EPBC 2015/7486: Offset Management Plan Report, Year 2

(Management period: 2020 / 2021)



Basalt rocks and Silver Tussock-grass within Offset Site

Landowner of offset site	Bleak House Pty Ltd		
Location and address of offset	435 McDonnells Road		
site	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 #	2		
Signature	Claire Danis Jel Demi		
	Claire Dennis James Dennis		
Date	February 2021		

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

 $\label{thm:complied:model} \mbox{Has "The landholder" complied?}$

Yes

Signed by:

Clarie Denin	JER Demi
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						
Fencin	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.						

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 detail Table 2. Briefly, a combination of pulse graze outlined in "Biomass Control" section of this and targeted weed control, such as spot spot and chipping of high threat weed species, where An overview is provided here based on the Vegetation Quadrat Assessments undertaked photo points. Total average weed cover reductive site was 22%. Some spot spraying of Toowoomba Canary-Phalaris aquatica and Brown-top Bent Agrace capillaris was undertaken adjacent the study the broader paddock. Due to COVID-19 trades restrictions the full extent of weed control were unable to be undertake this year.		
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 bulb, 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.	

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
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
Pest A	nimal Cor	ntrol			

		Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description	
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
1-10	32 ha of NTGVVP and SLL habitat	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.	January to September (see Management Action Description, subject to written approval from DELWP for seasonally dependent modifications)	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.	The Offset site was grazed with a high intensity (670 to 300 mob of sheep), but short period (four to 16 days dependent of size of mob of sheep, and amount of biomass) on three separate occasions with approximately two months rest between pulses, between February to August 2020. 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 - 670 wethers from 24/2 to 6/3, 670 wethers from 7/5 to 20/5 and 300 wethers from 23/7 to 6/8. Cell 5 - 670 wethers from 12/2 to 24/2, 300 wethers from 22/6 to 8/7 and 500 wethers 6/8 to 11/8. Cell 6 - 670 wethers from 6/3 to 16/3, 670 wethers from 9/6 to 22/6 and 500 wethers from 2/8 to 6/8.
1-10	32 ha of NTGVVP and SLL habitat	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.	April to May, Outside of the Victorian Declared Fire Danger Period	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.	There was no opportunity to burn this year as Fire Danger Period ran late and the autumn rain began prior to the lifting of the Fire Danger Period.

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
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.
Annua	al reportin	g			
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 2 report

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	Avena barbata	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulsegrazing 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	Agrostis capillaris	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 glyphosate application in the beginning of the growing season, June to August followed by planting with a mixture of native grasses and forbs. 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 was also trialled November 2020 within the broader paddock. Should this herbicide approach prove successful with the suppression of weeds but not off-target species, 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 2020 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	Plantago coronopus	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	Arctotheca calendula	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	Hypochaeris radicata	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	Stellaria media	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	Cynodon dactylon	Yes	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulsegrazing 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	Aira spp.	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	Trifolium arvense	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	Trifolium campestre var. campestre	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	Briza major	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulsegrazing 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	Romulea rosea	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	Helminthotheca echioides	No	1-A, 2-A	appropriate 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	Lolium perenne	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 Ryegrass in the Offset Site.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Ribwort	Plantago lanceolata	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	Tragopogon porrifolius subsp. porrifolius	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	Acetosella vulgaris	No	1-A, 2-A	Targeted spot spraying with appropriate Summer berbicide		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	Hypochaeris glabra	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	Bromus hordeaceus	No	1-A, 2-A	Targeted spot spraying with appropriate herbicide. Pulsegrazing 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	Cirsium vulgare	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	Vulpia bromoides	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	Anthoxanthum odoratum	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	Phalaris aquatica	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. Spot spraying will be carried out in Spring if necessary.	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
orkshire Tog	Holcus lanatus	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 2020 the cover of Yorkshire Fog within the Offset Site was higher than previous years but still sparse. The prevalence of this weed fluctuates from year to year and appears heavily dependent on years with higher rainfall such as 2020.

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

Offset Site: EPBC 2015/7486

Photo point number: 101 Photo point ID: Tussocks

Lat: -38 15 439 Long: 143 45 995

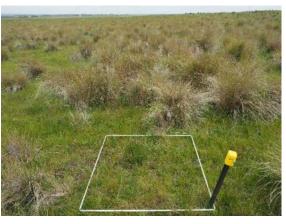
Date: 17/10/2020 Time: 12:40 pm



View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Offset Site: EPBC 2015/7486

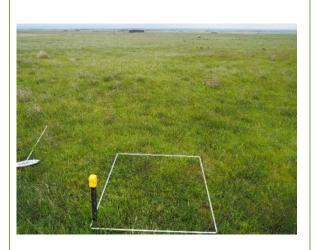
Photo point number: 102 Photo point ID: Themeda

Lat: -38 15 478 Long: 143 45 981

Date: 17/10/2020 Time: 12:22 pm



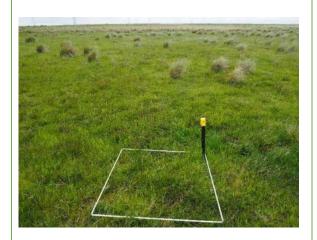
View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Offset Site: EPBC 2015/7486

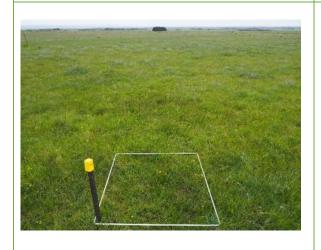
Photo point number: 103 Photo point ID: Buttons

Lat: -38 15 748 Long: 143 46 174

Date: 16/10/2020 Time: 4:30 pm



View from above quadrat.



Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Offset Site: EPBC 2015/7486

Photo point number: 104

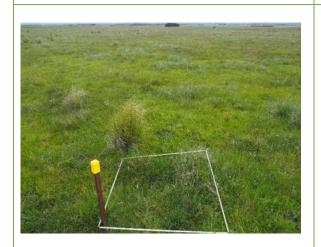
Photo point ID: Bent and Themeda

Lat: -38 15 605 Long: 143 46 133

Date: 16/10/2020 Time: 4:53 pm



View from above quadrat.



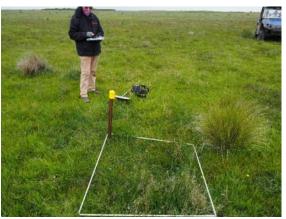
Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Offset Site: EPBC 2015/7486

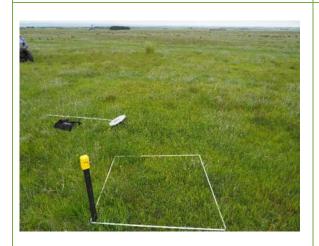
Photo point number: 105 Photo point ID: Wallaby grass

Lat: -38 15 681 Long: 143 46 044

Date: 16/10/2020 Time: 5:10 pm



View from above quadrat.



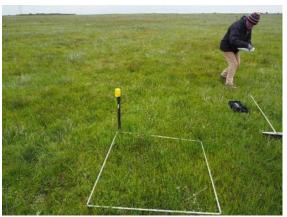
Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Offset Site: EPBC 2015/7486

Photo point number: 106 Photo point ID: Themeda south

Lat: -38 15 712 Long: 143 45 914

Date: 17/10/2020 Time: 11:46 pm



View from above quadrat.



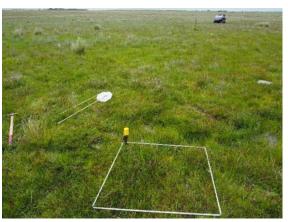
Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

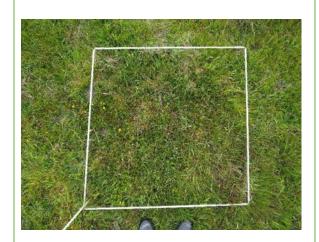
Offset Site: EPBC 2015/7486

Photo point number: 107

Photo point ID: NW corner cell 6

Lat: -38 15 590 Long: 143 45 966

Date: 16/10/2020 Time: 4:00 pm



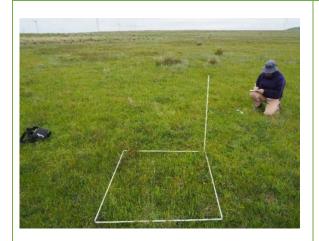
View from above quadrat.



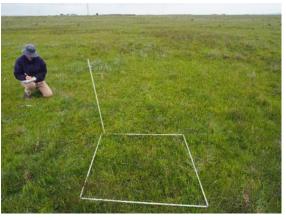
Landscape view looking South



Landscape view looking West



Landscape view looking North



Landscape view looking East

Offset Site: EPBC 2015/7486

Photo point number: 108

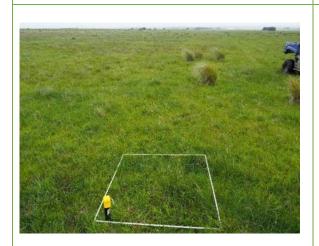
Photo point ID: NE corner cell 5

Lat: -38 15 638 Long: 143 46 298

Date: 17/10/2020 Time: 1:07 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
Photopoint ID	EPBC	cell 5 NE corner	cell 6 NW corner	Themeda south	Wallaby grass	Bent and Themeda	Buttons and Lomandra	Themeda	Tussocks
GPS Southing	2015/7486	38 15 638	38 15 590	38 15 712	38 15 681	38 16 605	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
	October	17/10/2020	16/10/2020	17/10/2020	16/10/2020	16/10/2020	16/10/2020	17/10/2020	17/10/2020
Date & time	2020	1:07 PM	4:00 PM	11:46 AM	5:10 PM	4:53 PM	4:30 PM	12:22 PM	12:40 PM
Total Vegetation Cover	82%	90%	90%	85%	77%	85%	77%	80%	71%
Total Native Vegetation Cover	60%	39%	75%	77%	50%	50%	67%	74%	51%
Graminoids	55%	35%	70%	75%	35%	48%	60%	70%	48%
Herbs	5%	4%	5%	2%	15%	2%	7%	4%	3%
Total Weeds	22%	51%	15%	8%	27%	35%	10%	6%	20%
Total Grasses	19%	50%	10%	7%	26%	33%	7%	5%	16%
Grasses – perennial	13%	40%	0%	2%	16%	30%	2%	0%	15%
Grasses – annual	6%	10%	10%	5%	10%	3%	5%	5%	1%
Dicots	2%	1%	5%	1%	1%	2%	3%	1%	4%
Bare Ground	15%	7%	7%	12%	20%	10%	20%	15%	25%
Litter	4%	3%	3%	3%	3%	5%	3%	5%	4%
Moss – present or absent	7	present	absent	present	present	present	present	present	present
Inter-tussock space	21%	12%	17%	15%	36%	14%	30%	20%	27%
Biomass monitoring									(rock)
Average biomass height (cm)	7.26	7.20	5.80	6.80	6.67	11.60	7.20	5.60	7.20
Average height (cm)	13.58	12.00	11.80	12.00	12.00	19.20	12.00	11.80	17.80

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

For each photo point and quadrat survey, all species found within the $1m^2$ quadrat have been indicated by " $1m^2$ ". Any further species recorded in $1m^2$ surrounding the $1m^2$ quadrat have been indicated by a $9m^2$.

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	Acaena ovina	Sheep's Burr			1m ²	9m ²	9m ²			1m ²
native	Arthropodium strictum	Chocolate Lily		1m ²	9m²			1m ²	1m ²	
native	Asperula conferta	Common Woodruff					9m²		9m²	9m²
native	Austrostipa spp.	Spear Grass	9m²	1m ²			1m ²	1m ²	1m ²	1m ²
native	Convolvulus angustissimus	Blushing Bind Weed	1m ²	9m ²		1m ²	9m ²		1m ²	
native	Dichelachne crinita	Long-hair Plume-grass	9m ²	9m²			1m ²			
native	Drosera peltata	Pale Sun Dew	1m ²	1m ²	1m ²	1m ²	9m ²	1m ²	1m ²	
native	Eryngium ovinum	Blue Devil	1m ²	1m ²	9m²	1m ²		1m ²	1m ²	1m ²
native	Gonocarpus tetragynus	Raspwort	1m ²			1m ²	1m ²	9m ²	9m ²	
native	Hypericum gramineum	Small St-John's wort								9m²
native	Juncus subsecundus	Finger Rush	9m ²		9m²	1m ²			1m ²	9m²
native	Leptorhynchos squamatus	Scaly Button	1m ²	1m ²		1m ²	9m ²	1m ²	9m ²	
native	Lomandra nana	Pale Mat Rush	1m ²				9m ²	1m ²	9m ²	
native	Microtis unifolia	Onion Orchid		1m ²		1m ²				
native	Oxalis perennans	Grassland Wood Sorrel	1m ²	1m ²				9m ²	1m ²	1m ²
native	Plantago gaudichaudii	Narrow-leaf Plantain							9m ²	
native	Poa labillardierei	Silver Tussock			9m²		9m²			1m²
native	Poa morrisii	Velvet Tussock Grass		1m ²						
native	Rumex dumosus	Wiry Dock			1m ²					
native	Rytidosperma sp.	Wallaby Grass sp.	9m²	1m ²		1m ²	9m²	1m ²	1m ²	
native	Schoenus apogon	Common Bog Rush	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	Solenogyne dominii	Solenogyne		1m ²		9m²	1m ²	1m ²		
native	Themeda triandra	Kangaroo Grass	1m ²							
exotic	Agrostis capillaris	Brown Top Bent	1m ²	1m ²		1m ²	1m ²	1m ²	9m²	
exotic	Aira caryophyllea	Silver Hair Grass		1m ²	9m ²	1m ²		1m ²		
exotic	Anthoxanthum odoratum	Sweet Vernal-grass	1m ²							
exotic	Avena fatua	Wild Oat						1m ²	1m ²	
exotic	Briza minor	Lesser Quaking Grass	1m ²		1m ²	1m ²				
exotic	Bromus hordeaceus	Soft Brome							1m ²	
exotic	Centaurium erythraea	Common Centaury			1m ²				9m²	
exotic	Cerastium vulgare	Common Mouse-ear Chickweed							9m²	
exotic	Cicendia spp.	Cicendia			9m²	1m ²	1m ²	1m ²	1m ²	
exotic	Cynosurus echinatus	Rough Dog's-tail		9m²	9m ²					
exotic	Disa bracteata	South African Orchid			1m ²					
exotic	Holcus lanatus	Yorkshire Fog	1m ²		1m ²	1m ²				1m ²
exotic	Hypochaeris radiata	Flat Weed	1m ²							
exotic	Isolepis levynsiana	Tiny Flat-sedge	1m ²		1m ²	1m ²	9m²	1m ²	1m ²	1m ²
exotic	Juncus bufonius	Toad Rush			1m ²			1m ²		1m ²
exotic	Juncus capitatus	Capitate Rush	1m ²			1m ²	1m ²	1m ²	1m ²	
exotic	Lolium perenne	Rye Grass								1m ²
exotic	Plantago coronopus	Buck's Horn Plantain		1m ²		1m ²	9m ²			
exotic	Romulea rosea	Onion Grass	1m ²							
exotic	Trifolium angustifolium	Narrow Leaf Clover	1m ²	9m²	1m ²	1m ²	1m ²		1m ²	1m ²
exotic	Trifolium campestre	Hop Clover			1m ²				1m ²	
exotic	Trifolium subterraneum	Sub Clover	1m ²	1m²			9m²	1m²		9m²

Table 8. Table of works completed

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

Date	Works undertaken	Time spent
24/02/2020	Biomass control: Stock (sheep) movement. Intensity 670 wethers, 11 days, 1/3rd site (cell 3)	1x2 hours
07/05/2020	Biomass control: Stock (sheep) movement. Intensity 670 wethers, 13 days, 1/3rd site (cell 3)	1x2 hours
23/07/2020	Biomass control: Stock (sheep) movement. Intensity 300 wethers, 14 days, 1/3rd site (cell 3)	1x2 hours
12/02/2020	Biomass control: Stock (sheep) movement. Intensity 670 wethers, 12 days, 1/3rd site (cell 5)	1x2 hours
22/06/2020	Biomass control: Stock (sheep) movement. Intensity 300 wethers, 16 days, 1/3rd site (cell 5)	1x2 hours
06/08/2020	Biomass control: Stock (sheep) movement. Intensity 500 wethers, 5 days, 1/3rd site (cell 5)	1x2 hours
06/03/2020	Biomass control: Stock (sheep) movement. Intensity 670 wethers, 10 days, 1/3rd site (cell 6)	1x2 hours
09/06/2020	Biomass control: Stock (sheep) movement. Intensity 670 wethers, 13 days, 1/3rd site (cell 6)	1x2 hours
02/08/2020	Biomass control: Stock (sheep) movement. Intensity 500 wethers, 4 days, 1/3rd site (cell 6)	1x2 hours
17/10/2020	Weed Control: African Weed Orchid removal	2x1 hours
16/10/2020	Monitoring and Reporting: Photo Point survey and monitoring	2x7 hours
17/10/2020	Monitoring and Reporting: Photo Point survey and monitoring	2x7 hours
Jan / Feb 2020	Monitoring and Reporting: Report writing	1x2 days
Nov-2020	Monitoring and Reporting: Engaging ecological consultants to undertake assessments	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.

	2-110	
	Chin Yer Dem	~
Signed:	Claud Denny	Date: 24 / 02 / 2021

Pictures documenting actions undertaken during management period.



Plate 1. Spot Spray of Browntop Bent in adjacent offset site.



Plate 2. Spur Goodenia *Goodenia pinnatifida* and Common Onion Orchid *Microtis unifolia* observed north of Photo Point 104.



Plate 3. Milk Maid Burchardia umbellata observed flowering in offset site.



Plate 4. Creamy Candles *Stackhousia monogyna* amongst Kangaroo Grass *Themeda triandra* observed in south-western portion of offset site.



Plate 5. Observing a November spray of Browntop Bent adjacent Offset Site in broader paddock.

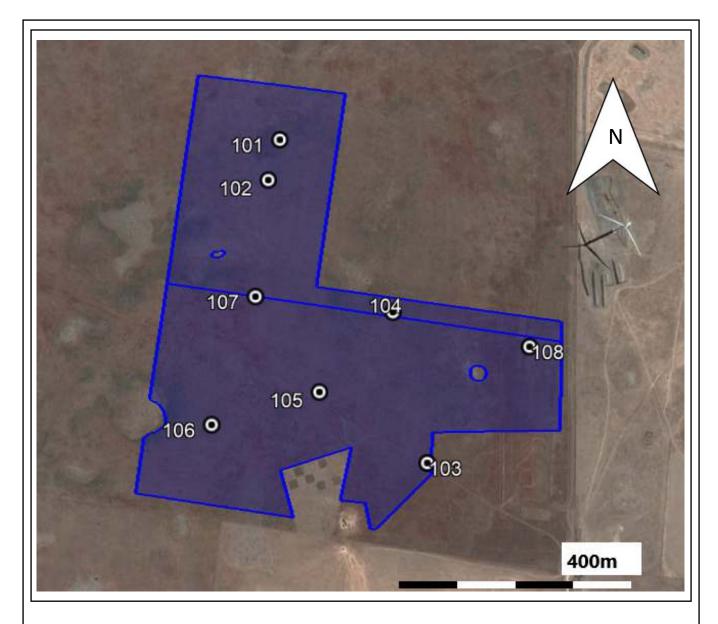


Figure 1: Location of Photo Points within Offset Site 435 McDonnells Road Ombersley (Birregurra), Victoria EPBC 2015/7486 VC-CFL-3044 LA02

- Offset Sites 1A (north) and 2A (south)
- Location of Photo Points



TAX INVOICE

INVOICE #: 2235

OUR REFERENCE: 1610

DATE: 18 DECEMBER 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 2 SLL and Vegetation Surveys		
100% of agreed fee	\$6,762.00	\$6,762.00
	SUBTOTAL	\$6,762.00
	10% GST	\$ 676.20
	TOTAL DUE	\$7,438.20

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!

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) '.

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)

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.

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

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.

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.



Stuart Cooney
Principal Ecologist
Ecolink Consulting Pty Ltd
PO Box 356
Northcote VIC 3070

Our Ref: 1610

18 December 2020

Claire and James Dennis C/- Sonia Petering 8 Cedar Grove Highton VIC 3216

Dear Claire and James,

Re: Offset Management Plan: 435 McDonnells Road, Ombersely, Victoria, Victoria

Ecolink Consulting was engaged by Claire and James Dennis to undertake a series of monitoring programs to evaluate the effectiveness of the management of an offset site, located on McDonnells Road, Ombersley (hereafter the study area: Figure 1). The 32 hectare offset site was established to offset for impacts to ecological values associated with the development of an industrial estate in Ravenhall, Victoria. This development was approved under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) via referral 2015/7486 on the basis that the proponent mitigate habitat losses for the nationally vulnerable Striped Legless Lizard *Delma impar* and approximately 18 hectares of the nationally threatened Natural Temperate Grasslands of Victorian Volcanic Plain (NTGVVP) ecological community.

An Offset Management Plan (OMP) for the offset site was prepared by Ecology and Heritage Partners Pty Ltd (2018). It prescribes a range of measures to ensure that the offset site is appropriately managed to preserve and enhance the ecological values offset within it (i.e. Striped Legless Lizards and NTGVVP). Section 8.3 of the OMP describes the requirements for Striped Legless Lizard surveys. Surveys are to be undertaken for an initial four year period and then in years 6, 8 and 10 of the OMP and thereafter upon written agreement with the Department of the Environment and Energy (now called the Department of Agriculture, Water and the Environment) (Ecology and Heritage Partners Pty Ltd 2018). Section 8.2 of the OMP relates to the monitoring of NTGVVP and requires that vegetation monitoring is undertaken for an initial four year period and then in years 6, 8 and 10 of the management plan (Ecology and Heritage Partners Pty Ltd 2018).



This report presents the findings of the second of the Striped Legless Lizard surveys and first vegetation assessment, undertaken in summer 2020.

Striped Legless Lizard Delma impar Surveys

The Striped Legless Lizard is listed as 'Vulnerable' under Schedule 1 of the Commonwealth Environment Protection and Biodiversity Conservation Act 1999. It is also listed as threatened on the Victorian Flora and Fauna Guarantee Act 1988, and is 'Endangered' on the Department of Sustainability and Environment's (now DELWP's) Advisory List of Threatened Vertebrate Fauna in Victoria (Department of Sustainability and Environment 2013). The species has a national recovery plan for its protection, prepared in 1999 (Smith and Robertson 1999).

The Striped Legless Lizard is a pale grey lizard up to 30 centimetres in length. They have a prominent, linear darker brown vertebral stripe running from head to tail, with finer, paler stripes on either side (Cogger 2000; Wilson and Swan 2010). Like all members of the Pygopodidae family, they are legless, with no visible forelimbs and reduced hind limbs that are apparent only as small flaps on either side of the vent (SEWPaC 2013).



Plate 1. Striped Legless Lizard

Striped Legless Lizards are usually found native in tussock grasslands and woodland (Wilson and Swan 2010), often dominated by species such as Spear Grass *Austrostipa bigeniculata* and Kangaroo Grass *Themeda triandra* (Smith and Robertson 1999). However recent observations of the species have demonstrated that non-native plant species, and even secondary grasslands, can support individuals of this species (Smith and Robertson 1999). This has led to a hypotheses that it is not the provenance of the grass species that is important, rather the structural characteristics of the vegetation that determines if the habitat is suitable for Striped Legless Lizards (Department of Sustainability and Environment 2011; Smith and Robertson 1999). Within these habitats, Striped Legless Lizards are usually found sheltering underneath logs, rocks and other debris (Cogger 2000).



The Striped Legless Lizard was formerly distributed throughout temperate lowland grasslands in southern Australia (SEWPaC 2013). In Victoria, it is believed that the range of the species has contracted to southern parts of its former range, although it is no longer found close to inner metropolitan Melbourne (SEWPaC 2013). One of the largest extant populations of the species is found in Victoria on the Keilor plains at St Albans, west of Melbourne (SEWPaC 2013). There are likely to be more than 1000 individuals of this species remaining in the wild, most of which occur in large reserves within the Victorian Volcanic Plain, although the precise size of the population is not known (SEWPaC 2013).

There are five historical records of Striped Legless Lizard from within five kilometres of the study area reported in the VBA (Figure 1) (Department of Environment Land Water and Planning 2020). These records are all from tile grids within the Dennis property. Other historic records supplied by the land-owner include 1 individual under Grid 7 in April 2015, and another two under Grid 7 in November 2016, and the shed skin of a possibly gravid female Striped Legless Lizard under Grid 6 in December 2016. Tile checks undertaken by Ecolink between 2017 and 2019 identified up to eight other individual Striped Legless Lizards underneath tiles in Grid 1 and 3. The current tile checks will provide more information about the species within the offset site.

Methods

Ten tile grids were surveyed within the study area (Figure 1). The grids are located in parts of the study area considered to have the highest likelihood of providing habitat for the species. All grids comprise 50 terracotta roof tiles in a 5 x 10 metre grid. The tiles were placed prior to 2018, with an additional three tile grids laid in May 2020 (tile grids 8-10), in consultation with the Dennis family (Figure 1). This ensured that the tiles had become established, and allowed more time for lizards to preferentially utilise the artificial habitat.

Tiles were checked on two occasions by Simon Scott, Principal Ecologist/Director of Ecolink Consulting Pty Ltd (Table 1). Simon is familiar with the species and has conducted dozens of similar tiling assessments for the species in the last decade. Surveys were undertaken under Permit No 10006840 issued by the Department of Environment and Industries.

The tiles were checked on fine days, during the morning, to avoid high temperatures later in the day. As lizards thermo-regulate, tiles may be desirable for basking and maintaining temperatures for foraging or other activities. However, in higher temperatures, the tiles become too hot for lizards to remain underneath, or they may become active and move elsewhere to forage, therefore reducing the chance of detecting the species.

Table 1. Weather conditions for Striped Legless Lizard surveys undertaken in December 2019.

Date	Time	Temp (°C)	Under-tile Temp (°C)	Cloud Cover (8ths)
16 Oct 2020	10:00 - 11:40	9.3-13.2	17.5-21.0	1
14 Dec 2020	9:25 – 11:30	24.8-31.0	26.9-34.5	3



Results

One Striped Legless Lizard was recorded during the current surveys under tile grid 7 on 16 October. Other lizards observed during the current assessment included Whites Skink *Liopholis whitii*, Southern Tussock Skink *Pseudemoia pagenstecheri*, and Eastern Blue-tongued Lizard *Tiliqua scincoides*. A Little Whip Snake *Suta flagellum* was also observed under tile grid 2.

The tiles in the south, Tile Grids 6 and 9 were located in slightly wetter soil than those in the north. Tiles within Tile Grid 6 were embedded and stuck into the ground possibly making them less accessible for Striped Legless Lizards during this survey period. After lifting the tiles, with the aid of a tyre iron, these tiles were shifted slightly to create a greater gap between the tile and the substrate.

Discussion

A single Striped Legless Lizard was detected during the current assessment. This lizard was observed under tile grid 7, where the majority of the historic observations originate. Numerous other lizards were recorded during the current assessment, comprising similar species to those recorded in previous years. This demonstrates that a population of Striped Legless Lizard persists within the study area.

Surveys will be undertaken again early in next season's survey window for the third round of monitoring.

Annual Detailed Vegetation Monitoring

The purpose of the ongoing monitoring of the vegetation within the study area is to determine whether management actions are improving the quality of habitat for Striped Legless Lizards and NTGVVP.

Methods

Monitoring of the vegetation included the following:

- An assessment of the quality and quantity of vegetation and composition of species, using the Department of Environment, Land, Water and Planning's endorsed Habitat Hectare assessment methods (Department of Sustainability and Environment 2004);
- Biomass levels (vegetation height and vegetation cover), assessed through 14 x 1m² sampling plots equidistant along the offset site (Figure 2); and,
- The extent, severity, trend and presence of current weed species and any new and emerging weed species.

The Habitat Hectare assessment was undertaken in accordance with the methodology prescribed within the *Vegetation Quality Assessment Manual – Guidelines for Applying the Habitat Hectares Scoring Method* (Department of Sustainability and Environment 2004). All indigenous vegetation was assessed, and then assigned a quality rating based on the Habitat Hectare score (Department of Sustainability and Environment 2004).



Results

A total of 45 flora species were recorded within the study area during the current assessment. This comprised 22 indigenous and 23 exotic plant species (Table A1, attached to this report).

The study area was dominated by Kangaroo Grass, Spear-grass, Rough Spear-grass Austrostipa scabra subsp. falcata, Bristly Wallaby-grass Rytidosperma setaceum, and Common Wallaby-grass Rytidosperma caespitosum. Other widespread species included Blue Devil Eryngium ovinum, Chocolate Lily Arthropodium strictum, Sheep's Burr Acaena echinata and Scaly Buttons Leptorhynchos squamatus. The cover abundance of native vegetation varied but generally was estimated to be approximately 70% of the total projective foliage cover over the entire offset site (Plate 2).



Plate 2. Dense swards of native grasses cover the study area

Weeds comprised the remaining cover and included species such as Wild Oat *Avena fatua*, Brown-top Bent *Agrostis capillaris*, Winter Grass *Poa annua*, Rye-grasses *Lolium* spp., Toowoomba Canary-grass *Phalaris aquatica*, Onion Grass *Romulea rosea* and Large Quakinggrass *Briza maxima*. There was a higher cover abundance of weeds in the current assessment, presumably as a result of the wetter season, compared to last year.



The patch of native vegetation within the study area, and the area that classifies as the NTGVVP ecological community was accurately recorded during assessment for the preparation of the OMP (Ecology and Heritage Partners Pty Ltd 2018).

Vegetation quality throughout the offset site was high, with a Habitat Hectare Score of 43 (out of 100) (Table 1).

Table 1. Habitat Hectare Score results

Bioregion			Vic Volcanic Plain		
EVC name			Heavier-soils Plains		
			Grassland		
EVC number 132_61					
Conservatio	n rating within bioregion		Endangered		
	Assessment Criteria	Maximum Score	Patch Score		
	a. Large old trees	10	N/A		
	b. Canopy cover	5	N/A		
_	c. Understorey	25	15		
Site	d. Lack of weeds	15	4		
Sil	e. Recruitment	10	<mark>6</mark>		
J	f. Organic litter	5	5		
	g. Logs	5	N/A		
	h. Total (sum of a-g)	75	30		
Standardise	Score (x 1.36)		41		
a e	i. Patch size	10	8		
Landscape	j. Neighbourhood	10	1		
_ Ea	k. Distance to core	5	4		
l. Habitat Po	oints (total)	100	54		
m. Habitat s	core (I ÷ 100)		0.54		

Biomass was assessed at 14 x 1 m² sampling plots placed throughout the study area (Table 2: Figure 2). Bare ground was approximately 15%, which remains lower than the optimum 20-40% as indicated in the Habitat Hectare Gain Scoring Manual (Department of Sustainability and Environment 2004), with total vegetative cover approaching 100%, except where rocks reduce this level of cover. The height of vegetation, however, was more than 10 cm in height at all of the monitoring plots, with a mean height of 22.2 cm. Heights were higher in areas containing Spear Grasses than those containing other tussocks, such as Kangaroo Grass and Wallaby Grasses.



Table 2. Results of the Biomass Plots

Quadrat number	Ave height ruler	Biomass height drop disc	Perennial cover	Annual cover	Bare ground	Dominant Species*	Latitude	Longitude
1	11	7.25	20	60	20	BriMin; TheTri; AgrCap; PoaAnn	143.772	-38.2617
2	60	18.75	70	25	5	PoaLab; RytCae	143.7681	-38.2602
3	20	11	60	30	10	LolRig; MicSti; TheTri	143.7672	-38.2569
4	12	7.25	10	80	10	AveFat;LolPer; BriMin	143.7652	-38.2569
5	45	12.75	75	10	15	PoaLab; TheTri; MicSti	143.7653	-38.2587
6	15	7.25	60	15	25	TheTri; HypRad; IsoLev	143.7671	-38.2585
7	16	11.25	75	20	5	AgrCap; BriMin	143.7663	-38.2626
8	15	7	75	10	20	TheTri	143.7692	-38.2625
9	15	6.75	50	30	20	TheTri; DroPel; LepSqu	143.7646	-38.2603
10	12	6	40	50	10	AgrCap; EryOvi; MicSti	143.7648	-38.2611
11	50	20	50	35	20	PoaLab; JunSub; MicSti	143.767	-38.2612
12	15	8.25	40	30	30	EryOvi; AgrCap	143.769	-38.2616
13	12	7	30	65	15	AusSca; AgrCap; EryOvi	143.7702	-38.2605
14	13	8.75	85	10	5	AgrCap; MicSti; HalHet	143.7666	-38.2573

Dominant Species key:

•	AgrCap	Brown-top Bent	Agrostis capillaris
•	AusSca	Rough Spear-grass	Austrostipa scabra
•	AveFat	Wild Oat	Avena fatua
•	BriMin	Lesser Quaking-grass	Briza minor
•	DroPel	Pale Sundew	Drosera peltata
•	EryOvi	Blue Devil	Eryngium ovinum
•	HalHet	Varied Raspwort	Haloragis heterophylla
•	HypRad	Flatweed	Hypochaeris radicata
•	IsoLev	Tiny Flat-sedge	Isolepis levynsiana
•	JunSub	Finger Rush	Juncus subsecundus
•	LepSqu	Scaly Buttons	Leptorhynchos squamatus
•	LolRig	Wimmera Rye Grass	Lolium rigidum
•	MicSti	Weeping Grass	Microlaena stipoides var. stipoides
•	PoaAnn	Winter Grass	Poa annua
•	PoaLab	Common Tussock-grass	Poa labillardierei
•	RytCae	Common Wallaby-grass	Rytidosperma caespitosum
•	TheTri	Kangaroo Grass	Themeda triandra

Species in bold are introduced species.

Discussion

The OMP identifies 24 exotic species to be managed. The current assessment identified 16 species (Table A2, attached to this report). Biomass target levels are mandated at being a minimum of 10cm in height and with vegetation cover of no greater than 70% (Ecology and Heritage Partners Pty Ltd 2018). This level of vegetative cover was generally not achieved, and when this value was reached it was largely due to the presence of embedded rocks. Therefore,



most plots exhibited lower than expected bare ground, compared to the EVC Benchmark. This suggests a higher biomass than would be expected in a pre-European state.

Only one noxious weed was recorded by both assessments, Spear Thistle Cirsium vulgare. This species is classified as Regionally Controlled within the Corangamite Catchment Management Area. This, and seven other species, have been identified as priority weeds. Priority weeds include exotic perennial species, some of which have an increased cover since the previous assessment; Wild Oat, Couch, Perennial Rye-grass, Toowoomba Canary-grass and Yorkshire Fog. It is understood that the proposed management regime includes pulse grazing and spot-spraying, and these management practices should continue.

Conclusion

A single Striped Legless Lizard was observed during the current assessment, demonstrating that the grasslands within the offset site remain suitable for the species, and continue to support the nationally threatened ecological community NTGVVP. It is expected that ongoing management of the offset site will increase the inter-tussock space and reduce biomass, which will further enhance the site of Striped Legless Lizards. This has not occurred in the last twelve months, since the previous surveys, however 2020 has been a good year for plant growth with a relatively wet winter and warm temperatures. Details of the required management actions are provided within the OMP (Ecology and Heritage Partners Pty Ltd 2018).

The next round of surveys will be undertaken in spring 2021.

I trust the above meets with your expectations, but please call me if you have any queries, or require any amendments.

Kind regards,

Stuart Cooney

Principal Ecologist

Ecolink Consulting Pty Ltd

Mobile: 0419 894 948



References

- Cogger H (2000). 'Reptiles and Amphibians of Australia' (Reed New Holland: Sydney).
- Department of Environment Land Water and Planning (2020). Victorian Biodiversity Atlas.

 Available at https://vba.dse.vic.gov.au/vba/index.jsp. Accessed 31 March 2020.

 Department of Environment Land Water and Planning, Melbourne.
- Department of Sustainability and Environment (2004). 'Habitat Hectares Native Vegetation: Sustaining a Living Landscape. Vegetation Quality Assessment Manual Guidelines for Applying the Habitat Hectares Scoring Method. Version 1.3.' (Department of Sustainability and Environment: Melbourne).
- Department of Sustainability and Environment (2011). 'Salvage and Translocation of Striped Legless Lizard in the Urban Growth Areas of Melbourne: Operational Plan.' (Department of Sustainability and Environment: Melbourne).
- Department of Sustainability and Environment (2013). 'Advisory List of Threatened Vertebrate Fauna in Victoria.' (Department of Sustainability and Environment: Melbourne).
- Ecology and Heritage Partners Pty Ltd (2018). Offset Management Plan: 435 McDonnells Road Ombersely (Birregurra), Victoria (EPBC 2015/7486). Unpublished report for Reeds Consulting Pty Ltd. (Ecology and Heritage Partners Pty Ltd: Ascot Vale).
- SEWPaC (2013). *Delma impar* Striped Legless Lizard in Species Profile and Threats Database. Available at http://www.environment.gov.au/cgibin/sprat/public/publicspecies.pl?taxon_id=1649. Accessed 19 August 2013. Department of Sustainability, Environment, Water, Population and Communities, Canberra.
- Smith WJS and Robertson P (1999). National Recovery Plan for the Striped Legless Lizard (*Delma impar*): 1999-2003. Unpublished report to Environment Australia, Canberra. (Smith WJS and Robertson P: Canberra).
- Wilson S and Swan G (2010). 'A Complete Guide to Reptiles of Australia.' (New Holland: Sydney).



 Table A1. Flora species recorded during the current assessment

Origin	Common Name	Scientific Name	Weed of National Significance	Noxious Weeds Classification
*	Annual Fog	Holcus annuus	-	-
*	Bearded Oat	Avena barbata	- 3	-
	Blue Devil	Eryngium ovinum	-	-
*	Brown-top Bent	Agrostis capillaris	-	-
*	Chickweed	Stellaria media	-	-
	Chocolate Lily	Arthropodium strictum	-	-
	Common Bog-sedge	Schoenus apogon	-	-
	Common Onion-orchid	Microtis unifolia	-	-
	Common Tussock-grass	Poa labillardierei	-	-
	Common Wallaby-grass	Rytidosperma caespitosum	7/ 1	-
	Common Woodruff	Asperula conferta	-	-
	Dwarf Mat-rush	Lomandra nana	7.4	-
	Finger Rush	Juncus subsecundus	-	-
*	Flatweed	Hypochaeris radicata	7/-/	-
	Grassland Wood-sorrel	Oxalis perennans	-	-
*	Hop Clover	Trifolium campestre var. campestre	47	-
	Kangaroo Grass	Themeda triandra	-	-
*	Large Quaking-grass	Briza maxima	-	-
*	Lesser Quaking-grass	Briza minor	-	-
*	Narrow-leaf Clover	Trifolium angustifolium var. angustifolium	-	-
*	Onion Grass	Romulea rosea	-	-
*	Ox-tongue	Helminthotheca echioides	-	-
	Pale Sundew	Drosera peltata	-	-
	Pink Bindweed	Convolvulus erubescens	-	-
	Plume Grass	Dichelachne spp.	-	-
*	Rough Dog's-tail	Cynosurus echinatus	-	-
	Rough Spear-grass	Austrostipa scabra	-	-
*	Salsify	Tragopogon porrifolius subsp. porrifolius	-	-
	Scaly Buttons	Leptorhynchos squamatus	-	-
	Sheep's Burr	Acaena echinata	-	-
*	Silvery Hair-grass	Aira caryophyllea subsp. caryophyllea	-	-
*	Soft Brome	Bromus hordeaceus	-	-
	Solenogyne	Solenogyne spp.	-	-



Origin	Common Name	Scientific Name	Weed of National	Noxious Weeds Classification
			Significance	
*	Spear Thistle	Cirsium vulgare	-	Regionally
				Controlled
*	Sweet Vernal-grass	Anthoxanthum odoratum	-	-
*	Tiny Flat-sedge	Isolepis levynsiana	-	-
*	Toowoomba Canary-grass	Phalaris aquatica	-	-
	Varied Raspwort	Haloragis heterophylla	-	-
	Velvet Tussock-grass	Poa rodwayi	-	-
	Weeping Grass	Microlaena stipoides var.	-	-
		stipoides		
*	Wild Oat	Avena fatua	-	-
*	Wimmera Rye-grass	Lolium rigidum	-	-
*	Winter Grass	Poa annua	-	-
	Wiry Dock	Rumex dumosus	-/	-
*	Yorkshire Fog	Holcus lanatus	-	-



 Table A2.
 Exotic Flora Species, Cover Abundance and Cover Targets

Origin	Common Name	Scientific Name	Cover (%) by EHP (2018)	Cover (%) by Ecolink (2020)	Weeds of National Significance	Noxious Weeds Classification	Priority Weed	Target (cover %) ¹
*	Bearded Oat	Avena barbata	<1	3	-	-	Yes	<1
*	Brown-top Bent	Agrostis capillaris	<1	7	-	-	-	<1
*	Buck's-horn Plantain	Plantago coronopus	<1	<1	-	-	-	<1
*	Capeweed	Arctotheca calendula	<1	<1	-	-	-	<1
*	Cat's Ear	Hypochaeris radicata	<1	5	-	-	-	<1
*	Chickweed	Stellaria media	<1	<1	-	-	-	<1
*	Couch	Cynodon dactylon var. dactylon	10	<1	-	-	Yes	<1
*	Curled Dock	Rumex crispus	-	<1	-	-	-	<1
*	Hair Grass	Aira spp.	<1	<1	-	-	-	<1
*	Hare's-foot Clover	Trifolium arvense	<1	<1	-	-	-	<1
*	Hop Clover	Trifolium campestre var. campestre	<1	<1	-	-	-	<1
*	Large Quaking Grass	Briza maxima	<1	<1	-	-	-	<1
*	Lesser Quaking Grass	Briza minor	-	3	-	-	-	<1
*	Onion Grass	Romulea rosea	<1	2	-	-	-	<1
*	Ox-tongue	Helminthotheca echioides	<1	<1	-	-	-	<1
*	Perennial Rye-grass	Lolium perenne	<1	2	-	-	Yes	<1
*	Ribwort	Plantago lanceolata	<1	<1	-	-	-	<1
*	Rough Dog's-tail	Cynosurus echinatus	-//	<1	-	-	Yes	<1
*	Salsify	Tragopogon porrifolius subsp. porrifolius	<1	<1	-	-	-	<1
*	Slender Centaury	Centaurium tenuiflorum		<1	-	-	-	<1
*	Smooth Cat's Ear	Hypochaeris glabra	5	5	-	-	-	<1





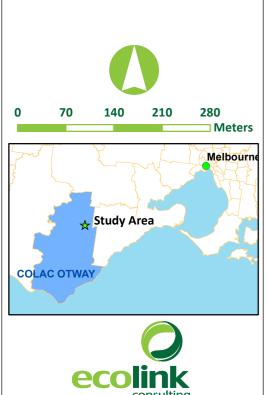
Origin	Common Name	Scientific Name	Cover (%) by EHP (2018)	Cover (%) by Ecolink (2020)	Weeds of National Significance	Noxious Weeds Classification	Priority Weed	Target (cover %) ¹
*	Soft Brome	Bromus hordeaceus	<1	<1	-	-	-	<1
*	Spear Thistle	Cirsium vulgare	<1	<1	-	Regionally Controlled	Yes	<1
*	Squirrel-tail Fescue	Vulpia bromoides	<1	<1	-	-	-	<1
*	Subterranean Clover	Trifolium subterraneum	-	<1	-	-	-	<1
*	Sweet Vernal-grass	Anthoxanthum odoratum	<1	<1	-	-	-	<1
*	Toowoomba Canary- grass	Phalaris aquatica	5	<1	-	-	Yes	<1
*	Wimmera Rye-grass	Lolium rigidum	-	<1	-	-	-	<1
*	Yorkshire Fog	Holcus lanatus	5	<1	-	-	Yes	<1

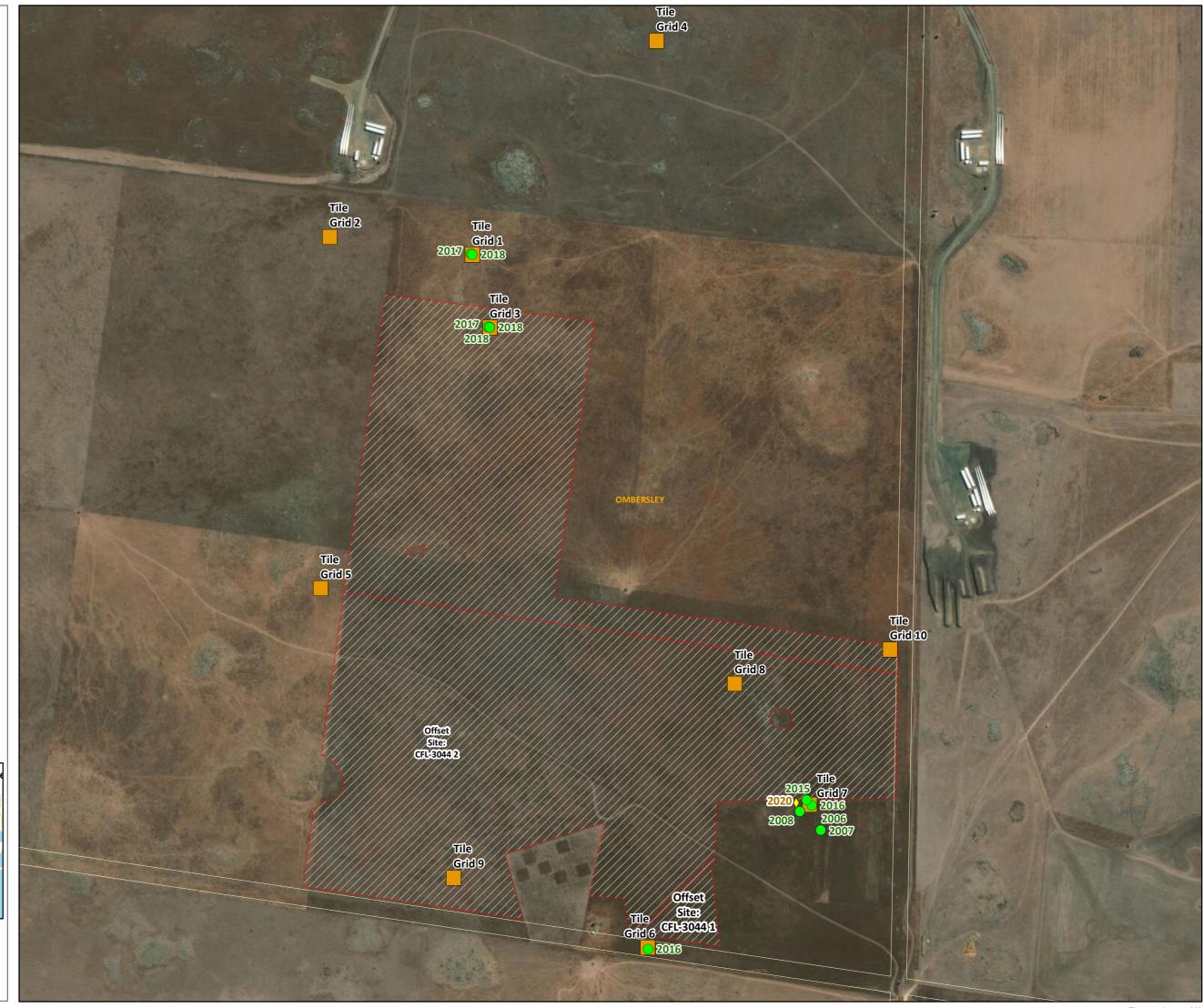
Figure 1: Striped Legless Lizard survey locations and historic observations

McDonnells Road, Birregurra

Legend

- Striped Legless Lizard Tile Grids
- Historic SLL Observations
- Striped Legless Lizards Recorded During the Current Assessment





P/N 10610 Figure 1. January 2020

Figure 2: Biomass plot locations McDonnells Road, Birregurra Legend Study Area Biomass plot locations 2019 10 **19**3 Offset Site: CFL-3044 1 and 2 M 112 13 150 200 ■ Meters Melbourn ★ Study Area COLAC OTWAY Offset Sites CFL-3044-1