

Final Report

# Annual Report (Year 2): Ravenhall Industrial Precinct Offset Site, Victoria

Prepared for

## Dexus C/- Citius Property Development

May 2022



Ecology and Heritage Partners Pty Ltd

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## DECLARATION OF ACCURACY

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I declare that:

1. To the best of my knowledge, all the information contained in, or accompanying this annual report (EPBC 2015/7486: Ravenhall Offset Site: Year Two Annual Report) is complete, current and correct.
2. I am duly authorised to sign this declaration on behalf of the approval holder.
3. I am aware that:
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  - c. The above offences are punishable on conviction by imprisonment, a fine or both.



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**Signed**

Samantha Barron (Consultant Botanist)

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**Full name (please print)**

Ecology and Heritage Partners Pty Ltd.

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**Organisation (please print)**

27/05/2022

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**Date**

## GLOSSARY

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Acronym	Description
AES	Aus Eco Solutions
CMP	Conservation Management Plan
DELWP	Victorian Department of Environment, Land, Water and Planning
DAWE	Commonwealth Department of Agriculture, Water and the Environment
EHP	Ecology and Heritage Partners
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)
NTGVVP	Natural Temperate Grassland of the Victorian Volcanic Plain
PG	Plains Grassland
OMP	Offset Management Plan
SLL	Striped Legless Lizard <i>Delma impar</i>
SRF	Spiny Rice-flower <i>Pimelea spinescens</i> subsp. <i>spinescens</i>
VQA	Vegetation Quality Assessment

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# 1 INTRODUCTION

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## 1.1 Background

Ecology and Heritage Partners Pty Ltd was commissioned by DWPL Nominees Pty Ltd and Dexus Wholesale Management Ltd (herein Dexus) to undertake ecological monitoring and oversee management works for the Ravenhall Industrial Precinct offset site, located at 91-167 Palm Street, Ravenhall, Victoria (Figure 1). This report outlines the results of the Year 2 ecological monitoring and addresses the management, in accordance with the *Conservation Management Plan: Ravenhall Industrial Precinct, Victoria* (CMP) (Ecology and Heritage Partners 2019) and EPBC Approval (EPBC 2015/7486).

The following conditions apply to the EPBC approval (EPBC 2015/7486):

### Condition 2: Construction

2. *In order to protect NTGVVP, SLL and SRF to be retained in the on-site offset:*
  - a. *The approval holder must ensure that no construction activities occur within the on-site offset, excluding activities required in the Conservation Management Plan for the on-site offset.*
  - b. *After the construction phase is complete, the on-site offset must be protected by permanent fencing that restricts vehicle access to the on-site offset.*
  - c. *The approval holder must implement the Construction Environmental Management Plan (CEMP).*

### Condition 3: On-site offsets

3. *To compensate for the loss of up to 18.02 ha of NTGVVP, up to 40.23 ha of SLL habitat, and up to 13 SRF, the approval holder must secure the on-site offset with a covenant prior to commencement of construction. The on-site offset must contain at least 13.37 ha of NTGVVP, at least 28.98 ha of SLL habitat and at least 86 SRF plants.*

To satisfy Condition 3, an on-site offset was established and secured in perpetuity through a Section 69 agreement (VC\_CFL-3086\_01) under the *Conservation, Forest and Lands Act 1978*. A CMP was developed and approved by DoE under the EPBC Act to guide the management, monitoring and auditing works, as per Condition 2. Additionally, parts of the site are used to generate offset credits for impacts to state listed species and communities, as per Condition 51 of Planning Permit PA2013-4050/4 issued by the City of Melton.

**Note:** Following submission of the annual report to DELWP, two Requests for Further Information (RFI) have been received. Appendix 5 and Appendix 6 address the RFIs and should be read concurrently with the main body of this report.

## 1.2 Objectives

The overall objective of the CMP is to protect and improve the quality and extent of native vegetation and significant ecological values present within the offset site, as specified in the landowner agreement (VC\_CFL-3086\_01). This includes the populations of nationally significant species listed under the EPBC Act, Spiny Rice-

flower *Pimelea spinescens* subsp. *spinescens* and Striped Legless Lizard *Delma impar*, as well as the threatened ecological community, *Natural Temperate Grassland of the Victorian Volcanic Plain*.

### 1.3 Offset Site Security

Condition 3 of the EPBC Act approval specifies that the land identified as the on-site offset in approval 2015/7486 adjacent to the clearing site must be protected in perpetuity to compensate for impacts to the nationally significant ecological community NTGVVP, SRF and SLL using a conservation covenant. A Section 69 Agreement was entered under the *Conservation, Forests and Lands Act 1987* between DWPL Nominees Pty Ltd and Dexus Wholesale Management as the landowners and DELWP (title secured and registered 28 November 2019).



## 2 MONITORING METHODS

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Baseline data to determine the condition and extent of Plains Grassland (PG) and NTGVVP, as well as the current population status of SLL and SRF within the offset site was undertaken on the 14 June 2019 to inform the EPBC Conservation Management Plan (Ecology and Heritage Partners 2019) and section 69 Management Plan. Ecological monitoring is undertaken annually until the quality conditions outlined within the CMP are met.

Ecological monitoring in Year 2 was undertaken to monitor the quality and extent of PG and NTGVVP, as well as the population status of residing SLL and the retained SRF populations within the offset site. The following section outlines the methods used to undertake the monitoring in Year 2, in accordance with the CMP (Ecology and Heritage Partners 2019) and Section 69 Agreement and EPBC Approval (EPBC 2015/7486).

### 2.1 Native Vegetation Monitoring

The following methods have been undertaken in accordance with the CMP (Ecology and Heritage Partners 2019) and associated federal policy documents, *Nationally Threatened Ecological Communities of the Victorian Volcanic Plain: Natural Temperate Grassland & Grassy Eucalypt Woodland* (Commonwealth of Australia 2011a) and *Commonwealth Listing Advice on Natural Temperate Grassland of the Victorian Volcanic Plain* (Threatened Species Scientific Committee 2008):

- To assess changes in quality and extent of PG and NTGVVP, the following monitoring was undertaken:
  - The extent of PG and NTGVVP was mapped and a Habitat Hectare assessment (as per the *Vegetation Quality Assessment Manual: Guidelines for applying the habitat hectares scoring method* (DSE 2004) was undertaken to determine the overall quality (i.e. condition); and,
  - Photo point (see Figure 4) monitoring was undertaken at photo points established in Year 1, which were placed in areas of native vegetation and predominantly weeds:
- An assessment of suitable habitat (i.e. extent, quality and structure) for SLL and SRF was undertaken to determine the effectiveness of management for the existing populations;
- Weed Monitoring to determine the effectiveness of management:
  - Broad weed mapping to record the overall cover, extent and composition (i.e. herbaceous, grassy, woody) of weeds within the offset site; and,
  - The cover and extent of all high threat weeds, as per the CMP, was mapped and recorded.

## 2.2 Spiny Rice-flower Monitoring

The following methods have been undertaken in accordance with the CMP (Ecology and Heritage Partners 2019) and the survey guidelines outlined within *the Significant impact guidelines for the critically endangered Spiny Rice-flower (Pimelea spinescens subsp. spinescens)* (DEWHA 2009):

- Monitoring was completed by suitably qualified botanists (i.e. botanists with prior survey experience);
- Multiple surveys were undertaken to ensure the survey effort was adequate;
- Monitoring was conducted at least six months post fire;
- Monitoring was conducted between April and August when the species is flowering;
- Survey effort included all potential habitat areas i.e. remnant grassland including degraded grassland;
- Transects at less than 5 metre intervals were undertaken in all areas of potential habitat;
- The number and location of all plants were recorded and individually marked with a stake and GPS coordinates; and,
- A broad assessment of the vegetation condition within the site was also recorded.

Spiny Rice-flower monitoring will be undertaken annually for the first four years, and then every second year (i.e. years 6, 8 and 10), as per the CMP (Ecology and Heritage Partners 2019).

## 2.3 Striped Legless Lizard Monitoring

The following methods have been undertaken in accordance with the CMP (Ecology and Heritage Partners 2019) and the *Survey guidelines for Australia's threatened reptiles: Guidelines for detecting reptiles listed as threatened under the EPBC Act* (Commonwealth of Australia 2011b):

- 10 tile grids (10 x 5 tiles per grid) were established in March 2020 (Figure 3);
- Tiles were established in areas of suitable habitat (i.e. tussock grassland or grassy habitat) at least three months before the survey period to allow 'bedding-in';
- Tiles were checked a minimum of eight times between September and December under suitable conditions (early morning on warm, still days);
- Time of survey, weather conditions and the ambient temperature will be recorded for each grid; and,
- Morphological data including sex, body size and reproductive condition will be recorded for all individuals captured, as well as dorsal head shots for unique identification purposes.

Striped Legless Lizard monitoring will be undertaken annually for the first four years, and then every second year (i.e. years 6, 8 and 10), as per the CMP (Ecology and Heritage Partners 2019).

## 3 MONITORING RESULTS

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### 3.1 Native Vegetation Monitoring

Baseline data collection to determine the current condition and extent of native vegetation within the offset site was undertaken on 14 June 2019. The baseline data informed the EPBC Conservation Management Plan objectives and section 69 Management Plan associated with the offset site.

In Year 2, detailed vegetation monitoring was undertaken on 8 April 2021 and 1 November 2021 (Figure 2), by a suitably qualified Botanist. As per the Year 1 monitoring (undertaken August 2020), a habitat hectare assessment was undertaken to assess any changes in the vegetation quality and/or extent.

A description of the current condition and extent of native vegetation is provided below. Habitat hectare scores for vegetation are provided in Appendix 1.2.

In Year 2, there were minor changes to the both the extent and quality of native vegetation, specifically Plains Grassland and NTGVVP. The changes in quality are largely attributed to a reduction in recruitment space (i.e. bare ground and bryophyte/lichens and soil crust) due to increased biomass (moderate to high in all patches of PG) from native and introduced grasses (typically annual pasture grasses). Consequently, inter-tussock spacing is reduced to less than 20cm in most areas and healthy spacing is now largely restricted to access tracks routinely used throughout the offset site. Patches of PG/NTGVVP are still dominated by Wallaby Grass *Rytidosperma* spp., with smaller drifts of Spear Grass *Austrostipa* spp., and Kangaroo Grass *Themeda triandra* (Plate 1; Plate 2).

Introduced weeds, including high threat species, are still common throughout the offset site. Serrated Tussock *Nassella trichotoma* has been actively controlled throughout Year 1, however the species is still present across the site, with approximately 10-20% cover.

Additionally, many weeds were observed flowering and setting seed during the Year 2 vegetation monitoring (Plate 3; Plate 4). Other high threat weeds observed during the monitoring include Cane Needle-grass *Nassella hyalina*, Chilean Needle-grass *Nassella neesiana* (prevalent in the western section), Artichoke Thistle *Cynara cardunculus* subsp. *flavescens*, Galenia *Aizoon pubescens*, Patterson's Curse *Echium plantagineum* and African Box-thorn *Lycium ferocissimum*. All high threat weeds have been actively controlled throughout the offset site; despite this, many have been allowed to set seed in Year 2. Further, African Box-thorn is mostly controlled across the site but continues to re-sprout.

Weed cover throughout the offset site is yet to reach the Year 10 cover thresholds outlined in the Conservation Management Plan. Year 3 management should focus on controlling all high threat weeds to reduce the cover to <1% throughout the site and controlling all other weeds to <5% cover.

Photos were captured at each of the nine photo points within the offset site, with the locations shown on Figure 4 and photos presented in Appendix 2.



**Plate 1.** Native grasses in PG intermixed with exotic pasture grasses (PG3a on Figure 2) (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate 2.** Wallaby Grass dominated PG (PG1 on Figure 2) (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate 3.** Dead/dying Serrated Tussock that has been actively controlled (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate 4.** Serrated Tussock that is setting seed in Year 2 (Ecology and Heritage Partners Pty Ltd 01/11/2021).

### 3.1.1 Impacted Vegetation

During Year 2, a section of the perimeter fence on the northern boundary was upgraded, and a new fence was installed. During these works, impacts to native vegetation has occurred within two areas (Figure 2). A site inspection was undertaken by Ecology and Heritage Partners 2021 to determine the extent of the impacts to native vegetation within the offset site. Ecology and Heritage Partners observed stockpiles and unauthorised vehicles within the offset site, resulting in temporary damage to 0.217 hectares of native vegetation (Plains Grassy Wetland and Plains Grassland) and Striped Legless Lizard habitat, and six Spiny Rice-flower plants (Plate 5; Plate 6).

Following the site inspection, a letter was prepared and submitted to DAWE. The letter outlined the impact details and proposed remediation. Following the removal of the stockpile/s from the offset site, rehabilitation of the site was proposed to be undertaken. Proposed rehabilitation included broadcast seeding of approximately 15 kilograms of Kangaroo Grass, Wallaby-grass, Spear-grass, and Tussock-grasses *Poa* spp. As of May 2022, no supplementary planting and/or broadcast seeding has been undertaken. However, targeted weed control was undertaken to encourage the reestablishment of native vegetation.

Since the impacts, a reduction of both quality and extent of Plains Grassy Wetland (PGWe1 and PG3a on Figure 2) within the offset site (Plate 7). While PGWe1 still meets the 25% cover threshold to be considered a patch, it is now considered to be marginal. PGWe1 is now dominated by introduced grasses and native grasses associated with neighbouring PG (Plate 8). Given the seasonal nature of this community, the extent and condition of both native vegetation and weeds are likely to change annually, however remediation works should be undertaken to improve the quality and extent of PGWe1. Additionally, vehicles should not be driven through sensitive wetland vegetation within the offset site.



**Plate 5.** Impacted PG3a and SLL habitat from machinery. Stakes in foreground represent proximity to unimpacted Spiny Rice-flower plants (Ecology and Heritage Partners Pty Ltd 2021).



**Plate 6.** Impacted PG3a and Striped Legless Lizard habitat (Ecology and Heritage Partners Pty Ltd 2021).



**Plate 7.** Impacted PGWe1, now dominated by exotic annual grasses (Ecology and Heritage Partners Pty Ltd 2021).



**Plate 8.** Impacted PGWe1 and adjacent PG and SLL/SRF habitat (Ecology and Heritage Partners Pty Ltd 2021).

### 3.1.2 Ecological Burn

An Ecological Burn was undertaken by Aus Eco Solutions in Autumn 2021. The Ecological Burn reduced the overall cover of biomass within the eastern section of the reserve. Following the burn, native species established quickly, with a good cover of Wallaby Grass noted in the Aus Eco Solutions *Ravenhall Grassland Offset – Final Report 2021* (Aus Eco Solutions 2021). Native herbs were also prevalent post-fire; common species included, Lemon Beauty-heads *Calocephalus citreus*, Bidgee-widgee *Acaena novae-zelandiae*, Common Woodruff *Asperula conferta*, and Narrow Plantain *Plantago gaudichaudii* (see Aus Eco Solutions 2021 for post-fire pictures).

## 3.2 Spiny Rice-flower Monitoring

Monitoring was undertaken during the species flowering period, by suitably qualified botanists on 5, 10, 17, and 24 May 2021. Identified individuals were marked with a GPS and staked for future monitoring (Plate 9; Plate 10).

In year 2, an additional 20 SRF plants were recorded within the offset area (70 in Year 1 and 90 in Year 2). The majority of SRF observed contained flowering material and appeared in good health (Plate 9; Plate 10). Several plants previously recorded in Year 1 could not be located (Figure 2).

Overall, the Year 2 monitoring event confirmed the presence of a large population of SRF within and directly adjacent to the offset site. It is anticipated that the population will increase as the cover of weeds is reduced, and biomass is reduced across the site, improving the habitat across the site and making detectability of SRF easier as the management actions are implemented. New individuals were located, and the location of previously mapped individuals were confirmed and staked. Some of the previously located individuals were not able to be relocated (see Figure 2).

High threat weeds such as Serrated Tussock, Chilean Needle-grass, Artichoke Thistle and Galenia have the potential to out-compete or smother translocated Spiny Rice-flower plants and prevent recruitment. Importantly, native grasses with high biomass (due to a lack of episodic disturbance such as fire), including

Kangaroo-grass can also out-compete Spiny Rice-flower plants. Ongoing targeted weed control, including hand weeding around SRF, and biomass removal through ecological burns will mitigate these threats to SRF plants.



**Plate 9.** Spiny Rice-flower within Kangaroo Grass within the offset area (Ecology and Heritage Partners 23/06/2021).



**Plate 10.** Staked flowering Spiny Rice-flower within the offset area (Ecology and Heritage Partners 23/06/2021).

### 3.3 Striped Legless Lizard monitoring

Striped Legless Lizard monitoring was undertaken on the 8 and 17 October 2021, 18 and 25 November 2021, and 2 and 10 December 2021 by qualified Zoologists. At the time of preparing this annual offset report, six surveys had been completed, with the final two scheduled for December 2021. The results of the final two surveys will be incorporated into the Year 3 Annual Report.

In Year 2, there has been a slight increase in the number of SLL found compared with Year 1, with 21 and 24 individuals recorded, respectively. These results compare the first five SLL surveys and do not include the last three surveys undertaken in Year 1. A comparison summary of all surveys for Year 1 and 2 will be presented in the Year 3 Annual Report.

In addition to the increase in SLL found using the site, there was an increase in other species within the offset site. In Year 1, two Eastern Blue Tongue lizards *Tiliqua scincoides* were recorded, while in Year 2 55 individuals were recorded. Further, only one Little Whip Snake *Suta flagellum* was recorded in Year 1 compared with 21 in Year 2. Several Tiger Snakes *Notechis scutatus* were also recorded in Year 2.

The increase in diversity and the number of individuals may be attributed to an increase in the quality of vegetation and suitable habitat within the offset site. Additionally, pressure from increasing infrastructure development in the surrounding land may also cause individuals to move into the offset site. Nevertheless, the overall increase indicates a stable population of SLL and other reptiles within the offset site, indicating that management is suitable and effective.



**Plate 11.** Headshot of SLL found within Tile Grid 1 (check 1) within the offset area (Ecology and Heritage Partners Pty Ltd 08/10/2021).



**Plate 12.** Healthy SLL found during check 1 within the offset area (Ecology and Heritage Partners Pty Ltd 08/10/2021).



**Plate 13.** Healthy SLL found during check 1 within the offset area (Ecology and Heritage Partners Pty Ltd 08/11/2021).



**Plate 14.** Gravid female SLL recorded during check six within the offset area (Ecology and Heritage Partners Pty Ltd 10/12/2021).



**Table 1.** Summary of survey results from Striped Legless Lizard surveys (Year 2).

Date	Observer	Time	Avg Air Temp °C	Avg Cloud Cover (avg)	Avg Wind Direction and Spd	Avg Above Tile Temp °C	Avg Under Tile Temp °C	Observations & Tile Grid No.									
								1	2	3	4	5	6	7	8	9	10
8/10/2020	MJ, SP, CM	9:50 – 12:21	15.74	10	17.5km (NW)	25.5	15.5	LWS X1	LWS X1	EBT X1	SLL X1	LWS X2	EBT X2; LWS X2	-	EBT X8	EBT X7; SLL X2	SLL X4; LWS X1
17/10/2021	SP & CM	9:17 – 12:44	14.3	95	7.6 (NW)	17.2	12.9	LWS X1; EBT X2	LWS X1	EBT X1	-	LWS X1	LWS X1; EBT X2	TS X1	EBT X5	SLL X2; EBT X2	SLL X4
18/11/2021	SP & CM	12:05 – 2:37	16.5	80	17.9 (S)	26.8	20.2	LWS X1	LWS X1	EBT X1	-	-	EBT X1	SLL X1; EBT X1; LWS X2	SLL X1; EBT X2	EBT X5	SLL X1
25/10/2021	SP & CM	9:25 – 12:39	12.4	88	22 (S)	18.2	14.6	EBT X3	LWS X1	-	-	EBT X1	SLL X1	TS X1; LWS X1	EBT X1	SLL X2; EBT X1	SLL X3
2/12/2021	SP & CM	7:50 – 10:48	26	16	13.5 (NNE)	29.6	24.1	-	-	SLL X1	-	-	EBT X2	LWS X1; EBT X1; TS X1	-	EBT X2; SLL X2	-
10/12/2021	SP & CM	9:17 – 11:45	15.7	80	25.9	26.4	19.3	LWS X1; EBT X2	-	SLL X1	-	-	-	EBT X2	SLL X2	EBT X3	SLL X1

**Note:** avg = average; EBT = Eastern Blue Tongue; LWS = Little Whip Snake; TS = Tiger Snake; SLL = Striped Legless Lizard.

### 3.4 Management Action Plan

**Table 2.** Assessment of completed/required actions in Year 2.

Management Action Description	Year action required	Target	Action completed	Year/Date action completed	Additional comments	Action required in Year 3
<b>SECURE OFFSET</b>	Prior to Year 1	-	Section 69 Agreement - title secured and registered 28 November 2019	2019	-	-
<b>FENCING</b>	Year 1	Erect fencing to DELWP fencing standards Management Standards for native vegetation offset sites (DELWP 2018). Ensure fence is rabbit proof.	Site was fenced with Temporary Fencing prior to the installation of permanent fencing.	2020/2021	Delayed by Covid-19.	-
<b>WEED CONTROL</b>	Annually	See CMP for targets.	Weed control is ongoing. Year 10 targets have not been met. See Section 3.1 and Appendix 4 for details.	Year 1 and 2.	Weeds have been substantially reduced, however targeted management is ongoing and required.	Continue working towards targeted outlined in the CMP.
<b>CONTROL HIGH THREAT WEEDS</b>	Annually	See CMP for targets.	Weed control is ongoing. Targets have not been met. See Section 3.1 and Appendix 4 for details.	Year 1 and 2.	Weeds have been substantially reduced, however targeted management is ongoing and required.	Continue working towards targeted outlined in the CMP.
<b>PEST ANIMALS</b>	Annually	No surface disturbance within the offset site. No active rabbit warrens to be present.	African Box-thorn was removed to reduce rabbit harbour.	Year 1 and 2.	Aus Eco Solutions noted that rock piles continue to support rabbit populations (Appendix 4).	Undertake pest animal control within rock piles, remove re-sprouting African Box-thorn and

Management Action Description	Year action required	Target	Action completed	Year/Date action completed	Additional comments	Action required in Year 3
		<p>No active fox dens to be present.</p> <p>No rubbish.</p> <p>Minimal artificial piles of logs and rocks.</p> <p>Control numbers of rabbits and foxes.</p> <p>Control numbers of any new and emerging pest animals</p>				other pest animal harbour.
<b>BIOMASS MANAGEMENT</b>	Year 2	<p>Approximately 20% to 40% cover of bare ground is required for optimal habitat conditions for Spiny Rice-flower and Striped Legless Lizard. See Year 1 annual report for Ecological Burn requirements.</p>	<p>An Ecological Burn was undertaken in Year 2 by Aus Eco Solutions within the eastern section of the reserve.</p>	Autumn - Year 2.	<p>See section 3.1.1 and Appendix 5 <i>Ravenhall Spring Ecological Burn Plan 2020</i> (Aus Eco Solutions 2020) for details.</p>	<p>Undertake Ecological Burn to reduce biomass/control weeds. Ensure pre- and post-burn targeted weed control is undertaken.</p>
<b>ANNUAL REPORT</b>	Year 2	<p>Prepare and submit annual progress report.</p>	<p>Report prepared and submitted.</p>	December 2021	-	<p>Prepare and submit annual progress report.</p>

## 4 CONCLUSION AND RECOMENDATIONS

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The Year 2 monitoring has shown that there continues to be an increase in the quality and extent of native vegetation, particularly PG and NTGVVP and associated suitable habitat for SLL and SRF.

To reduce the overall cover, extent and spread of high threat weeds, Aus Eco Solutions have undertaken targeted weed control within the periphery of larger patches (i.e. to prevent spread) and have focused efforts on areas where weeds are becoming established (i.e. small isolated patches or individual plants). Ongoing weed control will ensure that the spread of weeds is limited, and the extent and cover is reduced annually.

Although targeted weed control has been undertaken, an increase in rainfall throughout Year 2 has resulted in an increase in weed growth (i.e. biomass accumulation) and potentially increased seed set. Consequently, Year 3 management will focus on preventing any new emerging patches and reducing biomass by undertaking an ecological burn within the western section of the offset site.

Year 2 vegetation monitoring highlighted the reduction in both quality and extent of native vegetation impacted by fencing works (PGWe1 on Figure 2). Currently, PGWe1 is considered marginal vegetation; indicating that the cover of native vegetation is low and if remediation works are not undertaken the vegetation will no longer meet the 25% cover threshold to be considered patch vegetation. Follow up works should be undertaken (i.e. targeted weed control, supplementary planting/broadcast seeding) within areas impacted by fencing works to improve the quality of native vegetation. Further, vehicles should not be driven within sensitive wetland vegetation.

Based on the works undertaken to date, no alterations to the existing Conservation Management Plan or Management Plan incorporated in the section 69 agreement are considered necessary and will continue to be reviewed as the project continues.

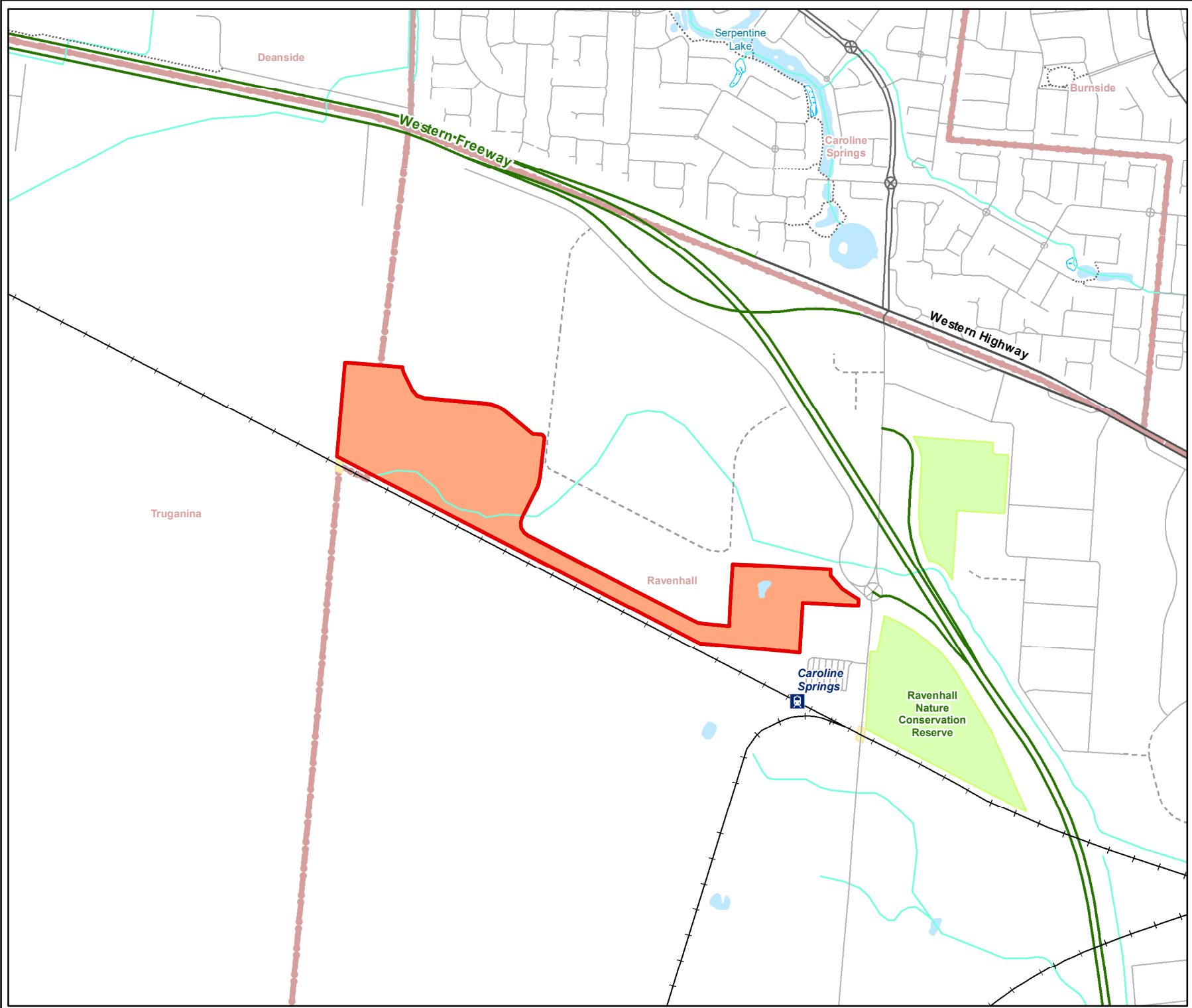
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## FIGURES

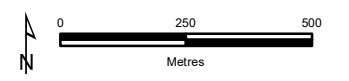
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- Legend**
- Study Area
  - Railway
  - Freeway
  - Major Road
  - Collector Road
  - Minor Road
  - Proposed Road
  - Walking Track
  - Minor Watercourse
  - Permanent Waterbody
  - Wetland/Swamp
  - Parks and Reserves
  - Crown Land
  - Localities



**Figure 1**  
**Location of the study area**  
*Ravenhall Industrial Precinct*  
*On-site Offset Reserve*



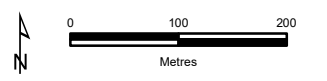
VicMap Data: The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

14716\_Fig01\_StudyArea 8/12/2021 psorensen



- Legend**
- Study Area
  - Property boundary
  - Internal 6m buffer
  - Ecological burn
  - Impacted area
  - ▲ Spiny Rice-flower (2021 survey)
  - ▲ Spiny Rice-flower (2020 survey)
  - ▲ Spiny Rice-flower
  - Striped Legless Lizard habitat
  - EPBC Act listed community**
  - Natural Temperate Grassland of the Victorian Volcanic Plain
  - Ecological Vegetation Class**
  - Plains Grassland

**Figure 2**  
**Ecological features**  
 Ravenhall Industrial Precinct  
 On-site Offset Reserve



VicMap Data: The State of Victoria does not warrant the accuracy or completeness of information in this publication and any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

14716 Fig02 EcoFeat\_SRF 24/05/2022 Melsley



## APPENDICES

### Appendix 1. Habitat Hectare Assessment

**Table A1.1.** Habitat hectare assessment for Year 2.

Management Zone		2B, 2C, 2E	2I, 3A, 3C	2D, 3B	2H
Vegetation Zone		PG <sub>1</sub>	PG <sub>2</sub>	PG <sub>3</sub>	PGWe <sub>1</sub>
Bioregion		VVP	VVP	VVP	VVP
EVC / Tree		PG	PG	PG	PGWe
EVC Number		132_61	132_61	132_61	125
EVC Conservation Status		Endangered	Endangered	Endangered	Endangered
Patch Condition	Large Old Trees /10	NA	NA	NA	NA
	Canopy Cover /5	NA	NA	NA	NA
	Under storey /25	15	10	5	5
	Lack of Weeds /15	7	7	0	2
	Recruitment /10	6	3	3	3
	Organic Matter /5	3	3	2	2
	Logs /5	NA	NA	NA	NA
	Treeless EVC Multiplier	1.36	1.36	1.36	1.36
Subtotal =		42.16	31.28	13.60	16.32
Landscape Value /25		15	15	15	15
Habitat Points /100		57	46	29	31
<b>Habitat Score</b>		<b>0.56</b>	<b>0.45</b>	<b>0.28</b>	<b>0.31</b>

**Note:** PG = Plains Grassland, VVP = Victorian Volcanic Plain, PGWe = Plains Grassy Wetland.

## Appendix 2. Photo Points

### A2.1 Year 2 Photo Points



**Plate A2.1.** Photo point 1 (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate A2.2.** Photo point 2 (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate A2.3.** Photo point 3 (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate A2.4.** Photo point 4 (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate A2.5.** Photo point 5 (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate A2.6.** Photo point 6 (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate A2.7.** Photo point 7 (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate A2.8.** Photo point 8 (Ecology and Heritage Partners Pty Ltd 01/11/2021).



**Plate A2.9.** Photo point 9 (Ecology and Heritage Partners Pty Ltd 01/11/2021).

**Table A2.1.** Photopoint monitoring data (Year 2).

Date	Time	Photo Point ID	Direction	Coordinates (lat/long)
01/11/2021	13:04	1	South	-37.7579, 144.7223
01/11/2021	13:10	2	North	-37.7592, 144.7232
01/11/2021	12:27	3	West	-37.7594, 144.7263
01/11/2021	13:24	4	North	-37.7611, 144.7255
01/11/2021	13:31	5	East	-37.7621, 144.7276
01/11/2021	11:46	6	East	-37.7643, 144.7325
01/11/2021	11:19	7	North East	-37.7646, 144.7343
01/11/2021	10:51	8	South	-37.7628, 144.7347
01/11/2021	10:31	9	East	-37.7636, 144.7363

## **Appendix 3. Ravenhall Grassland Offset Management Actions Report – Year 2 (AES 2021)**



# Ravenhall Grassland Offset - Final Report

2021

Report for Dexus / Ecology & Heritage Partners

PREPARED BY:

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# Ravenhall Offset Final Report 2021

## INTRODUCTION

Control works objectives:

1. Weed control - noxious Nassella species and herbaceous weeds
2. Woody weed control
3. Biomass reduction (Ecological burn of ~7ha)
4. Pest Animal control.
5. Remove rubbish from site
6. Spiny Rice Flower management
7. Challenges

All management activities were guided by the Conservation Management Plan:  
Ravenhall Industrial Precinct 2019 (Ecology and Heritage Partners).

# Ravenhall Offset Mapping

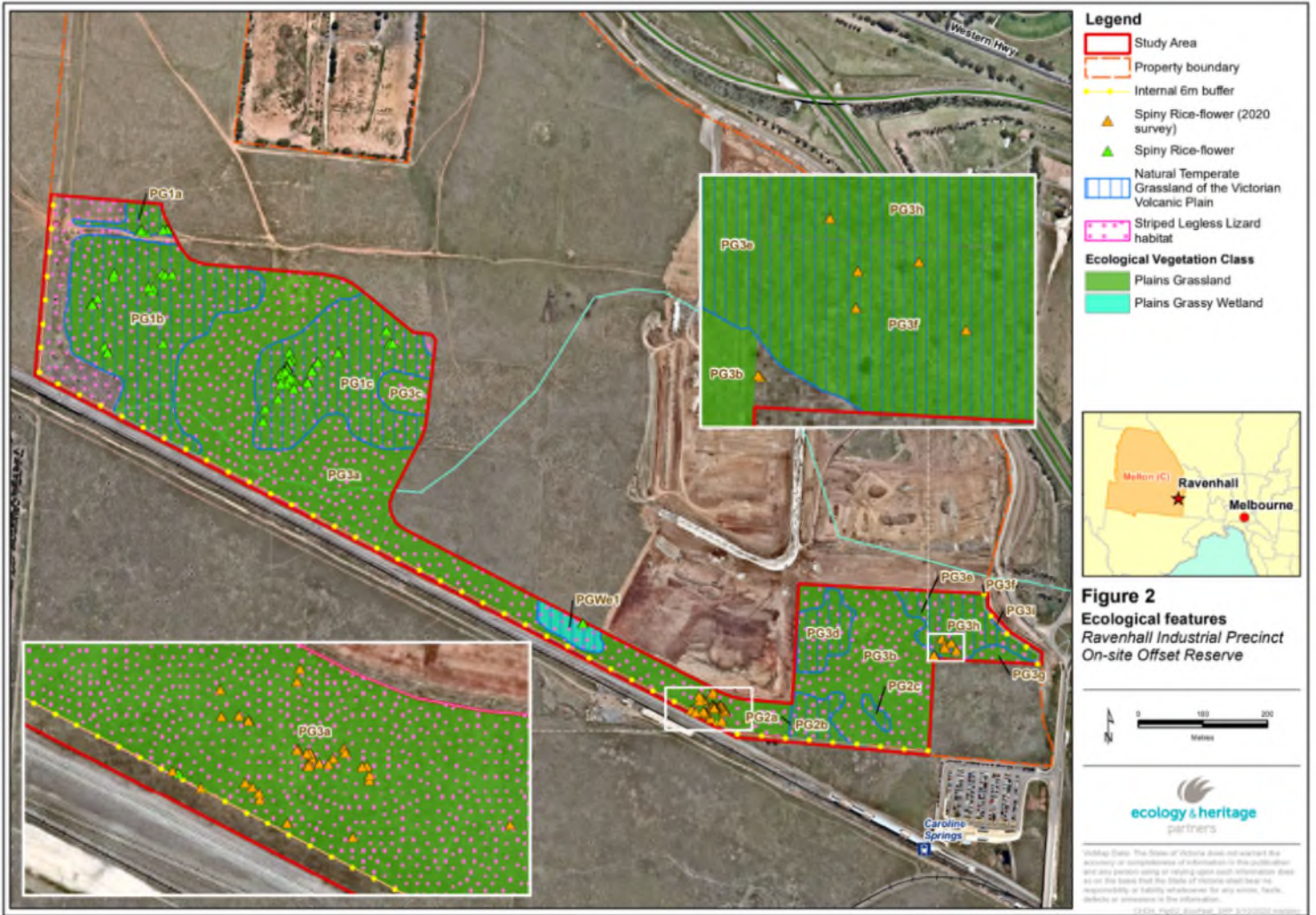


Image 1: Ravenhall Offset site



## 1.1. Site Observations

- The removal of the horses from site has allowed the vegetation to begin growing and establishing themselves much better. Letting the natives seed over Spring will be very beneficial to the site. However the Removal of the horses has allowed for annual grasses in particular to grow beyond there existing boundaries.
- Paterson's Curse control works are becoming more evident with populations reduced by approximately 75%
- Cape Weed has emerged after the ecological burn and will require ongoing control until grasses are established.
- There are some very large patches of Chilean Needle Grass in the western section of the grassland some of these larger patches have been sprayed around the border to prevent spread and any isolated patches have been treated.
- The area that connects the two larger grasslands has had a lot of disturbance caused by fencing contractors resulting in the spread of broadleaf weeds.
- Vehicle tracks through the area that connects the larger grasslands is causing ruts and annual grasses to spread. This disturbance has been caused by restricted access for fencing contractors, consultants and environmental contractors.
- Cane Needle Grass in the Eastern section has been greatly reduced by pre fire spraying.
- Artichoke and Pattersons Curse will continue to be an ongoing issue in the southern area of the Eastern section. Burning is recommended to control weed seed and promote native grasses.

## 1.2 Works Completed

- Serrated Tussock and Chilean Needle Grass have both been controlled through most of the eastern section and large parts of the western section using an active chemical (Glyphosate) and a residual chemical (Flupropanate). Using these two chemicals together assists with killing the adult plant quickly, as well as staying in the soil to prevent these Nassella seeds to grow and develop.
- Artichoke Thistle, Cape Weed and Paterson's Curse have also been treated in patches within these areas, and also in selective patches within the remainder of the offset site.
- The control of annual grasses was undertaken post burn to allow for natives to establish.
- Knapsack spraying around herb rich areas to assist in the spread of native forbs.
- Spraying Nassella Grasses around areas that contain Spiny Rice Flowers using selective grass herbicide resulting in no off target damage to Pimelea's.



Sprayed Serrated Tussock



Sprayed Artichoke Thistle



Annual grass control along fence line preventing spread into burn area








Sprayed serrated Tussock post burn.

The map below shows approximate areas treated.  
 Areas treated for Nassella grasses in yellow have also been treated for broadleaf weeds.

## Ravenhall Spray map

Untitled layer

-  Boundary
-  Nassella Grasses
-  Nassella Grasses
-  Broadleaf Weeds
-  Annual Grasses





**Knapsack  
spaying around  
herb rich areas  
was conducted  
to assist in the  
spread of Native  
Herbs.**

*Calocephalus citreus* and *Acaena novae-zelandiae* growing post burn



*Asperula conferta* growing post burn.



*Plantago gaudi chaudi* growing post burn.

## 2. Woody Weed Control

### 2.1. Site Observations

- Boxthorn is now mostly controlled with a few remaining shrubs growing in the rock pile in the S/W corner of the grasslands. Briar Rose has been treated through the whole site. Monitoring and ongoing control of any emerging weeds will be required.

### 2.2 Works Completed

- Boxthorn control in the more harder to access areas was conducted to reduce pest animal harbour.

## 3. Pest Animal Control

### 3.1. Site Observations

- The large rocks harbor the majority of rabbits within the offset.

### 3.2 Works Complete

- The control of Boxthorn was undertaken to reduce rabbit harbor.



Boxthorn growing on fence line



Treated Boxthorn

## 4. Biomass Reduction (Ecological Burn)

### 4.1. Site Observations

- Biomass in the Eastern side of the grassland is ready to be burnt to assist in inter tussock spacing allowing for native plant diversity.

### 4.2 Works Completed

- The burn plan has been created (V1.0 - V3.0) V1.0 was for Autumn, V3.0 is for Spring.
- All fire preparation was completed.
- Ecological Burn was conducted in Autumn.



Post Burn



Post burn



Post Burn Drone Photo



Regrowth of Wallaby Grass post Burn

## 5. Rubbish Removal

- Rubbish Removal was undertaken in the Eastern section of the grassland. During works around 70 tyres were discovered amongst the grass.

Before:



After:



Before:



After:



## 6. Spiny Rice Flower Management

### 6.1 Site observations

- Spiny Rice Flowers have been located by our team as weed control commenced. The site is home to over 100+ Spiny Rice Flowers, with more and more being found every day. The plants have been staked / flagged accordingly to assist with weed control onsite and to avoid these areas when driving.
- Spiny Rice Flowers have also been recorded outside of the offset site (pictured below) x3 have been found very close to the offset, with potentially many more.
- Spiny Rice Flowers have been found in another area outside of the offset on the S/W boundary 16 plants were found with potentially more. Dianella was also found in this area possibly Arching Flax Lilly.
- The Spiny Rice Flowers growing in the burn area have re-sprouted from root stock and are looking healthy. No new germinants have been recorded after Ecological burn as yet.

### 6.2 Works completed

- This work is completed outside of the project scope, but in interest on the conservation value of the property by Aus Eco Solutions and its employees.
- Hand weeding 2m buffer around Spiny Rice Flowers.



## 7. Challenges

Consistent challenges that the Ravenhall Offset faces include:

- Invasive weed seed from neighboring land (Vline), which spread into the reserve.
- Noxious weed invasion from neighbouring properties
- The large rocks harbour the majority of rabbits within the offset.
- Weed control along disturbed areas after fence installation.
- Access to western section of grassland although this will change once development is complete.
- Annual grass encroachment from disturbed areas.
- Large areas of Chilean Needle Grass in the western section.



Annual grasses encroaching from the boundary.



Vehicle tracks due to restricted access.



## Appendix 4. Addendum to Year 2 Annual Report - DELWP RFI<sub>1</sub> response (VC\_CFL-3086\_01 – Dated 29 January 2022)

A follow-up site inspection was undertaken on the 10 February 2022 by a Vegetation Quality Assessment (VQA) accredited Botanist in response to the RFI received from DELWP. The following addendum addresses each item in detail.

### 4.5 Ongoing Management Issues – impacted vegetation

The area identified in Section 3.1.1 as being temporarily impacted by fencing installation was originally identified as Plains Grassland (zone 2H), as per the Section 69 Agreement (VC\_CFL-3086\_01). This area occupies a natural depression and seasonal changes has resulted in floristic variation that may be associated with both Plains Grassland and Plains Grassy Wetland (EVC 125).

During the site assessment undertaken in November 2021, annual grass cover was generally high, largely due to favourable weather promoting plant growth and reproduction (see Section 3.1.1 for photos), and the area was occupied by native species often found in locations prone to inundation or those with heavier soils, such as Brown-back Wallaby-grass *Rytidosperma duttonianum* and Lesser Loosestrife *Lythrum hyssopifolia*.

During the follow-up assessment in February 2022, annual grasses had completed their life cycle and were no longer contributing to grass cover, allowing the full extent and cover of native vegetation to be more easily identified and mapped. While the area was still occupied by native species typically found in water prone areas, native grasses associated with Plains Grassland dominated and this area now qualifies as PG and NTGVVP, due to the high cover of native grasses, such as Wallaby-grass, Spear-grass and Kangaroo Grass (Plate A4.1 – Plate A4.4). Therefore, based on the condition and extent of native vegetation at the time of the February 2022 follow-up assessment, no native vegetation is considered ‘lost’ within the offset site, despite the fence installation disturbing native vegetation.

Native vegetation across the offset site was also assessed during the follow-up assessment. Several patches have increased in extent and quality, and some vegetation zones have now been combined (Plate A4.5; Plate A4.6) (Figure 2). An updated Habitat Hectare Assessment was undertaken to determine current condition for combined patches (Table A4.1).

**Table A4.1.** Updated Habitat hectare assessment for Year 2.

Management Zone	1a, 1b, 1C	2a, 2b, 2c	3a, 3b, 3c, 3d, 3f - 3i
Vegetation Zone	PG <sub>1</sub>	PG <sub>2</sub>	PG <sub>3</sub>
Bioregion	VVP	VVP	VVP
EVC / Tree	PG	PG	PG
EVC Number	132_61	132_61	132_61
EVC Conservation Status	Endangered	Endangered	Endangered
	Large Old Trees /10	NA	NA
	Canopy Cover /5	NA	NA
	Under storey /25	15	10

Management Zone		1a, 1b, 1C	2a, 2b, 2c	3a, 3b, 3c, 3d, 3f - 3i
Vegetation Zone		PG <sub>1</sub>	PG <sub>2</sub>	PG <sub>3</sub>
Patch Condition	Lack of Weeds /15	9	6	0
	Recruitment /10	6	3	3
	Organic Matter /5	3	3	2
	Logs /5	NA	NA	NA
	Treeless EVC Multiplier	1.36	1.36	1.36
	Subtotal =	44.88	29.92	13.60
Landscape Value /25		15	15	15
Habitat Points /100		59.88	44.92	28.6
<b>Habitat Score</b>		<b>0.60</b>	<b>0.43</b>	<b>0.29</b>

**Note:** PG = Plains Grassland, VVP = Victorian Volcanic Plain.



**Plate A4.1.** PG and NTGVPP adjacent to impacted area (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate A4.2.** PG and NTGVPP within impacted area (vehicle tracks are associated with land management vehicles) (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate A4.3.** PG and NTGVVP adjacent to impacted area (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate A4.4.** PG and NTGVVP within impacted area (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate A4.5.** High quality PG and NTGVVP (zone 2C) (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate A4.6.** High quality PG and NTGVVP (zone 1A) (Ecology and Heritage Partners Pty Ltd 10/02/2022).

## 4.6 Fencing / Stock Exclusion

All perimeters of the offset site are now fenced and are in good condition. Further, no-go zone/protected vegetation signage is attached at regular intervals to rabbit proof fencing (Plate B4.1 – Plate B4.5). The section of fencing in zone 2D was observed as unrepaired during the site inspection (Plate B4.6). Works are underway to engage a fencing contractor to address this.



**Plate B4.1.** Rabbit proof fence along the north-west boundary (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate B4.2.** Rabbit proof fencing along the north-east boundary (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate B4.3.** Rabbit proof fencing along the south-west (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate B4.4.** Signage on rabbit proof fencing (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate B4.5.** Cyclone fence installed post-installation (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate B4.6.** Broken wire in zone 2D (Ecology and Heritage Partners Pty Ltd 10/02/2022).

## 4.7 Unauthorised Human Access

There is no evidence of unauthorised access to the offset site in Year 2. The entire offset site is fenced with rabbit proof fencing and is gated at several points.

## 4.8 Pest Animals

Evidence of pest animals is generally low across offset site, largely due to rabbit proof fencing around the perimeter of the offset site. Despite being fully fenced, there are gaps at the base of fencing where the cyclone fence has not been buried (Plate C4.1) that provides potential entry points for pest animals. Importantly, these areas are typically where the boundary is raised between the offset site and adjacent parcel and are therefore unlikely entry points. Rabbit proof fencing will be installed in the coming weeks following completion to prevent pest animals entering the site.

Several European Hares *Lepus europaeus* and numerous forms (i.e. shelters) were observed during the site inspection, particularly in areas where Serrated Tussock is the dominant graminoid (Plate C4.2). No European Rabbits *Oryctolagus cuniculus* or Red Fox *Vulpes vulpes* were observed, however there was evidence of these species. Diggings and warrens from European Rabbits were observed, restricted to areas where rocks/rubble have been stored. Evidence of Red Fox were observed in the form of scattered scats within the offset site.

In Year 2, Aus Eco Solutions focussed pest animal works on areas where rabbit harbour was present in the form of exotic vegetation (Appendix 3).

Specific details for pest animals in each zone are provided below in Table A4.2.

**Table A4.2.** Pest animals observed within the offset site and recommended control technique/timing.

Zone/s	Pest animal/s observed	Control method/s	Timing
2A, 2B, 2C, 2D, 2E, 2F and 2G.	Red Fox, European Rabbit, and European Hare.	Fumigate warrens of European Rabbits and remove harbour. Consider fencing rock piles with rabbit proof fencing to remove access to harbour.  Monitor the population of Red Fox and undertake additional control measures, if required.	Ongoing.
All zones.	European Hare.	Remove/destroy harbour throughout the offset site. Monitor the population and undertake additional control measures, if required.	Ongoing.
2I, 3A, 3B, 3C, 3D, 3E, 4A, 4B, 4C, 5A, 5B and 5C.	European Rabbit.	Fumigate warrens of European Rabbits and remove harbour.	Ongoing



**Plate C4.1.** Cyclone fencing with gap at the base (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate C4.2.** European Hare firm in weedy vegetation (Ecology and Heritage Partners Pty Ltd 10/02/2022).

## 4.9 Weeds

### 4.9.1 Woody Weeds

Overall cover of woody weeds across the offset site is low, with approximately <10% cover of mature and re-sprouting plants. Woody weeds are typically restricted to the perimeter of the offset site, particularly in areas where rock/rubble piles are present, such as zones 2A and 2D (adjacent 3A) (Plate D4.1).

Common woody weeds include African Box-thorn and Sweet Briar *Rosa rubigonsa* (approx. 5% cover throughout) (Plate D4.2); the native shrub Sifton Bush *Cassinia sifton* is also present in low numbers (<5%). This species is being monitored during land management works and site inspections as Sifton Bush can negatively impact native grasslands when it occurs in high numbers (Plate D4.3).

Weed control works by Aus Eco Solutions have focused on removing woody weeds that are harbouring pest animals (Appendix 3) (Plate D4.4). Some of these are re-sprouting and should be addressed in Year 3. While all woody weeds are considered high-threat, many of the mature plants are restricted to areas of disturbance and rock/rubble piles and don't appear to be spreading throughout areas of native vegetation. Despite this, mature plants are a source of seed and should be removed in year 3 by Aus Eco Solutions.



**Plate D4.1.** Mature African Box-thorn within rock/rubble piles (zone 2A) (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate D4.2.** Sweet Briar re-sprouting within zone 3B (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate D4.3.** Sifton Bush scattered throughout zone 2D (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate D4.4.** African Box-thorn that has been removed (zone 2D) (Ecology and Heritage Partners Pty Ltd 10/02/2022).

#### 4.9.2 Grassy Weeds

Cover of grassy weeds is low-moderate throughout the offset site and varies between zones. The dominant grassy weeds are Chilean Needle-grass and Serrated Tussock (approx. 10-15% cover throughout). Both species are intermixed with native vegetation and cover is typically uniform throughout, except in areas of high cover, e.g. small independent ‘patches’ bordering native vegetation. Areas of high cover (>70%) tend to be at the perimeter of the offset site or in areas that are frequently disturbed and degraded areas (i.e. management tracks, bordering the dam, and rubbish/rubble piles). During the site inspection, a high cover of Chilean Needle-grass and Serrated Tussock was observed between zones 2A/2B and 2C, and throughout 2D, particularly between 2C and 2E, and throughout 3B.

Other high threat grassy weeds were observed in low numbers (<5% cover), including Cane Needle-grass, Kikuyu *Cenchrus clandestinus* and Couch *Cynodon dactylon* var. *dactylon* (Plate E4.1). These species were particularly prevalent in low lying areas in the eastern section of the offset site (e.g. 3A – 3E, 4A – 4C). Annual grasses had completed their life-cycle and cover was difficult to determine at the time of the follow-up assessment, however, annual grass cover was high during the previous site inspection (1 November 2021) and biomass was subsequently high within areas where annual grasses are dominant, such as 2D, 3A – 3E, and 4A – 4C.

Aus Eco Solutions focussed much of the Chilean Needle-grass works in high-quality zones in the western section of the offset site (Plate E4.2; Plate E4.3). Extensive works for Serrated Tussock were undertaken in Year 1 to control large areas with high cover; year 2 works included targeted works for small infestations, particularly those within and bordering high-quality patches, such as zone 2C, 2E, 3C and 3D (Plate E4.4 - Plate E4.6). Grassy Weed control was also undertaken post-burn areas (Appendix 3).

Despite targeted weed control, both Chilean Needle-grass and Serrated Tussock were able to set seed within the offset site. Year 3 works should continue working towards the targets outlined within the CMP.





**Plate E4.1.** Cane Needle-grass within zone 3B (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate E4.2.** Chilean Needle-grass throughout zone 2C (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate E4.3.** Chilean Needle-grass that has been recently sprayed with herbicide (zone 2D) (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate E4.4.** Mature Serrated Tussock that has set seed in zone 2H (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate E4.5.** Serrated Tussock that was controlled in Year 1 (zone 2E) (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate E4.6.** Mature Serrated Tussock that has been recently sprayed with herbicide (zone 2E) (Ecology and Heritage Partners Pty Ltd 10/02/2022).

#### 4.9.3 Herbaceous Weeds

Herbaceous weed cover is low-moderate throughout the offset site and varies from 10 –60% throughout the zones. The dominant herbaceous species include Ribwort *Plantago lanceolata*, Patterson’s Curse, Rough Sow-thistle *Sonchus asper*, Ox-tongue *Helminthotheca echioides*, Artichoke Thistle, and Galenia (Plate F4.1 - Plate F4.6). Several high threat weeds occur throughout the offset site at low numbers (i.e. 1-5% cover), including Bathurst Burr *Xanthium spinosum*, Common Bindweed *Convolvulus arvensis* and Squirting Cucumber *Ecballium elaterium* (Plate F4.2; Plate F4.3).

Herbaceous weed cover is lowest (< 10%) within high-quality patches of native vegetation, particularly within all zones in the western section of the offset site, excluding 2D, 2G and 2F. Within high-quality areas, high weed cover is largely restricted to the perimeter of native vegetation, particularly in rock/rubble piles, or in areas regularly disturbed (i.e. management tracks). A high cover (25 – 60%) of herbaceous weeds was observed throughout zones 2D and 3B, with Ribwort becoming the dominant species in areas of Plains Grassland, especially zone 2D (Plate F4.4).

In Year 2, Aus Eco Solutions have focused herbaceous weed control works on Artichoke Thistle in areas of high-quality native vegetation (i.e. NTGVVP patches), including zones 2C and 2E. Plants had been sprayed with an appropriate herbicide and were observed as dead/dying, however, many plants still set seed in Year 2 (Plate F4.5; Plate F4.6). This is largely due to favourable weather conditions and the intermission while the Year 3 contract was being prepared and Aus Eco Solutions were engaged.



**Plate F4.1.** Herbaceous weeds intermixed with Serrated Tussock that was controlled in Year 1 (zone 2D) (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate F4.2.** Squirting Cucumber observed within the offset site (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate F4.3.** Bathurst Burr within zone 2D (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate F4.4.** A high cover of Ribwort in zone 2D (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate F4.5.** Mature Artichoke Thistle within the offset site (Ecology and Heritage Partners Pty Ltd (zone 2D) 10/02/2022).



**Plate F4.6.** Mature Artichoke Thistle that have been recently sprayed with herbicide (zone 3B) (Ecology and Heritage Partners Pty Ltd 10/02/2022).

#### 4.10 Rubbish Issues

Rubbish across the offset site is relatively low. During the site inspection, small amounts of rubbish were observed (Plate G4.1; Plate G4.2) throughout, however, most of the rubbish is contained to rock/rubble piles (Plate G4.3; Plate G4.4). Removal of small windblown rubbish is regularly removed from the offset site; however, larger rubbish (e.g. old fencing and rock/rubble) is difficult to remove due to the size and location. Removal would likely result in damage to the ecological values within the offset site. Despite this, quotes to address larger items are being sought from AES. AES removed piles of rubbish and scattered windblown rubbish from the offset site within Year 2 (Plate G4.5; Plate G4.6; Appendix 5).



**Plate G4.1.** Scattered rubbish within the offset site (Ecology and Heritage Partners Pty Ltd (10/02/2022).



**Plate G4.2.** Scattered rubbish within the offset site (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate G4.3.** Rubbish intermixed with rock/rubble piles within the offset site (zone 2A) (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate G4.4.** Rubbish intermixed with rock/rubble piles within the offset site (zone 2A) (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate G4.5.** Rubbish within the offset site – pre-removal by AES in Year 2 (AES 2021).



**Plate G4.6.** Post rubbish removal by AES in Year 2 (AES 2021).

### 4.11 Biomass Management Issues

Biomass is high throughout the offset site, particularly in high-quality areas of native vegetation, such as NTGVVP patches (i.e. 2E and 2C). In these areas, biomass is a combination of native grasses such as Kangaroo Grass, Spear-grass, and Wallaby-grass, and annual grasses (Plate H4.1; Plate H4.2). To reduce biomass and promote appropriate inter-tussock spacing (<20%) and bare-ground (20% to 40%), an ecological burn is planned in Year 3 within the western section. Biomass reduction within the remainder of the offset site continues to be monitored and slashing will be implemented if necessary, as per the Section 69 Agreement (VC\_CFL-3086\_01).

Post ecological burn (Autumn 2021), native grasses have established, and the quality and extent of NTGVVP has increased (Figure 2) (Plate H4.3; Plate H4.4).



**Plate H4.1.** High cover of native grasses in NTGVVP (zone 2C) (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate H4.2.** Annual grasses that have died resulting in high biomass (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate H4.3.** PG in ecological burn area (zone 3B) that is now NTGVVP (Ecology and Heritage Partners Pty Ltd 10/02/2022).



**Plate H4.4.** PG post-burn (zone 3B) (Ecology and Heritage Partners Pty Ltd 10/02/2022).

## Appendix 5. Addendum to Year 2 Annual Report - DELWP RFI2 response (VC\_CFL-3086\_01 – Dated 29 March 2022)

The following addendum addresses each item outlined in the RFI that was received from DELWP, dated 29 March 2022.

### 5.1 Ongoing Management Issues – impacted vegetation

#### 5.1.1 Vegetation Condition and Extent

Table A5.1 addresses the following:

- Confirmation of the area (ha) damaged per zone – identify zone names; and,
- Calculation of the vegetation damaged (area and condition) using VQA data of the post damaged compared to the baseline data collected when establishing the offset site. For this analysis please conduct a VQA on the area/s that have been damaged, isolated from the areas that did not get damaged.

Based on the recent site assessment and habitat hectare assessment the native vegetation has improved since the offset site was established. The area that was temporarily disturbed by fencing works has recovered and is now considered to be NTGVVP (Table A5.1). The area is dominated by Wallaby Grass, Spear Grass, and Kangaroo Grass, as well as scattered herbs.

**Table A5.1.** Habitat Hectare score for current vegetation and baseline vegetation.

Management Zone		Current Condition			Baseline Condition	
		1c	3a	3e	2h, 2d (S.6g Agreement)	
Vegetation Zone		PG1	PG3		PG18	PG3
NTGVVP (Y/N)		Y	N	Y	Y	N
Bioregion		Victorian Volcanic Plain				
EVC / Tree		Plains Grassland				
EVC Number		132_61				
EVC Conservation Status		Endangered				
Patch Condition	Large Old Trees /10	NA				
	Canopy Cover /5	NA				
	Under storey /25	20	20	20	5	10
	Lack of Weeds /15	7	4	7	4	0
	Recruitment /10	10	6	10	3	3
	Organic Matter /5	5	2	5	4	2
	Logs /5	NA				
	Treeless EVC Multiplier	1.36				
	Subtotal =	37	43.52	37	21.76	20.4

	Current Condition			Baseline Condition	
Management Zone	1c	3a	3e	2h, 2d (S.6g Agreement)	
Vegetation Zone	PG <sub>1</sub>	PG <sub>3</sub>		PG <sub>18</sub>	PG <sub>3</sub>
NTGVVP (Y/N)	Y	N	Y	Y	N
Landscape Value /25	15	15	15	15	15
Habitat Points /100	72.12	58.52	72.12	36.76	35.4
Habitat Score	0.72	0.58	0.72	0.37	0.35
Zone Area (Ha)	0.39	0.6	0.7	2.99	0.69
Damaged Area (Ha)	0.07	0.1	0.01	0.07	0.01

**Note:** PG = Plains Grassland, NTGVVP = *Natural Temperate Grassland of the Victorian Volcanic Plain*.

### 5.1.2 Rehabilitation Plan

The following section outlines the rehabilitation plan for the temporarily impacted areas, if required by DELWP, as outlined within the RFI:

- *Rehabilitation plan (for DELWP approval) for areas affected including mapping, timelines, actions and species lists.*

Given that native vegetation in the temporarily disturbed area has improved since the establishment of the offset site and the native vegetation has recovered, additional remedial works are not considered necessary. Nevertheless, a rehabilitation guide (Table A5.2) has been developed if additional rehabilitation is required.

**Note:** the guide detailed below in Table A5.2 has been broadly developed for grassland vegetation; many species included do not occur within the offset site but may still be considered appropriate for inclusion.

**Table A5.2.** Plains Grassland rehabilitation guide.

Scientific Name	Common Name	Tube stock (no. per ha)	Seed mix %	Notes
<b>INDIGENOUS GRASSES</b>				
<i>Austrostipa bigeniculata</i>	Knead Spear Grass	-	20%	Common grassland species in northern Melbourne.
<i>Austrostipa nodosa</i>	Knotty Spear Grass			
<i>Austrostipa oligostachya</i>	Spear Grass			
<i>Austrostipa scabra</i>	Spear Grass			
<i>Themeda triandra</i>	Kangaroo Grass		25%	
<i>Microlaena stipoides</i> var. <i>stipoides</i>	Weeping Grass		15%	Include for areas that may be shaded (e.g under trees etc.).
<i>Rytidosperma setacea</i>	Bristly Wallaby Grass		20%	Common grassland species in northern Melbourne.
<i>Rytidosperma caespitosa</i>	Common Wallaby Grass			
<i>Rytidosperma racemosum</i> var. <i>racemosum</i>	Wallaby Grass			



Scientific Name	Common Name	Tube stock (no. per ha)	Seed mix %	Notes
<i>Rytidosperma duttonianum</i>	Brown-back Wallaby-grass		5%	Include if there are wet areas (depressions).
<i>Dichanthium sericeum</i> subsp. <i>sericeum</i>	Silky Blue-grass		10%	Less common species typically scattered throughout grasslands NW of Melbourne.
<i>Chloris truncata</i>	Windmill-grass			Will readily colonise recently disturbed areas and competes well against invasive species.
<i>Poa labillardierei</i> var. <i>labillardierei</i>	Common Tussock Grass		5%	Include if there are wet areas (depressions).
<b>INDIGENOUS HERBS</b>				
<i>Calocephalus lacteus</i> or <i>Calocephalus citreus</i>	Milky Beauty-heads Lemon Beauty Heads	1000	-	Herbs should be planted in groups (drift planting).
<i>Chrysocephalum apiculatum</i>	Common Everlasting			
<i>Eryngium vesiculosum</i>	Prickfoot			
<i>Einadia hastata</i> or <i>Einadia nutans</i>	Salop Nodding Saltbush	200		
<i>Enchylaena tomentosa</i> var. <i>tomentosa</i>	Ruby Saltbush			
<i>Convolvulus angustissimus</i>	Common Bindweed	200		
<i>Senecio</i> spp.	Fireweed	200		
<i>Acaena echinata</i>	Sheep's Burr	200		
<b>INDIGENOUS GRAMINOIDS</b>				
<i>Dinaella revoluta</i>	Black-anther Flax-lily	200	-	Graminoids should be planted in groups (drift planting).
<i>Lomandra filiformis</i> subsp. <i>filiformis</i>	Wattle Mat-Rush			
<b>INDIGENOUS SHRUBS (if appropriate)</b>				
<i>Melicytus dentatus</i>	Tree Violet	10	-	Best planted in drifts at low numbers on the edges of grassland areas.
<i>Acacia acinacea</i>	Gold-dust Wattle	10		
<i>Acacia implexa</i>	Lightwood	10		
<i>Goodia medicaginea</i>	Western Golden-tip	10		

If additional plants or seed are required to be incorporated into the ongoing management of the Ravenhall Offset Site, supplementary weed control and watering may be necessary to ensure plant survival and

establishment. Table A5.3 below outlines the frequency of watering and weed control works required to ensure seedling survivorship. Following a 12 to 24-month period of intensive management, watering and targeted weed control will cease, and ongoing weed control will be incorporated into the overall management of the offset site (provided plants area established and rehabilitation is deemed sufficient by DELWP).

**Table A5.3.** Watering and targeted weed control requirements for supplementary plantings.

Months after planting	WATER REGIME		WEED CONTROL	
	Period between significant rainfall events that triggers watering	Watering Interval	Hand Weeding	Herbicide Application
0-4	1 week	Weekly	Monthly	Monthly
4-12	3-4 weeks	Fortnightly		
12 - 24	1 – 2 Months	Monthly	As required	

## 5.2 Fencing / Stock Exclusion

Rabbit proof fencing has been added to all locations where a gap is located at the base of the cyclone fencing (Plate A5.1 – Plate A5.4), and the broken wire in zone 2D has been repaired (Plate A5.5 – Plate A5.7).



**Plate A5.1.** Rabbit proof fencing buried and attached to the cyclone fence (Photo provided by Citius 8/04/2022).



**Plate A5.2.** Rabbit proof mesh attached to the retaining wall and cyclone fencing (Photo provided by Citius 8/04/2022).



**Plate A5.3.** Rabbit proof fencing attached to cyclone fence, retaining wall and buried beneath rocks (Photo provided Citius 8/04/2022).



**Plate A5.4.** Rabbit proof mesh attached to the cyclone fence and secured to retaining wall (Photo provided by Citius 8/04/2022).



**Plate A5.5.** Repaired broken wire in zone 2D (Photo provided by Citius 25/05/2022).



**Plate A5.6.** Repaired broken wire in zone 2D (Photo provided by Citius 25/05/2022).



**Plate A5.7.** Repaired broken wire in zone 2D (Photo provided by Citius 25/05/2022).

### **5.3 Contractor Proof of Works**

The following documents have been provided by Aus Eco Solutions as proof of works undertaken within the Ravenhall Offset Site in Year 2:

- *A2086 Ravenhall Offset Year 2 Management Actions 2020-2021;*
- *A2086 - P3235 Ravenhall Offset Site \_ Invoice Tracking Year 2;*
- *Guppy Enterprises Pty Ltd Tas Aus Eco Solutions - Dexus Invoices 2020-2021;*
- *210922 Horizon 3023 - Guppy Enterprises Pty Ltd Variation 01 (1);*
- *Tyre Collection Australia \_ Aus Eco Solutions 10\_10\_2021; and,*
- *Waste Disposal Moorabool Transfer Station 11\_08\_2021.*



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**Management Diary**

*Activity: January 01-October 30, 2021*

<b>Activity Date</b>	<b>Memo/Description</b>
5-Jul-2021	Spot spraying broadleaf weed species along the linear section from east to west. Spot spraying nasella grasses in the western section of the grasslands.
5-Jul-2021	Spot spraying broadleaf weed species along the linear section from east to west. Spot spraying nasella grasses in the western section of the grasslands.
5-Jul-2021	Spot spraying broadleaf weed species along the linear section from east to west. Spot spraying nasella grasses in the western section of the grasslands.
5-Jul-2021	Spot spraying broadleaf weed species along the linear section from east to west. Spot spraying nasella grasses in the western section of the grasslands.
5-Jul-2021	Spot spraying broadleaf weed species along the linear section from east to west. Spot spraying nasella grasses in the western section of the grasslands.
6-Jul-2021	Spot spraying emerging pattersons curse and artichoke thistle in burn area.
6-Jul-2021	Spot spraying emerging pattersons curse and artichoke thistle in burn area.
27-Jul-2021	Cut and paint of woody weeds including boxthorn and briar rose.
27-Jul-2021	Cut and paint of woody weeds including boxthorn and briar rose.
27-Jul-2021	Cut and paint of woody weeds including boxthorn and briar rose.
28-Jul-2021	Chipping out Artichoke in areas containing Pimelea.
28-Jul-2021	Chipping out Artichoke in areas containing Pimelea.
29-Jul-2021	Spot spraying emerging pattersons curse, artichoke, oxtongue and cape weed in the Autumn burn area.
29-Jul-2021	Spot spraying emerging pattersons curse, artichoke, oxtongue and cape weed in the Autumn burn area.
2-Aug-2021	Rig spraying broadleaf weeds and nasella grasses in and around the Autumn burn area.
2-Aug-2021	Rig spraying broadleaf weeds and nasella grasses in and around the Autumn burn area.
5-Aug-2021	Spot spraying annual grasses in and around Autumn burn area.
5-Aug-2021	Spot spraying annual grasses in and around Autumn burn area.
11-Aug-2021	Rubbish pickup of larger rubbish including tyres. Tip run.
11-Aug-2021	Rubbish pickup of larger rubbish including tyres. Tip run.
13-Aug-2021	Spraying nassellas in burn area - ST. CNG & Phalaris. Spraying vehicle track as a buffer for broadleaf weeds including artichoke, pattersons curse, cape weed and brassica
13-Aug-2021	Spraying nassellas in burn area - ST. CNG & Phalaris. Spraying track as buffer for broadleaf weeds including artichoke, pattersons curse, cape weed and brassica
13-Aug-2021	Spraying nassellas in burn area - ST. CNG & Phalaris. Spraying track as buffer for broadleaf weeds including artichoke, pattersons curse, cape weed and brassica
16-Aug-2021	Spraying Western section for artichoke, pattersons curse and cape weed.
16-Aug-2021	Spraying Western section for artichoke, pattersons curse and cape weed.
18-Aug-2021	Rig spraying in western section for nassella species. Rig spraying broadleaf weeds in western section
18-Aug-2021	Rig spraying in western section for nassella species. Rig spraying broadleaf weeds in western section
18-Aug-2021	Rig spraying in western section for nassella species. Rig spraying broadleaf weeds in western section
18-Aug-2021	Rig spraying in western section for nassella species. Rig spraying broadleaf weeds in western section
19-Aug-2021	Rig spraying western section vehicle track sides for nassella grasses.. Knapsack spray Nassella grasses around areas containing pimeleas with selective herbicide.
19-Aug-2021	Rig spraying western section vehicle track sides for nassella grasses.. Knapsack spray Nassella grasses around areas containing pimeleas with selective herbicide.
19-Aug-2021	Rig spraying western section vehicle track sides for nassella grasses.. Knapsack spray Nassella grasses around areas containing pimeleas with selective herbicide.
20-Aug-2021	Cut and paint boxthorn in rock piles for pest animal harbour removal.
20-Aug-2021	Cut and paint boxthorn in rock piles for pest animal harbour removal.
26-Aug-2021	Spot spraying nassella grasses including serrated tussock and chilean needle grass in the eastern section of the grasslands.
26-Aug-2021	Spot spraying nassella grasses including serrated tussock and chilean needle grass in the eastern section of the grasslands.
26-Aug-2021	Spot spraying nassella grasses including serrated tussock and chilean needle grass in the eastern section of the grasslands.

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**Management Diary**

*Activity: January 01-October 30, 2021*

<b>Activity Date</b>	<b>Memo/Description</b>
26-Aug-2021	Spot spraying nassella grasses including serrated tussock and chilean needle grass in the eastern section of the grasslands.
6-Sep-2021	Rig spraying western section for nassella grass species
6-Sep-2021	Rig spraying western section for nassella grass species
22-Sep-2021	Rig spraying western section for ST & CNG
22-Sep-2021	Rig spraying western section for ST & CNG
23-Sep-2021	Rig spraying broadleaf weeds in the linear section east to west and in the western section.
23-Sep-2021	Rig spraying broadleaf weeds in the linear section east to west and in the western section.
1-Oct-2021	Rubbish removal of tyres and general wind blown rubbish 77 tyres removed
1-Oct-2021	Rubbish removal of tyres and general wind blown rubbish 77 tyres removed

***Wednesday May 11, 2022 EST***



A2086 - P3235 Ravenhall Offset Site & Invoice Tracking Year 2

A2086 - P3235 Ravenhall Offset Site & Budget Tracking Year 2	Budget	January	February	March	April	May	June	July	August	September	October	Total Invoiced Amount EX GST	Budget Remaining	Percentage Expended
		29/01/2021		31/01/2021	30/04/2021			30/07/2021	30/08/2021	30/08/2021	25/10/2021			
		INV-6181		INV-6314	INV-6392			INV-6581	INV-6636	INV-6700	INV-6731			
1.1 Weed control-Noxious Nassella species & herbaceous weeds	\$39,600.00	\$2,696.85		\$10,550.71	\$1,381.45			\$9,772.94	\$13,441.95	\$1,756.10		\$39,600.00	\$0.00	100.00%
1.2 Pest animal control	\$3,456.00								\$1,320.00	\$2,136.00		\$3,456.00	\$0.00	100.00%
1.3 Biomass reduction (Ecological Burn of ~7 ha in Autumn)	\$9,150.00			\$2,650.00	\$6,500.00							\$9,150.00	\$0.00	100.00%
1.4 Rubbish Removal	\$2,587.64								\$1,224.00		\$1,363.64	\$2,587.64	\$0.00	100.00%
1.5 End of Year Report	\$1,552.00									\$1,552.00		\$1,552.00	\$0.00	100.00%
<b>Totals</b>	<b>\$56,345.64</b>	<b>\$2,696.85</b>	<b>\$0.00</b>	<b>\$13,200.71</b>	<b>\$7,881.45</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$9,772.94</b>	<b>\$15,985.95</b>	<b>\$5,444.10</b>	<b>\$1,363.64</b>	<b>\$56,345.64</b>	<b>\$0.00</b>	<b>100.00%</b>

# Invoices

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Dexus Property Services Pty Limited  
From 1 November 2020 to 31 October 2021  
Showing payments to 18 May 2022

Date	Number	Due Date	Total	Paid	Credited	Due
1 Nov 2020	Opening Balance					-
29 Jan 2021	INV-6181	28 Feb 2021	2,967	2,967	-	-
31 Mar 2021	INV-6314	30 Apr 2021	14,521	14,521	-	-
30 Apr 2021	INV-6392	30 May 2021	8,670	8,670	-	-
30 Jul 2021	INV-6581	30 Aug 2021	10,750	10,750	-	-
30 Aug 2021	INV-6636	29 Sep 2021	17,585	17,585	-	-
30 Sep 2021	INV-6700	30 Oct 2021	5,989	5,989	-	-
25 Oct 2021	INV-6731	24 Nov 2021	1,364	1,364	-	-
<b>Total</b>			<b>61,844</b>	<b>61,844</b>	-	-
<b>Closing Balance</b>			<b>61,844</b>	<b>61,844</b>	-	-

## BUILDING WORKS AGREEMENT - VARIATION

SERVICES	On-Site Native Vegetation Offset Site Management - Year 2		
PREMISES	HORIZON 3023 – 11 to 167 PALM SPRINGS RD, RAVENHALL, VIC		
VARIATION DATE	31 <sup>th</sup> August 2021	REVISED COMPLETION DATE	30 <sup>th</sup> September 2021
ORIGINAL FEE	\$53,758.00	GST	\$5,375.80
VARIATION FEE	\$2,587.64		\$258.76
TOTAL REVISED FEE	\$56,345.64		\$ 5,634.56
			TOTAL \$59,133.80
			\$2,846.40
			\$61,980.20

SCOPE OF VARIATION	<p>1. Rubbish removal inclusive of all tip fees and all other associated costs.</p> <p>2. Rubbish removal includes but is not limited to:</p> <p style="padding-left: 40px;">(a) Fencing;</p> <p style="padding-left: 40px;">(b) Tyres;</p> <p style="padding-left: 40px;">(c) Building materials; and</p> <p style="padding-left: 40px;">(d) Any other materials deemed to be waste.</p>
VARIATION DOCUMENTATION	See Annexure "A"

<b>PRINCIPAL</b>	
Dexus Property Services Pty Limited	
ABN	24 060 920 783
Address	C/- Level 25, 264 George St, Sydney, NSW, 2000
Principal's Representative	Dominic Meese
Telephone	0419 012 641
Email	Dominic.meese@dexus.com
<b>Executed as an Agreement by:</b>	
Dexus Property Services Pty Limited	
 Signature of Authorised Person	
Name (print) –	<b>Dominic Meese</b>
Date:	<b>22/9/21</b>

<b>CONTRACTOR</b>	
Guppy Enterprises Pty Ltd trading as Aus Eco Solutions	
ABN	40 087 267 310
Address	11 Smallmans Road, Ballan VIC 3342
Contractor's Representative	Jonathan Nester
Telephone	0466 157 042
Email	info@ausecosolutions.com.au
<b>Executed as an Agreement by:</b>	
Guppy Enterprises Pty Ltd trading as Aus Eco Solutions	
Signature of Authorised Person	
Name (print) –	
Date:	

This Agreement incorporates the terms of the Standard Terms & Conditions a copy of which the Consultant acknowledges it has received on or before the Commencement Date of this Agreement.

Initial: \_\_\_\_\_

## BUILDING WORKS AGREEMENT - VARIATION

### Annexure "A"

Item 1: Image: Rubbish Removal including but not limited to tyres scattered within Native Veg Zone.



Item 2: Memo: Ecology and Heritage Partners Re: Ravenhall Offset Site, Rubbish Removal DELWP

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**From:** Sally Burgemeestre  
**Sent:** Tuesday, 27 July 2021 2:53 PM  
**To:** 'Krishin.Chand@citius.com.au' <[Krishin.Chand@citius.com.au](mailto:Krishin.Chand@citius.com.au)>  
**Subject:** [EHP14716] Ravenhall Offset Site, Rubbish Removal

Hi Krishin,

Thanks for the chat earlier. As discussed, we want to ensure we are addressing the outcomes of the DELWP monitoring prior to the year 2 reporting. The biggest issue that needs to address is the rubbish on site, please refer to Richard Boons letter attached, which includes things such as old tyres, fencing wire, building materials and concrete among other things.

AES has reviewed the locations of the rubbish while on site conducting vegetation management and are able to remove the smaller items scattered across the site (i.e. fencing, tyres, smaller building materials) for a per visit cost of \$1,224.00 (excl. GST). The larger items such as the concrete will require heavy machinery to remove, and thus Aus Eco will provide a fee proposal to undertake the works.

I've also attached the original AES fee proposal that would have likely been sent to Graham for dispersal to Dexus.

Please note, it is in best interest that these area of rubbish are removed as they are providing harbour within the site for pest species such as rabbit which can have adverse impacts on native vegetation quality.

Could you please also advise on any feedback on the letter regarding the impacts to the site?

Kind Regards,

[Sally Burgemeestre](#) | Bushfire Consultant

**Ecology and Heritage Partner**

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T 1300 839 32 | M 0407 512 17 | [sburgemeestre@ehpartners.com.au](mailto:sburgemeestre@ehpartners.com.au) | [www.ehpartners.com.au](http://www.ehpartners.com.au)

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## Dashboard

# Aus Eco Solutions - Reconciled transaction details

**Bank Mecu - 2789**

313-140-23182789



This statement line...

Has been reconciled with the following payments...

[View Statement](#)[Reconciliation Report](#)

debit 1 Oct 2021

POS #000149-TYRE COLLECTION AUST SUNSHINE WES AU

381.15

Date	Contact	Spent	Received
1 Oct 2021	TYRE COLLECTION	381.15	

**Commonwealth Bank**  
MOORABOOL SHIRE COUNCIL  
BALLAN VIC



**CUSTOMER COPY**

CARD NO. 4434-1670(c)  
EXPIRY DATE  
VISA CARD  
Visa Debit  
CREDIT

PURCHASE \$104.00  
TOTAL AUD \$104

APPROVED

1 Aug 2021

TERMINAL ID  
REFERENCE  
MATH NUMBER  
ID  
C 154 TVR AP  
N 00 8r  
THAN

# Ballan

Address: Monteville Lane, Ballan

Hours: 1.00pm – 5.00pm Wednesday to Monday

Closed: Tuesday

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## Receipt / Tax Invoice #4585

11 Aug 2021 2:53pm | Main Outlet

Served by: Jock Davis at Ballan Transfer Station

1	Large Trailer Resident	@ \$68.00	\$68.00
2	Tyre Car (tyres on rims)	@ \$18.00	\$36.00
	Subtotal		\$94.55
	Total Tax (GST, 10%)		\$9.45
TOTAL 3 Items			\$104.00
EFTPOS			\$104.00
TO PAY			\$0.00



## 5.4 Weeds

The overall cover (%) of all weeds recorded throughout the offset site is provided below in Table A5.4.

**Table A5.4.** Weed Cover throughout the Ravenhall Offset Site.

Scientific Name	Common Name	Zones	Current Cover %
<b>WOODY WEEDS</b>			
<i>Lycium ferocissimum</i>	African Box-thorn	2A, 2C, 2D	<5%
<i>Marrubium vulgare</i>	- Horehound	All zones	1%
<i>Prunus spp.</i>	-	2D	<1%
<i>Rosa rubigonsa</i>	Sweet Briar	2A, 2C, 2D, 3B	<5%
<b>HERBACEOUS WEEDS</b>			
<i>Convolvulus arvensis</i>	Common Bindweed	2D	1%
<i>Ecballium elaterium</i>	Squirting Cucumber	2D	1%
<i>Aizoon pubescens</i>	Galenia	All Zones	5-10%
<i>Arctotheca calendula</i>	Capeweed	3B	<1%
<i>Cirsium vulgare</i>	Spear Thistle	All Zones	5-10%
<i>Cynara cardunculus</i>	Artichoke Thistle	All Zones	5%
<i>Echium plantagineum</i>	Paterson's Curse	All Zones	5%
<i>Helminthotheca echioides</i>	Ox-tongue	All Zones	5%
<i>Hypochoeris spp., Plantago spp., Brassica spp. etc</i>	Flat Weeds and Mustards	All Zones	5%
<i>Lactuca serriola</i>	Prickly Lettuce	All Zones	1%

Scientific Name	Common Name	Zones	Current Cover %
<i>Sonchus spp.</i>	Sow-thistle	All Zones	3-5%
<i>Xanthium spinosum</i>	Bathurst Burr	2D, 2E, 3A, 3B, 3C, 3D, 3E	1%
<b>GRASSY WEEDS</b>			
<i>Avena spp.</i>	Oats	All Zones	5-15%
<i>Agrostis capillaris</i>	Brown-top Bent	All Zones	<5%
<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass	All Zones	5-15%
<i>Brome spp.</i>	Brome	All Zones	5-15%
<i>Cynodon dactylon</i> spp. <i>dactylon</i>	Couch	All Zones	<5%
<i>Dactylis glomerata</i>	Cocksfoot	2A, 2D, 2E	3%
<i>Holcus lanatus</i>	Yorkshire Fog	All Zones	5-15%
<i>Lolium perenne</i>	Perennial Rye-grass	All Zones	<5-15%
<i>Nassella hyalina</i>	Cane Needle-grass	3B	1%
<i>Nassella neesiana</i>	Chilean Needle-grass	All Zones. Present in moderate abundance in zones 2D; 3B; 3C, 4A; 5A; 5B.	Approx. 5-10%
<i>Nassella trichotoma</i>	Serrated Tussock	All Zones. Cover varies throughout: moderate-high cover in zones 2E, 2G, 2F, 2D, 2I.	15%
<i>Paspalum dilatatum</i>	Paspalum	2A, 2D, 2E	3%
<i>Phalaris aquatica</i>	Toowoomba Canary-grass	2A, 2D, 2E	3%



## **5.5 Biomass Management Issues**

The area that was incorporated in the Year 2 ecological burn was previously shown on the Figure 2 as a red dash outline; it included the eastern portion of the offset site. For clarity, the Figure 2 has been updated to clearly show the area included in the ecological burn and is now shown as a yellow dash.