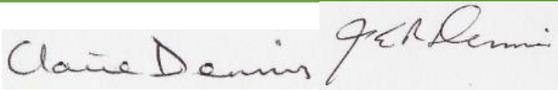


EPBC 2015/7486: Offset Management Plan Report, Year 4

(Management period: 2022 / 2023)



Inundated ground months after ecological burn in 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 #	4
Signature	 Claire Dennis James Dennis
Date	April 2023

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 (Table 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 12.

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 and 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.

Adaptive Weed Management Strategy

A Weed Management Strategy (WMS) was developed by Geordie Scott-Walker in 2022 in response to an request by DELWP to address high weed cover. An interim update relating to the WMS has been prepared (Geordie Scott-Walker, 3 April 2023). A full WMS report will be prepared and submitted to DEECA which will detail progress made towards objectives outlined in the WMS, results from monitoring of different treatments and the amended objectives for the following 12 months.

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:

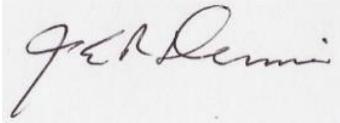
	
Claire Dennis	James Dennis

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.

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)	<p>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 burning, spot spraying and hand weeding of high threat weed species, was used.</p> <p>An overview is provided here based on the Vegetation Quadrat Assessments undertaken at the photo points. The average weed cover across the photopoints was 44% while the external consultants recorded 52% weed cover. There is discrepancy between these results is likely due to the different sampling approaches used and later timing of survey of Ecolink (2023). Regardless the above average rainfall and mild temperatures have favoured the growth of exotic species such as Brown-top Bent and Sweet Vernal Grass which have contributed substantially to this change in cover between years (as described by Ecolink 2023). In addition, the wetter ground has prevented grazing to be used across the offset so to avoid pugging.</p> <p>Some spot spraying of Toowoomba Canary-grass <i>Phalaris aquatica</i> and Brown-top Bent <i>Agrostis capillaris</i> was undertaken in burn areas following the autumn burns. Due the severe rainfall conditions during 2022 the full extent of weed control works were unable to be undertaken, and additional weed</p>

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
					management as per the WMS (2022) will be implemented for the following 12 months.
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	<p>The main 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.</p> <p>All plants observed are recorded with GPS, removed, including their bulb, placed in a bag and burnt offsite.</p> <p>This appears to be an effective approach to limit further establishment of the species as current records are few and sporadic.</p> <p>Recently a few tussocks of <i>Paspalum Paspalum dialatum</i> were observed within the offset, the flowering heads were removed and the tussocks were spot sprayed. No further individuals have been observed (26 April 2022) (Plate 10).</p>
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 Animal Control					

Year	Area	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 have been observed within the study area, and regular monitoring is ongoing. Fresh Fox diggings and scats were recorded in March 2023 during monitoring assessment. Poison has been ordered from supplier (April 2023) who has informed next shipment due in May 2023.
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. Fresh Fox diggings and scats were recorded in March 2023 during monitoring assessment. Poison has been ordered from supplier (April 2023) who has informed next shipment due in May 2023.
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	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 (850 mob of sheep), but short period (three to 14 days). The intention was to graze on three separate occasions with approximately one to two months rest between pulses, between February to August 2022. The fencing of areas to be burnt delayed the start time for grazing as sheep are not supposed to graze areas to be burnt prior to the burn to ensure enough biomass to burn. The very wet late winter and spring caused by the La Nina of 2023 prevented grazing to occur in the final months of the grazing window as grazing is not permitted when the paddock is wet as this can cause pugging. The inability to graze through Spring and early Summer or undertake Spring burns has lead to the unavoidable increases in biomass accumulation and reduction in bare ground as reported by Ecolink (2023). However inter-tussock space was still measured to be 22% as per below. The grazing schedule for this offset site is detailed in Table 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.	A burn plan was developed in March 2021 and approved DELWP. Four regions were fenced and burnt in April to May. These regions were designed to satisfy the requirements of the OMP and were under 60 metres in width. There was plenty of recruitment of plants in burnt areas however due to

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
					<p>the cool wet season this favoured both native and exotic species.</p> <p>Additional areas were fenced and left to be burnt in Spring in accordance with the WMS (2022) however the wet conditions throughout the Spring of 2022 and following Summer prevented these areas from being burnt.</p>
Detailed SLL population and vegetation monitoring					
Years 1-4, 6, 8 and 10	NTGVVP Offset	Monitoring Refer Section 8.2 and 8.3	Spring	<p>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.</p>	<p>Third-party vegetation monitoring is provided separately. Ecolink noted that the condition score for the Site were still low and attributed this to the wet conditions.</p> <p>Ecolink advised that due to the heavy rainfall, conditions were too wet to undertake effective SLL surveys during the recent season (2022) and recommended undertaking these surveys in 2023 (Ecolink 2023)</p>
Annual reporting					

Year	Area	Management Action Description	Timing	Environmental outcome to be achieved	Action taken with description
1-10	NTGVVP Offset	<p>Prepare and submit an annual report and photo monitoring to DELWP and DoEE. Refer Section 5.5.7 and 8.1 of OM.</p> <p>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.</p> <p>Allow for ongoing auditing of the effectiveness of management.</p>	Submit at least 1 to 2 months prior to on-title agreement anniversary date	<p>Annual report is signed, dated and submitted by the Landowner at least 2 months prior to the anniversary date of on-title agreement registration</p> <p>Reports will include a review of past management works against the performance targets and objectives contained within this OMP.</p> <p>Future management priorities will also be detailed in these reports.</p> <p>Obligations of the Landowner have been met and the obligations form is signed, dated and submitted with the annual report</p>	An annual report has been prepared and submitted to DOEE and DELWP
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 4 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	<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	Pulse grazing helps to control this annual species by reducing seed set but this years flowering and seeding season was delayed due to the wet and mild conditions yet the sheep were not permitted to graze beyond September.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
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	<p>Brown-top Bent is considered to be the weed of highest threat within the Offset Site. Grazing doesn't appear to be effective in reducing the cover of Browntop Bent as it is less palatable to sheep.</p> <p>Ecological burns were undertaken in April and May 2021. Glyphosate was applied in burnt areas on early growth of Browntop Bent in June and August. Grazing later into the season may also help to control this weed by reducing seed set, and promoting greater native species diversity.</p>	<p>Following ecological burns within the offset site, application of fluazifop-P on new growth of Browntop Bent was undertaken in accordance with the WMS.</p> <p>This area will be monitored over the coming season to assess the appropriateness of the treatment.</p> <p>Glyphosate was applied to an area of Browntop Bent that was unburnt as per the WMS. This was undertaken during December 2022 prior to flowering to again assess the effectiveness of the treatment at a different season and will be monitored as per the WMS and discussed in the report prepared by Scott-Walker 2023.</p> <p>The Glyphosate and fluazifop-P both appeared effective in the short term at killing the Browntop Bent and follow up monitoring will be undertaken to assess the different approaches.</p> <p>The high level of rain over the Spring of 2022 and following Summer prevented the full extent of weed works intended as per the WMS, which included later grazing, additional spraying after burns and a Spring burn.</p>

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 lower threat weeds to low cover abundance.
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 lower threat weeds to low cover abundance.
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 lower threat weeds to low cover abundance.
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.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
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. Ecological burns appear to favour this annual species. The use of pulse grazing is maintaining lower threat weeds to low cover abundance.
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 lower threat weeds to low cover abundance.
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 lower threat weeds to low cover abundance.
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 uncommon and never dominant across the Offset Site. The use of pulse grazing is maintaining lower threat weeds to low cover abundance.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
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 lower threat weeds to low cover abundance.
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.
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.
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 lower threat weeds to low cover abundance.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
Salsify	<i>Tragopogon porrifolius subsp. 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. Hand removal of plants is undertaken when encountered.
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 lower threat weeds to low cover abundance.
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 lower threat weeds to low cover abundance.
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 lower threat weeds to low cover abundance.

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
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 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 lower threat weeds to low cover abundance.

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	<p>Pulse grazing helps to control this grass by reducing seed set. This species is described as a short lived perennial hence the destruction of fruiting seed heads for a few years in succession should substantially reduce the abundance of this species.</p> <p>Manual removal of seed heads was undertaken in October in the burnt area in cell 6.</p>	<p>Sweet Vernal-grass has been rare within the Offset Site in previous years, however the cooler and wet conditions of the past 36 months appear to have favoured this species with a high cover of it recorded across the offset stie, the paddock and the whole region.</p> <p>Research suggests that a cool burn of the weed in spring may prevent seed set. Cool spring burns were discussed with DELWP as a way to address the sudden prevalence of Sweet Vernal, however the paddock was still inundated during seed set which prevented this management action or grazing from being undertaken. There was intention to spray this species during this season however the ground was too wet to undertake spraying at the appropriate time. This species will be closely monitored into the following years with adaptive management approaches (such as cool burns, spot spray or late grazing or mowing to remove seed heads) assessed pragmatically.</p>

Common name	Scientific name	High Threat	Zone(s)	Method	Timing	Description of actions	Comments and observations
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. Spot spraying was undertaken in winter in burnt areas.	Toowoomba Canary- grass is rare within the Offset Site and is being targeted by spot spraying in winter. Targeted Spot Spray of Toowoomba Canary-grass was undertaken in a burn area during the same time as the fluazifop-P was applied to the Browntop Bent.

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.	<p>During 2020, 2021 and 2022 the cover of Yorkshire Fog within the Offset Site was higher than previous years. The prevalence of this weed fluctuates from year to year and appears heavily dependent on years with higher rainfall such as 2020, 2021 and 2022. Spot spray is likely to be more effective during active growing seasons such as Autumn and Spring. The areas were surveyed during winter (July) in areas Yorkshire Fog was recorded the previous year (in the northern portion of the offset) however the species could not be identified at that time of the year.</p> <p>Heavier grazing during late winter and early spring may help to suppress vigour and seed set. Likewise a cool burn of the weed in Spring may help to suppress seed set. Unfortunately the heavy rainfall during Spring of 2022 and following Summer prevented a late graze or Spring burn from being undertaken this year, likewise the wet conditions prevented later spot spraying from being undertaken.</p>

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.	No rabbits have been recorded. 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. Fresh Fox diggings and scats were recorded in March 2023 during monitoring assessment. Poison has been ordered (April 2023) and waiting for supplier who has informed the next shipment expected in May 2023.
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

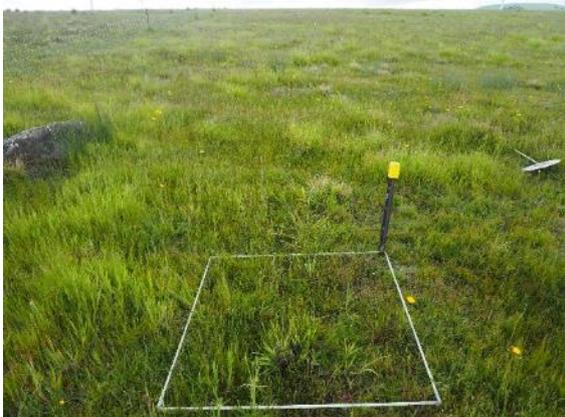
Photo Point Monitoring results	
<p>Offset Site: EPBC 2015/7486</p> <p>Photo point number: 101 Photo point ID: Tussocks</p> <p>Lat: -38 15 439 Long: 143 45 995</p> <p>Date: 5/11/2022 Time: 12:20 pm</p>	 <p>View from above quadrat.</p>
 <p>Landscape view looking South</p>	 <p>Landscape view looking West</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: 5/11/2022

Time: 12:05 pm



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: 5/11/2022

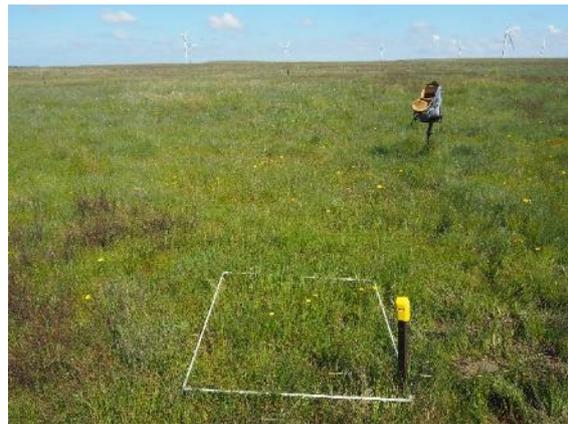
Time: 10:25 am



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

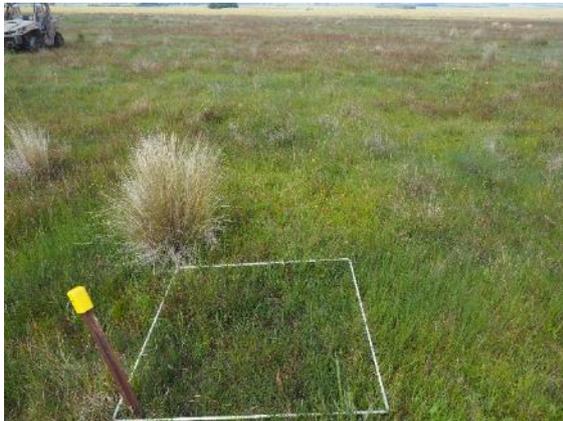
Long: 143 46 133

Date: 5/11/2022

Time: 11:13 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: 5/11/2022

Time: 13:03 pm



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: 5/11/2022

Time: 14:55 pm



View from above quadrat.



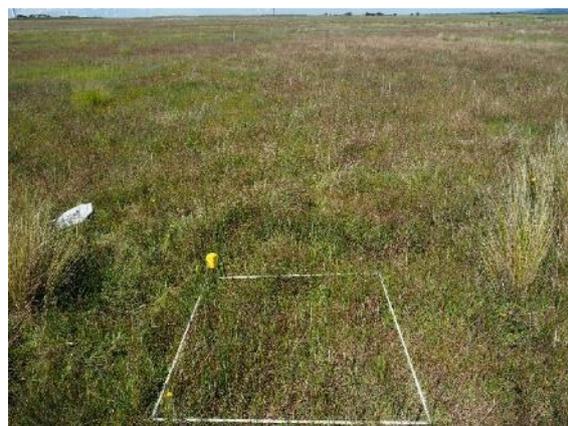
Landscape view looking South



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: 5/11/2022

Time: 14:15 pm



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: 143 46 298

Date: 5/11/2022

Time: 11:34 am



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 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 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
Date	Nov-22	Nov-22	Nov-22	Nov-22	Nov-22	Nov-22	Nov-22	Nov-22	Nov-22
Total Vegetation Cover	87%	80%	90%	98%	80%	85%	90%	89%	87%
Total Native Vegetation Cover	43%	36%	45%	86%	13%	61%	25%	62%	12%
Graminoids	40%	35%	40%	83%	10%	60%	20%	60%	10%
Herbs	3%	1%	5%	3%	3%	1%	5%	2%	2%
Total Weeds	44%	44%	45%	12%	67%	19%	65%	27%	75%
Total Grasses	38%	43%	35%	10%	65%	18%	55%	12%	68%
Grasses – perennial	20%	35%	5%	3%	55%	15%	35%	10%	3%
Grasses – annual	18%	8%	30%	7%	10%	3%	20%	2%	65%
Dicots	6%	1%	10%	2%	2%	1%	10%	15%	7%
Bare Ground	8%	5%	8%	2%	10%	15%	7%	5%	15%
Litter	7%	15%	2%	7%	10%	7%	3%	10%	2%
Moss – present or absent		present	present	present	absent	present	absent	present	present
Inter-tussock space	22%	22%	25%	7%	25%	22%	25%	28%	22%
Biomass monitoring									
Average height (cm)	23.68	35.2	22.4	24.8	26.6	21.4	23.8	19.6	15.6
Average biomass height (cm)	11.45	13.6	9.4	11.4	15.2	11.4	13	9	8.6

- Monitoring assessment was undertaken at the beginning of November rather than October due to heavy rainfall during October 2022

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 ovina</i>	Sheep's Burr	9m2						1m2					
native	<i>Anthosachne scabra</i>	Common Wheat Grass												
native	<i>Arthropodium strictum</i>	Chocolate Lily	1m2			1m2		1m2	9m2					
native	<i>Asperula conferta</i>	Common Woodruff												
native	<i>Austrostipa spp.</i>	Spear Grass	1m2			1m2		1m2						
native	<i>Convolvulus angustissimus</i>	Blushing Bind Weed	9m2		9m2		9m2		9m2	1m2				
native	<i>Dichelachne crinita</i>	Long-hair Plume-grass												
native	<i>Drosera peltata</i>	Pale Sun Dew	1m2		1m2		1m2	9m2		9m2	1m2			
native	<i>Eryngium ovinum</i>	Blue Devil	1m2			1m2		9m2		1m2	1m2			
native	<i>Gonocarpus tetragynus</i>	Raspwort	1m2		1m2		9m2		1m2	1m2		9m2		
native	<i>Hypericum gramineum</i>	Small St-John's wort	1m2		1m2		9m2		1m2		1m2	9m2		
native	<i>Juncus subsecundus</i>	Finger Rush	1m2		9m2		1m2		9m2		1m2		9m2	
native	<i>Leptorhynchos squamatus</i>	Scaly Button	9m2			9m2								
native	<i>Lomandra nana</i>	Pale Mat Rush	1m2				9m2		1m2					
native	<i>Microtis unifolia</i>	Onion Orchid	1m2		1m2		9m2		9m2		9m2		1m2	
native	<i>Oxalis perennans</i>	Grassland Wood Sorrel	9m2			1m2		1m2		1m2				
native	<i>Plantago gaudichaudii</i>	Narrow-leaf Plantain												

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>Poa labillardierei</i>	Silver Tussock			9m2		1m2			9m2
native	<i>Poa morrisii</i>	Velvet Tussock Grass								
native	<i>Rumex dumosus</i>	Wiry Dock			1m2					
native	<i>Rytidosperma sp.</i>	Wallaby Grass sp.		1m2		1m2	1m2	1m2		1m2
native	<i>Schoenus apogon</i>	Common Bog Rush	1m2	1m2		1m2	1m2	1m2	1m2	1m2
native	<i>Solenogyne dominii</i>	Solenogyne		9m2	9m2		1m2			
native	<i>Themeda triandra</i>	Kangaroo Grass	1m2							
exotic	<i>Agrostis capillaris</i>	Brown Top Bent		1m2	1m2	1m2	1m2			1m2
exotic	<i>Aira caryophylla</i>	Silver Hair Grass	1m2	1m2		1m2			1m2	1m2
exotic	<i>Anthoxanthum odoratum</i>	Sweet Vernal-grass	1m2	9m2				9m2		
exotic	<i>Avena fatua</i>	Wild Oat								
exotic	<i>Briza maxima</i>	Large Quaking Grass						1m2		
exotic	<i>Briza minor</i>	Lesser Quaking Grass	1m2							
exotic	<i>Bromus hordeaceus</i>	Soft Brome					9m2			
exotic	<i>Centaureum erythraea</i>	Common Centaury	1m2	1m2	1m2				1m2	1m2
exotic	<i>Cerastium vulgare</i>	Common Mouse-ear Chickweed								
exotic	<i>Cicendia spp.</i>	Cicendia			9m2		9m2			9m2
exotic	<i>Cynosurus echinatus</i>	Rough Dog's-tail							1m2	
exotic	<i>Disa bracteata</i>	South African Orchid								
exotic	<i>Holcus lanatus</i>	Yorkshire Fog	1m2	1m2			1m2		1m2	1m2
exotic	<i>Hypochaeris radiata</i>	Flat Weed	1m2							
exotic	<i>Isolepis levynsiana</i>	Tiny Flat-sedge	1m2	1m2		1m2	1m2	1m2	1m2	1m2
exotic	<i>Juncus bufonius</i>	Toad Rush	1m2	1m2	1m2	9m2	1m2	1m2	1m2	1m2

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
exotic	<i>Juncus capitatus</i>	Capitate Rush	1m2							
exotic	<i>Lolium perenne</i>	Rye Grass								
exotic	<i>Plantago coronopus</i>	Buck's Horn Plantain		1m2			9m2			
exotic	<i>Romulea rosea</i>	Onion Grass	1m2		1m2	1m2	1m2	1m2	1m2	1m2
exotic	<i>Tragopogon porrifolius</i>	Salsify	9m2							
exotic	<i>Trifolium angustifolium</i>	Narrow Leaf Clover			1m2					
exotic	<i>Trifolium campestre</i>	Hop Clover						9m2		
exotic	<i>Trifolium subterraneum</i>	Sub Clover								
exotic	<i>Veronica peregrina</i>	Wandering Speedwell						1m2		
exotic	<i>Vulpia bromoides</i>	Squirrel-tail Fescue		1m2		1m2		1m2		9m2

Table 8. Table of works completed

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

Date	Works undertaken	Time spent
10/5/2022	Biomass control: Stock (sheep) movement. Intensity 850 wethers, 14 days, 1/3rd site (cell 3)	1x2 hours
20/7/202	Biomass control: Stock (sheep) movement. Intensity 850 wethers, 4 days, 1/3rd site (cell 3)	1x2 hours
12/4/2022	Biomass control: Stock (sheep) movement. Intensity 850 wethers, 14 days, 1/3rd site (cell 5)	1x2 hours

Date	Works undertaken	Time spent
5/7/2022	Biomass control: Stock (sheep) movement. Intensity 850 wethers, 5 days, 1/3rd site (cell 5)	1x2 hours
26/4/2022	Biomass control: Stock (sheep) movement. Intensity 850 wethers, 14 days, 1/3rd site (cell 6)	1x2 hours
26/4/2022	Removal of flower heads and spot spray of Paspalum	1 x 1 hr
Jan-March 2022	Fencing and preparing areas for ecological burns	2x40
24-25 April 2022	Undertake ecological burns for biomass control	5x16
24 May 2022	Undertake ecological burns for biomass control	5x16
March – June 2022	Develop Adaptive Weed Management Strategy (WMS)	3x40
January – March 2022	Shortlist weed management contractors	1x20
July-August	Arrange for weed management contractors to undertake works based on WMS	1x8
27 July 2022	Baseline recording of weed management areas in accordance with WMS	2x8
4-5 September 2022	Spray of Brown-top Bent (with fluazifop-P) and Toowoomba Canary-Grass (Glyphosate) in burn undertaken in north of Offset Site	3x16
December 2022	Spray of Brown-top Bent (Glyphosate)	2x12
5 November 2022	Monitoring and Reporting: Photo Point survey and monitoring	2x8 hours
6 January 2023	Monitoring inspection of fences, pest animals, etc.	1x1 hours
February	Follow up monitoring of WMS plots	1x8 hours
11 March 2023	Monitoring inspection of fences, pest animals, etc.	1x2 hours

Date	Works undertaken	Time spent
April 2023	Monitoring and Reporting: Report writing	1x24 hours

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 1-12) 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:

Clare Dennis

J.P. Dennis

Date: 24 / 04 / 2023

Pictures documenting actions undertaken during management period.



Plate 1. Preparing for ecological burns, erected fencing, slashed perimeter to be used as wet break.



Plate 2. Undertaking ecological burns.



Plate 3. Undertaking ecological burns.



Plate 4. Conducting burn in northern portion of Offset Site during May 2022.



Plate 5. Base line monitoring (August 2022) prior to fluazifop-P forte spot spray of area in burnt in May 2022 in north of Offset Site.



Plate 6. Spot spray trialling fluazifop-P (as per WMS) during September 2022 in northern portion of Offset Site in area burnt in May 2022. Spray was targeted on areas of Brown-top Bent around patches of Kangaroo Grass



Plate 7. Spot spray trialling fluazifop-P (as per WMS) during September 2022 in northern portion of Offset Site in area burnt in May 2022. Spray was targeted on areas of Brown-top Bent around patches of Kangaroo Grass



Plate 8. Spot spray trialling fluazifop-P (as per WMS) during September 2022 in northern portion of Offset Site in area burnt in May 2022. Spray was targeted on areas of Brown-top Bent around patches of Kangaroo Grass



Plate 9. Spot spray trialling fluazifop-P (as per WMS) during September 2022 in northern portion of Offset Site in area burnt in May 2022. Spray was targeted on areas of Brown-top Bent around patches of Kangaroo Grass



Plate 10. Removing heads of Paspalum recently observed within Offset Site.



Plate 11. Spot spray of Paspalum following removal of flowering heads.



Plate 12. Manual removal of South African Weed Orchid.



Plate 13. Cut-leaf Velia flowering in Offset site.



Plate 14. Lemon Beauty-heads within the burn and sprayed area in the north of the Offset Site.



Plate 15. Pale Sundew amongst Kangaroo Grass in the Offset Site.



Plate 16. Fairies Apron within the Offset Site.



Plate 17. Chocolate Lily found in Offset Site.

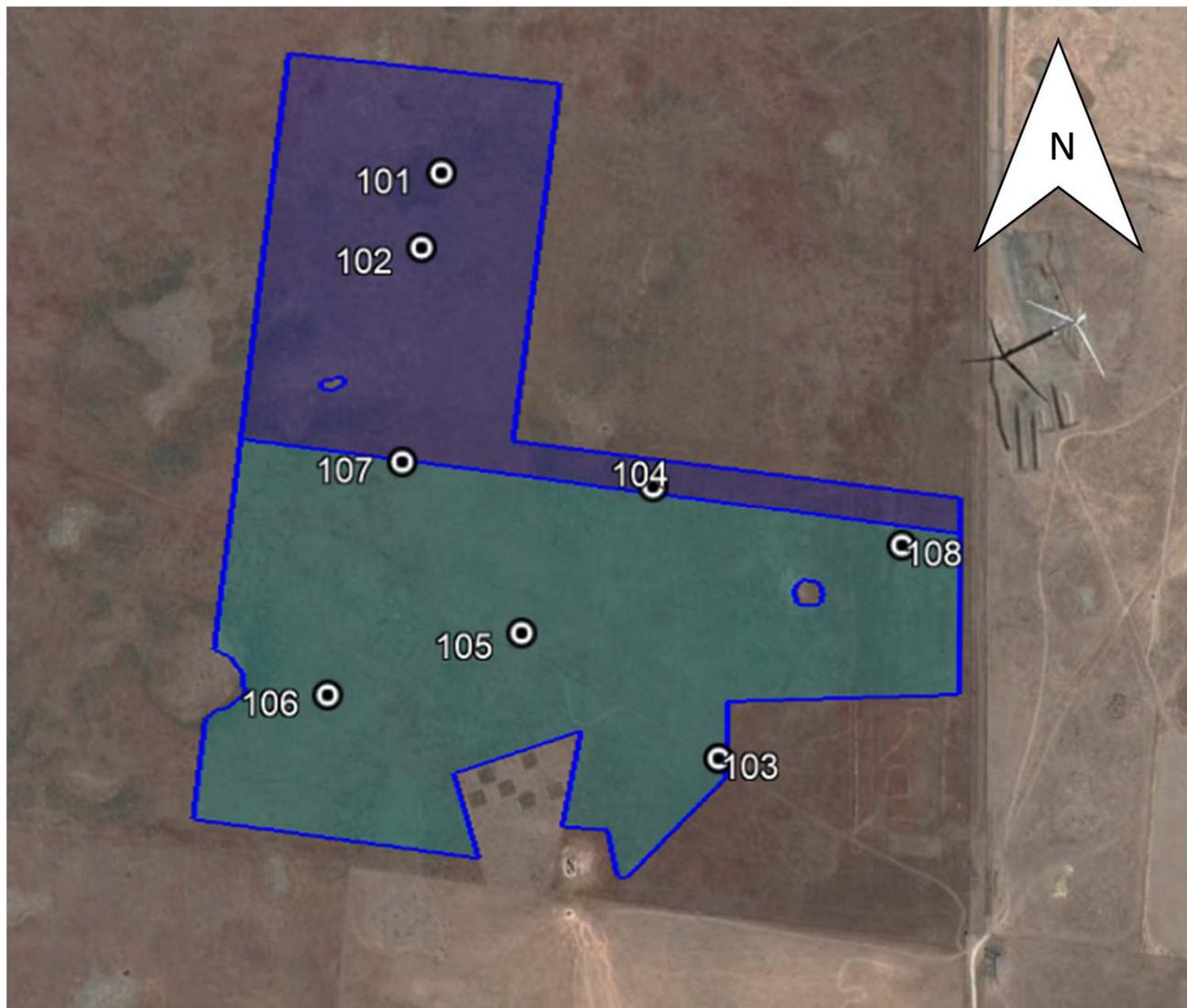


Figure 1:

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

WJ Dennis Farming Trust
 ABN: 31616379071

Invoice Date
 20 Jan 2023

Invoice Number
 0329

Reference
 Summer 2022/23 Offset
 Weed Control

ABN
 13 623 160 305

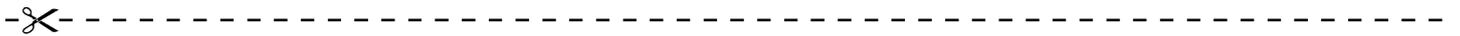
TREC Land Services
 Attention: Daniel Young
 147 King Street
 WALLAN VIC 3756
 AUSTRALIA

Description	Quantity	Unit Price	GST	Amount AUD
Attn: Ross Dennis Offset weed control September 6 and 7, 2022. 2 staff	2.00	1,100.00	10%	2,200.00
Offset Weed Control December 19, 2022. 2 staff	1.00	1,100.00	10%	1,100.00
			Subtotal	3,300.00
			TOTAL GST 10%	330.00
			TOTAL AUD	3,630.00

Due Date: 19 Feb 2023

Payment Terms: 30 days from invoice date.

Bank Details:
 ANZ
 BSB: 013 347
 Account: 234175583
 Name: TREC Land Services



PAYMENT ADVICE

Customer WJ Dennis Farming Trust
Invoice Number 0329
Amount Due **3,630.00**
Due Date 19 Feb 2023

To: TREC Land Services
 Attention: Daniel Young
 147 King Street
 WALLAN VIC 3756
 AUSTRALIA

Amount Enclosed _____
 Enter the amount you are paying above



TAX INVOICE

Ross Dennis
Attention: Ross Dennis
4970 Princes Highway
BIRREGURRA VICTORIA 3242
AUSTRALIA

Invoice Date
28 Jun 2022

Invoice Number
INV-0017

Reference
021009-01

Geordie Scott-Walker
Consultant Ecologist
PO Box 64
Williamstown VIC 3015
Mobile: +61 401 850 880
Email:
geordiescottwalker@gmail
.com
ABN: 65 329 174 294

Description	Quantity	Unit Price	GST	Amount AUD
Weed Management Strategy for BB-3044 LA01 and VC-CFL-3044_02, Ombersely.	1.00	4,000.00	10%	4,000.00
			Subtotal	4,000.00
			TOTAL GST 10%	400.00
			TOTAL AUD	4,400.00

Due Date: 30 Jun 2022

Payment to:
Geordie Scott-Walker
Account 165548041
BSB 633-000

PAYMENT ADVICE

To: Geordie Scott-Walker
Consultant Ecologist
PO Box 64
Williamstown VIC 3015
Mobile: +61 401 850 880
Email: geordiescottwalker@gmail.com
ABN: 65 329 174 294

Customer Ross Dennis
Invoice Number INV-0017
Amount Due **4,400.00**
Due Date 30 Jun 2022

Amount Enclosed

Enter the amount you are paying above

Bleak House Land Trust
C/O Ross Dennis
By email: rossjdennis@gmail.com



3 April 2023

Geordie Scott-Walker

M. Env; B. Nat. Res. Mgmt. (Hons)
Consultant Ecologist

geordiescottwalker@gmail.com

+61 401 850 880

An update on adaptive grassland weed management at BB-3044 LA01 and VC-CFL-3044_02, Ombersely, and proposed works for 2023.

Dear Ross,

This letter provides an update on the progress of adaptive grassland weed management works on the subject land. In late July 2022 baseline assessment of several trial sites was completed. Floristic data was recorded at six quadrats each of 400 m² (20 x 20 m) based on the survey methods outlined in the weed management strategy (Scott-Walker 2022). Plots are located in areas where weed management is to be completed over the next few years including burning, spraying, grazing and mowing.

Herbicidal weed control treatments for *Agrostis stolonifera* (Creeping Bent-grass) was done in early September and December 2022. The September treatment was at the northern part of the study site where the grass selective herbicide fluazifop-P was sprayed on infestations that surround patches of *Themeda triandra* (Kangaroo Grass). In December, glyphosate was sprayed on infestations in the southern treatment zone. Care was taken by the contractor to avoid spraying any tussocks of Kangaroo Grass and other desirable native species.

No other treatments were undertaken including burning, grazing or mowing due to inappropriate site conditions. Throughout 2022 a third consecutive La Niña climatic event was affecting weather patterns across south-eastern Australia. Local effects included high rainfall totals that included, for example, 159.6 mm recorded at the Winchelsea post office in October, located approximately 14 km east of Ombersely¹ (Bureau of Meteorology 2023). From September onwards the soils were saturated and many areas boggy and this prevented any works from being completed.

¹ weather stations closest to the study site at Mount Gellibrand (c. 5 km away) and Eurack (c. 11 km away) have incomplete datasets in recent years including monthly rainfall records for spring and summer in 2022.

In February 2023, I resurveyed the monitoring plots. The vegetation was in a natural phase of senescence and perennial plants had mostly died back to dormant, below-ground parts. Surficial biomass comprised mainly dried materials, except for Kangaroo Grass, which is a C_4 photosynthetic species. Glyphosate treatment had a very strong, clearly visible impact on Creeping Bent-grass, which appeared dead and had stunted tiller height and no evidence of successful flowering. The wet spring likely delayed Creeping Bent-grass flowering that explains the low biomass evident after a treatment in December when plants would have been in full flower in a typical season. In the case of fluzifop-P, the treatments were evident in the form of prolific growth of non-target species that benefitted from Bent-grass control, including *Schoenus apogon* (Common Bog-sedge), *Aira* spp. (Hair-grass) and *Briza maxima* (Large Quaking-grass). At the current time monitoring doesn't show the full effect of spray treatments. Following the autumn break, Bent-grass is likely to resume active growth and seedlings may germinate, we may observe stronger treatment effects such as a pulse in recruitment of other species in areas where Bent-grass has declined.

Works planning for 2023

Autumn burning

- Discuss any autumn burning proposals with the landholder to identify any research opportunities such as pre- or post-burn spraying treatment, or to monitor the vegetation response generally.

Spring burning

- Re-assess suitable plots for spring burns and ensure that pre- and post-burn monitoring is completed; at least one spring-burn plot should be combined with a pre-burn spray treatment for Creeping Bent-grass. Note that the timing of spring burns requires further discussion, and burns could be carried out in very early spring or late spring depending on site conditions.

Herbicide treatments

- Continue follow-up monitoring of 1st year sprayed plots to determine spray outcomes in 2023 and to inform the design of future (adaptive) works that may be required.
- Discuss any proposals to carry out more extensive herbicide treatment of Creeping Bent-grass using glyphosate or fluzifop-P.
- Discuss options for testing other herbicides.
- Discuss the need for herbicide or other treatments on *Holcus lanatus* (Yorkshire Fog) or any other high threat weed on the site.

Data analysis and further monitoring

- Analyse the data collected over 2022-23 and present results in a summary report later in 2023 or early 2024 after the final monitoring in 2023.
- Identify if there is any change to the monitoring method required to improve survey outcomes.
- Map the vegetation communities of the Ombersley grasslands and record important features including fences to more accurately show different treatment areas on maps.
- Update the map provided in the weed management strategy with new spatial data as required.

It's a pleasure to continue to provide services to Bleak House Land Trust on this project. For further discussion on any of the matters above, please do not hesitate to reach out to me on the contacts details below.

Kind regards,



Geordie Scott-Walker
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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.