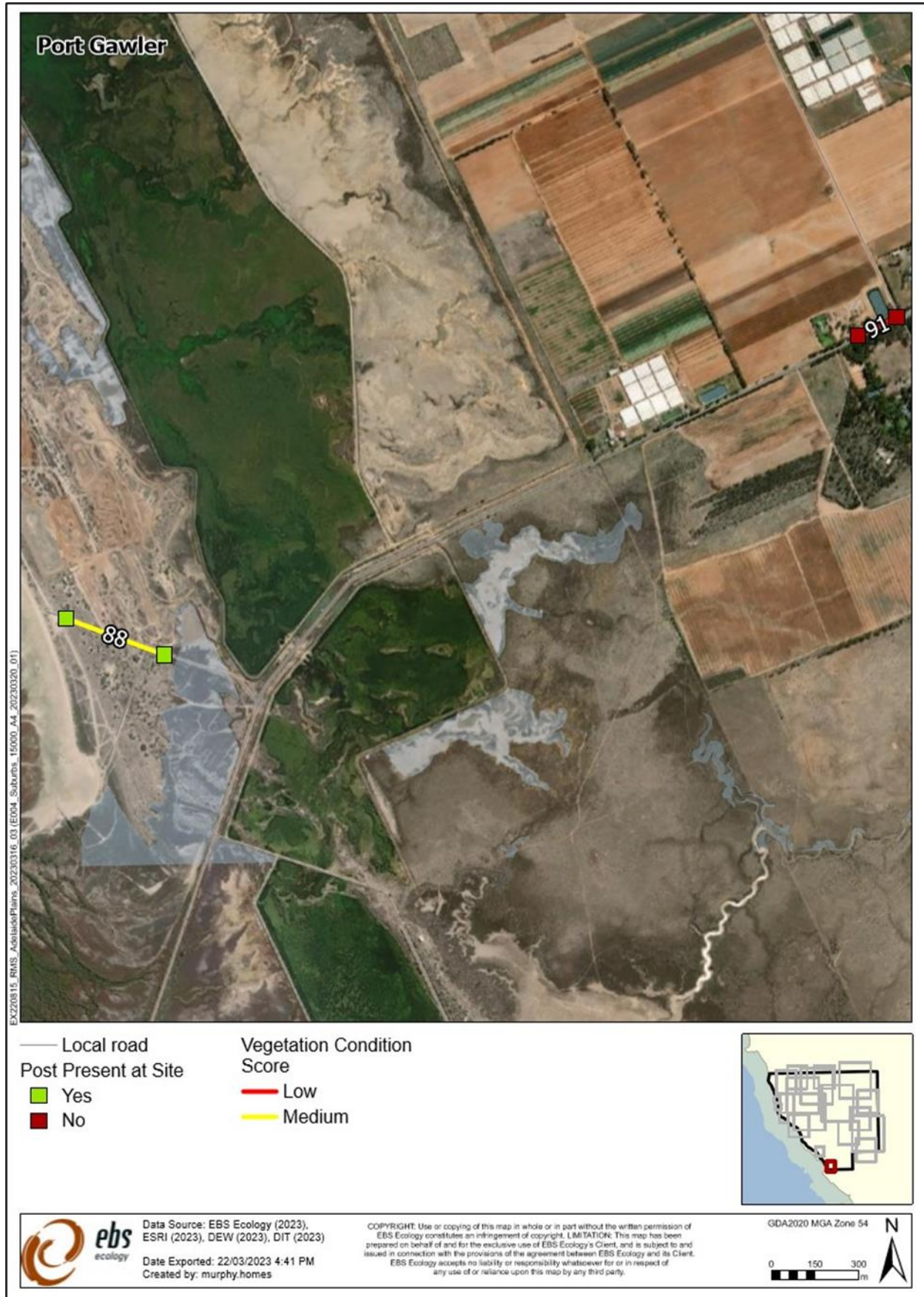


Figure 24. Roadside Marker Sites across Port Gawler.

5.19 Middle Beach

A total of two Sites were surveyed across Middle Beach (Figure 25).

5.19.1 Roadside Marker Site 090 (Middle Beach Rd and Shorebird Rd)

One post was observed at the start of Site 90 (Table 297). A total of 24 native species were, with seven species naturally regenerating. A total of 10 introduced species were observed with the presence of five environmental weeds and one declared weed. No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Site 90 had two different benchmark communities, NA 9.1 and NA 10.2 therefore, this vegetation was assessed separately, and the scores were not averaged. Site 90a (*Salicornia* spp. Shrubland) received a VCS of 56.02 out of 80, reflecting vegetation of medium quality. Site 90b (*Alyxia buxifolia* and *Pittosporum angustifolium* Shrubland) received a VCS of 52.79 out of 80, reflecting vegetation of medium quality (Table 299).

Table 297. Summary of Roadside Marker Site 090

Site	090
Road	Middle Beach Rd and Shorebird Rd
Suburb	Middle Beach
Date surveyed	10/1/2023
Longitude and Latitude	Start: 138.4122 -34.6017 (NE end of Middle Beach Rd) End: 138.414 -34.6089 (S end of Shorebird and The Esplanade)
Posts present?	One (NE end of Middle Beach Rd)
Threats	Weed invasion
Vegetation Condition Score	90a: Medium - 56.02 90b: Medium - 52.79
Adjacent land use	Cropping/agriculture
Vegetation association	90a: <i>Salicornia</i> spp. Shrubland 90b: <i>Alyxia buxifolia</i> and <i>Pittosporum angustifolium</i> Shrubland
Benchmark Community	NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity NA 9.1 – Shrublands and Low Shrublands on Coastal Dunes and Shell grit Ridges
Photo points	NE end of Middle Beach Rd



S end of Shorebird and The Esplanade



Table 298. Flora Species List at Roadside Marker Site 090.

Native			
Species Name	Common Name	AUS	SA
<i>Alyxia buxifolia</i>	Sea Box		
<i>Atriplex cinerea</i>	Coast Saltbush		
<i>Atriplex paludosa</i> ssp.	Marsh Saltbush		
<i>Austrostipa elegantissima</i>	Feather Spear-grass		
<i>Austrostipa nodosa</i>	Tall Spear-grass		
<i>Austrostipa</i> sp.	Spear-grass		
<i>Dianella</i> sp.	Flax-lily		
<i>Distichlis distichophylla</i>	Emu-grass		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		
<i>Exocarpos aphyllus</i>	Leafless Cherry		
<i>Geijera linearifolia</i>	Sheep Bush		
<i>Lawrencina spicata</i>	Salt Lawrencina		
<i>Maireana oppositifolia</i>	Salt Bluebush		
<i>Myoporum insulare</i>	Common Boobialla		
<i>Nitraria billardiarei</i>	Nitre-bush		
<i>Olearia axillaris</i>	Coast Daisy-bush		
<i>Pimelea</i> sp.	Riceflower		
<i>Pittosporum angustifolium</i>	Native Apricot		
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush		
<i>Salicornia blackiana</i>	Thick-head Samphire		
<i>Salicornia quinqueflora</i> ssp. <i>quinqueflora</i>	Beaded Samphire		
<i>Sclerolaena diacantha</i>	Grey Bindyi		

Native				
Species Name	Common Name	AUS	SA	
<i>Senecio sp.</i>				
<i>Suaeda australis</i>	Austral Seablite			
<i>Tecticornia arbuscula</i>	Shrubby Samphire			
<i>Threlkeldia diffusa</i>	Coast Bonefruit			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Asphodelus fistulosus</i>	Onion Weed			Yes
<i>Avena barbata</i>	Bearded Oat			Yes
<i>Euphorbia terracina</i>	False Caper			Yes
<i>Lagurus ovatus</i>	Hare's Tail Grass			
<i>Limonium sp.</i>	Sea-lavender			
<i>Lolium perenne</i>	Perennial Ryegrass			Yes
<i>Marrubium vulgare</i>	Horehound	Yes		
<i>Plantago coronopus ssp.</i>	Bucks-horn Plantain			
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Sonchus oleraceus</i>	Common Sow-thistle			Yes

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 299. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 090.

Attribute	90a	90b
Native Plant Species Diversity	27/30	24/30
Weeds	6.5/15	6.5/15
Native Plant Life forms	16/20	16/20
Regenerating	9/12	9/12
Native: Exotic Understorey Biomass	4/5	4/5
Tree Canopy cover	NA	NA
Hollow-bearing trees	NA	NA
Fallen Timber/debris	NA	NA
Mature Tree	NA	NA
TOTAL VEGETATION CONDITION SCORE	56.02/80	52.79/80

5.19.2 Roadside Marker Site 092 (Middle Beach Rd)

One post was observed on the northern end of this Site on Smith Rd at Site 92 (Table 300). A total of 12 native species were identified, with two species naturally regenerating. A total of 10 introduced species were observed with the presence of three environmental weeds (Table 301). No threatened species protected under the NPW Act and the EPBC Act were observed on Site. Overall, Site 92 received a VCS of 8.60 out of 80, reflecting vegetation of low quality (Table 302).

Table 300. Summary of Roadside Marker Site 092.

Site	092
Road	Middle Beach Rd
Suburb	Middle Beach
Date surveyed	10/1/2023


Longitude and Latitude	Start: 138.4258 -34.5832 (N end of Smith Rd on the E side) End: 138.4311 -34.586 (E end of Middle Beach Rd)
Posts present?	One
Threats	Mowing of roadside vegetation, tyres, weed invasion and plantings
Vegetation Condition Score	Low – 8.60
Adjacent land use	Cropping/agriculture
Vegetation association	<i>Melaleuca brevifolia</i> and <i>Nitraria billardierei</i> Shrubland
Benchmark Community	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory.
Photo points	<p>N end of Smith Rd on the E side</p> 
	<p>E end of Middle Beach Rd</p> 

Table 301. Flora Species List at Roadside Marker Site 092.

Native			
Species Name	Common Name	AUS	SA
<i>Acacia notabilis</i>	Notable Wattle		
<i>Acacia oswaldii</i>	Umbrella Wattle		
<i>Atriplex cinerea</i>	Coast Saltbush		
<i>Atriplex paludosa</i> ssp. <i>cordata</i>	Marsh Saltbush		
<i>Enchylaena tomentosa</i> var.	Ruby Saltbush		

Native				
Species Name	Common Name	AUS	SA	
<i>Melaleuca brevifolia</i>	Short-leaf Honey-myrtle			
<i>Nitraria billardierei</i>	Nitre-bush			
<i>Pittosporum angustifolium</i>	Native Apricot			
<i>Rhagodia candolleana</i> ssp.	Sea-berry Saltbush			
<i>Rhagodia parabolica</i>	Mealy Saltbush			
<i>Rytidosperma</i> sp.	Wallaby-grass			
<i>Tetragonia</i> sp.	False Spinach			
Introduced				
Species Name	Common Name	Declared	WoNS	Environmental Weed
<i>Aizoon pubescens</i>	Coastal Galenia			Yes
<i>Brassica rapa</i> ssp. <i>rapa</i>	Turnip Rape			
<i>Brassica</i> sp.				
<i>Lolium</i> sp.	Ryegrass			
<i>Piptatherum miliaceum</i>	Rice Millet			Yes
<i>Reichardia tingitana</i>	False Sowthistle			
<i>Rumex</i> sp.	Dock			
<i>Salvia verbenaca</i> var.	Wild Sage			Yes
<i>Sisymbrium</i> sp.	Wild Mustard			
<i>Vulpia</i> sp.	Fescue			

WoNS = Weeds of National Significance (LSA Act). AUS= National threatened species under the EPBC Act; SA= State threatened species under the NPW Act; RA= Rare, EN=Endangered, VU=Vulnerable, CE= Critically Endangered.

Table 302. Scores for Bushland Assessment Vegetation Condition Components for Roadside Marker Site 092.

Attribute	Score
Native Plant Species Diversity	9/30
Weeds	10/15
Native Plant Life forms	4/20
Regenerating	3/12
Native: Exotic Understorey Biomass	2/5
Tree Canopy cover	0/5
Hollow-bearing trees	0/5
Fallen Timber/debris	0/5
Mature Tree	0/5
TOTAL VEGETATION CONDITION SCORE	8.60/80

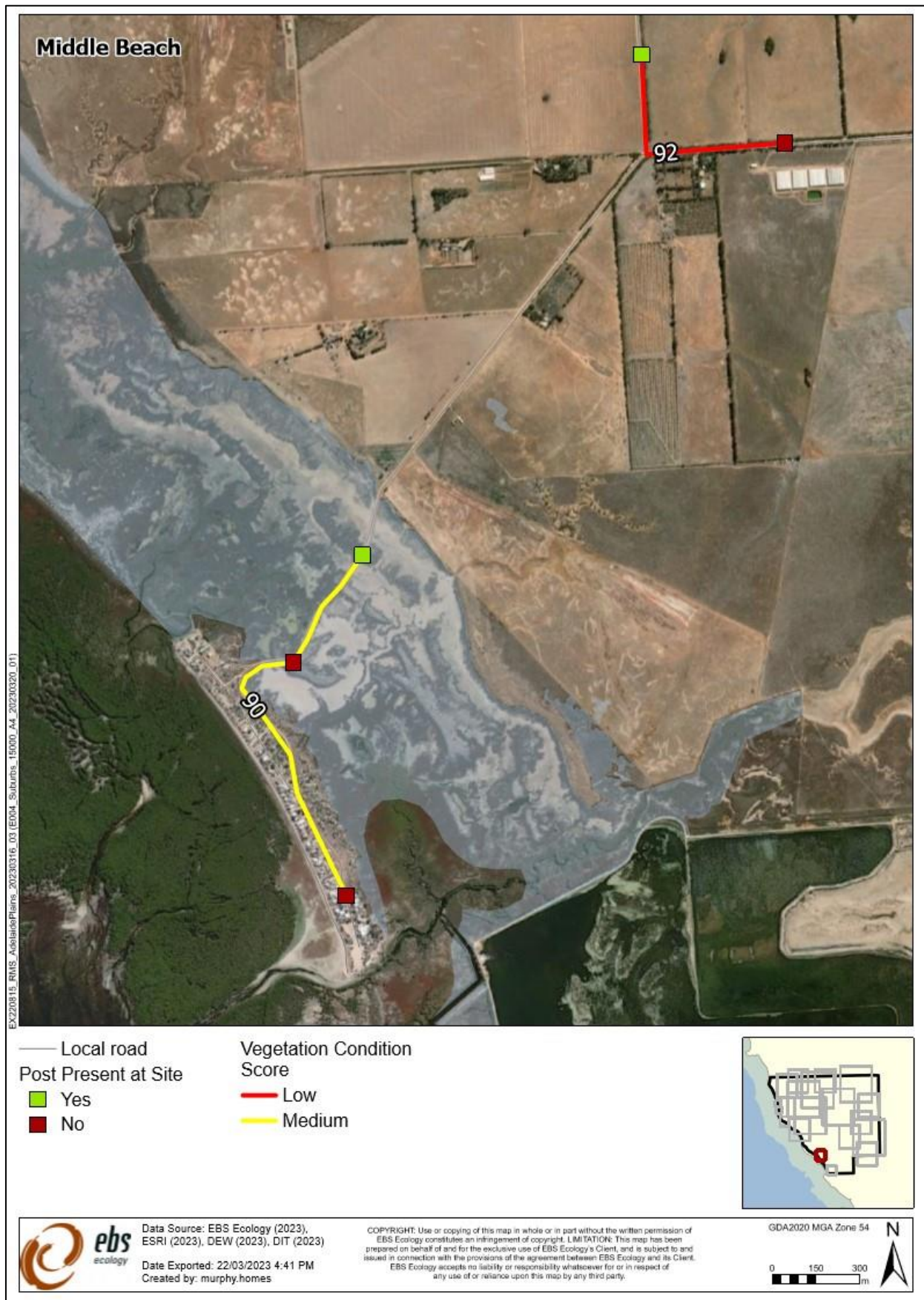


Figure 25. Roadside Marker Sites across Middle Beach.

6 SURVEY SUMMARY

Across the Adelaide Plains region, a total of six benchmark communities (Croft *et al.* 2005-2009, Appendix 9.3) were observed. This included:

- NA 4 – Low Woodlands & Open Mallee with dense to mid-dense shrub &/or Spinifex and sedge understorey (three sites);
- NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory (87 sites);
- NA 7.1 Riparian Woodlands (one site);
- NA 9.1 Shrublands and Low Shrublands on Coastal Dunes and Shell-grit Ridges (five sites);
- NA 9.2 – Low Woodlands on Coastal Dunes and Shell Grit Ridges (three sites); and
- NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity (four sites).

A total of five Roadside Marker Sites (15, 85, 86, 90 and 93) contained one or more benchmark communities. These sites were located along the western side of the Project Area (Figure 26), where samphire shrublands, amongst salt clay pans, meet with the coastal dunes and shell-grit ridges. The vast majority of RMS sites (approx. 84%) were assessed as the *Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory community*. A total of 4% of the sites assessed were determined as the *Shrublands and Low Shrublands on Coastal Dunes and Shell-grit Ridges* and approximately 3.9% of the sites were assessed as *Samphire low shrublands with infrequent inundation/Lower salinity*. Only three sites were assessed as *Low Woodlands & Open Mallee with dense to mid-dense shrub &/or Spinifex and sedge understorey* and *Low Woodlands on Coastal Dunes and Shell Grit Ridges*, with only one site (102) assessed as a Riparian Woodland.

Out of 99 Roadside Marker Sites assessed, there were a total of 103 different vegetation associations. The following condition was observed across the Sites:

- One site (Site 85a) have a High Vegetation Condition Score (VCS);
- Seven sites have a Medium to High VCS;
- 56 sites have a Medium VCS;
- 27 sites have a Low to Medium VCS; and
- 13 sites have a Low VCS (Appendix 2: Complete list of RMS Sites, condition, benchmark community and vegetation association).

All of the Sites assessed, showed signs of degradation, this included:

- Weed invasion;
- Inappropriate management by land holders (roadside verge planting and spray drift);
- Illegal dumping and roadside rubbish; and
- Introduced pests.

Section 6, under Recommendations discusses these in more detail.

7 RECOMMENDATIONS

To improve the overall condition of vegetation, recorded at each of the Roadside Marker Sites, the following recommendations should be considered. These recommendations are based on both direct observations made during the field work, as well as additional to the Roadside Vegetation Management Plan written by J. Pedler and W. Matheson (1993), and the Roadside Vegetation Drive-by Survey #60 by V. Philpott (2004).

7.1 Weed control

The invasion of weeds was prominent across all of the Sites surveyed. This includes both environmental and declared weeds. Council is responsible for the control of declared weeds on land owned or under the control of Council, as outlined in the *Landscape of South Australia (LSA) Act 2019*. Declared weeds and Weeds of National Significance (WoNS) should be the priority. This includes, but is not limited to:

- *Asparagus asparagoides* (Bridal Creeper);
- *Lycium ferocissimum* (African Boxthorn);
- *Oncosiphon suffruticosum* (Calomba Daisy);
- *Solanum elaeagnifolium* (Silver-leaf Nightshade); and
- *Tamarix aphylla* (Athel Pine).

Weeds pose an ongoing management challenge, and a variety of management methods are required to control various weed species. EBS recommends that APC consult the *Weed Control Handbook for Declared Plants in South Australia* (PIRSA, 2018), or seek expert advice for details on recommended herbicide use and application. Other garden escapees and agricultural plantings are also a major issue across RMS Sites, especially at Site 50. As stated by the *Local Government Act (LGA) 1999*, “a person (other than the Council or a person acting under some statutory authority) must not make an alteration to a public road unless authorised to do so by the Council (APC 2021)”. EBS observed during the field survey work that garden plantings (most of which were introduced), had extended out into the verge both intentionally and unintentionally. EBS recommends that Adelaide Plains Council may undertake an education program with residents to ensure that plantings must remain within the property boundary.

7.2 Pest and pet management

Introduced fauna, such as foxes, cats, rabbits, and hares, have become part of the Australian landscape. Roadside vegetation provides refuges for these pests which can then exploit urban resources. A species that has learnt to exploit extra resources such as this, is the European Fox (*Vulpes vulpes*). Similarly, large areas of vegetation, such as Dublin Scrub, provide hunting grounds for both feral and domesticated pets, in particular cats, which are allowed to roam free. These predators pose significant threats to any wildlife remaining in the patch. Control options for pest animals is difficult in urban environments, where the use of poison baits is not suitable, due to the risk to domestic pets. Many of the issues stem from irresponsible domestic pet ownership, where cats are allowed to roam free, resulting in widespread predation on native wildlife such, small birds, and reptiles. Other than legislative / policy changes, the main method of controlling this issue may involve encouraging responsible pet ownership and using educational /

interpretive material to educate people on the biodiversity values of their natural surroundings, and ways in which they can assist with its protection.

7.3 Spray drift

Unexplained dieback was observed across five Sites, especially Sites that were surrounded by agricultural land. Spray drift is a likely cause of the dieback in native species. Spraying of agricultural chemicals is an essential part of primary production. However, primary producers need also to be aware of the impact these chemicals have on the surrounding environment (PIRSA 2013).

7.4 Revegetation

Revegetation will help to improve the overall vegetation condition score of RMS Sites, by reducing the establishment of exotic weeds and re-establishment of native species. Selecting local indigenous species grown from native seeds or plant material are generally the preferred choice for revegetation, as they provide the greatest long-term benefits because they:

- are best suited to the local conditions and are well suited to regenerating without assistance;
- maximise biodiversity in the local area and provide the best habitat for local wildlife;
- benefit the health of existing remnants; and
- will maintain the natural character of the local landscape (Greening Australia 2003).

It is also recommended that plants and ecological communities that are protected under the NPW Act and the EPBC Act, should be targeted for revegetation projects, where possible.

7.5 Other

These recommendations are discussed further in the Revegetation and Management Plan (EBS 2023a, in prep)). A summary of the main recommendations are as follows:

- Increase community awareness and engagement by either the formation of a roadside vegetation management group or by distribution of newsletters, emails and meetings.
- Updating the current RMS signs with new improved signs to help highlight areas of protected remnant vegetation. This will improve vegetation condition monitoring in the future and educate the general public on the importance of native vegetation.
- Extension of RMS Sites (i.e., 4, 28, 49 and 55) to protect existing remnant vegetation and or include new Sites to exiting RMS.
- Abolish Sites that have a low score (i.e., 91) and are past the point of rehabilitation.
- Implement appropriate weed hygiene methods when undertaking roadside maintenance activities.
- Incorporate appropriate fire management to prevent future catastrophic bushfires and to increase the regeneration of natives. Continue to manage what was rehabilitated after the Pinery fire.

8 REFERENCES

- Adelaide Plains Council (2019). Vegetation Management Policy. Accessed 22nd of March 2023.
https://www.apc.sa.gov.au/_data/assets/pdf_file/0025/357730/vegetation_management_policy.pdf
- Adelaide Plains Council (2021). Verge Landscaping and Maintenance Guidelines. Accessed on the 22 of March 2023. Available at: https://www.apc.sa.gov.au/_data/assets/pdf_file/0024/840471/Verge-Landscaping-and-Maintenance-Guidelines.PDF
- Croft SJ, Pedler JA, Milne TI (2009) Bushland Condition Monitoring Manual – Northern Agricultural & Yorke Peninsula Regions. Nature Conservation Society of South Australia, Adelaide.
- Department of Climate Change, Energy the Environment and Water (DCCEE) (2022) Protected Matters Search Tool. Available at: <https://www.environment.gov.au/epbc/protected-matters-search-tool> [Accessed 22/03/2023].
- Department for Environment and Water (DEW) (2023) NatureMaps. Available at: <http://data.environment.as.gov.au/NatureMaps/Pages/default.aspx> [Accessed 20/03/2023].
- Landscape South Australia Northern and Yorke (2023). Wetlands. Accessed on the 20 March 2023. Available at: <https://www.landscape.sa.gov.au/ny/water/managing-water-resources/wetlands>.
- National Parks and Wildlife Service South Australia (NPWSSA) (2023). Adelaide International Bird Sanctuary National Park – Winaityinaityi Pangkara. Accessed on the 20 March 2023. Available at: <https://www.parks.sa.gov.au/parks/adelaide-international-bird-sanctuary-national-park>.
- Native Vegetation Council (NVC) (2020) Bushland Assessment Manual July 2020. Native Vegetation Council, Adelaide. Available at: <https://www.environment.sa.gov.au/topics/native-vegetation/clearing/vegetation-assessments>.
- Pedler, J.A & Matheson, W.E (1993). Remnant Vegetation in the Mallala District Council Area: Its Status and Conservation Strategies.
- Philpot, V (2004). District Council of Mallala Roadside Vegetation Drive-by Survey #60 Survey Findings and Recommendations to Council.
- PIRSA (2013). Working together to minimise chemical spray drift. Accessed on the 22 of March 2023. Available at: https://www.pir.sa.gov.au/_data/assets/pdf_file/0005/235526/FSWorkingTogethertoMininiseChemicalSDrift0913.pdf
- Zimmerman, A (2017). Pinery Fire Recovery Final Report. Access on the 28 of March 2023. Available at: https://dhs.sa.gov.au/_data/assets/pdf_file/0007/57418/2015-Pinery-Fire-Recovery-Report.pdf

9 APPENDICES

9.1 Appendix 1. Fauna species recorded during the survey.

*	Scientific name	Common name	Conservation status	
			Aus	SA
AVES				
	<i>Actitis hypoleucos</i>	Common Sandpiper		R
	<i>Anthochaera carunculata</i>	Red Wattlebird		
	<i>Cacatua galerita</i>	Sulphur-crested Cockatoo		
	<i>Chroicocephalus novaehollandiae</i>	Silver Gull		
	<i>Coracina novaehollandiae</i>	Black-faced Cuckooshrike		
	<i>Cygnus atratus</i>	Black Swan		
	<i>Egretta garzetta</i>	Little Egret		
	<i>Elanus axillaris</i>	Black Shouldered Kite		
	<i>Epthianura albifrons</i>	White-fronted Chats		
	<i>Falco berigora</i>	Brown Falcon		
	<i>Glossopsitta concinna</i>	Musk lorikeet		
	<i>Gymnorhina tibicen</i>	Australian Magpie		
	<i>Haematopus longirostris</i>	Pied Oyster Catcher		
	<i>Lalage tricolor</i>	White-winged Triller		
	<i>Larus argentus</i>	Seagull		
	<i>Lichenostomus virescens</i>	Singing honeyeater		
	<i>Malurus leucopterus</i>	White-winged Fairy Wren		
	<i>Manorina melanocephala</i>	Noisy Miner		
	<i>Microcarbo melanoleucos melanoleucos</i>	Little Pied Cormorant		
	<i>Neophema elegans</i>	Elegant parrot		R
	<i>Ocyphaps lophotes</i>	Crested Pigeon		
*	<i>Passer domesticus</i>	House Sparrow		
	<i>Pelecanus conspicillatus</i>	Pelican		
	<i>Phalacrocorax sulcirostris</i>	Little black cormorant		
	<i>Phaps chalcoptera</i>	Bronzewing Pigeon		
	<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater		
	<i>Platycercus elegans</i>	Crimson Rosella		
	<i>Pomatostomus superciliosus</i>	White-browed Babblers		
	<i>Psephotus haematonotus</i>	Red-rumped Parrots		
	<i>Psephotus varius</i>	Mulga Parrot		
	<i>Threskiornis moluccus</i>	White Ibis		
	<i>Turnix velox</i>	Button Quail		
	<i>Vanellus miles</i>	Masked lapwing		
MAMMALIA				
*	<i>Felis catus</i>	Cat		
*	<i>Lepus europaeus</i>	Hare		
	<i>Macropus rufus</i>	Red Kangaroo		
*	<i>Oryctolagus cuniculus</i>	Rabbit		
REPTILIA				

*	Scientific name	Common name	Conservation status	
			Aus	SA
	<i>Pseudonaja textilis</i>	Eastern Brown snake		
	<i>Tiliqua rugosa</i>	Sleepy Lizard		
	<i>Varanus gouldii</i>	Sand goanna		

Aus: Australia (*Environment Protection and Biodiversity Conservation Act 1999*). SA: South Australia (*National Parks and Wildlife Act 1972*). Conservation codes: CE: Critically Endangered. EN/E: Endangered. VU/V: Vulnerable. R: Rare. *: Introduced.

9.2 Appendix 2: Complete list of RMS Sites, condition, benchmark community and vegetation association

RMS	VCS	Benchmark community	Vegetation association
001	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> and <i>E. gracilis</i> Mallee over <i>Melaleuca lanceolata</i> and <i>Acacia ligulata</i> .
002	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus odorata</i> Mallee over <i>Acacia ligulata</i> and +/- <i>Myoporum platycarpum</i>
003	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus odorata</i> Mallee over <i>Acacia notabilis</i> and <i>Senna artemisioides</i> ssp. <i>X coriacea</i> .
004	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Melaleuca brevifolia</i> and <i>Nitraria billardi</i> Shrubland
005	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> Open Mallee over <i>Acacia ligulata</i> and <i>A. notabilis</i>
006	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> and <i>E. odorata</i> over <i>Acacia notabilis</i> and <i>Senna</i> spp.
007	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> Mallee over <i>Senna artemisioides</i> ssp. <i>petiolaris</i>
008	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> Mallee over <i>Maireana brevifolia</i> and <i>Senna artemisioides</i>
009	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Senna artemisioides</i> ssp. <i>X coriacea</i> with <i>Acacia</i> spp. Shrubland
010	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus odorata</i> Mallee over <i>Senna</i> spp. and <i>Acacia oswaldii</i>
011	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> +/- <i>E. largiflorens</i> Mallee over <i>Acacia</i> spp. and <i>Rhagodia parabolica</i>
012	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> Open Mallee over <i>Senna</i> spp.
013	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> & <i>E. odorata</i> over <i>Senna</i> spp.
014	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> , <i>E. odorata</i> , <i>E. gracilis</i> Mallee over <i>Senna</i> spp.
015a	Medium	NA 4 Low Woodlands & Open Mallee with Dense to Mid dense Shrub & / or Spinifex and sedge Understorey	<i>Eucalyptus incrassata</i> over <i>Rhagodia parabolica</i> +/- <i>Triodia scariosa</i>
015b	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> and <i>Eucalyptus brachycalyx</i> mallee over <i>Senna</i> spp.
016	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> Mallee over <i>Senna artemisioides</i> and <i>Acacia notabilis</i>
017	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> +/- Mixed Mallee over <i>Senna</i> spp.
018	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> Mallee over <i>Senna artemisioides</i> ssp.
019	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> +/- Mixed <i>Eucalyptus</i> spp. Mallee over <i>Senna</i> spp.
020	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus phenax</i> +/- Mixed <i>Eucalyptus</i> spp. Mallee over <i>Senna</i> spp.
021	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> +/- Mixed <i>Eucalyptus</i> spp. Mallee over <i>Senna</i> spp.
022	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus odorata</i> Mallee over <i>Callitris gracilis</i>
023	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> and <i>E. oleosa</i> Mixed Mallee over <i>Callitris gracilis</i>
024	Medium	NA 4 – Low Woodlands & Open Mallee with dense to mid-dense shrub &/or Spinifex and sedge understorey	<i>Eucalyptus socialis</i> Mallee over <i>Senna artemisioides</i> ssp

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RMS	VCS	Benchmark community	Vegetation association
025	Medium	NA 4 – Low Woodlands & Open Mallee with dense to mid-dense shrub &/or Spinifex and sedge understorey	<i>Eucalyptus incrassata</i> mixed Mallee over chenopod shrubs
026	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus odorata</i> and <i>E. incrassata</i> Mallee over <i>Melaleuca acuminata</i> , <i>Acacia oswaldii</i> and <i>Rhagodia parabolica</i>
027	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus porosa</i> and <i>E. socialis</i> Mixed Mallee over <i>Callitris gracilis</i>
028	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Senna artemisioides</i> ssp. <i>X coriacea</i> Shrubland
029	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus odorata</i> +/- <i>E. socialis</i> Mixed Mallee over <i>Nitraria billardierei</i>
030	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus socialis</i> Mallee over <i>Acacia hakeoides</i>
031	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus socialis</i> Mallee over <i>Senna artemisioides</i> ssp. <i>X coriacea</i>
032	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus socialis</i> over <i>Senna artemisioides</i> ssp. <i>X coriacea</i> and <i>Acacia oswaldii</i>
034	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus odorata</i> , <i>E. gracilis</i> Mixed Open Mallee over <i>Acacia ligulata</i> .
035	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus socialis</i> Mallee over <i>Senna</i> spp.
036	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus gracilis</i> Mallee over <i>Senna artemisioides</i> ssp. <i>X coriacea</i>
037	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Acacia ligulata</i> shrubland +/- <i>Eucalyptus socialis</i>
038	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus socialis</i> and <i>E. porosa</i> Mallee over <i>Senna</i> spp.
039	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus porosa</i> Mallee over <i>Senna</i> spp.
040	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus leptophylla</i> Mallee over <i>Acacia</i> spp. and <i>Senna artemisioides</i> ssp. <i>petiolaris</i>
041	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus leptophylla</i> with <i>E. porosa</i> Mallee over <i>Acacia ligulata</i> and <i>A. notabilis</i>
042	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus leptophylla</i> over <i>Senna artemisioides</i> ssp. <i>petiolaris</i> and chenopod shrubs
043	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus porosa</i> Mallee over <i>Acacia oswaldii</i> and <i>Pittosporum angustifolium</i>
044	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus porosa</i> Mallee over <i>Acacia</i> spp
045	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus porosa</i> Mallee over <i>Acacia hakeoides</i>
046	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus porosa</i> Mallee over <i>Senna artemisioides</i> ssp. <i>petiolaris</i>
047	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus porosa</i> Mallee over <i>Pittosporum angustifolium</i> and <i>Eremophila longifolia</i>
048	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus brachycalyx</i> Mallee over <i>Senna artemisioides</i> ssp. <i>X coriacea</i> and <i>Pittosporum angustifolium</i>
049	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus leptophylla</i> and <i>E. socialis</i> and <i>E. odorata</i> Mallee over <i>Pittosporum angustifolium</i> .
050	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus socialis</i> Mallee over <i>Senna</i> spp.
051	Medium to High	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus porosa</i> Mallee over <i>Senna artemisioides</i>
052	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understorey	<i>Eucalyptus porosa</i> Mallee over <i>Senna artemisioides</i> ssp. and <i>Geijera linearifolia</i>

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RMS	VCS	Benchmark community	Vegetation association
053	Medium to High	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> , <i>E. odorata</i> and <i>E. socialis</i> Mixed Mallee over <i>Senna</i> spp. and <i>Acacia</i> spp.
054	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus</i> spp. Mixed Mallee over chenopod shrubs
055	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus</i> spp. Mixed Mallee over <i>Pittosporum angustifolium</i> and <i>Chenopod</i> shrubs.
056	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus oleosa</i> and <i>E. socialis</i> Mixed Mallee over <i>Atriplex nummularia</i> ssp
057	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus brachycalyx</i> and <i>E. dumosa</i> Mixed Mallee over <i>Senna artemisioides</i> ssp. <i>petiolaris</i> with <i>Pittosporum angustifolium</i>
058	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i> and <i>E. porosa</i> Mixed Mallee over chenopod shrubs
059	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> and <i>E. gracilis</i> Mixed Mallee over <i>Acacia oswaldii</i>
060	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> and <i>E. socialis</i> mixed mallee over <i>Senna</i> spp. and <i>Acacia oswaldii</i>
061	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> and <i>E. gracilis</i> Mixed Mallee over <i>Acacia</i> spp.
063	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> Mixed Mallee over <i>Acacia</i> spp. Shrubland
064	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> and <i>E. porosa</i> Mixed Mallee over <i>Acacia</i> spp. and <i>Senna</i> spp.
066	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> , <i>E. gracilis</i> and <i>E. socialis</i> Mixed Mallee over <i>Acacia oswaldii</i>
067	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus odorata</i> over <i>Alectryon oleifolius</i> ssp. <i>canescens</i> and <i>Senna artemisioides</i> ssp. <i>petiolaris</i>
068	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> Mallee over <i>Acacia oswaldii</i>
069	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i> Mallee over <i>Pittosporum angustifolium</i>
070	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus oleosa</i> ssp. <i>ampliata</i> and <i>E. brachycalyx</i> Mixed Mallee over <i>Pittosporum angustifolium</i>
071	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> and <i>E. dumosa</i> Mixed Mallee over <i>Geijera linearifolia</i> and chenopods shrubs
072	Medium to High	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus</i> spp. Mixed Mallee over <i>Geijera linearifolia</i>
073	Medium to High	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> and <i>E. dumosa</i> Mallee over <i>Nitraria billardiarei</i> and <i>Geijera linearifolia</i>
074	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus socialis</i> Mallee over chenopod shrubs
075	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> and <i>E. socialis</i> Mixed Mallee over chenopod shrubs
076	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> Mixed Mallee over <i>Nitraria billardiarei</i> and chenopod shrubland
077	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> , <i>E. porosa</i> and <i>E. socialis</i> Mixed Mallee over <i>Acacia</i> spp., chenopod shrubs
078	Low to Medium	NA 9.2 – Low Woodlands on Coastal Dunes and Shell Grit Ridges	<i>Myoporum insulare</i> and <i>Olearia axillaris</i> shrubland
079	Medium to High	NA 9.1 Shrublands and Low Shrublands on Coastal Dunes and Shell-grit Ridges	<i>Alyxia buxifolia</i> and <i>Myoporum insulare</i> Shrubland
080	Medium	NA 9.2 – Low Woodlands on Coastal Dunes and Shell Grit Ridges	<i>Melaleuca lanceolata</i> Low Woodland

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081	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> and <i>E. dumosa</i> over <i>Geijera linearifolia</i> and <i>Threlkeldia diffusa</i>
082	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Nitraria billardierei</i> and <i>Melaleuca brevifolia</i> shrubland +/- <i>Eucalyptus</i> spp.
083	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus oleosa</i> and <i>E. gracilis</i> Mixed Open Mallee over <i>Atriplex paludosa</i> and <i>Nitraria billardierei</i>
084	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Acacia</i> spp. and <i>Santalum acuminatum</i> shrubland
085a	High	NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity	<i>Salicornia</i> spp. and <i>Tecticornia</i> ssp. shrubland
085b	Medium	NA 9.1 Shrublands and Low Shrublands on Coastal Dunes and Shell-grit Ridges	<i>Olearia axillaris</i> shrubland
086a	Medium	NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity	<i>Salicornia</i> spp. and <i>Tecticornia</i> ssp. shrubland
086b	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Senna artemisioides</i> ssp. <i>X coriacea</i> shrubland
087	Medium to High	NA 9.1 Shrublands and Low Shrublands on Coastal Dunes and Shell-grit Ridges	<i>Myoporum insulare</i> and <i>Alyxia buxifolia</i> Tall shrubland
088	Medium	NA 9.1 Shrublands and Low Shrublands on Coastal Dunes and Shell-grit Ridges	<i>Olearia axillaris</i> shrubland over <i>Nitraria billardierei</i> and <i>Atriplex paludosa</i> ssp.
090	Medium	NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity	<i>Salicornia</i> spp. Shrubland
091	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Maireana brevifolia</i> Shrubland over exotic grasses
093a	Medium to High	NA 10.2 – Samphire low shrublands with infrequent inundation/Lower salinity	<i>Sarcornia</i> spp. and <i>Tecticornia</i> spp. Shrubland
093b	Medium	NA 9.2 – Low Woodlands on Coastal Dunes and Shell Grit Ridges	<i>Myoporum insulare</i> and <i>Olearia axillaris</i> Shrubland +/- <i>Tecticornia</i> spp.
095	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> Open Mallee over <i>Senna</i> spp.
097	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus oleosa</i> Mallee over <i>Eremophila longifolia</i>
098	Low to Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus porosa</i> , <i>E. odorata</i> and <i>E. phenax</i> Mixed Mallee over <i>Acacia ligulata</i> and <i>A. notabilis</i>
099	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus gracilis</i> and <i>E. dumosa</i> Mixed Mallee over <i>Geijera linearifolia</i>
100	Low	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Acacia oswaldii</i> shrubland over chenopod shrubs
101	Medium	NA 5 – Mallee & Woodlands with Open Chenopod and Sclerophyll Shrub understory	<i>Eucalyptus brachycalyx</i> and <i>Eucalyptus gracilis</i> mallee over <i>Geijera linearifolia</i>
102	Medium	NA 7.1 Riparian Woodlands	<i>Eucalyptus camaldulensis</i> Open Woodland over <i>Phragmites australis</i>

9.3 Appendix 3: Map of the NA benchmark communities across the Project Area.

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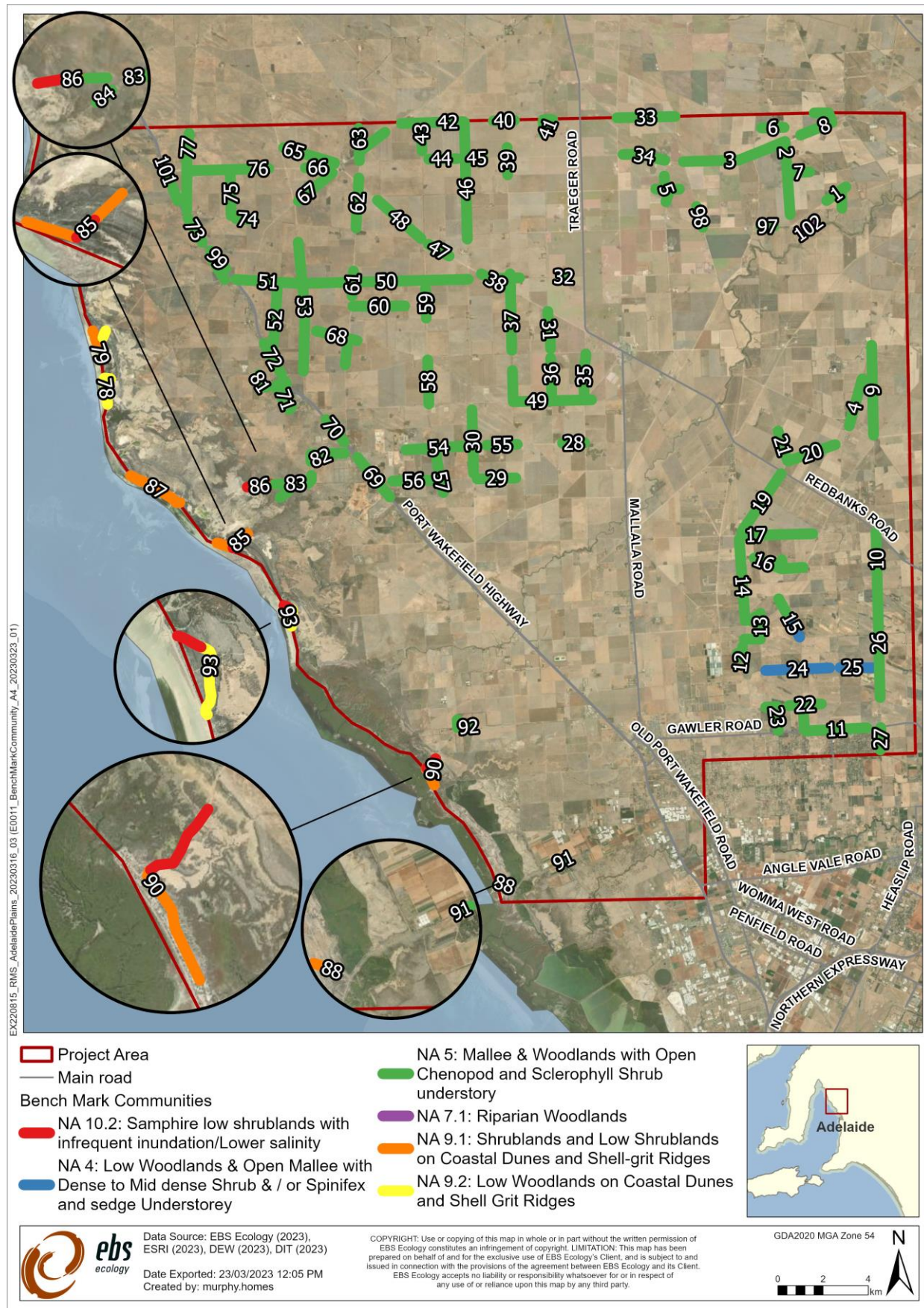


Figure 26. The Northern Agricultural benchmark communities across the Project Area.



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