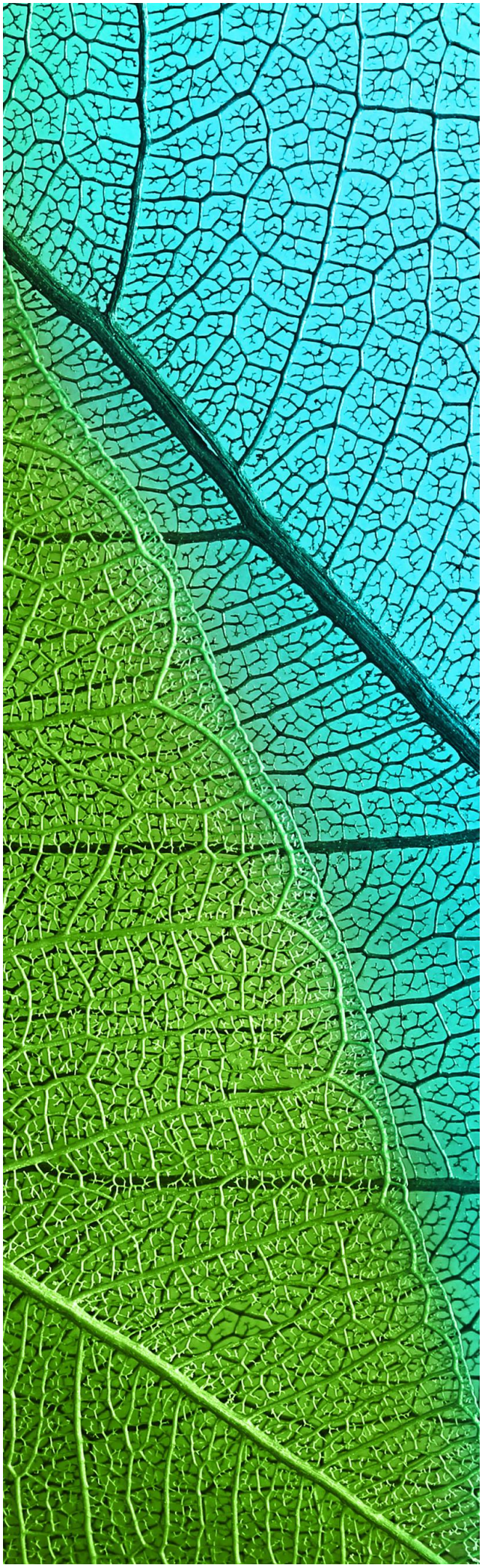

Manzeene Avenue, Lara Warrambeen Offset Site

Offset Monitoring Report

Stage 2 – Year 3
Stage 3 – Year 2

Prepared for Manzeene Avenue Development Project Trust

February 2020
Report No. 11212 (10.1)

Nature Advisory

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1. INTRODUCTION

Manzeene Avenue Development Project Trust Pty Ltd engaged Nature Advisory Pty Ltd (formerly Brett Lane & Associates) to conduct an annual offset monitoring survey of a native vegetation offset site at Warrambeen Estate, Shelford. This area is used as an offset for the permitted native vegetation removal at Manzeene Village, Lara and is subject to an offset monitoring plan prepared by Brett Lane & Associates (BL&A 2015).

Baseline monitoring of the offset site was undertaken in December 2015 for a 30-hectare area used as an offset in three stages. This report focuses on stages 2 and 3 of the offset area.

This investigation was commissioned to collect:

- year-three monitoring data for Stage 2; and
- year-two monitoring data for Stage 3.

It includes the condition of native vegetation, extent of weed cover in the offset site and the adequacy of fencing, grazing and other biomass and weed control regimes. The data will be used in the monitoring and adaptive management of the offset site consistent with the Offset Management Plan (OMP) for this site (BL&A 2015).

Specifically, the scope of the investigation included:

- Estimation of overall weed cover and cover of each high threat [woody] weed species (refer to Table 11 of the OMP);
- Taking photographs at fixed photo point locations;
- Assessment of the integrity of offset zone fencing;
- Assessment of the level of grazing pressure;
- Monitoring of compliance with land-use commitments and other management commitments; and
- Monitoring of the quality of NTGVVP.

This report is divided into the following sections:

Section 2 provides an overview of the characteristics of the study area and describes the sources of information including the background of the project.

Section 3 describes the methods used for the field survey and monitoring.

Section 4 presents the investigation results, describing the vegetation of the study area.

Section 5 discusses the implications of the management plan implementation, analysis of results and recommendations to improve the management process.

This investigation was undertaken by a team from BL&A, comprising Verity Fyfe (Botanist) and Inga Kulik (Senior Ecologist & Project Manager).

2. SITE DESCRIPTION AND BACKGROUND

2.1. Site Description

Stage 2 (11.6 ha) and Stage 3 (13.5 ha) of the offset site (Figure 1) are located in the northern part of a large property along the Rokewood-Shelford Road, in Shelford. Together with Stage 1 of the offset site, they form a 30-hectare area set aside for offsets regarding Manzeene Avenue in Lara, which is encompassed within a 195-hectare paddock.

The offset property is known as Warrambeen Gumley Land Trust and is located approximately 50 kilometres northwest of Geelong. The offset property is bordered by Rokewood Shelford Road to the south, Lonies Road to the east and Gumley Mount Mercer Road to the west. The offset property incorporates livestock (sheep) grazing, and has done so for decades.

Large areas of native grassland exist in the area. The landowner of the offset property has indicated that there are over 500 hectares (including the offset sites) of native grassland within the Warrambeen Gumley Land Trust alone (Landowners, *pers. comm*. 2010).

The offset site is lies within the Victorian Volcanic Plain bioregion and falls within the Corangamite catchment.

2.2. Background

This project was commissioned by Manzeene Avenue Development Project Trust Pty Ltd to provide annual data for the study area, which is being used for native vegetation offset credits. The native vegetation offset credits are a requirement for the construction of the Manzeene Village Development at Lara, under the Victorian *Biodiversity assessment guidelines* (DEPI 2013) and *Environment Protection and Biodiversity Conservation* (EPBC) *Act 1999*. The offset monitoring includes assessment against the requirements detailed by the offset management plan produced by Brett Lane & Associates (BL&A 2015).

The offset site within the Warrambeen property is secured as an offset by Manzeene Avenue Development Project Trust Pty Ltd under Section 173 of the *Planning and Environment Act 1987*. The requirement of the Offset Security Agreement between Manzeene Avenue Development Project Trust Pty Ltd, City of Greater Geelong and the Landowners, is to undertake monitoring at the offset site in years 1, 2, 5 and 10.

Offset Management Plan

The following assessments were undertaken in order to gather monitoring data under the offset management plan:

- Flora surveys by a qualified Botanist, documenting the overall vegetation condition and percentage cover of weed species;
- Assessment of mapped vegetation against the criteria for the EPBC Act listed community *Natural Temperate Grasslands of the Victorian Volcanic Plain* (NTGVVP).

The offset management plan outlined the following management actions which need to be undertaken:

- *Pest Plant Control:* Herbaceous weed control to be undertaken regularly throughout the year using spot spraying technique. Focusing on elimination of woody weeds and high threat herbaceous weeds;
- *Pest Animal Control:* Monitor for signs of pest animal activity, taking action where required;

- *Access:* Regularly check integrity of fencing throughout the life of the management plan;
- *Biomass Control:* Strategically graze the study area (in winter if dry), generally spelling in spring/summer to maintain and enhance a herb-rich open ground cover and significant species populations every year. Avoid grazing in any ephemerally wet areas.
- *Monitoring*: Regularly monitor composition and trends of vegetation to assess management effectiveness and guide future management actions. Monitoring will occur in years 1, 2, 5 and 10, with a brief report prepared for years 1 and 2, and a more detailed monitoring report at the end of year five and year 10. This report establishes year two data for the annual monitoring program for Stage 3, and provides year three data for Stage 2.

Methods employed to address the offset management plan requirements are presented in

Table 2 2.

3. METHODS

3.1. Field methodology

Habitat hectare, weed-cover assessments and photo point monitoring was conducted on 22nd November 2019. During this assessment, all stages of the offset area were inspected on foot.

Incidental records of threatened flora species were taken within all vegetation types and landforms whilst undertaking the habitat hectare and weed cover assessments. Specimens requiring identification using laboratory techniques were collected.

Photos were taken in pre-established photo points within Stage 2 and Stage 3. Two additional photo points (373 & 374) were established within the western half of Stage 2. Notes from photo points taken during the current survey are provided below in Table 1. Photos taken in these locations are provided in Appendix 1.

Table 1: Photo point notes

Stage 2		
Pole No.	Photo direction	Notes
364	S	
365	E	
366	N	
363	SE	
362	SW	
367	W	
368	NW	
Stage 3		
Pole No.	Photo direction	Notes
369	S	No pole
370	W	No pole
371	S	No pole
372	N	No pole
373	S	Wooden stake only
374	E	Wooden stake only

3.2. Offset management actions

Nature Advisory have reviewed the offset management plan to ensure that the proposed methods, discussed below, correspond to the requirements of the offset management plans.

The management actions include:

- Access control and fencing;
- Biomass reduction;
- Pest plant control;
- Pest animal control; and
- Protection of significant flora and fauna.

Table 2 details the methods used for the offset site monitoring.

Based on the above methodology, the following surveys were undertaken, discussed in the sections below:

- Habitat hectare assessment (including documentation of the introduced flora species occurring in the offset site); and
- Photography at fixed photo points.

Table 2: Monitoring methods

Monitoring actions	Relevant performance measures (as per OMP)	Monitoring method
Access control and fencing	Maintenance of existing fencing	Visual inspection to determine the condition of the fence
Biomass reduction	Appropriate stock grazing	Discussions with the landowner as to how stock was managed throughout the year (including when the grassland was rested from grazing)
	Maintenance of NTGVVP	Monitoring of vegetation to determined qualification as NTGVVP
Pest plant control	No increase in cover of any weed species	Visual inspection of site and through habitat hectare assessment
	No new weed species introduced	Visual inspection of site and through habitat hectare assessment
Pest animal control	Reduce the number of rabbits	Discussions with landowner as to how pest animals have been controlled
	Identify all rabbit warrens	Visual Inspection

3.2.1. Habitat hectare and weed cover assessment

In Victoria, native vegetation is assessed using the habitat hectare method, which is a DELWP approved vegetation quality assessment method. Native vegetation is currently defined in the Victoria Planning Provisions as 'plants that are indigenous to Victoria, including trees, shrubs, herbs and grasses'. The *Biodiversity assessment guidelines* define native vegetation as belonging to two categories (DEPI 2013):

- Patch; or
- Scattered tree.

The definitions of these categories are provided below, along with the prescribed DELWP methods to assess them.

In Victoria, native vegetation is assessed using the habitat hectare method, which is a vegetation quality assessment method prescribed by the Department of Environment, Land, Water and Planning (DELWP). Native vegetation in Victoria is defined as belonging to two categories (DELWP 2017):

- Patch; or
- Scattered tree.

A description of these is provided below.

Patch

A patch of native vegetation is either:

- An area of vegetation where at least 25 per cent of the total perennial understorey plant cover is native; or
- Any area with three or more native canopy trees[1] where the drip line[2] of each tree touches the drip line of at least one other tree, forming a continuous canopy; or
- Any mapped wetland included in the *Current wetlands map*, available in DELWP systems and tools.

Patch condition is assessed using the habitat hectare method (Parkes *et al*. 2003; DSE 2004) whereby components of the patch (e.g. tree canopy, understorey and ground cover) are assessed against an EVC benchmark. The score effectively measures the percentage resemblance of the vegetation to its original condition.

Scattered tree

A scattered tree is:

- A native canopy tree[2] that does not form part of a patch.

Scattered trees are counted and mapped, the species identified and their circumference at 1.3 m above the ground is recorded.

[1] A native canopy tree is a mature tree (i.e. it is able to flower) that is greater than 3 metres in height and is normally found in the upper layer of the relevant vegetation type.
[2] The drip line is the outermost boundary of a tree canopy (leaves and/or branches) where the water drips on to the ground.

3.2.2. Photography at photo points

Photographs were taken at photo monitoring points (see Figure 1) to get a representation of the vegetation types and condition within the study area. Photos were taken at pre-established photo monitoring points within Stage 2 and Stage 3. Two additional photo points were established within Stage 3 (373 & 374). All photo monitoring points within Stage 3 need to be marked with permanent posts, as was done for Stages 1 & 2.

3.3. Limitations of field assessment

The temporally constrained nature of the field assessments can result in a failure to record all species and life-forms because of the seasonal absence of some species. This investigation was designed to provide an indicative assessment of site condition, rather than an exhaustive inventory of species in the study area.

The survey was undertaken in Spring, which is adequate to assess most of the features of this community.

4. ASSESSMENT RESULTS

4.1. Habitat hectare assessment

4.1.1. Habitat hectares

Evidence on site, including floristic composition and soil characteristics, suggested that *Heavier-soils* Plains Grassland Heavier Soils (EVC 132_61) was present within the study area (Figure 1).

***Heavier-soils* Plains Grassland (EVC 132_61)** is described in the benchmark as "treeless vegetation mostly less than 1 m tall dominated by largely graminoid and herb life forms. Occupies fertile cracking basalt soils prone to seasonal waterlogging in areas receiving at least 500 mm annual rainfall" (see Appendix 3).

One remnant patch referred to herein as Offset Zone Stages 2 & 3 (see Figure 1) comprising the abovementioned EVC is pertinent to this report (Table 3).

Table 3: Description of offset zone

Offset Zone	Bioregion	EVC	Description
Stage 1	VVP	*Heavier-soils* Plains Grassland (EVC 132_61) NTGVVP	A continuous portion of a larger, high-quality native grassland that was dominated by a number of indigenous grasses and herbs. Tussock grasses, Wallaby grasses, Kangaroo grass and Spear grass species were co-dominant across the area, with native herbs such as Scaly Buttons, Blue Devil, and Poison Lobelia common and widespread throughout the entire site. Two small shrubs of Spiny Rice-flower, was also found onsite. Recruitment was very low, with moderately high leaf litter presence. The area was gently undulating, with a number of basalt rocky rises. Introduced species were present, with Wild Oat, and Soft Brome providing the highest cover.
Stage 2	VVP	*Heavier-soils* Plains Grassland (EVC 132_61) NTGVVP	The site description and species composition were much the same as Stage 1, though, Spiny Rice-flower was not noted. Higher weed cover and high leaf litter was present at this site.

Offset Zone	Bioregion	EVC	Description
Stage 3	VVP	*Heavier-soils* Plains Grassland (EVC 132_61) NTGVVP	A continuous portion of a larger, high-quality native grassland that was dominated by indigenous grasses. Tussock grasses, wallaby grasses, Kangaroo Grass and spear grasses were co-dominant across the area, with native herbs such as Scaly Buttons, Blue Devil and Lemon Beauty Heads common across the site. Recruitment opportunities were relatively low, with high leaf litter presence. The area was gently undulating with a number of basalt rocky rises. Introduced species were more abundant here than the other stages, with Oat, Soft Brome, Spear Thistle and Quaking Grass providing the highest levels of cover.

The habitat hectare assessment results for this habitat zone are provided below in Table 4. More detailed habitat scoring results are presented in Appendix 2. The habitat scores for the current assessment – 67 for Stage 2 and 52 for Stage 3 – were notably higher than for the February assessment – 48 for both stages. Despite an observed increase in the overall diversity of indigenous species (due to the different timing of the assessments), this contrast is mostly attributed to a difference in the landscape context score, which was found to be underestimated for the previous assessment.

Table 4: Summary of habitat hectare assessment results

Offset Zone	EVC	Area (ha)	Habitat Score (out of 100)
Stage 2	*Heavier-soils* Plains Grassland (EVC 132_61)	11.6	67
Stage 3	*Heavier-soils* Plains Grassland (EVC 132_61)	13.5	52

4.1.2. Threatened species

Targeted surveys for threatened species were not included in this monitoring plan. Nonetheless, two state-listed threatened flora species have been incidentally encountered and recorded during offset site monitoring. One Small Milkwort was recorded in Stage 1 in February 2019 and numerous Small Scurf-pea have been recorded throughout the offset site since 2017, forming large matts in association with rock outcropping. Small Milkwort is listed as threatened under the FFG Act and as vulnerable on the DELWP Advisory list, while Small Scurf-pea is listed as threatened under the FFG Act and as endangered on the DELWP Advisory list.

One federally-listed flora species, listed as critically endangered under the EPBC Act, has been recorded during the offset site monitoring; Spiny Rice-flower. Two plants were identified (and their locations recorded with a GPS) within Stage 1 during February 2019.

The analysis within the OMP (BL&A 2015) indicated that the additional listed flora species are likely to occur or have the potential to occur:

- Clover Glycine (EPBC Act: Vulnerable).

This species is yet to be recorded anywhere within the offset site.

4.1.3. Access control and fencing

The fencing was found to be of good quality, and is required to be maintained over the years to retain this standard. A temporary fence stands at the southern extent of the offset site, and a more robust permanent fence is planned for construction (Landholder pers. com. Feb 2019). A fence surrounds the 195-hectare paddock, of which the offset site forms a portion, and no additional fence between different offset parties is required (as per BL&A 2015).

There appeared to be very little impact from vehicle access through the offset site, and people are discouraged from accessing the area unless it is absolutely necessary (Landholder pers. com., Dec 2016).

4.1.4. Biomass reduction

Discussions with the landholder found that the following biomass reduction efforts were undertaken during year 3 management within a portion of Stage 2:

- 2079 ewes (South Woolshed A Flock) grazed the site from 16th May 2019 until 20th May 2019;
- 1824 ewes (South Woolshed A Flock) grazed the site from 7th June 2019 until 14th June 2019; and
- 185 ewes (South Woolshed B Flock) grazed the site from 1st July 2019 until 10th September 2019.

Assessment of the site found that the current grazing pressure at the time of the survey was low, and was having a minimal effect on biomass reduction (Photo 1).

Photo 1: High biomass observed throughout the offset site

4.1.5. Pest animal monitoring

No evidence of the presence of European Rabbit was detected at the offset site, however rabbits were recorded on the property to and from the site.

4.1.6. Pest plant monitoring

Weed species currently contribute to approximately 43% of the vegetative cover in the offset site, compared with approximately 30% at the time of the February 2019 assessment. Under the offset plan (BL&A 2015), to achieve site gain all weeds are required to be controlled such that their covers do not increase beyond original levels. In addition to this, there are obligations for land managers under the *Catchment and Land Protection Act 1994* with respect to eradicating regionally prohibited weeds and preventing the growth and spread of regionally controlled weeds. The pest plant species recorded on-site and their percentage cover at the time of the current survey are included in Table 5.

One additional weed species – Serrated Tussock – was recorded at a very low density within the offset site. Serrated Tussock is regarded as a high threat weed.

The most abundant weeds within the offset site were Oat species (14%), Squirrel-tail Fescue (7%), Yorkshire Fog (4%), Soft Brome (4%), Spear Thistle (4%) and Large Quaking-grass (3%). All of these weeds exhibited a notable increase in cover since the February 2019 assessment. To a lesser degree, increased covers of Toowoomba Canary-grass, Onion Grass and Wimmera Rye-grass were also observed.

Evidence of successful spot spraying of Serrated Tussock (Photo 2) and Spear Thistle (Photo 3) was observed.

Despite an overall increase in weed cover within the offset site, the majority of weeds consisted of annual grasses, and the overall quality of the native grassland at the offset site is still considered to be of high quality. The variation in weed cover could also be due to seasonal variation as the last survey was undertaken in late summer (February 2019) and this survey was in Spring (November 2019).

Photo 2: Treated Serrated Tussock

Photo 3: Treated Spear Thistle

Table 5: Pest plant data year three

Common Name	Scientific name	Weed Category	Control under offset plan - Ensure cover does not increase beyond current level	Stage 1 (YR 1) - 2016	Stage 1 (YR 2) & Stage 2 (YR 1) - 2017	Stage 1 (YR 3), Stage 2 (YR 2) & Stage 3 (YR 1) - Feb 2019	Stage 2 (YR 3) - Nov 2019	Stage 3 (YR 2) - Nov 2019
Barley Grass	*Hordeum vulgare*	Low-threat	X	-	<1%	<1%	-	-
Briar Rose	*Rosa rubiginosa*	High-threat woody	X	-	-	1%	<1%	-
Brown-Top Bent	*Agrostis capillaris*	Low-threat	X	-	-	<1%	-	-
Buck's-horn Plantain	*Plantago coronopus*	Low-threat	X	<1%	<1%	<1%	<1%	-
Capeweed	*Arctotheca calendula*	Low-threat	X	<1%	<1%	<1%	<1%	<1%
Clover	*Trifolium* spp.	Low-threat	X	15%	2%	2%	2%	2%
Flatweed	*Hypochaeris radicata*	Low-threat	X	1%	1%	1%	1%	1%
Hair Grass	*Aira* sp.	Low-threat	X	1%	<1%	<1%	<1%	<1%
Large Quaking-grass	*Briza maxima*	High-threat	X	-	<1%	1%	**3%**	**3%**
Lesser Hawkbit	*Leontodon saxatilis*	Low-threat	X	-	-	<1%	-	-
Narrow-leaved Clover	*Trifolium angustifolium* var. *angustifolium*	Low-threat	X	<1%	<1%	<1%	<1%	<1%
Oat	*Avena* spp.	High-threat	X	4%	20%	10%	**12%**	**15%**
Onion Grass	*Romulea rosea*	High-threat	X	-	<1%	<1%	**2%**	**2%**
Prickly Lettuce	*Lactuca serriola*	Low-threat	X	-	-	<1%	-	-
Rough Dog's-tail	*Cynosurus echinatus*	Low-threat	X	<1%	<1%	<1%	<1%	<1%
Rough Sow-thistle	*Sonchus asper s.l.*	Low-threat	X	<1%	<1%	<1%	<1%	-
Saffron Thistle	*Carthamus lanatus*	Low-threat	X	<1%	<1%	<1%	<1%	<1%
Serrated Tussock	*Nassella trichotoma*	High-threat weed	X	-	-	-	**<1%**	**<1%**
Soft Brome	*Bromus hordeaceus*	High-threat weed	X	3%	<1%	<1%	**3%**	**4%**

Common Name	Scientific name	Weed Category	Control under offset plan - Ensure cover does not increase beyond current level	Stage 1 (YR 1) - 2016	Stage 1 (YR 2) & Stage 2 (YR 1) - 2017	Stage 1 (YR 3), Stage 2 (YR 2) & Stage 3 (YR 1) - Feb 2019	Stage 2 (YR 3) - Nov 2019	Stage 3 (YR 2) - Nov 2019
Spear Thistle	*Cirsium vulgare*	High-threat weed	X	<1%	<1%	1%	**3%**	**3%**
Squirrel-tail Fescue	*Vulpia bromoides*	High-threat weed	X	<1%	5%	5%	**6%**	**7%**
Sweet Vernal Grass	*Anthoxanthum odoratum*	Low-threat	X	-	<1%	<1%	-	-
Toowoomba Canary-grass	*Phalaris aquatica*	High-threat	X	-	<1%	<1%	**2%**	**1%**
Wimmera Rye-grass	*Lolium rigidum*	High-threat weed	X	1%	1%	1%	**2%**	**1%**
Wood-sorrel	*Oxalis* sp.	Low-threat	X	<1%	<1%	<1%	-	-
Yorkshire Fog	*Holcus lanatus*	High-threat	X	1%	5%	5%	5%	3%

4.1.7. Qualification as NTGVVP

The entirety of the offset site qualified as *Natural Temperate Grasslands of the Victorian Volcanic Plain* (NTGVVP) at the time of year four survey as it met all the diagnostic features and two of the three condition thresholds from the listing advice (TSSC 2008), as detailed in Table 6.

Table 6: Qualification of offset site at NTGVVP

NTGVVP key diagnostic features (must meet all)	
Quaternary basalt soils within the Victorian Volcanic Plain bioregion.	Yes
At least one of the following grass genera is the dominant native species in the ground layer: Kangaroo-grass, Wallaby-grass, Spear-grass and/or Tussock-grass.	Yes
For a native vegetation remnant >1 hectare in size, the minimum contiguous size of a grassland patch is 0.5 hectare and the density of mature trees within the grassland patch should not exceed 2 trees per hectare.	Yes
NTGVVP condition thresholds (must meet at least one)	
The total perennial tussock cover represented by the native grass genera Kangaroo-grass, Wallaby-grass, Spear-grass and/or Tussock-grass is at least 50%.	Yes
The ground cover of native forbs (wildflowers) is at least 50% of total vegetation cover during spring-summer (September to February).	No
The cover of non-grass weeds is less than 30% of total vegetation cover at any time of the year.	Yes

4.2. Photo points

A comparison of the yearly images from the photo points are shown in Appendix 1. Photo monitoring points were taken within Stage 2 and Stage 3.

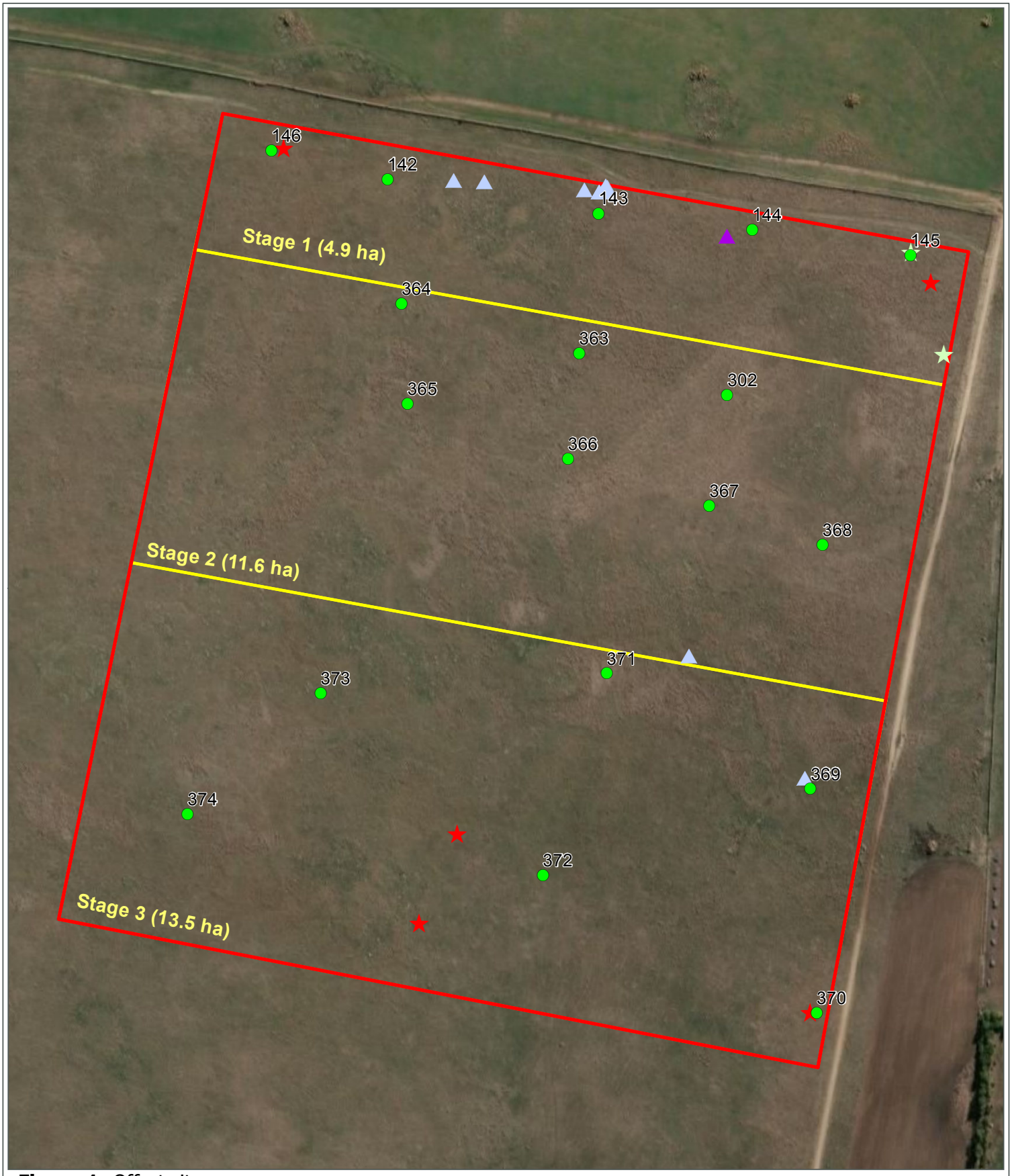

Figure 1: Offset site

Project: Warrambeen Offset Site **Client**: Manzeene Avenue Development Project Trust **Date**: 17/02/2020

Offset site
Offset staging
Photo points

Threatened flora species
Spiny Rice Flower
Small Scurf Pea
Small Milkwort
Briar Rose

N

Metres
0 50

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5. RECOMMENDATIONS

The following measures are recommended to be implemented at the offset site during Year 5 (2020), in addition to existing monitoring, fencing maintenance and pest animal control.

5.1. Biomass management

Grazing is currently still the preferred approach for reducing biomass at the offset site. The offset site has a long history of grazing and the grassland is likely to be somewhat adapted to this kind of disturbance. Grazing is most useful where biomass reduction is primarily required for dominant species which are susceptible to a proportionally higher loss of foliage (than favourable species) (Morgan *et al* 2015), and this is the case at the offset site. Furthermore, grazing may be more favourable to C3 grasses such as some spear grasses which may be susceptible to fire in historically grazed and unburned grassland.

High winter rainfall was experienced in 2019 which facilitated substantial growth of pasture grasses and increased biomass at the site. Even so, the current grazing regime is not having an adequate impact on biomass, and a different grazing regime should be trialled in 2020. Instead of exercising three 'pulse' grazing periods from May – September, Nature Advisory propose exercising two longer grazing periods ending later in the year, such as follows:

- Approximately 1,500 sheep form 1st June – 1st July; and
- Approximately 1,500 sheep from 1st October – 1st November.

This grazing regime may be adapted based on knowledge obtained through ongoing monitoring of the site and the effectiveness of management actions. For example, if it appears grazing is having a minimal effect on biomass then more sheep should be added. On the contrary, if grazing is having an exaggerated and undesirable effect on biomass then the number of sheep may be reduced or grazing ceased until otherwise advised.

5.2. Weed control

The following weeds should be prioritised for control on the site via physical removal or herbicide application:

- Serrated Tussock; and
- Spear Thistle.

Remaining weeds on the site are palatable to stock and it is expected that grazing will lead to a significant reduction of these weeds, especially pasture grasses.

No woody weeds were observed during the current assessment, though Sweet Briar is known to occur on site and any emerging woody weeds must be immediately treated using the 'cut and paint' method of herbicide treatment.

6. REFERENCES

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Appendix 1: Photo-point monitoring photographs

Photo No.	Photograph	Photo direction and date	WP #	Notes
Stage 2				
362		SW 08/02/2019	37° 54’ 13” S 143° 52’ 06” E	EVC: *Heavier Soils* Plains Grassland (132_61)
		SW 22/11/2019		EVC: *Heavier Soils* Plains Grassland (132_61)

Photo No.	Photograph	Photo direction and date	WP #	Notes
363		SE 08/02/2019	37° 54’ 12” S 143° 52’ 01” E	EVC: *Heavier Soils* Plains Grassland (132_61)
		SE 22/11/2019		EVC: *Heavier Soils* Plains Grassland (132_61)
364		S 08/02/2019	37° 54’ 11” S 143° 51’ 56” E	EVC: *Heavier Soils* Plains Grassland (132_61)

Photo No.	Photograph	Photo direction and date	WP #	Notes
365		S 22/11/2019	37° 54’ 14” S 143° 51’ 57” E	EVC: *Heavier Soils* Plains Grassland (132_61)
		E 08/02/2019		EVC: *Heavier Soils* Plains Grassland (132_61)
		E 22/11/2019		EVC: *Heavier Soils* Plains Grassland (132_61)

Photo No.	Photograph	Photo direction and date	WP #	Notes
366		N 08/02/2019	37° 54’ 15” S 143° 52’ 01” E	EVC: *Heavier Soils* Plains Grassland (132_61)
		N 22/11/2019		EVC: *Heavier Soils* Plains Grassland (132_61)
367		W 08/02/2019	37° 54’ 16” S 143° 52’ 05” E	EVC: *Heavier Soils* Plains Grassland (132_61)

Photo No.	Photograph	Photo direction and date	WP #	Notes
368		W 22/11/2019	37° 54' 17" S 143° 52' 09" E	EVC: *Heavier Soils* Plains Grassland (132_61)
		NW 08/02/2019		EVC: *Heavier Soils* Plains Grassland (132_61)
		NW 22/11/2019		EVC: *Heavier Soils* Plains Grassland (132_61)

Photo No.	Photograph	Photo direction and date	WP #	Notes
Stage 3				
369		S 08/02/2019	37° 54’ 22” S 143° 52’ 08” E	EVC: *Heavier Soils* Plains Grassland (132_61)
		S 22/11/2019		EVC: *Heavier Soils* Plains Grassland (132_61)

Photo No.	Photograph	Photo direction and date	WP #	Notes
370		W 08/02/2019	37° 54’ 27” S 143° 52’ 09” E	EVC: *Heavier Soils* Plains Grassland (132_61)
		W 22/11/2019		EVC: *Heavier Soils* Plains Grassland (132_61)
371		S 08/02/2019	37° 54’ 20” S 143° 52’ 03” E	EVC: *Heavier Soils* Plains Grassland (132_61)

Photo No.	Photograph	Photo direction and date	WP #	Notes
372		S 22/11/2019	37° 54' 24" S 143° 52' 01" E	EVC: *Heavier Soils* Plains Grassland (132_61)
		N 08/02/2019		EVC: *Heavier Soils* Plains Grassland (132_61)
		N 22/11/2019		EVC: *Heavier Soils* Plains Grassland (132_61)

Photo No.	Photograph	Photo direction and date	WP #	Notes
373		S 22/11/2019	37° 54' 02" S 143° 51' 59" E	EVC: *Heavier Soils* Plains Grassland (132_61)
374		E 22/11/2019	37° 54' 06" S 143° 51' 57" E	EVC: *Heavier Soils* Plains Grassland (132_61)