

Final Report

Annual Report for the Ravenhall Industrial Precinct On-site Offset Reserve – Year 1

PREPARED FOR

Dexus C/- Citius Property Development

March 2021



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DECLARATION OF ACCURACY

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 One 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:
 - a. Section 490 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) makes it an offence for an approval holder to provide information in response to an approval condition where the person is reckless as to whether the information is false or misleading.
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 - c. The above offences are punishable on conviction by imprisonment, a fine or both.

Signed

Full name (please print)

Organisation (please
print)

Date

GLOSSARY

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
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)
NTGVVP	Natural Temperate Grassland of the Victorian Volcanic Plain
OMP	Offset Management Plan
SLL	Striped Legless Lizard <i>Delma impar</i>
SRF	Spiny Rice-flower <i>Pimelea spinescens</i> subsp. <i>spinescens</i>

APPROVAL CONDITION STATUS

Table 1 below summarises the current compliance status of the EPBC 2015/7486 approval conditions.

Table 1 Compliance status of EPBC 2015-7486 Approval Conditions

Approval Condition	Status	Condition Met
1	No more than 18.02 hectares of NTGVVP, 40.23 hectares of SLL habitat and 13 SRF plants were impacted during the Year One monitoring period.	Yes
2	A CMP has been prepared detailing the management measures that will be undertaken to maintain and enhance the protected matters within the on-site offset site. The CEMP is being implemented to ensure the protected matters in the on-site offset are protected during construction. This report addresses fencing requirements in Section 2.5.2.	Yes
3	The on-site offset contains at least 13.37 ha of NTGVVP, at least 28.98 ha of SLL habitat and at least 86 SRF plants.	Yes
4	Off-site offset in Ombersley secured.	Yes
5	An OMP has been submitted to and approved by the Department. The OMP is being implemented by the landowner of the off-site offset.	Yes
6	The Year 1 OMP (2019/2020) was prepared addressing the requirements of Condition 6 by a EcoLink (Bleak House Pty Ltd 2020; Appendix 4). A report detailing the quality of vegetation and SLL population numbers has also been submitted to the Department (February 2020).	Yes
7	Shapefiles were provided to the Department on 11/09/2018	Yes
8	Not applicable	
9	Not applicable	
10	Report published online within one (1) month following approval by the Minister.	Yes
11	Report published online within three months of the 12-month anniversary.	Yes
12	Not applicable	
13	Not applicable	
14	Not applicable	
15	Not applicable	
16	Not applicable	
17	Not applicable	
18	Not applicable	
19	Not applicable	

EXECUTIVE SUMMARY

Ecology and Heritage Partners were engaged by Dexus to undertake the Year One monitoring of the on-site offset reserve in accordance with the EPBC referral 2015/7486, and the corresponding Conservation Management Plan and Offset Management Plan.

This report details the results of the Year One ecological monitoring, including the status of three matters of National Environmental Significance; Spiny Rice-flower *Pimelea spinescens* subsp. *spinescens* population, Striped Legless Lizard *Delma impar* population and condition of the ecological community, *Natural Temperate Grassland of the Victorian Volcanic Plain*.

Natural Temperate Grassland of the Victorian Volcanic Plain

An assessment of the condition and extent of *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP) was undertaken to observe any changes in the native vegetation cover and weed extent within the grassland. NTGVVP has improved in condition, with weed levels being actively managed to reduce the extent of cover. The removal of grazing pressure (i.e. horses) from the site has resulted in an emergence of native grasses.

An ecological burn is scheduled for autumn 2021 to remove the exotic dead plant material and provide opportunity for native grasses to establish in areas previously dominated by exotic species (i.e. Serrated Tussock *Nassella trichotoma*).

Spiny Rice-flower

An existing population of Spiny Rice-flower are present within the offset reserve which were monitored during the flowering period of the species (April – August). A population was recorded in the initial ecological assessments undertaken between 2017 – 2019, which remain within the offset site. The recent surveys undertaken as a part of the Year One monitoring recorded additional SRF both within and adjacent to the offset area, with a total of 149 SRF recorded within the offset site.

Striped Legless Lizard

Ten tile grids, comprising of 50 tiles in each, were established within the offset site in March 2020. Surveys for Striped Legless Lizard consisted of eight tile grid checks undertaken between 21 September 2020 and 26 November 2020. A total of 33 Striped Legless Lizards were recorded across the eight tile checks, with some individuals likely to be recaptures. Within a single survey event, the maximum number recorded was six. Striped Legless Lizard were found to occur across the entire offset site, with only one grid (grid four), not recording any individuals.

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1 INTRODUCTION

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 and oversee management and monitoring works for Year One relating to a 28.98 hectare offset area at the site of the Ravenhall Industrial Precinct, located on Palm Springs Road, Ravenhall (Figure 1).

As part of the Commonwealth approval conditions (EPBC 2015/7486 – Condition 3) for the development of the Ravenhall Industrial Precinct, an on-site offset must be established to protect at least 13.37 hectares of *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP), 28.98 hectares of Striped Legless Lizard *Delma impar* habitat, and a population of Spiny Rice-flower *Pimelea spinescens* subsp. *spinescens*. Several patches of Plains Grassland are also used to generate offset credits in order to partially satisfy Condition 51 of Planning Permit PA2013-4050/4 issued by the City of Melton.

The management, monitoring and auditing works required to be undertaken at Ravenhall are detailed in the Conservation Management Plan (CMP) (Ecology and Heritage Partners 2019) and Management Plan prepared for the section 69 agreement (VC_CFL-3086_01) prepared for the site. The CMP was approved by the Commonwealth Department of Agriculture, Water and the Environment (DAWE) (formally the Department of Environment and Energy (DoEE)) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC 2015/7486) and the section 69 agreement under the *Conservation, Forests and Lands Act 1987* approved by the Victorian Department of Environment, Land, Water and Planning (DELWP).

Specifically, the works relate to the protection and ecological monitoring of the quality of the native vegetation and significant ecological values present within the offset site, as specified in the CMP, which includes three matters of National Environmental Significance (NES); NTGVVP, Spiny Rice-flower and Striped Legless Lizard. Management within Year One primarily focused on weed and pest control works, and rubbish removal.

Ecology and Heritage Partners subcontracted Aus Eco Solutions Pty Ltd (AES) to implement pest plant and animal control, biomass reduction and revegetation for the ecological management works for the Year One works.

The Year One annual monitoring report presented below outlines the management and monitoring actions undertaken throughout the offset reserve between October 2019 and November 2020. The section 69 agreement was secured on title on the 12 December 2019, and this report addresses the monitoring and reporting requirements of the approved management plan for the offset site.

1.2 Objectives

The objective is to monitor and manage the biodiversity values within the Ravenhall Industrial Precinct on-site offset reserve in accordance with EPBC 2015/7486, and the Commonwealth approved CMP (Year One).

The methodology focuses on biodiversity monitoring of the quality of the EPBC Act-listed community *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP), and the status of the Striped Legless Lizard

and Spiny Rice-flower populations which exist within the reserve, and the management and monitoring of the Plains Grassland vegetation to improve the overall condition of the site.

On-ground monitoring surveys were undertaken, with an overall objective to provide a framework for the continuation of the management, auditing and reporting required to be undertaken as part of the approved CMP, to ensure the enhancement of the 28.98 hectare offset reserve at the Ravenhall Industrial Precinct.

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 *Natural Temperate Grassland of the Victorian Volcanic Plain* (NTGVVP), Spiny Rice-flower and Striped Legless Lizard using a conservation covenant. A Section 69 Agreement was entered into under the *Conservation, Forests and Lands Act 1987/1987* between DWPL Nominees Pty Ltd and Dexu Wholesale Management as the landowners and DELWP and registered on title on 12 December 2019.

1.4 Scope of Works

1.4.1 *Spiny Rice-flower Monitoring*

The following methodology has been undertaken in accordance with the CMP (Ecology and Heritage Partners 2019), and the specific survey procedures outlined within the Significant Impact Guidelines for the species (DEWHA 2009), to determine the population status of the Spiny Rice-flower within the conservation reserve. The following approach was undertaken:

- Targeted surveys were completed by people familiar with recognising the subspecies.
- Multiple surveys were undertaken to identify the species and provide adequate survey effort across the site.
- Surveys were not conducted for at least six months after fires and for at least three months after the cessation of grazing.
- Surveys were conducted between April and August while flowering (easily overlooked when not in flower).
- The targeted survey effort was directed to all potential habitat areas i.e. remnant grassland including degraded grassland.
- Transects at less than 5 metre intervals were undertaken in all potential habitat.
- Numbers of plants were recorded per land parcel with each located individual marked with a stake and GPS coordinates recorded for future reference.
- A general assessment of the vegetation condition within the site was also be recorded.

1.4.2 *Striped Legless Lizard Monitoring*

The following methodology was implemented to determine the population status of Striped Legless Lizard within the conservation reserve:

- A total of 10 tile grids of 10 x 5 tiles were established within the conservation reserve in March 2020;
- Tiles were laid in areas of suitable habitat within tussock grassland or grassy habitat at least three months before the determined 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). Other suitable protective structures on site were systematically overturned and replaced to actively search for Striped Legless Lizard;
- Time of day, weather conditions and the ambient temperature were recorded for each grid; and,
- Morphological data including sex, body size and reproductive condition were recorded for all Striped Legless Lizard captured, as well as dorsal head shots for unique identification purposes.

1.4.3 *Natural Temperate Grassland of the Victorian Volcanic Plain Monitoring*

The following methodology was implemented to assess the condition of the native grassland within the offset site, specifically focusing on areas of *Natural Temperate Grassland of the Victorian Volcanic Plain*.

- Monitored the quantity and quality of native grassland within the offset area during May 2020 and August 2020, with a brief follow up undertaken in November 2020 to observe the offset site in an optimal time for native vegetation.
 - Surveys (Habitat Hectare assessment) were structured around biomass reduction activities;
 - Fixed photo points were utilised in areas of both intact vegetation and those dominated by weeds in order to also visually record any successive changes;
 - Surveys focused on the quality and structure of remnant grassland as suitable habitat for Striped Legless Lizard (SLL) and Spiny Rice-flower (SRF), and whether the cover of native species was retained and or enhanced by ongoing management.
- Conducted regular monitoring for high threat weeds, with the aim of eventual elimination of all woody weeds (currently approx. 1% cover) and reduction of herbaceous weeds to at or below 10% cover (currently approx. 20%.);
- High threat weeds including Serrated Tussock *Nassella trichotoma*, Paterson's Curse *Echium plantagineum* and Artichoke Thistle *Cynara cardunculus* are present within the offset area. The cover and distribution of weeds was monitored and described, with management recommendations included to inform ongoing weed control works.
- Established permanent photo points (Figure 4).

2 YEAR ONE MONITORING RESULTS

2.1 Overview of Vegetation and Site Condition

Vegetation varies in condition across the site, from moderate to high quality areas. Weed control and removal of grazing in the eastern end of the offset site has greatly improved the condition, with areas now dominated by thick fields of native Wallaby-grass. All woody weeds have been removed from this area, with limited numbers remaining in the western end of the site. Native grasses have flourished across the site and will contribute to ongoing improvement through the distribution of seed across the site.

Biomass across the offset site ranges in density, however was generally high when observed in the November site visit. Within the eastern end, there is a lot of dead plant matter (Serrated Tussock and African Box-thorn *Lycium ferocissimum*), which are scheduled to be burnt in the planned burn in autumn 2012 to remove the built-up biomass. Biomass across the remainder of the site was moderate based on the last observation in November 2020, with a wet spring contribution to an increase in vegetation cover, along with the removal of grazing pressure (horses) and protection of the site (fencing), with vegetation in moderate to good condition due to the ranging cover of high threat weeds and mixture of native herbs and grasses present.

Extensive weed control, focusing on woody weeds and high threat weeds, have resulted in a large improvement in the eastern end of the offset reserve, where works focused during Year One due to the high cover of weeds in this area. The remainder of the site remained in moderate to good condition, with Year Two works planned to focus on the western extent.

Refer to Appendix 3 for a summary of weed control activities undertaken to date by AES.

2.2 Native Vegetation Monitoring

Monitoring is required to assess the positive and negative impacts of management actions on the integrity of the study area, and to implement change if required. Detailed vegetation monitoring was undertaken on two occasions in Year One, on 5 May 2020 and 3 August 2020, which included the areas of NTGVVP (Figure 2). An additional assessment was undertaken in November 2020 to capture vegetation condition in an optimal time for grassland assessments (late spring).

The monitoring was undertaken by suitably qualified ecologists.

2.2.1 *Monitoring Results*

Baseline data collection on the condition of the native grassland within the offset site was undertaken on 14 June 2019, to inform the starting condition of the site for the EPBC Conservation Management Plan and section 69 Management Plan associated with the offset site. During this assessment, the condition of the grassland and extent of weeds were recorded, with condition assessed through a habitat hectares assessment. Where native vegetation was identified a habitat hectare assessment was undertaken following methodology described in the Vegetation Quality Assessment Manual (Department of Sustainability and Environment (DSE) 2004). The recent assessment in August 2020 undertook an additional habitat hectare assessment, with the results included in Appendix 1.

The condition of the native vegetation within the offset site demonstrated an improvement in cover and quality, with the native grasses observed flourishing across the offset site. Large areas were dominated by Wallaby-grass, present in thick patches (Plate 1; Plate 2). Smaller sections were dominated by Spear-grass or Kangaroo Grass. Overall, there is a vast improvement in the native grassland since the initial assessment undertaken in July 2019, with the control of Serrated Tussock, removal of African Box-thorn and removal of horses playing a large part in the site improvement. Plate 3 and Plate 4 are taken at approximately the same location and demonstrate the improvement in native grass cover in a few months following a good spring rain.

A total of nine photo points were established within the offset site, with the locations shown on Figure 4 and photos in Appendix 2.



Plate 1. Wallaby-grass dominated large areas of the eastern extent of the offset site (Ecology and Heritage Partners 24/11/2019).



Plate 2. Extensive improvement in native vegetation cover in the offset site after site protection (Ecology and Heritage Partners 24/11/2020).



Plate 3. Vegetation cover in narrow neck in August 2020 after some weed control (Ecology and Heritage Partners 12/08/2020).



Plate 4. Native vegetation flourishing in narrow neck observed in November 2020 visit (Ecology and Heritage Partners 24/11/2020).

2.3 Spiny Rice-flower Monitoring

Monitoring of the status of the Spiny Rice-flower (SRF) population is required within the offset reserve annually for the first four years, and then in years 6, 8 and 10 (within the ten-year management timeframe).

Monitoring will determine if management actions to improve habitat are suitable for the longevity of a viable Spiny Rice-flower population and determine when remedial actions are required.

The objective of the Spiny Rice-flower monitoring was to ensure that the population is maintained or improved through management of threats to the population, based on the initial 86 individuals recorded within the offset site reserve as detailed in the CMP (Ecology and Heritage Partners 2019).

2.3.1 *Monitoring results*

Long-term monitoring of SRF within the offset reserve is crucial to ensuring ongoing survival (Vallee *et al.* 2004). Monitoring was undertaken in accordance with the current survey guidelines for Spiny Rice-flower in the Significant Impact Guidelines for the species (DEWHA 2009), which are summarised in Section 3 of the CMP (Ecology and Heritage Partners 2019).

Monitoring was undertaken by qualified botanists, familiar with the ecology and growth habits of SRF. SRF monitoring was undertaken on 5 June 2020, 19 June 2020 and 23 June 2020 during the flowering period of the species. Identified individuals were marked with a GPS and staked for future monitoring (Plate 6).

In addition to the 86 SRF individuals previously recorded, a further 63 individuals were located within the offset site, primarily within the narrow neck (Figure 2). The majority of SRF observed were relatively small in size, however contained flowering material and appeared in good health (Plate 5; Plate 6).

2.3.2 *General Comments*

Overall, the Year One monitoring event confirmed the presence of a large population of SRF within the offset site with a total of 149 SRF individuals recorded within the offset site to date. A number of SRF were also recorded within the six-meter fire buffer surrounding the site, primarily along the southern boundary. 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.



Plate 5. Flowering Spiny Rice-flower within the study area (Ecology and Heritage Partners 19/06/2020).



Plate 6. Staked flowering Spiny Rice-flower within the study area (Ecology and Heritage Partners 03/08/2020).

2.3.3 Threatening Processes

Weed invasion and biomass accumulation present the greatest threats to the health and survival of SRF plants at the offset site. In all cases, remedial actions to mitigate these threats were undertaken throughout the Year One monitoring period, and these actions are summarised below.

Weeds such as Serrated Tussock, Common Sow-thistle *Sonchus oleraceus*, Patterson's Curse and Spear Thistle *Cirsium vulgare*, and native grasses including Kangaroo-grass have the potential to out-compete or smother translocated Spiny Rice-flower plants and prevent recruitment. However, ongoing weed control and biomass removal are anticipated to continue to mitigate these threats to SRF plants.

2.3.4 Management Actions

The current main threat to the SRF population within the offset site is biomass accumulation by the surrounding native and exotic grasses and disturbance from pest animal activity. To mitigate these threats, ongoing control of high threat weeds, such as Serrated Tussock, has reduced the risk to the Spiny Rice-flower population. Aus Eco Solutions have conducted selective herbicide application on high-threat weeds within the offset site (with a particular focus on Serrated Tussock, thistles, and Patterson's Curse) that have a higher potential to impact the SRF population but avoid the use of herbicides within close proximity to SRF individuals.

Pest animals are being actively controlled by Aus Eco Solutions, as detailed in Appendix 3.

An ecological burn to reduce biomass is scheduled for autumn 2021 when conditions are favourable.

2.4 Striped Legless Lizard monitoring

Monitoring is required for both the status of the Striped Legless Lizard population and their habitat for a period of ten years within the offset reserve. Monitoring of Striped Legless Lizard will be undertaken for an initial four-year period, then in years 6, 8 and 10 in accordance with the CMP prepared for the site (Ecology and Heritage Partners 2019). A total of 10 grids comprising 10 x 5 tiles were established within the site on 19 March 2020 (Figure 3).

Monitoring of the Striped Legless Lizard population commenced in late September, when conditions were suitable for species detection. Surveys were undertaken during late September 2020 through until November 2020, with a total of eight tile checks to be undertaken during Year One.

Individuals of Striped Legless Lizard were recorded in each survey event (Plate 7; Plate 8). Of the ten grids, grid number three, six and 10 the highest number of SLL across the eight surveys. These grids are dispersed across the site, with grid three located in the far west, grid six in the narrow neck in the centre, and grid 10 in the far east (Figure 3). This indicates that the broader Striped Legless Lizard population is dispersed across the entire offset site, opposed to being restricted to one section. In total, 33 individuals of Striped Legless Lizard were recorded across all survey events. It is likely that some of these individuals were recorded several times over separate survey events. The most recorded during a single survey event was six individuals, recorded during the final check on 26 November 2020.

Several additional fauna species were recorded during the tile checks, including Eastern Blue-tongue Lizard *Tiliqua scincoides* (Plate 9), Little Whip Snake *Suta flagellum* (Plate 10) and skinks (species not identified).

Results of the Year One survey efforts are presented in Table 1.



Plate 7. Striped Legless Lizard recorded within the study area (Ecology and Heritage Partners 19/11/2020).



Plate 8. Striped Legless Lizard recorded within the study area (Ecology and Heritage Partners 19/11/2020).



Plate 9. Eastern Blue-tongue Lizard recorded during the tile checks within the study area (Ecology and Heritage Partners 09/10/2020).



Plate 10. Little Whip Snake recorded during the tile grid checks (Ecology and Heritage Partners 09/10/2020).

Table 2. Summary of survey results from Striped Legless Lizard surveys

Date	Observer	Time	Air Temp	Cloud Cover	Wind Direction and Spd	Above Tile Temp	Under Tile Temp	Observations & Tile Grid No.									
								1	2	3	4	5	6	7	8	9	10
21/09/2020	AW, EK, SB	13:00 – 16:00	19.8	5%	N 24 km	23.6	18.3	-	-	1 x SLL	-	2 x SLL	1 x SLL	-	-	-	1 x SLL
1/10/2020	AW, BJ, GT	08:30 – 12:00	14.6	20%	24 km W	19.3	13.7	-	-	-	-	-	1 x SLL	-	1 x EBT	-	1 x SLL
9/10/2020	AW & BJ	09:30 – 12:30	13.7	100%	15 km W	16.2	12.9	-	-	1 x SLL	-	-	1 x SLL	1 x LWS	-	-	1 x EBT
14/10/2020	AW & GT	12:00 – 14:15	19.1	5%	9 km S	49.7	24.3	1 x SLL	1 x SLL	1 x SLL	-	-	-	-	1 x EBT	1 x SLL	1 x SLL
22/10/2020	EK & BJ	13:00 – 16:00	19.8	5%	24 km N	23.6	18.3	-	-	1 x SLL	-	2 x SLL	1 x SLL	-	-	-	1 x SLL
28/10/2020	AW & CL	08:33 – 12:00	16.7	10%	6 km E	38.0	21.2	-	-	1 x SLL	-	1 x SLL	SLL Skin	-	1 x EBT	-	3 x SLL
19/11/2020	GT & NP	10:30 – 14:00	33.3	15%	25.9 km NNW	61.2	31.2	-	-	-	-	-	2 x SLL	-	-	-	1 x SLL
26/11/2020	EK & GT	10:00 – 13:00	17.5	99%	20.4 km S	27.9	22.4	-	-	1 x SLL	-	1 x SLL	-	-	1 x SLL 1 x EBT	2 x SLL	1 x SLL

Note: EBT = Eastern Blue Tongue, LWS = Little Whip Snake

2.5 Off-site Offset Monitoring Plan

All reporting requirements of the Offset Management Plan (Ecology and Heritage Partners 2018) were addressed as part of the Offset Management Plan Report, Year 1 (2019/2020; Appendix 4).

2.6 Management Action Plan

An assessment of completed actions to date against the Management Action Plan table in the CMP (Ecology and Heritage Partners 2019), are summarised below.

2.6.1 *Secure the offset site*

An on-title legal agreement for the conservation reserve was secured on title on 12 December 2019 through a Section 69 Agreement under the *Conservation, Forests and Lands Act 1987* approved by the Victorian Department of Environment, Land, Water and Planning (DELWP).

2.6.2 *Fencing*

Fencing was required as part of the management actions for Year One. Erection of a new rabbit-proof fence around the entire boundary of the site, enclosing the perimeters of the offset site to grazing by introduced herbivores such as rabbits.

Target to be achieved:

- Erect fencing to DELWP fencing standards Management Standards for native vegetation offset sites (DELWP 2018). Ensure fence is rabbit proof.

Action completed:

A temporary fence was initially erected around the perimeter of the site, which had been replaced by a rabbit proof fence across the majority of the site (Plate 11; Plate 12). Works are still being completed, with anticipated completion by December 2020. Delays in fence construction are primarily due to COVID-19 (effecting site access, number of contractors on site and availability of materials), along with local council discussions and weather (site was too wet to access without causing undue damage).



Plate 11. Perimeter fence constructed along the northern boundary of the offset site (Ecology and Heritage Partners 03/08/2020).



Plate 12. Rabbit proof fence constructed surrounding the offset site (Ecology and Heritage Partners 03/08/2020).

2.6.3 Weed Control

Monitoring of new and emerging woody and herbaceous weeds across the site was required to determine whether the extent of weeds within the offset site was managed and controlled appropriately and consistently throughout the 10-year management plan. Monitoring is also essential to ensure that weed cover does not increase. Woody weeds observed during the baseline condition site assessment in 2019 included a low number of Briar Rose *Rosa rubignosa* and African Boxthorn *Lycium ferocissimum*, with African Box-thorn scattered across the site, and some clusters in the eastern end of the offset site. Herbaceous weeds present within the study are include Serrated Tussock, Chilean Needle-grass *Nassella neesiana*, Cape Weed *Arctotheca calendula*, Paterson's Curse and Artichoke Thistle. Total weed cover of all herbaceous and grassy weeds ranged from 20% to 75% across the offset site.

Targets to be achieved:

- Eliminate high threat environmental weeds (cover reduced to <1%) within higher quality vegetation with low weed cover and controlling high threat environmental weeds within vegetation with medium cover of weeds (cover reduced to <5%) by end of CMP (Year Ten).
- Control all other weeds within all habitat zones (cover reduced to <5%) by end of CMP (Year Ten).
- Minimise off-target damage (avoid all native plants).

Action completed:

Control of woody and herbaceous weeds within the study area was carried out by Aus Eco Solutions (Appendix 3). Weed control works focused primarily on the eastern end of the offset site. African Boxthorn and Sweet Briar were present along fence lines and areas outside the offset boundaries. Control of African Boxthorn and Sweet Briar began with cutting and painting all woody weeds on site using chainsaws, loppers and neat chemical at the beginning of the control period. Some cut wood weeds were piled and will be burnt. Currently, no mature African Box-thorn or Briar Rose remain in the eastern end of the offset site. Limited numbers remain in the western end, which will be targeted in Year Two. It is expected that no mature woody weeds will remain within the offset site at the completion of Year Two management.

Control of two high threat grassy weeds, Serrated Tussock and Chilean Needle-grass was undertaken using a combination of Glyphosate (an active chemical) with Flupropanate (a residual chemical). This combination assists with killing the adult plant quickly whilst staying in the soil to prevent seeds from growing and developing. The works were focused on the eastern end of the offset site, targeting a large infestation of Serrated Tussock, with high levels of dieback evident in targeted areas (Plate 13). Artichoke Thistle, Cape Weed and Paterson’s Curse were also treated in patches within these areas and select areas across the rest of the site using the same combination of chemicals (Aus Eco Solutions 2020). Native grasses have been observed flourishing in the areas where weed control works have commenced (Plate 14).

No herbaceous weeds have increased in cover since the commencement of management actions. Due to the high cover of native grasses observed in the recent November site visit, no revegetation or supplementary planting is currently considered necessary.



Plate 13. Boundary of herbaceous weed control works completed to date, showing high levels of Serrated Tussock dieback (Ecology and Heritage Partners 03/08/2020).

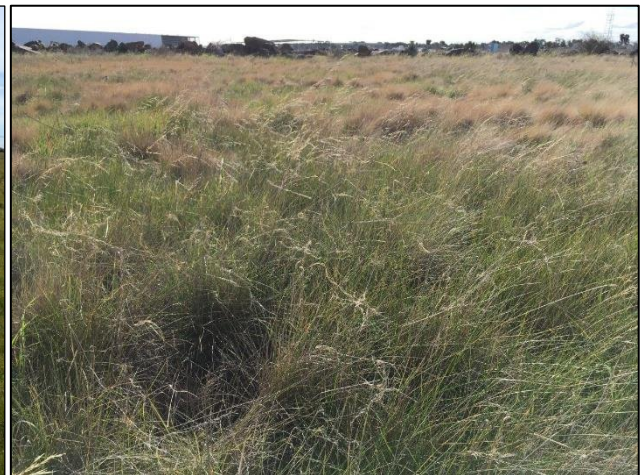


Plate 14. Native grass establishment in areas where herbaceous weeds have been controlled (Ecology and Heritage Partners 03/08/2020).

2.6.4 Control All High Threat Weeds

All high threat weeds must be controlled to improve the condition of native vegetation. High threat weeds are listed in Table 7 of the Management Plan incorporated into the Landowner agreement, and in Table 2 below.

Table 3. High Threat weed control method and timing.

Description of high threat	Method for monitoring and control / Actions	Timing
Spear Thistle	Present in moderate numbers across all sites. Monitoring will be ongoing, and control will be in accordance with Table 4.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).
Serrated Tussock	Present in low abundance across all sites. Moderate cover in zones 4A; 5A; 5B. High cover in zones 2D and 3B. Annual Spraying (before seeding) will be in accordance with Table 4. Monitoring will be ongoing.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).
Artichoke Thistle	Present in low abundance across all sites. Moderate cover in zones 4A; 5A; 5B. High cover in zones 2D and 3B. Annual Spraying (before seeding) will be in accordance with Table 4. Monitoring will be ongoing.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).

Description of high threat	Method for monitoring and control / Actions	Timing
Chilean Needle-grass	Present in moderate abundance in zones 2D; 3B; 3C, 4A; 5A; 5B. Annual Spraying (before seeding) will be in accordance with Table 4. Monitoring will be ongoing.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).
Perennial Rye-grass	Present in low to moderate abundance across all sites. High cover in zones 2D and 3B. Annual Spraying (before seeding) will be in accordance with Table 4. Monitoring will be ongoing.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).
Toowoomba Canary-grass	Present in low to moderate abundance across all sites. High cover in zones 2D and 3B. Annual Spraying (before seeding) will be in accordance with Table 4. Monitoring will be ongoing.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).
Bathurst Burr	Scattered presence in zones 2D and 3B. Annual Spraying (before seeding) will be in accordance with Table 4. Monitoring will be ongoing.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).
Paterson's Curse	Moderate cover in zones 2D; 3A; 3B; 4A; 5A; 5B.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).
Brown-top Bent	Present in low to moderate abundance across all sites. High cover in zones 2D and 3B. Annual Spraying (before seeding) will be in accordance with Table 4. Monitoring will be ongoing.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).
Galenia	Present in low to moderate abundance in all sites except 2C and 2E. Annual Spraying (before seeding) will be in accordance with Table 4. Monitoring will be ongoing.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).
Yorkshire Fog	Present in low to moderate abundance across all sites. High cover in zones 2D; 3B; 3C, 4A; 5A; 5B. Annual Spraying (before seeding) will be in accordance with Table 4. Monitoring will be ongoing.	Ongoing Monitoring. Control activities predominantly in Spring (before seed set).

Target to be achieved:

- No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date.

Actions completed:

Year One focused on the removal of Serrated Tussock, which dominated areas of the eastern end of the offset site. Other high threat weeds, primarily Paterson's Curse and Artichoke Thistle, were prevalent in this area, which have also been controlled through the on-ground works completed by AES. An ecological burn is scheduled within this eastern end to further reduce and control weed cover, along with continuing the weed control works (i.e. spraying).

2.6.5 Pest Animals

All landowners are required to take reasonable steps to prevent the spread of, and as far as possible, eradicate, established pest animals on their land according to the *Catchment and Land Protection (CaLP) Act 1994*. European Rabbit *Oryctolagus cuniculus* and Red Fox *Vulpes vulpes* are listed as established pest animals

under the CaLP Act. The study area contained evidence of pest animal presence, with rabbit warrens and fox dens observed across the site during the baseline assessment.

Target to be achieved:

- No surface disturbance within the credit site.
- No active rabbit warrens to be present.
- No active fox dens to be present.
- No rubbish.
- Minimal artificial piles of logs and rocks.
- Control numbers of rabbits and foxes.
- Control numbers of any new and emerging pest animals.

Action completed:

Pest animal control was undertaken by Aus Eco Solutions. Control methods included fumigation and warren collapsing where possible across the study area (Aus Eco Solutions 2020). No active dens were observed during Year One, and no new and emerging pest animals were observed.

2.6.6 *Biomass Management*

Biomass control is an essential practice for maintenance of flora and fauna values, and for protection against grass fires. Maintaining an open-structured grassland with inter-tussock spaces using biomass reduction and control methods will aid in maintaining the available areas for Spiny Rice-flower and Striped Legless Lizard to inhabit. Approximately 20% to 40% cover of bare ground is required for optimal habitat conditions for Spiny Rice-flower and Striped Legless Lizard. Control Biomass management regimes such as burning, and slashing may be employed to maintain this percentage cover.

Target to be achieved:

Ecological burn

- No single area to be burnt more than once every five years.
- Sufficient bare ground (approximately 20% - 40% cover) maintained to maintain space for recruitment of herbs and grasses.
- No loss of native plant diversity as a result of burning regimes.
- Burn widths of no more than 60 meters wide, to allow movement of Striped Legless Lizard into adjacent unburnt areas following a burn.

Slashing

- Slashing to occur no more than once annually.
- Sufficient bare ground (approximately 20% - 40% cover) maintained to maintain space for recruitment of herbs and grasses.
- No loss of native plant diversity as a result of slashing regimes.

Action completed

Biomass control by Aus Eco Solutions was planned for Autumn 2020, however did not take place due to the unfavourable weather conditions and impacts associated with COVID-19. The burn has been postponed until autumn 2021, where dead exotic plant material accumulated through the weed control works will be targeted for removal.

Biomass cover across the site, primarily in the eastern and narrow neck section, was relatively low due to the presence of grazing horses prior to the protection of the site (Plate 15). Since the protection and management within the site has commenced, a notable improvement in the cover of native grasses was observed (Plate 16). Due to the high cover of native biomass, no supplementary planting is currently considered necessary.



Plate 15. Vegetation cover in narrow neck prior to site protection (Ecology and Heritage Partners 14/06/2019).



Plate 16. Vegetation cover in narrow neck after site protection showing re-growth due to removal of grazing pressure (Ecology and Heritage Partners 03/08/2020).

2.6.7 Annual Reporting

In accordance with condition 11 of the EPBC approval, an annual report must be submitted to the Department for each year of the ten years of the Management Plan. The Annual Report addresses progress against the commitments set out in the Management Plan. Annual Reports should provide enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of/progress against the commitments for each zone.

Target to be achieved:

- Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for the offset site.
- Assessment against the approval conditions for the project.

Action Completed:

This report provides a summary of the management and monitoring actions undertaken to date within the offset site during Year One and includes an assessment against the Management Actions Plan Table incorporated into the CMP.

3 CONCLUSION

The management and monitoring works undertaken in Year One of the Ravenhall offset site demonstrate that the offset site condition has improved, and that the management actions undertaken to date are enhancing the ecological values present within the site.

Due to the high cover of Serrated Tussock within areas of the site, AES concentrated a lot of weed control efforts on spraying the infestation. These works were focused on the eastern end of the offset site, and the dead plant material is proposed to be burnt in autumn 2021 to remove biomass and provide opportunity for native grass recruitment. Large areas of Serrated Tussock have been controlled as a result of the works, with native grasses observed in moderate to high density in these areas.

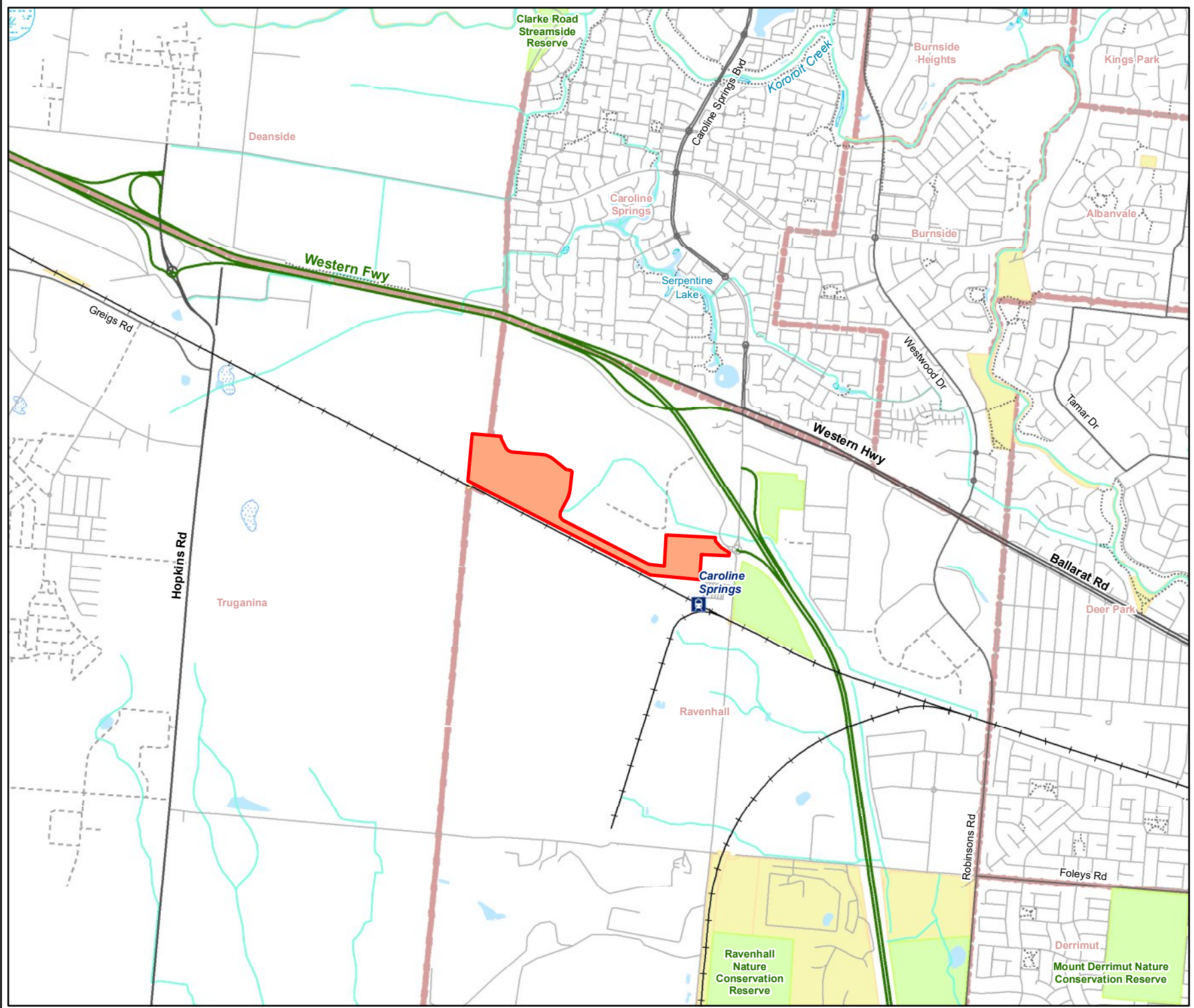
A strategic approach to management is being implemented across the site, to manage the vast size and target priority areas and items. Based on the works undertaken to date, no alterations to the existing Conservation Management Plan or Management Plan incorporated in the section 69 agreement are considered necessary due to the observed improvement in the site and will continue to be reviewed as the project progresses.

This report fulfils condition 3 of the approval, through the establishment of an on-site offset containing at least 13.37 hectares NTGVVP, 28.98 hectares of Striped Legless Lizard habitat and at least 86 SRF plants, and Condition 11 of the approval through the provision of this Year One monitoring report. The results of this report highlight that the offset site contains a population of Striped Legless Lizard dispersed across the site, supports more than the required 86 SRF, with 149 SRF recorded within the offset site, and contains at least 13.37 hectares of NTGVVP, which has demonstrated an improvement in quality since the offset site protection and commencement of management.

REFERENCES

- DEWHA 2009. Significant impact guidelines for the critically endangered Spiny Rice-flower (*Pimelea spinescens* subsp. *spinescens*). Nationally threatened species and ecological communities EPBC Act Policy Statement 3.11. Commonwealth of Australia, 2009.
- DSE 2004. *Vegetation quality assessment manual: Guidelines for applying the habitat hectares scoring method*. Version 1.3. Victorian Department of Sustainability and Environment, Melbourne Victoria.
- Ecology and Heritage Partners 2019. Conservation Management Plan: Ravenhall Industrial Precinct, Victoria. Prepared for DWPL Nominees Pty Ltd and Dexus Wholesale Management Limited.

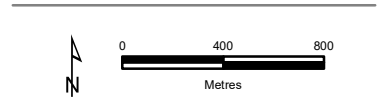
FIGURES



- Legend**
- Study Area
 - Railway
 - Freeway
 - Major Road
 - Collector Road
 - Minor Road
 - Proposed Road
 - Walking Track
 - Minor Watercourse
 - Permanent Waterbody
 - Land Subject to Inundation
 - 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.

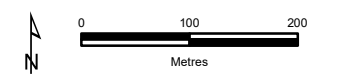
13434 Fig01 StudyArea 5/08/2020 melsley



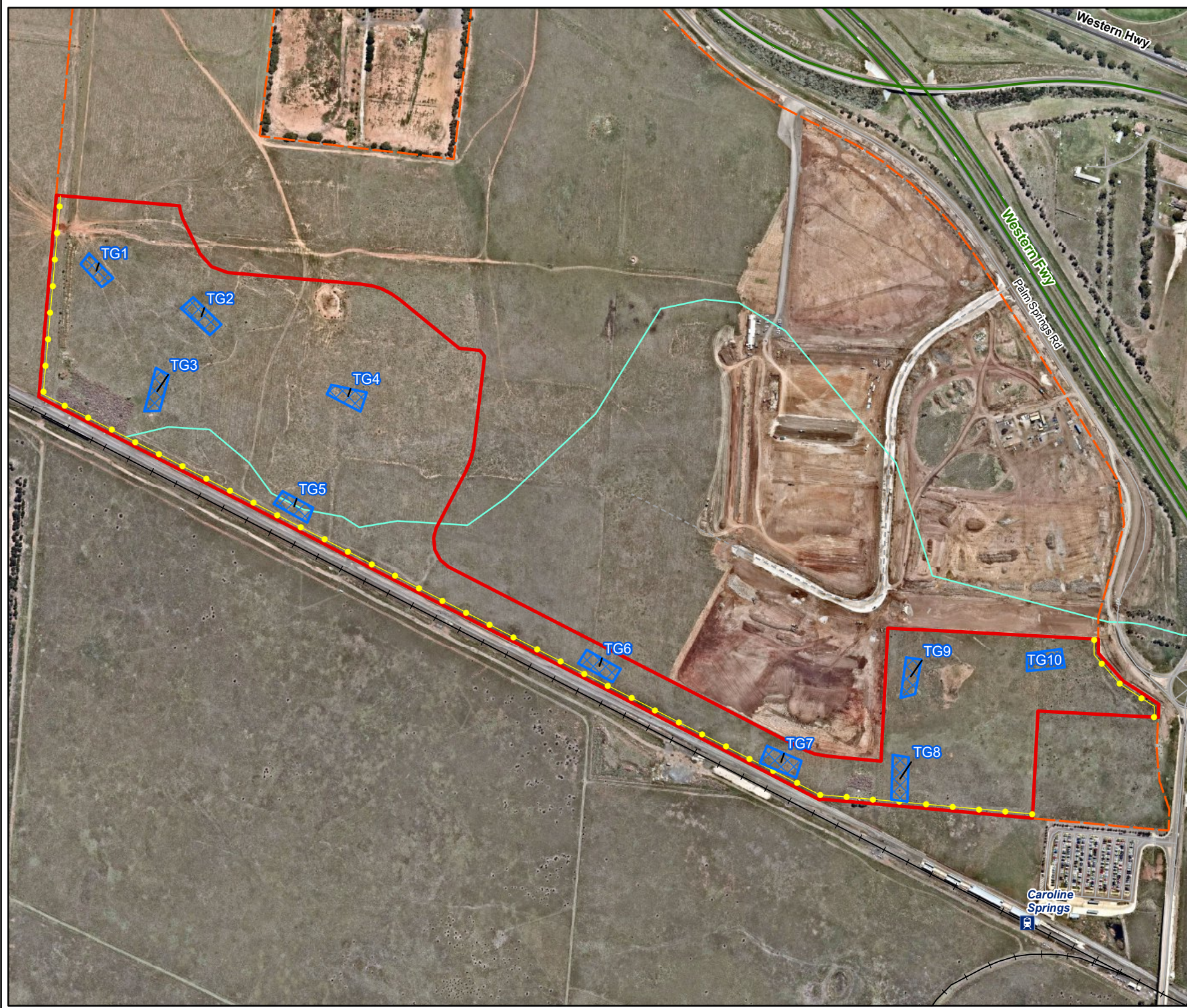
- Legend**
- Study Area
 - Property boundary
 - Internal 6m buffer
 - ▲ Spiny Rice-flower (2020 survey)
 - ▲ Spiny Rice-flower
 - Natural Temperate Grassland of the Victorian Volcanic Plain
 - Striped Legless Lizard habitat
- Ecological Vegetation Class**
- Plains Grassland
 - Plains Grassy Wetland



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



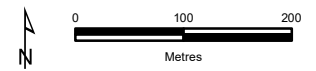
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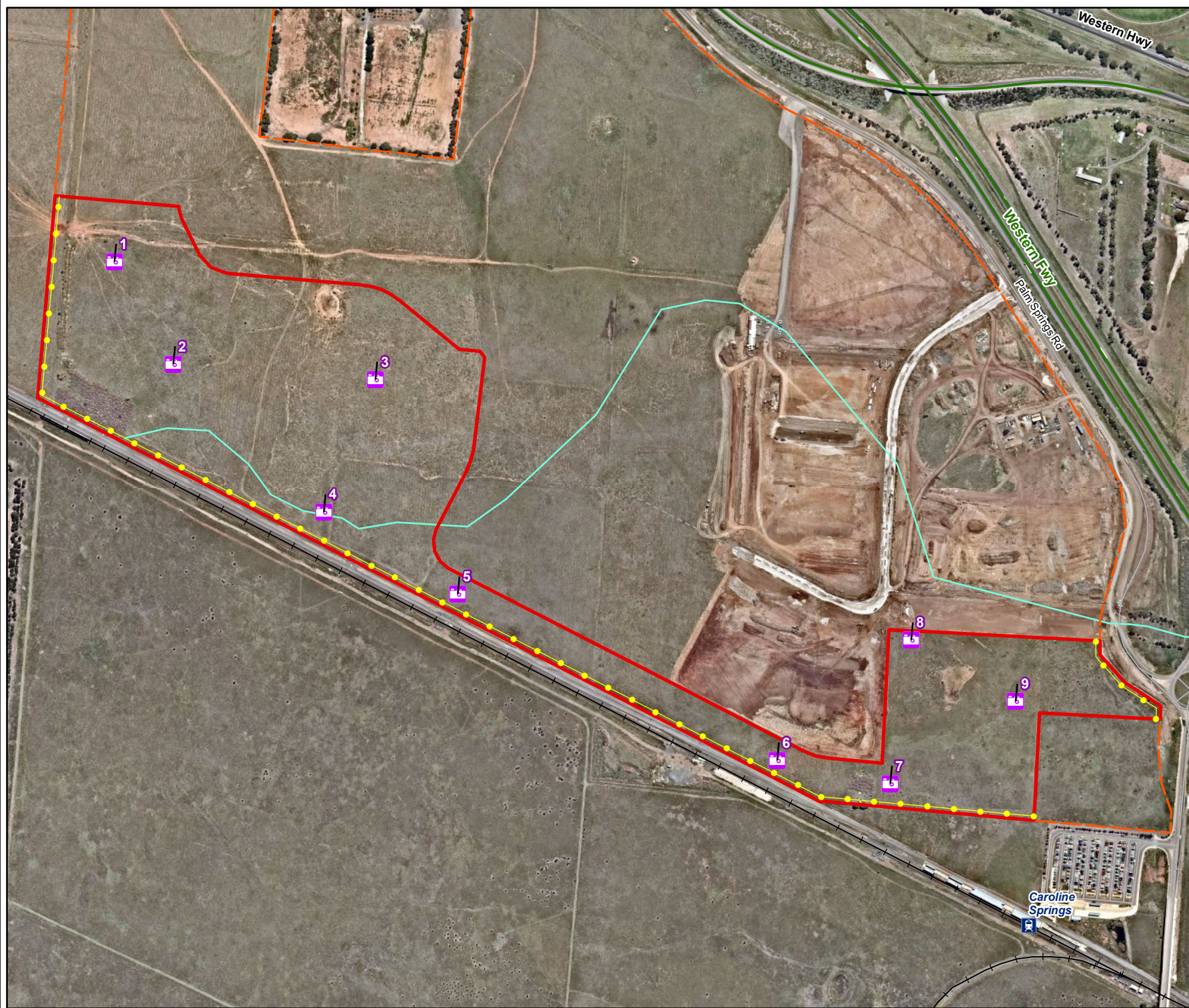
- Legend**
- Study Area
 - Property boundary
 - Internal 6m buffer
 - Tile grid locations



Figure 3
Striped Legless Lizard tile grid locations
Ravenhall Industrial Precinct
On-site Offset Reserve



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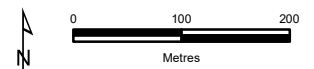


Legend

- Study Area
- Property boundary
- Internal 6m buffer
- 6 Photo points



Figure 4
Photo points
Ravenhall Industrial Precinct
On-site Offset Reserve



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13434 Fig04 Photopoints 5/10/2020 melsley

APPENDICES

Appendix 1. Habitat Hectare Assessment

Table A1.1. Habitat hectare assessment (Year 1 Baseline condition)

Management Zone		2B, 2C, 2E	2I, 3A, 3C	2D, 3B	2H
Vegetation Zone		PG1	PG2	PG3	PGWe
Bioregion		VVP	VVP	VVP	VVP
EVC / Tree		PG	PG	PG	Plains Grassy Wetland
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	10
	Lack of Weeds /15	7	7	0	2
	Recruitment /10	6	6	3	6
	Organic Matter /5	3	5	2	2
	Logs /5	na	na	na	na
	Treeless EVC Multiplier	1.36	1.36	1.36	1.36
	Subtotal =	42.16	38.08	13.60	27.20
	Landscape Value /25		14	14	14
Habitat Points /100		56	52	28	42
Habitat Score		0.56	0.52	0.28	0.42

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

Appendix 2. Photo Points

A2.1 Year One Photo Points



Plate A2.1. Photo point 1 (Ecology and Heritage Partners Pty Ltd 03/08/2020)



Plate A2.2. Photo point 2 (Ecology and Heritage Partners Pty Ltd 03/08/2020)



Plate A2.3. Photo point 3 (Ecology and Heritage Partners Pty Ltd 03/08/2020)



Plate A2.4. Photo point 4 (Ecology and Heritage Partners Pty Ltd 03/08/2020)



Plate A2.5. Photo point 5 (Ecology and Heritage Partners Pty Ltd 03/08/2020)



Plate A2.6. Photo point 6 (Ecology and Heritage Partners Pty Ltd 03/08/2020)



Plate A2.7. Photo point 7 (Ecology and Heritage Partners Pty Ltd 03/08/2020)



Plate A2.8. Photo point 8 (Ecology and Heritage Partners Pty Ltd 03/08/2020)



Plate A2.9. Photo point 9 (Ecology and Heritage Partners Pty Ltd 03/08/2020)

A.2.2 Photo Point Data

Date	Time	Photo Point ID	Direction	Coordinates (lat/long)
3/08/2020	11:34	1	South	-37.7579, 144.7223
3/08/2020	12:05	2	North	-37.7592, 144.7232
3/08/2020	12:20	3	West	-37.7594, 144.7263
3/08/2020	12:35	4	North	-37.7611, 144.7255
3/08/2020	12:57	5	East	-37.7621, 144.7276
3/08/2020	1:12	6	East	-37.7643, 144.7325
3/08/2020	1:25	7	North East	-37.7646, 144.7343
3/08/2020	1:32	8	South	-37.7628, 144.7347
3/08/2020	1:52	9	East	-37.7636, 144.7363

Appendix 3. Ravenhall Grassland Offset Management Actions Report (AES 2020)



Ravenhall Grassland Offset - Final Report

Report for Dexus / Ecology & Heritage Partners

PREPARED BY:

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Ravenhall Offset Final Report 2020

INTRODUCTION

Control works objectives:

1. Weed control - noxious Nassella species and herbaceous weeds
2. Woody weed control
3. Pest animal control
4. Biomass reduction (Ecological burn of ~7ha)
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



Aerial source: Nearmap 2020

Image 1: Ravenhall Offset site

1. Weed Control - Noxious Grasses & Herbaceous Weeds

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.
- Paterson's Curse covers alot of the offset and will take time to eradicate completely from site
- There are some very large patches of Chilean Needle Grass, some of these larger patches have been sprayed around the border to prevent spread.

1.2 Works Completed

- Serrated Tussock and Chilean Needle Grass have both been controlled onsite (Yellow polygon) 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 Patersons Curse have also been treated in patches within these areas, and also in selective patches within the remainder of the offset site.

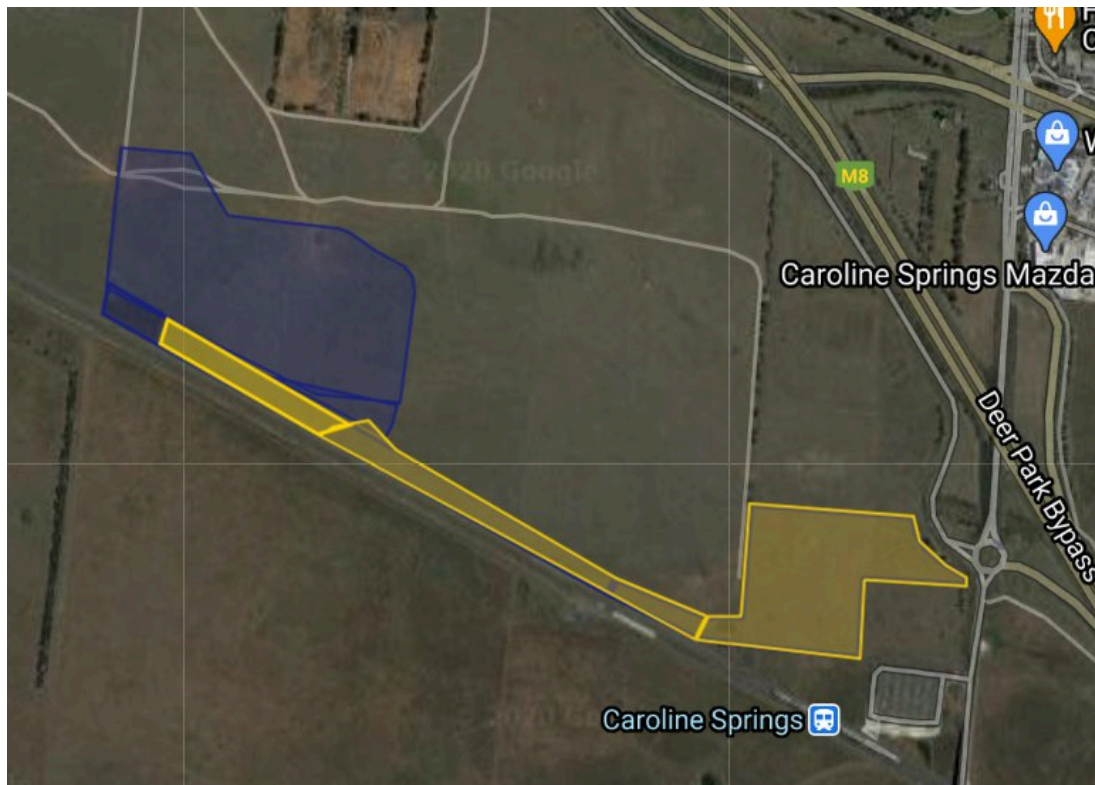


Image 2: Offset site (blue). Current control of target weeds (yellow) (October 2020)



Image 3-6: Examples of weed control onsite



Image 7: Examples of weed control onsite

2. Woody Weed Control

2.1. Site Observations

- Boxthorn and Sweet Briar only remains in minimal numbers along fence lines and areas outside of offset site boundaries

2.2 Works Completed

- Boxthorn and Sweet Briar control works began at the beginning of the control period. This involved cutting and painting all woody weeds onsite with chainsaws, loppers and neat chemical. Some of these have been piled for burning to remove from site and remove harbour for any rabbits.
- Works are completed.

3. Pest Animal Control

3.1. Site Observations

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

3.2 Works Completed

- Fumigation and warren collapsing has been conducted in the soil piles where possible (see attached pictures)
- Another fumigation was conducted in Spring.



Image 8 & 9: Examples rabbit warrens / activity

4. Biomass Reduction (Ecological Burn)

4.1. Site Observations

- The Autumn ecological burn could not go ahead with the small window of opportunity available and weather conditions that were not in our favor. The burn was postponed until spring, and with the extension of COVID-19 restrictions it was decided to postpone all burning activities onsite.

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.
- Burn has been postponed until Autumn 2021 due to COVID-19 restrictions.



Image 10 & 11: Examples firebreak installation for Spring Burn

5. Rubbish Removal

Before:



After:



Image 12 & 13: Examples of rubbish removal

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.

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.



Image 14 & 15: Spiny Rice Flowers found inside and outside offset site

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.


Appendix 4. Off-site Offset Management Plan Report – Year 1 (Bleak House 2020)

EPBC 2015/7486: Offset Management Plan Report, Year 1

(Management period: 2019 / 2020)



Pair of Brolgas browsing between Silver Tussock-grass within Offset Site

Landowner of offset site	Bleak House Pty Ltd
Location and address of offset site	435 McDonnells Road Ombersley (Birregurra), Victoria
Offset site number	All zones (01A and 02A)
Offset plan reference number	EPBC 2015/7486
Responsible Authority	DOEE
DELWP Management Agreement	VC-CFL-3044 LA02
Landholder/s	Claire Dennis, James Dennis
Report #	1
Signature	 Claire Dennis James Dennis
Date	February 2020

Introduction

Bleak House Pty Ltd was engaged to undertake the protection and management of 32 ha of Natural Temperate Grassland of the Victorian Volcanic Plain (NTGVVP) and Stripped Legless Lizard *Delma impar* (SLL) habitat, into perpetuity including the actions detailed within “*EPBC 2015/7486: Offset Management Plan: 435 McDonnells Road Ombersely (Birregurra), Victoria*” henceforth refer to as the OMP (Ecology and Heritage Partners Pty Ltd 2019).

Detailed in Section 8: “*Monitoring and Reporting*” from the OMP, refers to the landowner’s responsibilities for monitoring and reporting on yearly actions resulting from undertaking of the OMP. Details of the desired outcomes and responsibilities are of the monitoring and reporting are contained in Appendix A1.

The OMP annual Management Actions Report is intended to demonstrate the management measures are effective in meeting the environmental outcomes determined within the OMP, and the annual submission of this report to DELWP and DoEE, is one of the specified actions required by the OMP. The monitoring obligations over the course of the year include recording:

- The extent, severity, trend and presence of current weed species and any new and emerging weed species;
- The extent, severity, trend and presence of pest animal activity;
- Biomass levels, visually assessed across the site;
- Evidence of unpermitted human/stock access; and,
- Any new threats.

This report contains the results of monitoring and details of actions undertaken in accordance with the OMP. This data is reported within a tabulated format as specified within the OMP and includes detailed descriptions of management actions, specifically:

- A copy of the Management Action Table from the OMP with information on which actions have been completed for year/s of this reporting period (Table 1);
- A description of the specific monitoring results from surveys undertaken (i.e. SLL surveys);
- Success of weed (Table 2) and pest animal control work (Tables 3);
- Successful management tools (i.e. techniques used to control weed species, protection of new plants, monitoring technique, etc.);
- Any problems or issues experienced (i.e. new infestation of weed species, etc.); and,
- Provide photographs showing evidence of works.

Photo point monitoring and quadrat assessments were undertaken in October at eight locations representative of the vegetation within the study area as determined by the Landowner at the commencement of the OMP. The results of photo point monitoring and vegetation quadrat assessments undertaken by the Landowner are presented in Tables 4 and 5. Additional supporting documentation of actions undertaken in accordance with the OMP are provided in Plates 1 through 6.

Methodologies

Photo Point Monitoring

Eight photo points were established within the Offset Site. Five photos were taken at each photo point taken with a Olympus E-M5 Mark II digital camera. One photo was taken looking vertically down from the centre of a 1 m² vegetation quadrat plot, from a height that included the whole plot in the frame, from 1.5 m above the ground. The other four photos were taken in a landscape orientation, 1.5 m off the ground, standing 1.5 m back from the quadrat with the 1 m² quadrat completely visible at the base of the image looking either south, west, north or east according to a compass.

Vegetation Quadrat Surveys

Vegetation quadrat surveys have been undertaken at each photo point. A marker post was placed in the north east corner of each 1 m² quadrat and a GPS point was taken at this corner. Within the 1 m² plot percentages of total vegetation cover, native and weed species cover, inter-tussock space bare ground and litter were estimated. The percentages of different types of native (graminoids and herbs) and weed species (perennial, annual grasses and dicotyledons) were also recorded. This type of estimation is dependent on the time of year, the conditions at that time and the person undertaking the surveys.

All species within the 1 m² plot were identified where possible and recorded. Surrounding each 1m² quadrat a 9 m quadrat was also surveyed for additional species which were also recorded.

Average Biomass height was also measured using the 'drop disc method' (Bransbury 1977; Catchpole 1992). A disc with a central slot is dropped down a vertically held ruler and the height above ground where the disc comes to rest is then measured. The disc is a standard 200 g, 30 cm in diameter, and dropped from 1 meter.

The height of the vegetation was measured using a ruler placed vertically against the ground, in five locations within the quadrat. These five measurements were then averaged to give the average vegetation height for the quadrat.

Compliance with the Obligations of the Landowner

Conditions detailed in Appendix A.5 Landowner Agreement: Compliance with the Obligations of the Landowner

Has "The landholder" complied?

Yes

Signed by:


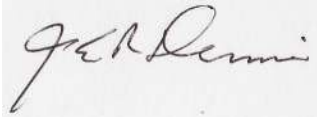
	
Claire Dennis	James Dennis

Table 1. Offset Management Plan: Management Actions

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
Fencing Erection and Maintenance					
1-10	32 ha of NTGVVP and SLL habitat	Maintain fencing in good condition around entire boundary of all sites where fencing exists or is required	Ongoing	Maintain fencing to DELWP fencing standards in BushBroker Information Sheet 12 - Standards for Management – Fencing	Fences bordering offset site and broader property pertinent to Offset Site meets conditions DELWP specified standards and are stock proof. Monitoring of fence integrity is ongoing.
1-10	32 ha of NTGVVP and SLL habitat	Erect temporary fencing around offset site during grazing exclusion period (if stock present during this period cannot be confined to certain areas)	October - November	Exclude stock from the offset site during exclusion period to protect NTGVVP community.	Fencing has been installed across the broader paddock where the offset site is located. This enables targeted control of grazing within the offset site as well as the broader paddock which is also managed for conservation purposes.
1-10	32 ha of NTGVVP and SLL habitat	If a threat arises erect an additional fence immediately around the entire boundary of the offset site	Immediately on identification of threat	Erect fencing to DELWP fencing standards in BushBroker Information Sheet 12 - Standards for Management – Fencing	Monitoring of emerging threats is ongoing, as such no threats have been observed which require additional fencing.
1	32 ha of NTGVVP and SLL habitat	Establish posts to mark the boundary of the offset site in accordance with advice from a qualified ecologist and land surveyor	Immediately on approval of Year 1 of management works	Facilitate management and monitoring of the offset site. Delineate location of temporary exclusion fence.	A land surveyor has been engaged to undertake installation of posts to mark the offset boundary. GPS points have been established along the boundary of the offset site to facilitate on ground management and monitoring of the offset site.

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
Weed Control					
1-10	32 ha of NTGVVP and SLL habitat	Control all herbaceous weeds. Refer to Table 2 for list of herbaceous weeds, their control method and timing of actions	Refer Table 2	Reduction in weed cover (ie. <24%). Minimise off-target damage (avoid all native plants)	Herbaceous weed control actions are detailed in Table 2 . Briefly, a combination of pulse grazing, outlined in "Biomass Control" section of this table, and targeted weed control, such as spot spraying and chipping of high threat weed species, was used. An overview is provided here based on the Vegetation Quadrat Assessments undertaken at the photo points. Total average weed cover recorded on the site was 20%.
1-10	32 ha of NTGVVP and SLL habitat	Eliminate all new & emerging herbaceous weeds	Ongoing.	<1% cover of all new and emerging herbaceous weeds at the end of Year 10	The only new and emerging weed is the South African Weed-Orchid <i>Disa Bracteata</i> , observations occur in Spring when the plant flowers, as the plant exists as a bulb outside of this period and is difficult to monitor outside of Spring. All plants observed are recorded with GPS, removed, including their blub, placed in a bag and burnt offsite. This appears to be an effective approach to limit further establishment of the species as current records are few and sporadic.
1-10	32 ha of NTGVVP and SLL habitat	Eliminate all new and emerging woody weeds	Ongoing	<1% cover of all woody weeds at the end of Year 10	Currently no woody weeds within Offset Area Ongoing monitoring of woody weed establishment

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
Pest Animal Control					
1-10	32 ha of NTGVVP and SLL habitat	Control rabbits and foxes. Refer to Table 3 for a list of control methods and timing of actions	Refer Table 3	No surface disturbance within the offset site; No active rabbit warrens to be present; No active fox dens to be present; No rubbish/artificial harbour present; Minimal artificial piles of logs and rocks;	Details of pest animal control actions are provided in Table 3 . Briefly, no rabbits or foxes have been observed within the study area, and regular monitoring is ongoing.
1-10	32 ha of NTGVVP and SLL habitat	Monitor and control rabbits and foxes	Ongoing	Reduction in the abundance of pest animals, and no detectable impacts to the NTGVVP ecological community	Monitoring of rabbits and foxes is ongoing. There have been no observations of rabbits or foxes within the study area, nor have there been signs of recent warrens or scats.
1-10	32 ha of NTGVVP and SLL habitat	Monitor and control all new and emerging pest animals	Ongoing	Control numbers of any new & emerging pest animals	New and emerging pest animals might include, cats or hares. Neither of these species have been observed within the offset site during regular monitoring, nor have any other pest animal species been observed.

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
Biomass Management					
1-10	32 ha of NTGVVP and SLL habitat	<p>Pulse grazing: The maximum length of continuous grazing is four weeks with at least two weeks rest between cycles. Stock generally excluded during October -November within NTGVVP. Stock removed immediately following any high rainfall events.</p>	<p>January to September (see Management Action Description, subject to written approval from DELWP for seasonally dependent modifications)</p>	<p>Stock must be removed should total vegetation cover fall to or below 70% Sufficient bare ground (approximately 20% to 40% cover) maintained in order to maintain space for recruitment of herbs and grasses. No loss of native plant diversity as a result of grazing regimes. Reduction in weed cover.</p>	<p>The Offset site was grazed with a high intensity (1500 or 500 mob of sheep), but short period (three to six days dependent of size of mob of sheep, and amount of biomass) on three separate occasions with approximately two months rest between pulses, between January to August 2019. For effective targeting of pulse grazing and to comply with the grazing guidelines of the OMP the 32 ha Offset site has been split over three smaller, but contiguous cells in an approach known as cell grazing. The grazing schedule pertinent to this offset site is as follows*: Cell 3 - 800 ewes from 1/2 to 6/2, 1500 ewes from 25/4 to 27/4 and 500 ewes from 3/7 to 10/7. Cell 5 - 1100 ewes from 23/1 to 24/1, 800 ewes from 24/1 to 28/1, 1500 ewes from 1/4 to 4/4 and 500 wethers 21/6 to 24/6. Cell 6 - 800 ewes from 24/1 to 28/1, 1500 ewes from 4/4 to 8/4 and 500 wethers from 24/6 to 27/6.</p>
1-10	32 ha of NTGVVP and SLL habitat	<p>Ecological Burning: Burn less 60 m wide, minimise risks to life and property and biodiversity, less often than once in 5 years in any one area.</p>	<p>April to May, Outside of the Victorian Declared Fire Danger Period</p>	<p>Grazing and burning: aim to maintain approximately 20% to 40% cover of bare ground or intertussock space to allow sufficient space for recruitment of herbs and grasses.</p>	<p>Two small cool burns (Plates 8, 9 and 10) were carried out in 2A, 23 May 2019. The burn areas were less than 60 m wide and located near photo points 105 and 106 (Figure 1). The opportunity to burn was small as Fire Danger Period ran late and the autumn rain began soon after.</p>

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
Detailed SLL population and vegetation monitoring					
Years 1-4, 6, 8 and 10	NTGVVP Offset	Monitoring Refer Section 8.2 and 8.3	Spring	Allow for ongoing auditing of the effectiveness of management. Reports will include a review of past management works against the performance targets and objectives contained within this OMP.	Report on SLL and third-party vegetation monitoring is provided separately.
Annual reporting					
1-10	NTGVVP Offset	Prepare and submit an annual report and photo monitoring to DELWP and DoEE. Refer Section 5.5.7 and 8.1 of OM. Briefly report entails: Enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for the offset site. Allow for ongoing auditing of the effectiveness of management.	Submit at least 1 to 2 months prior to on-title agreement anniversary date	Annual report is signed, dated and submitted by the Landowner at least 2 months prior to the anniversary date of on-title agreement registration Reports will include a review of past management works against the performance targets and objectives contained within this OMP. Future management priorities will also be detailed in these reports. Obligations of the Landowner have been met and the obligations form is signed, dated and submitted with the annual report	An annual report has been prepared and submitted to DOEE and DELWP

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
5	NTGVVP Offset	Review effectiveness of OMP. Refer Section 5.5.8 and 8.1	End of Year 5.	If existing OMP is not leading to the ongoing maintenance and improvement of the NTGVVP community, a review will be undertaken, and a new management plan prepared for the remaining 5 years of management.	Not applicable to year 1 report

* The current reporting period covers from May 2019 to January 2020, and as such the specific grazing requirements outlined in the OMP did not come into effect until May 2019. Despite this partial year of management, details of the grazing schedule have also been provided for the prior months of 2019 so as to be consistent with future reports (however the OMP had not been written until August).

Table 2. Offset Management Plan: Weed Management Actions

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Bearded Oat	<i>Avena barbata</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	There is very little of this species in the Offset Site	Controlled pulse grazing helps to control this annual by reducing seed set.
Brown-top Bent	<i>Agrostis capillaris</i>	Yes	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	Brown-top Bent is considered to be the weed of highest threat within the Offset Site. Some trials of different control methods within the whole paddock have begun which included a burn in May with a follow up of glyphosate application in the beginning of the growing season, August. Controlled pulse grazing may also help to control this weed by reducing seed set, and greater native species diversity.	A Brown-top Bent specific herbicide will be available from 2020 which will be also trialled within the broader paddock. Should this herbicide approach prove successful with the suppression of weed, the herbicide will be used across a larger area affected by Brown-top Bent. In previous years targeted mowing of areas dominated by Brown-top Bent during flowering have proven moderately effective, however during spring 2019 the high level of soil moisture did not permit this management approach.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Buck's-horn Plantain	<i>Plantago coronopus</i>	No	1-A, 2-A	Hand chip and spot spray.	Spring / Summer	Controlled pulse grazing helps to control this weed by reducing seed set, and allowing greater native regeneration.	Buck's-horn Plantain is a low threat weed which is common but in low numbers across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Cape weed	<i>Arctotheca calendula</i>	Yes	1-A, 2-A	Hand chip and spot spray.	Spring / Summer	Cape Weed is rare within the Offset Site and appears to be controlled with pulse grazing.	Extent of this species is highly localised to deserted rabbit warrens no longer used which are found on a few barriers within the broader paddock. These occurrences are not located within the Offset Site.
Cat's Ear	<i>Hypochaeris radicata</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide.	Spring / Summer	Controlled pulse grazing helps to control this weed by reducing seed set, and allowing greater native regeneration.	Cat's Ear is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Chickweed	<i>Stellaria media</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide.	Spring / Summer	Controlled pulse grazing helps to control this annual by reducing seed set.	Chickweed is a low threat weed which is rare across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Couch	<i>Cynodon dactylon</i>	Yes	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	There is very little of this species in the Offset Site	There has been no couch observed within the Offset Site. The assessor or author of the OMP may have confused Couch grass with Brown-top Bent which has a cover closer to the 10% reported for the Couch. Refer above for details of Brown-top Bent.
Hair Grass	<i>Aira spp.</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	Controlled pulse grazing helps to control this annual by reducing seed set.	Hair Grass is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Hare's-foot Clover	<i>Trifolium arvense</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide.	Spring / Summer	Controlled pulse grazing helps to control this annual by reducing seed set.	Hare's-foot Clover is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Hop Clover	<i>Trifolium campestre var. campestre</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide.	Spring / Summer	Controlled pulse grazing helps to control this annual by reducing seed set.	Hop Clover is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Large Quaking-grass	<i>Briza major</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October Graze – January – October – January;	Controlled pulse grazing helps to control this annual by reducing seed set.	Large Quaking-grass is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Onion Grass	<i>Romulea rosea</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide.	Spring / Summer	Controlled pulse grazing helps to control this weed by reducing seed set, and allowing greater native regeneration.	Onion Grass is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Ox-tongue	<i>Helminthotheca echioides</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide.	Spring / Summer	Controlled pulse grazing helps to control this annual by reducing seed set.	Ox-tongue is a low threat weed which is rare across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Perennial Rye-grass	<i>Lolium perenne</i>	Yes	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	Controlled pulse grazing helps to control this grass and spot spraying will be carried out in the spring in areas if necessary.	There is very little Perennial Rye-grass in the Offset Site.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Ribwort	<i>Plantago lanceolata</i>	No	1-A, 2-A	Hand chip and spot spray.	Spring / Summer	Controlled pulse grazing helps to control this weed by reducing seed set and allowing greater native regeneration.	Ribwort is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Salsify	<i>Tragopogon porrifolius</i> subsp. <i>porrifolius</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	Salsify has been observed in only a few areas within the Offset Site and have been removed by either hand pull or chipping. These areas will be monitored and follow up will be carried out again this spring.	Salsify is rare within the Offset Site
Sheep Sorrel	<i>Acetosella vulgaris</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide.	Spring / Summer	Controlled pulse grazing helps to control this weed by reducing seed set, and allowing greater native regeneration.	Sheep Sorrel is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Smooth Cat's-ear	<i>Hypochaeris glabra</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide.	Spring / Summer	Controlled pulse grazing helps to control this weed by reducing seed set, and allowing greater native regeneration.	Smooth Cat's-ear is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Soft Brome	<i>Bromus hordeaceus</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	Controlled pulse grazing helps to control this annual by reducing seed set.	Soft Brome is a low threat weed which is common but in low numbers across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.
Spear Thistle	<i>Cirsium vulgare</i>	Yes	1-A, 2-A	Hand chip and spot spray.	Spring / Summer	Thistle have been hoed in three areas. More follow up will be undertaken this spring. There are not many thistle areas in this site.	There are not many thistle areas in this site.
Squirrel-tail Fescue	<i>Vulpia bromoides</i>	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	Controlled pulse grazing helps to control this annual by reducing seed set.	Squirrel-tail Fescue is a low threat weed which is common but never dominant across the Offset Site. The use of pulse grazing is maintaining the combined cover of weeds below 24%.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Sweet Vernal-grass	<i>Anthoxanthum odoratum</i>	Yes	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	Pulse grazing helps to control this grass by reducing seed set. Spot spraying will be carried out in Spring if necessary. Research suggests that a cool burn of the weed in spring may control it, preventing seed set but this may be difficult to achieve due to the wetness of the grass. We may be able to mow before seed set, although there is not very much in this area.	Sweet Vernal-grass is rare within the Offset Site
Toowoomba Canary-grass	<i>Phalaris aquatica</i>	Yes	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	Controlled pulse grazing will help to control this weed and some spot spraying has been undertaken in August. This will be monitored with a follow up in spring 2020.	Toowoomba Canary- grass is rare within the Offset Site

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Yorkshire Fog	<i>Holcus lanatus</i>	Yes	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulse-grazing can occur when annual weeds cover is equal to, or exceeds 25%.	Spot-Spray – October – January; Graze – January – October	Controlled pulse grazing helps to control this species by reducing seed set.	During 2019 the cover of Yorkshire Fog within the Offset Site was minimal. The prevalence of this weed fluctuates from year to year and appears heavily dependent on years with higher rainfall.

Table 3. Offset Management Plan: Pest Animal Control Actions.

Common name	Zone(s)	Method	Timing	Description of actions	Comments and observations
Rabbits	1-A, 2-A	Baiting. When baiting collect and dispose of carcasses to prevent poisoning of native predators.	Ongoing	Ongoing monitoring is carried out of the rabbit population.	Some burrow activity on near-by barriers have been noticed. This will be monitored and action taken if necessary.
Rabbits & Foxes	1-A, 2-A	Fumigation and collapse of rabbit burrows and fox dens if identified. Remove or disperse surface harbour.	Ongoing	Ongoing monitoring is carried out of the fox population.	Foxes occasionally traverse the Offset Site and use the rocky barriers in the broader paddock for their dens. These areas are monitored and treated if active. Fox baiting has been carried out in the adjacent surrounding paddocks for the Wind Farm.
New & Emerging pest animals	1-A, 2-A	Monitor and control	Ongoing	Ongoing monitoring is carried for new and emerging pest animals.	No other pests have been recorded.

Table 4. Offset Management Plan: Landowner Photo Point Monitoring results

Photo Point Monitoring results	
<p>Offset Site: EPBC 2015/7486</p> <p>Photo point number: 101 Photo point ID: Tussocks</p> <p>Lat: -38 15 439 Long: 143 45 995</p> <p>Date: 20/10/2019 Time: 11:01 am</p>	 <p>View from above quadrat.</p>
 <p>Landscape view looking South</p>	 <p>Landscape view looking West</p>
 <p>Landscape view looking North</p>	 <p>Landscape view looking East</p>

Photo Point Monitoring results

Offset Site: EPBC 2015/7486

Photo point number: 102
Photo point ID: Themeda

Lat: -38 15 478
Long: 143 45 981

Date: 20/10/2019
Time: 10:47 am



View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Photo Point Monitoring results

Offset Site: EPBC 2015/7486

Photo point number: 103

Photo point ID: Buttons

Lat: -38 15 748

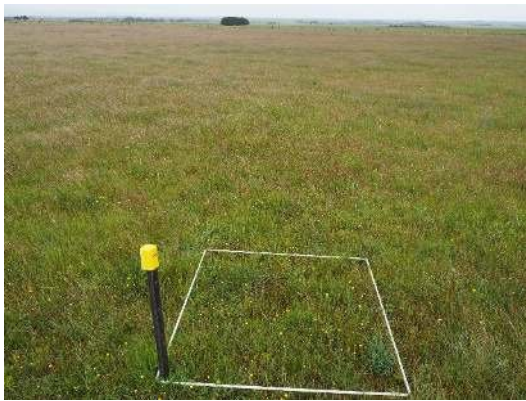
Long: 143 46 174

Date: 20/10/2019

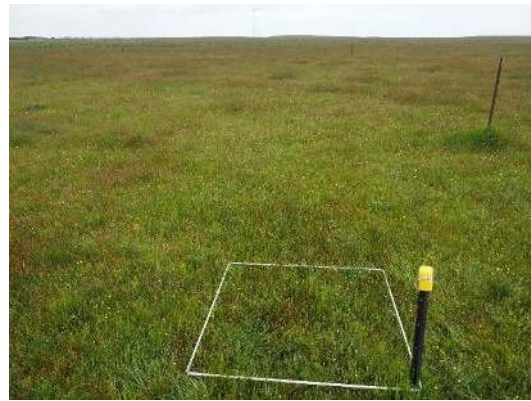
Time: 09:38 am



View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Photo Point Monitoring results

Offset Site: EPBC 2015/7486

Photo point number: 104

Photo point ID: Bent and Themeda

Lat: -38 15 605

Long: 143 46 133

Date: 20/10/2019

Time: 10:04 am



View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Photo Point Monitoring results

Offset Site: EPBC 2015/7486

Photo point number: 105
Photo point ID: Wallaby grass

Lat: -38 15 681
Long: 143 46 044

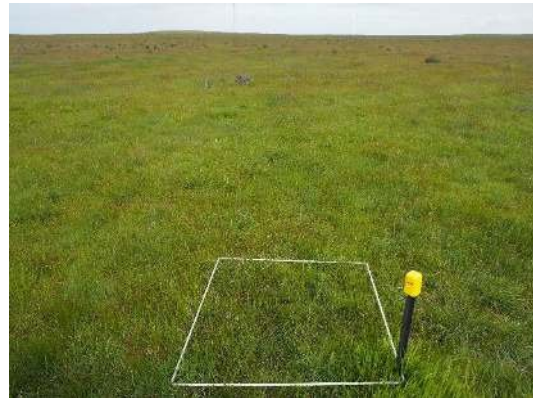
Date: 20/10/2019
Time: 10:26 am



View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Photo Point Monitoring results

Offset Site: EPBC 2015/7486

Photo point number: 106

Photo point ID: Themeda south

Lat: -38 15 712

Long: 143 45 914

Date: 20/10/2019

Time: 11:39 am



View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Photo Point Monitoring results

Offset Site: EPBC 2015/7486

Photo point number: 107

Photo point ID: NW corner cell 6

Lat: -38 15 590

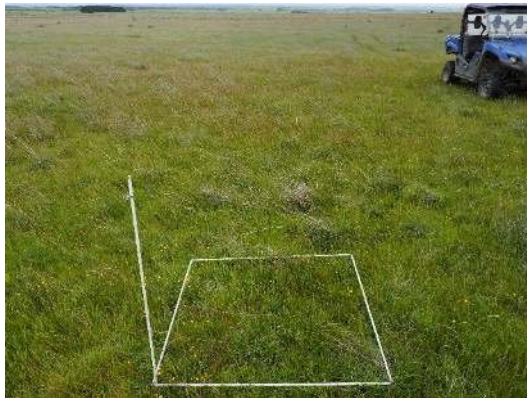
Long: 143 45 966

Date: 20/10/2019

Time: 11:58 am



View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Photo Point Monitoring results

Offset Site: EPBC 2015/7486
Photo point number: 108
Photo point ID: NE corner cell 5
Lat: -38 15 638
Long: xxx
Date: 20/10/2019
Time: 12:23 pm



View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Table 5. Offset Management Plan: Vegetation Quadrat Assessment Results

Photopoint Number	Average	108	107	106	105	104	103	102	101
Photo Point ID	EPBC 2015/7486	cell 5 NE corner	cell 6 NW corner	Themeda south	Wallaby grass	Bent and Themeda	Buttons and Lomandra	Themeda	Tussocks
GPS Southing		38 15 638	38 15 590	38 15 712	38 15 681	38 15 605	38 15 748	38 15 478	38 15 439
GPS Easting		143 46 298	143 45 966	143 45 914	143 46 044	143 46 133	143 46 174	143 45 981	143 45 995
Date & time	October 2019	20/10/2019 12:23 PM	20/10/2019 12:00 PM	20/10/2019 11:40 AM	20/10/2019 10:24 AM	20/10/2019 10:00 AM	20/10/2019 9:38 AM	20/10/2019 10:43 AM	20/10/2019 11:01 AM
Total Vegetation Cover	80%	95%	80%	70%	70%	90%	80%	80%	75%
Total Native Vegetation Cover	60%	50%	73%	60%	55%	50%	65%	70%	60%
Graminoids	53%	45%	65%	55%	50%	45%	55%	60%	50%
Herbs	7%	5%	8%	5%	5%	5%	10%	10%	10%
Total Weeds	20%	45%	7%	10%	15%	40%	15%	10%	15%
Total Grasses	16%	44%	6%	8%	12%	35%	8%	3%	10%
Grasses – perennial	10%	30%	3%	3%	7%	30%	0%	0%	5%
Grasses – annual	6%	14%	3%	5%	5%	5%	8%	3%	5%
Dicots	4%	1%	1%	2%	3%	5%	7%	7%	5%
Bare Ground	18%	3%	18%	29%	30%	8%	18%	17%	20%
Litter	2%	2%	2%	1%	0%	2%	2%	3%	5%
Moss – present or absent	7 / 8	present	present	present	present	present	absent	present	present
Inter-tussock space	26%	7%	28%	35%	35%	10%	30%	30%	30%
Biomass monitoring									<i>(rock)</i>
Average biomass height (cm)	7.76	9.80	7.80	4.50	7.60	9.60	7.60	6.60	8.60
Average height (cm)	20.65	24.20	18.60	21.20	17.40	24.00	14.83	20.20	24.80

Table 6. Offset Management Plan: Vegetation Quadrat Assessment species recorded

For each photo point and quadrat survey, all species found within the 1m² quadrat have been indicated by “1m²”. Any further species recorded in 1 m surrounding the 1m² quadrat have been indicated by a 9m².

Origin	Scientific name	Common name	Photo point: 108	Photo point: 107	Photo point: 106	Photo point: 105	Photo point: 104	Photo point: 103	Photo point: 102	Photo point: 101
native	<i>Acaena ovinum</i>	Sheep’s Burr			1m ²	9m ²	9m ²			1m ²
native	<i>Arthropodium strictum</i>	Chocolate Lily		1m ²			1m ²	1m ²	1m ²	
native	<i>Asperula conferta</i>	Common Woodruff					9m ²		9m ²	
native	<i>Austrostipa spp.</i>	Spear Grass		1m ²			9m ²	9m ²	9m ²	1m ²
native	<i>Convolvulus erubescens</i>	Blushing Bind Weed			9m ²	1m ²			1m ²	
native	<i>Drosera peltata</i>	Pale Sun Dew	1m ²	1m ²	1m ²	1m ²	9m ²	1m ²	1m ²	
native	<i>Drosera whittakeri</i>	Scented Sun Dew							9m ²	
native	<i>Eryngium ovinum</i>	Blue Devil	1m ²	1m ²	9m ²	1m ²	1m ²	1m ²	1m ²	
native	<i>Gonocarpus tetragynus</i>	Raspwort	1m ²	1m ²		1m ²	1m ²	1m ²		
native	<i>Hypericum gramineum</i>	Small St-John’s wort								9m ²
native	<i>Hypoxis glabra</i>	Tiny Star			9m ²					
native	<i>Isolepis cernua</i>	Nodding Club Rush	1m ²	1m ²	1m ²	1m ²	1m ²	1m ²	1m ²	1m ²
native	<i>Juncus subsecundus</i>	Finger Rush	9m ²		9m ²	1m ²	9m ²		9m ²	
native	<i>Leptorhynchus squamatus</i>	Scaly Button	1m ²	1m ²		1m ²	9m ²	1m ²	9m ²	
native	<i>Lomandra nana</i>	Pale Mat Rush					9m ²	1m ²		9m ²
native	<i>Microtis unifolia</i>	Onion Orchid		1m ²			9m ²			
native	<i>Oxalis perennans</i>	Grassland Wood Sorrel	9m ²		1m ²	9m ²	1m ²		1m ²	1m ²
native	<i>Plantago gaudichaudii</i>	Narrow-leaf Plantain							9m ²	
native	<i>Poa labillardierei</i>	Silver Tussock			9m ²		9m ²			1m ²
native	<i>Poa morrisii</i>	Velvet Tussock Grass		1m ²						

Origin	Scientific name	Common name	Photo point: 108	Photo point: 107	Photo point: 106	Photo point: 105	Photo point: 104	Photo point: 103	Photo point: 102	Photo point: 101
native	<i>Rumex dumosus</i>	Wiry Dock			1m ²					
native	<i>Rytidosperma spp.</i>	Wallaby Grass spp.		1m ²	9m ²	1m ²	1m ²	1m ²	9m ²	1m ²
native	<i>Schoenus apogon</i>	Common Bog Rush	1m ²	1m ²		1m ²		1m ²	1m ²	
native	<i>Solenogyne dominii</i>	Solenogyne		1m ²			1m ²	1m ²	9m ²	
native	<i>Thelymitra spp.</i>	Sun Orchid			9m ²					
native	<i>Themeda triandra</i>	Kangaroo Grass	1m ²	1m ²	1m ²	9m ²	1m ²	9m ²	1m ²	1m ²
exotic	<i>Agrostis capillaris</i>	Brown Top Bent	1m ²	9m ²	1m ²	1m ²	1m ²		9m ²	
exotic	<i>Aira caryophyllea</i>	Silver Hair Grass	1m ²							
exotic	<i>Avena fatua</i>	Wild Oat							9m ²	
exotic	<i>Briza minor</i>	Lesser Quaking Grass	1m ²	1m ²		1m ²	1m ²	1m ²	1m ²	1m ²
exotic	<i>Cicendia spp.</i>	Cicendia				1m ²	1m ²		9m ²	
exotic	<i>Cirsium vulgare</i>	Spear Thistle								9m ²
exotic	<i>Holcus lanatus</i>	Yorkshire Fog	9m ²			9m ²				1m ²
exotic	<i>Hypochaeris radiata</i>	Flat Weed	9m ²	1m ²	1m ²	1m ²	1m ²	1m ²	1m ²	1m ²
exotic	<i>Lolium perenne</i>	Rye Grass								1m ²
exotic	<i>Phalaris aquatica</i>	Toowoomba Canary Grass	1m ²							
exotic	<i>Plantago coronopus</i>	Buck's Horn Plantain				1m ²	1m ²			1m ²
exotic	<i>Poa annua</i>	Annual Meadow Grass		1m ²						
exotic	<i>Romulea rosea</i>	Onion Grass	1m ²	1m ²	1m ²	1m ²	1m ²	1m ²	1m ²	
exotic	<i>Trifolium angustifolium</i>	Narrow Leaf Clover		1m ²		1m ²	1m ²	1m ²	1m ²	1m ²
exotic	<i>Trifolium subterraneum</i>	Sub Clover	1m ²				9m ²	1m ²		9m ²
exotic	<i>Vulpia bromoides</i>	Squirrel Tail Fescue		9m ²			9m ²			

Table 8. Table of works completed

Note: 1x indicates 1 person; 2x indicates 2 people.

Date	Works undertaken	Time spent
23/05/2019	Biomass control: Cool ecological burn	3x7 hours
01/02/2019	Biomass control: Stock (sheep) movement. Intensity 800 ewes, 5 days, 1/3rd site (cel 3)	1x2 hours
25/04/2019	Biomass control: Stock (sheep) movement. Intensity 1500 ewes, 2 days, 1/3rd site (cell 3)	1x2 hours
03/07/2019	Biomass control: Stock (sheep) movement. Intensity 500 ewes, 6 days, 1/3rd site (cell 3)	1x2 hours
23/01/2019	Biomass control: Stock (sheep) movement. Intensity 800 ewes, 6 days, 1/3rd site (cell 5)	1x2 hours
24/04/2019	Biomass control: Stock (sheep) movement. Intensity 1500 ewes, 3 days, 1/3rd site (cell 5)	1x2 hours
21/06/2019	Biomass control: Stock (sheep) movement. Intensity 500 wethers, 3 days, 1/3rd site (cell 5)	1x2 hours
24/01/2019	Biomass control: Stock (sheep) movement. Intensity 800 ewes, 3 days, 1/3rd site (cell 6)	1x2 hours
04/04/2019	Biomass control: Stock (sheep) movement. Intensity 1500 ewes, 3 days, 1/3rd site (cell 6)	1x2 hours
24/06/2019	Biomass control: Stock (sheep) movement. Intensity 500 wethers, 3 days, 1/3rd site (cell 6)	1x2 hours
24/12/2019	Weed Control: African Weed Orchid removal	
04/11/2019	Weed Control: Salsify removal	1x2 hours
07/08/2019	Weed Control: Spot spray of Phalaris	1x5 hours
01/11/2019	Weed Control: Spot spray grassy weeds	1x5 hours
20/10/2019	Weed Control: Spot spray grassy weeds	1x2 hours
04/11/2019	Weed Control: Thistle chipping	1x3 hours

Date	Works undertaken	Time spent
20/10/2019	Weed Control: Thistle chipping	1x2 hours
20/10/2019	Monitoring and Reporting: Photo Point survey and monitoring	2x7 hours
Jan / Feb 2020	Monitoring and Reporting: Report writing	1x5 days
Nov-2019	Monitoring and Reporting: Engaging ecological consultants to undertake assessments	1x1 hour
Jan-2020	Monitoring and Reporting: Engaging land surveyor to mark out Offset Site	1x1 hour
Aug-2019	Monitoring and Reporting: Liaison with stakeholders including consultants, state government regarding reporting requirements	1x1 hour
Jan-2020	Monitoring and Reporting: Liaison with stakeholders including consultants, state government regarding reporting requirements	1x1 hour

Table 9. Annual report declaration of accuracy and completion

Site Zone	Management Action	Management action description	Timing	Completed (Yes/No)	Include or attach supporting evidence of actions completed / comments / observations
All	Annual report is signed, dated and submitted by the landowner at least 1 month before the anniversary date of the agreement. The annual report is a useful opportunity to make comprehensive comments and observations, giving a picture of the current condition of the site(s), issues identified, works undertaken and actions still required. You are encouraged to create a separate report to include in your annual reporting each year that captures this detailed information. The benefits of monitoring your vegetation condition and identifying issues and management undertaken, is that it aids you to gauge the success of management on the condition of native vegetation over time. The Department is also able to use this information to assist with the assessment of your compliance with the agreement and provides us with useful information and data for future management advice. Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met, and I have read, signed, dated and submitted the obligations form with the annual report. Where the actions were not carried out provided evidence as to the reason why.	Include supporting evidence by: Obligations of the landowner form Payment method is correct Detailed written observations & additional report Photo point monitoring Map of zones & photo points Photographs of works undertaken Receipts/invoices for materials & works carried out, including by contractors Logbook of works carried out Receipts: seeds, seedlings purchased, list of species, No. each species (estimate No. seeds), provenance Site log: list of No. species planted, recruiting or germinated, incl. No. each species by life form that are present/survived and/or were replaced	Submit at least 1 month prior to agreement anniversary date	Yes (Page 4) Not Applicable Yes (Table 1-3) Yes (Tables 4-6) Yes (Figure 1) Yes (Plates 1-9) Yes (Figure 2) Yes (Table 8) Not Applicable Not Applicable	Where applicable: Obligations of the landowner form Payment method is correct Detailed written observations & additional report Photo point monitoring Map of zones & photo points Photographs of works undertaken Receipts/invoices for works carried out, including by contractors Logbook of works carried out Receipts seeds/seedlings, provenance, table of species list & numbers Site log / table of plantings/germination & survival numbers by life form

I hereby declare that the supplied information is accurate and complies with reporting requirements under General Conditions under the Second Schedule of the DELWP Management Agreement.

Signed:  

Date: 24 / 02 / 2020

Pictures documenting actions undertaken during management period.



Plate 1. Chipping of Spear Thistles and Salsify within the Offset Site



Plate 2. Bag of Salsify Chipped out and removed from Offset Site.



Plate 3. Spot spraying of grassy weeds such as Perennial Rye-grass and Sweet Vernal near Photo Point within Offset Site



Plate 4. Creamy Candles recently found within Offset Site (not previously observed in paddock or near-by).



Plate 5. Pale Sun Dew recorded within the Offset Site.



Plate 6. Common Rice Flower in flower nestled within a tussock of Kangaroo Grass. Common Rice Flower has only recently been found within Offset Site (not previously observed within the paddock or near-by).



Plate 7. Cool, ecological burn undertaken in 2A in an area dominated by a mix of Kangaroo Grass, Wallaby Grasses and Brown-top Bent.



Plate 8. Cool, ecological burn undertaken in 2A in an area dominated by a mix of Kangaroo Grass, Wallaby Grasses and Brown-top Bent, photo point 105 is visible in foreground marked by a star with a yellow cap.



Plate 9. Cool, ecological burn undertaken in 2A in an area dominated by Kangaroo Grass, near photo point 106.

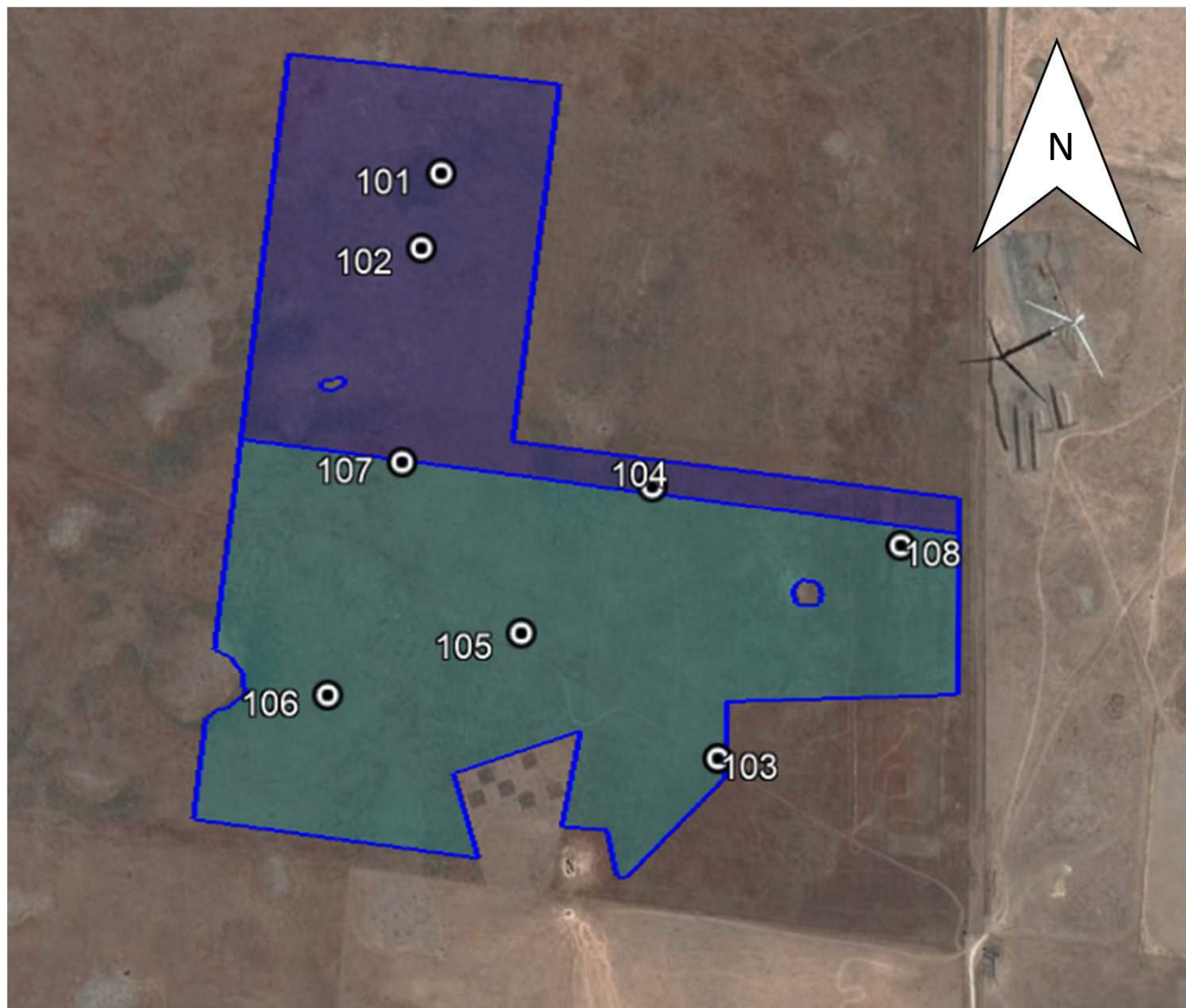


Figure 1:

Location of Photo Points within Offset Site

435 McDonnells Road

Ombersley (Birregurra), Victoria

EPBC 2015/7486

VC-CFL-3044 LA02



Offset Site



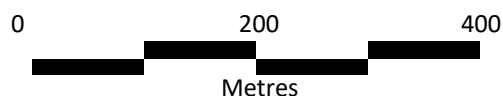
Offset Zone 1A



Offset Zone 2A



Location of Photo Points





TAX INVOICE

INVOICE #: 2053

OUR REFERENCE: 1610

DATE: 10 FEBRUARY 2020

To:

Claire Dennis
Bleak House Pty Ltd
Via email: cdennis09@gmail.com

COMMENTS OR SPECIAL INSTRUCTIONS:

Please direct debit the following bank account: Ecolink Consulting Pty Ltd, BSB 063 133, Account Number 1118 9135. Email remittance to info@ecolinkconsulting.com.au.

Alternatively, make all cheques payable to Ecolink Consulting Pty Ltd.

DESCRIPTION	UNIT PRICE	TOTAL
Offset Management Plan: 435 McDonnells Road, Ombersely Year 1 SLL and Vegetation Surveys 100% of agreed fee	\$6,440.00	\$6,440.00
	SUBTOTAL	\$6,440.00
	10% GST	\$ 644.00
	TOTAL DUE	\$7,084.00

Our terms are strictly 30 days from the date of the invoice. If you have any questions please contact Stuart Cooney via phone on 0419 894 948 or via email at stuart.cooney@ecolinkconsulting.com.au

Thank you for your business!

Ecolink Consulting Pty Ltd | ABN: 80 646 930 817 | ACN: 159 690 472

Postal: PO Box 356, Northcote VIC 3070 | Web: www.ecolinkconsulting.com.au | Email: info@ecolinkconsulting.com.au

References

- Bransbury DIaT, N. M. (1977). The disc pasture meter: Possible applications in grazing management. *Proceedings of the Grasslands Society of South Africa* **5**, 115-118.
- Catchpole WRaW, C. J. (1992). Estimating plant biomass: A review of techniques. *Australian Journal of Ecology* **17**, 121-131.
- Ecology and Heritage Partners Pty Ltd (2019). 'Offset Management Plan: 435 McDonnells Road Ombersely (Birregurra), Victoria (EPBC 2015/7486) '.

Appendix A.1

Section 8: Annual monitoring of habitat and effectiveness of management actions

The Landowner undertakes to establish seven permanent photo-points across the offset site. These points will be marked via GPS and shown on a Figure. Photographs taken from these points will be representative of the vegetation and objectives of the OMP (e.g. areas of high threat weed invasion). Photographs will be taken in October annually and clearly labelled. Each photo will be taken from as near to the same point each year and will use the same direction, trajectory and camera settings as is practicable.

Annual monitoring must be undertaken by the landowner (or an appointed entity on behalf of the landowner), and must include an assessment of:

- Photographs taken at seven established photo-points;
- The extent, severity, trend and presence of current weed species and any new and emerging weed species.
- The extent, severity, trend and presence of pest animal activity;
- Biomass levels, visually assessed across the site;
- Evidence of unpermitted human/stock access; and,
- Any new threats.

The annual monitoring must be undertaken for each year of the ten years of this Offset Management Plan, and every year following for the life of the projects approval under the EPBC Act (ie. until July 2030)

Appendix A.2

Section 8.4: Reporting

To demonstrate that the management measures are effective in meeting the environmental outcomes, this OMP requires the landowner to submit a report annually to DELWP and DoEE for each year of the ten years of this Offset Management Plan, and every year following for the life of the projects approval under the EPBC Act (ie. until July 2030).

Photographs and reports are to be submitted at least 2 months prior to the anniversary date of the execution of the agreement to allow time for compliance to be assessed before the anniversary date.

The report must address progress against the commitments set out in this agreement and the conditions of the EPBC Act referral (EPBC 2015/7486). Reports should provide enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of/progress against the commitments for each zone.

- Information to be provided in the progress report includes:
- Detailing actions completed during the reporting period;
- Results of SLL population monitoring;
- Results of vegetation condition assessment (Habitat Hectare Assessment);
- A description of the specific monitoring results from ecological surveys undertaken;
- Results of weed and pest animal control work;
- Successful management tools (i.e. techniques used to control weed species, monitoring technique, etc.);
- Any problems or issues experienced (i.e. new infestation of weed species, etc.);
- Any corrective actions and contingency measures where monitoring indicates that there has been a deterioration in the native vegetation or SLL population;
- Photographs showing evidence of works; and,
- Assessment on how the site is on track to meet, or meets the conditions of the conditions under the EPBC referral (EPBC 2015/7486), including an assessment against the EPBC offset gain calculator inputs

If any agreed management actions or commitments are incomplete or have not been undertaken in the times specified, the landowner is to document the justification and the substituted actions that will be undertaken in order to compensate and ensure the required outcomes are achieved.

All records/evidence of management actions must be maintained, and be submitted to DoEE upon request.

Appendix A.3

Section 8.2: Detailed vegetation monitoring (Years 1-4, 6, 8 and 10)

Detailed vegetation monitoring will be conducted by a qualified ecologist for an initial four year period, and then in years 6, 8 and 10 of this management plan, and will document the following components:

- Overall assessment of the quality and quantity of vegetation and composition of species (i.e. Habitat Hectare assessment*);
- Biomass levels, assessed through 14 x 1 m² sampling plots equidistant along the offset site; and,
- The extent, severity, trend and presence of current weed species and any new and emerging weed species.

* Department of Sustainability and Environment 2004. Vegetation quality assessment manual: Guidelines for applying the habitat hectares scoring method. Version 1.3. Victorian Department of Sustainability and Environment, Melbourne Victoria

Appendix A.4

Section 8.3: Striped Legless Lizard population monitoring (Years 1-4, 6, 8 and 10)

In addition to annual monitoring outlined in Section 8.1.1, appropriate monitoring of SLL will be undertaken for an initial four year period, and then in years 6, 8 and 10 of this management plan, or thereafter upon written agreement with the Commonwealth Minister for Environment. If the results indicate a decline in the population size or habitat degradation becomes evident, actions within this management plan will be re-evaluated. If any changes to management are required in the landowners' view, a revised management strategy must be approved by DoEE prior to implementation. Monitoring of SLL habitat must be undertaken by a suitably qualified ecologist(s).

Specific survey procedures will follow those approved monitoring guidelines for SLL prepared by DoEE*. The following measures will be undertaken as part of population and habitat monitoring for SLL at the offset site:

Surveys are to be conducted by suitably trained observers;

As the offset site is contiguous with other conservation areas managed for the same conservation values, monitoring for SLL may be undertaken across the broader area (thereby reducing the survey effort required within each individual conservation/offset site). However, a minimum of ten monitoring grids, containing 50 tiles each, must be located within the offset site outlined within this plan, or within adjacent conservation areas. At least three of these grids must be located within the offset site outlined within this plan (ie the remaining seven grids may be located within adjacent conservation areas). These tile grids must be maintained and checked a minimum of two times between October – November;

- Shelter sites will be checked when ambient temperatures do not exceed 28°C. Grids may be checked during summer/autumn for the presence of shed skin; and,
- Checking more frequently than once or twice a week may lead to SLL abandoning the artificial shelters, as such, tile checks at this frequency should be avoided.

* Department of Sustainability, Environment, Water, Population and Communities 2011. Survey guidelines for Australia's threatened reptiles, EPBC Act survey guidelines 6.6.

Appendix A.5

Landowner Agreement: Compliance with the Obligations of the Landowner

Management of the site

In relation to the Site, the Landowner covenants and agrees:

5.4 to complete the Management Actions for the purpose of achieving the Management Commitments, to the standards required by the Site Management Plan and to the satisfaction of the Secretary, regardless of whether all Native Vegetation Credits have been sold to other people. Where the Landowner has completed the Management Actions specified in the Site Management Plan to the satisfaction of the Secretary, but a Management Commitment is not achieved for reasons out of the control of the Landowner, the Secretary will not withhold any payment to the Landowner;

5.5 to allow the Secretary and the Secretary's officers, employees, agents, contractors, invitees and licensees access to, and entry onto the Site in accordance with this Agreement or the Conservation Forests and Land Act 1987; and

5.6 to undertake the works required to implement the Site Management Plan in compliance with all relevant laws, regulations and statutes, including subordinate instruments and authorisation.

Protection of Native Vegetation

5.7 The Landowner must:

5.7.1 not cause or consent to the removal, destruction, lopping or any other interference with any Native Vegetation on the Site;

5.7.2 take all reasonable steps to ensure that no Native Vegetation on the Site is removed, destroyed, lopped or otherwise interfered with; and

5.7.3 subject to clause 6.4, not apply for, or consent to an application for, a permit under the Planning and Environment Act 1987 (Vic) to remove, destroy or lop Native Vegetation on the Site.

Protection of other habitat

5.8 Subject to clauses 2.13 and 6.4, the Landowner must:

5.8.1 not cause or consent to the removal or interference with any rocks or fallen vegetation on the Site; and

5.8.2 take all reasonable steps to ensure that no rock or fallen vegetation on the Site is removed or interfered with.

Exclusion of livestock

5.9 Subject to clauses 2.13 and 6.4, and except as provided for in any Management Notice under clause 7, the Landowner must:

5.9.1 not cause or consent to the introduction of any livestock on the Site; and

5.9.2 take all reasonable steps to ensure that no livestock enter or remain on the Site.

Introduction of animals other than livestock

- 5.10 Subject to clauses 2.13, 5.11 and 6.4, the Landowner must:
- 5.10.1 not bring, or consent to the bringing of, any Domestic Animal onto the Site;
 - and
 - 5.10.2 take all reasonable steps to exclude any Domestic Animal that enters onto the Site.

5.11 The Landowner may bring domestic dogs on to the Site provided that any dogs so brought are under the immediate control of the Landowner or another person authorised by the Landowner at all times.

Installation or upgrade of fencing

- 5.12 This clause applies if the Site is adjacent to any land from which any stock or person (whether or not the person is in a vehicle):
- 5.12.1 has ready access to the Site;
 - 5.12.2 is reasonably likely to have ready access to the Site; or
 - 5.12.3 becomes reasonably likely to have ready access to the Site.

5.13 If clause 5.12 applies, the Landowner must, subject to clause 6.4, ensure that there is adequate fencing and gates between the land and the Site so as to protect the Site from being readily accessible by stock or persons.

- 5.14 Subject to clause 6.4, any works required under clause 5.13 must be carried out:
- 5.14.1 in the case of a site to which clauses 5.12.1 or 5.12.2 apply at the Commencement of this Agreement, within three months of the Commencement Date of this Agreement or at any earlier time specified in the Site Management Plan; or
 - 5.14.2 in any other case, within three months of any change in circumstance that creates a reasonable likelihood of any stock or person having ready access to the Site for the purposes of clause 5.12.3, or at any earlier time specified by the Secretary by written notice to the Landowner.

Maintenance of fencing

5.15 Subject to clause 6.4, the Landowner must maintain any fencing required by clause 5.10.2 or clause 5.13 in good repair and condition at all times.

Statutory pest management obligations

- 5.16 From the Commencement Date of this Agreement and on an ongoing basis, the Landowner must, in relation to the Site, ensure compliance with:
- 5.16.1 the requirement to prevent the growth and spread of Regionally Controlled Weeds under section 20(1)(e) of the Catchment and Land Protection Act 1994 (Vic);
 - 5.16.2 the requirement to prevent the spread of, and as far as possible, eliminate established pest animals under section 20(1)(f) of the Catchment and Land Protection Act 1994 (Vic); and
 - 5.16.3 the requirement to eradicate Regionally Prohibited Weeds under section 20(1)(d) of the Catchment and Land Protection Act 1994 (Vic).

Weeds identified in Site Management Plan

5.17 The Landowner must, to the extent specified in the Site Management Plan, eradicate or prevent the growth and spread of any Weed or other plant as specified in the Site Management Plan.

Application of fertiliser

- 5.18 The Landowner must:
- 5.18.1 not apply any fertiliser to any part of the Site;
 - 5.18.2 not consent to the application of any fertiliser to any part of the Site; and
 - 5.18.3 take all reasonable steps to ensure that fertiliser is not applied to any part of the Site.

Buildings and structures

- 5.19 Subject to clauses 2.13, 6.4 and 5.20, the Landowner must:
- 5.19.1 not erect or place any building or structure on the Site; and
 - 5.19.2 take all reasonable steps to ensure that no building or structure is placed on the Site by any other person.
- 5.20 The Landowner may erect temporary structures on the Site as part of any grazing of livestock authorised under the Site Management Plan, consent under clause 6.4 or Management Notice under clause 7.

Alterations to the natural state of water bodies

- 5.21 Subject to clauses 2.13 and 6.4, the Landowner must not cause or consent to, and must take all reasonable steps to avoid any occurrence of, any act which alters the natural state of, or the flow, supply, quantity or quality of, any body of water on to or from the Site.

Rubbish and other materials

- 5.22 The Landowner must not cause or consent to, and must take all reasonable steps to avoid, the dumping of any rubbish or the storage of any materials on the Site.

Further restrictions on using the land

- 5.23 Subject to clause 6.4, the Landowner must not cause or consent to any of the following, and must take all reasonable steps to ensure that the following do not occur on the Site:
- 5.23.1 the removal, introduction or disturbance of any soil, rocks or other minerals or the construction of dams or modification of existing dams;
 - 5.23.2 subdivision;
 - 5.23.3 the operation of any trade, industry or business;
 - 5.23.4 the recreational use of trail bikes or four wheel drive vehicles;
 - 5.23.5 the carrying out of any works on the Site other than those required by this Agreement or by law; and
 - 5.23.6 the carrying out of any other activities not consistent with the purposes of this Agreement.

Extractive industry and utility installations

- 5.24 The Landowner must not permit, unless required by law:
- 5.24.1 the issue of any licence or approval for exploration, mining, extraction or production of gas, petroleum, minerals or other substances on the Site; or
 - 5.24.2 the installation of any transmission lines or other services or works on the Site.
- 5.25 The Landowner must bring this Agreement to the attention of any person who notifies the Landowner that they have applied for or will be applying for a licence, approval or proposal to take an action of the kind described in clauses 5.24.1 and 5.24.2, and to any other person or body whose approval is required to take that action.
- 5.26 The landowner must notify the Secretary of any notification of an application for a licence, approval or proposal to take an action of the kind described in clauses 5.24.1 and 5.24.2.