



Report for Wellington Shire Council

West Sale Aerodrome Offset Implementation
Report 2019 - 2020

EPBC 2017/8106

February 2021

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1 Introduction

1.1 Project Background

Indigenous Design Environmental Management (Indigenous Design) has been commissioned by Wellington Shire Council to report on the implementation of offset works at the West Sale Aerodrome as part of EPBC approval 2017 / 8106 Condition 7 for the West Sale Airport Runway Extension.

The offset site is managed through an on-title agreement with the Victorian Government (the Landowner Agreement) CW_CFL-3055_01, which details the management commitments to be completed (*Appendix 1*).

Indigenous Design currently undertake conservation works at the site for Wellington Shire Council in order for offset obligations to be met at both the state and federal level.

This report covers the first 2 years of implementation of the offset site, being 2019 & 2020.

1.2 Study Site

The site is located at West Sale Aerodrome, in East Gippsland, adjacent to the Princess Highway in Fulham. The site is approximately 13 hectares and is managed as an offset by Wellington Shire Council.

West Sale Aerodrome - LOA CW_CFL-3055_01

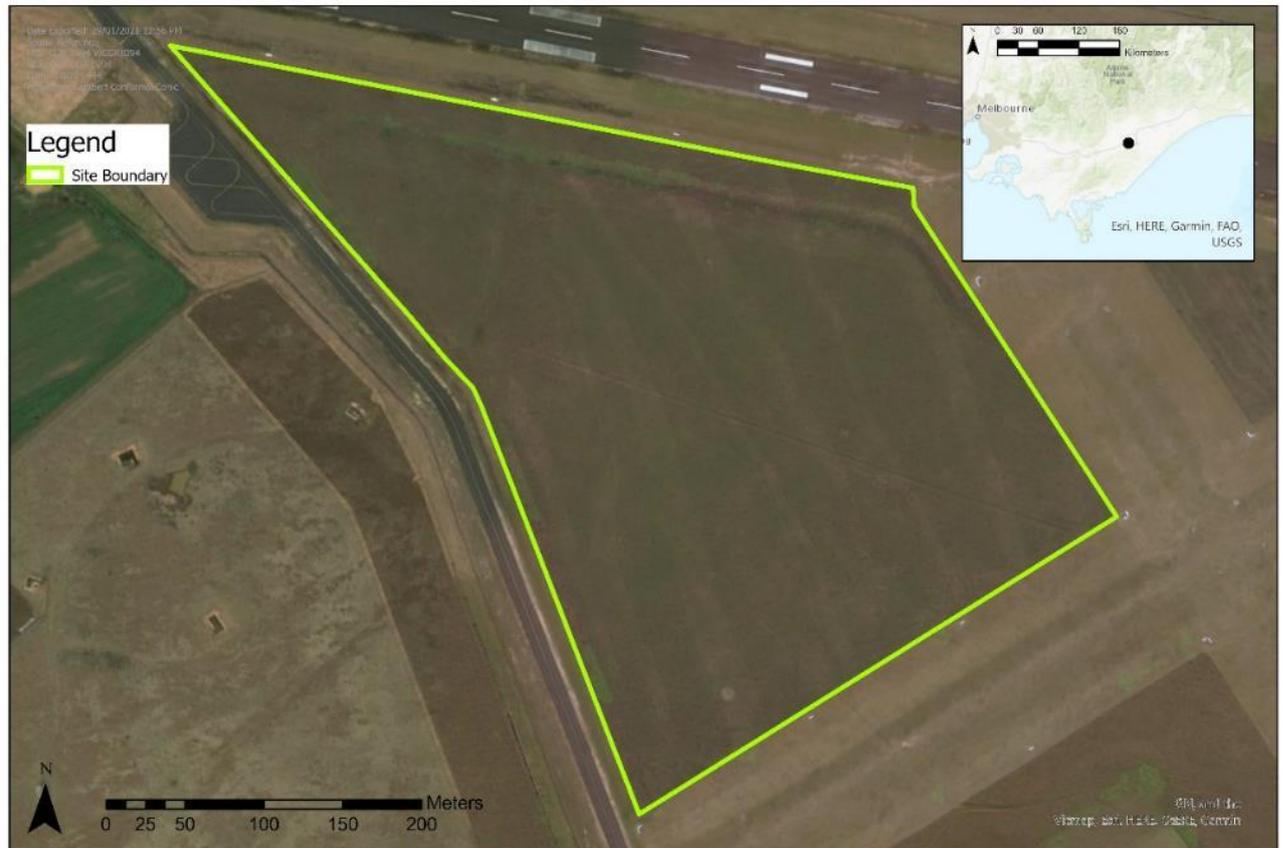


Figure 1: Site Boundary

2 Summary of Works

The following sections provide a summary of works undertaken on site during 2019 & 2020 and the site's progress towards meeting its Landowner Agreement obligations. The summary is based on site observations and descriptions of works undertaken by conservation work crews across the past 2 years as well as a site audit to determine the progress of the site completed in August 2020. This audit was undertaken by an ecologist experienced in restoration activities and familiar with the implementation of Landowner Agreements and their annual reporting requirements. The audit is provided in *Appendix 2*.

Table 1 identifies the management commitments of the site for the first 2 years of management.

Table 1: Management Obligations

Item	Management Obligations	Standard
Fencing	Restrict and prohibit vehicle access across offset site. Mark the perimeter of Site 1 with suitably visible markers that meet CASA standards.	No vehicle or machinery access of offset site. Visible to vehicle and aircraft personnel.
	Maintain fencing around boundary of the property in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Maintain fencing to DELWP standards.
Woody Weeds	Monitor for and eliminate all woody weeds. Monitor for any re-sprouting or seedlings and eradicate.	Aim to eliminate all listed woody weeds by the end of Year 1. <1% of woody weeds at the end of Year 10.
	Eliminate all new & emerging woody weeds	<1% of woody weeds at the end of Year 10.
Herbaceous Weeds	Monitor for and reduce cover of all high threat herbaceous and grassy weeds.	Aim to reduce the cover of all listed high threat herbaceous weeds to <5% by end of Year 5. <5% cover of all high threat herbaceous weeds at the end of Year 10.
	Monitor for and control herbaceous weeds.	No increase in cover beyond the cover listed in Table 5 for each zone for all herbaceous weeds.
	Eliminate all new & emerging herbaceous weeds	<1% cover of all new and emerging herbaceous weeds at the end of Year 10.
Pest Animals	Monitor for and control rabbits and foxes	No surface disturbance in the offset site. No active rabbit warrens. No active fox dens. Control numbers of rabbits and foxes.
	Monitor and control all new and emerging pest animals	Control numbers of any new and emerging pest animals.
Biomass Management for High Rainfall Plains Grassland	Ecological burning or slashing of grassland	Aim to complete biomass reduction across the entire site by end of Year 3. Complete biomass reduction at a 3-5 year interval from date of last burn.
	Monitor biomass accumulation	Annually.
Reporting	Prepare and submit an annual report	Annual report is signed, dated and submitted at least 2 months prior to the anniversary date of the agreement.

		<p>Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine compliance / progress against the commitments.</p>
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2.1 Fencing

Site markers were installed to delineate the boundary of the offset site at the commencement of the Agreement in 2018.

A single set of tyre tracks was observed within the offset site in August 2020 (*Photo 1*) during implementation of on-ground works and the site audit. Little damage to the soil profile was observed, however the tyre marks were clear. All field staff have been informed that there is to be no vehicles driven within the offset site, although it is unknown to whom this vehicle belonged or when the site was accessed in this way.

Wellington Shire Council advised that there have been no breaches of perimeter fencing in the past 2 years. Airport fencing is constructed of chain mail to prevent animals or other unauthorised entry onto the operating airport runways.



Photo 1: Vehicle tracks through the central grassland are of the site (August 2020)

2.2 Woody Weeds

The Management Plan identified the following woody weeds as present on site:

- *Rubus fruticosus* spp. Agg. (Blackberry)
- *Lycium ferocissimum* (African Boxthorn)

Mapping and knapsack spraying of Blackberry was undertaken across the site between November 2019 and March 2020, particularly on the western side and central drain line. These patches were primarily small and scattered with a small number of canes identified and controlled. Follow-up control of patches which had previously been treated early in 2019 was also completed. The one large patch found along the eastern edge of the site was carefully sprayed with a selective herbicide and low-volume knapsack to prevent damage to adjacent grassland species.

The location of Blackberry across the site has now been mapped to provide on-going follow up control points each Summer (*Map 1*).

No African Boxthorn has yet been identified on site by conservation work crews.

A single cherry plum seedling was hand removed on the eastern side of the site, which was recorded as a new and emerging woody weed species.

A site audit undertaken in August 2020, included an assessment of how the site was tracking against the Management Plan requirements. This audit (*Appendix 2*) found that woody weed cover is currently less than 1%, meeting this management obligation 2 years earlier than required by the Management Plan.



Photo 2: Success of previously treated Blackberry and CASA approved site perimeter markings in the background (December 2019)



Photo 3: Re-treatment of re-sprouting Blackberry (December 2019)



Photo 4: Dead blackberry, previously treated with herbicide (August 2020)

2.3 Herbaceous & Grassy Weeds

The Management Plan identified 17 high threat herbaceous weeds present on site that are to be controlled to less than 5% coverage (from an initial 15% at the commencement of the agreement).

Weed control works, involving knapsack spraying, have been undertaken across the site, targeting high threat species from November 2019 through to August 2020. Conservation work crew noted the species encountered as they undertook works across the site that were controlled including: *Agrostis capillaris* (Brown-top Bent-grass), *Cirsium vulgare* (Spear Thistle), *Cynodon dactylon var. dactylon* (Couch), *Pennisetum clandestinum* (Kikuyu), *Phalaris aquatica* (Toowoomba Canary Grass), *Anthoxanthum odoratum* (Sweet Vernal Grass), *Conyza bonariensis* (Flax-leaf Fleabane), *Dactylis glomerata* (Cocksfoot), *Holcus lanatus* (Yorkshire Fog), *Paspalum dilatatum* (Paspalum) and *Hypericum perforatum* (St. John's Wort), particularly along the perimeters, although grasses such as Paspalum were selectively spot-sprayed throughout the site. St. John's Wort, a common high-threat weed in native grasslands, was found to be prevalent along the north western edge of the site and was treated, whilst Flax-leaf Fleabane was recorded as being scattered across the site.

The Management Plan identified a further 12 herbaceous weeds as present on site to be controlled and maintained at current levels (5% at the commencement of the agreement).

Herbaceous weed control was also undertaken over eight weed control visits, targeting five of the additional herbaceous weeds, including those with the highest coverage, such as *Sonchus oleraceus* (Sow Thistle), *Plantago coronopus* (Buck's-horn Plantain), *Lysimachia arvensis* (Pimpernel), *Hypochaeris radicata* (Flatweed) and *Plantago lanceolatus* (Ribwort).

New and emerging weeds recorded on site were *Arctotheca calendula* (Cape Weed), *Disa bracteata* (South African Weed Orchid), *Gamochaeta purpurea* (Purple Cudweed), *Holcus lanatus* (Yorkshire Fog) and *Plantago bellardii* (Silky Plantain), all of which received control throughout the 2 year period. The location of South African Weed Orchid was GPS recorded and the 3 individuals hand weeded. This location will now be prioritised for follow up control in the Spring of 2021 (Map 2).

The site audit undertaken in August 2020 (Appendix 3), resulted in estimates of 6% cover for high threat herbaceous weeds (as compared with the 5% coverage required but reduced from the original 15%), 8% for Herbaceous weeds (slightly higher than the required 5% coverage), and less than 1% for new and emerging herbaceous weeds. These figures show that weed control and management works are having positive effects on meeting management obligations. The site audit assessor also observed large patches of the native *Plantago gaudichaudii* (Narrow Plantain), *Convolvulus* sp. (Bindweed), *Senecio* sp. (Fireweed) and indigenous *Galium* sp. (Bedstraw) within the area of weed control activities on the western side of the site, highlighting the importance of continued careful and selective weed control. Masses of *Tricoryne elatior* (Yellow Rush-lily) were also flowering across the site and some large patches of *Wahlenbergia gracilis* (Australian Bluebell) were also in flower.



Photo 5: Paspalum control amongst native Themeda triandra (Kangaroo Grass) (December 2019)



Photo 6: Ribwort subjected to weed control (August 2020)



Photo 7: Northern edge of site showing the poorer quality raised mound along the perimeter. Note the Kangaroo Grass coverage on either side of this mound indicating higher quality grassland and the large number of native Senecio sp. recolonising the site (Grey herbaceous species) (August 2020).



Photo 8: Native Plantago gaudichaudii (Narrow Plantain) patch within the central area of the grassland (August 2020).



Photo 9: A dense patch of Dianella amoena (Matted Flax-lily) located in the offset site, listed as endangered under the EPBC Act, as well as being protected under the FFG Act 1988. (August 2020).

2.4 Pest Animals

Conservation work crews did not observe any evidence of pest animals within the site, although old *Oryctolagus cuniculus* (European Rabbit) scats were recorded during the audit.

Rabbits are controlled by the airport operator across the site on an annual basis through the use of Pindone oat baiting, in response to observed scats and diggings primarily adjacent to airport buildings.

No new & emerging pest animals have been identified within the offset site.

2.5 Biomass Management for High Rainfall Plains Grassland

Wellington Shire Council have a mosaic burn plan for the West Sale Aerodrome, with the offset site proposed to be burnt in Autumn 2021 to comply with this biomass reduction requirement which will be before the end of Year 3.

2.6 Reporting

A summary of all works completed on site within the past 2 years was provided to the Department of Environment, Land, Water & Planning (DELWP) as part of the Landowner Agreement annual reporting requirements (*Table 2*). Supporting evidence was also provided, with an example of this included in

Appendix 3 - a Conservation Crews Daily Works record completed at the end of each day's activities within the site.

Table 2: Site Management Works Summary

Year	Month Works Completed	Zone	Management Action / Commitments	Standard	Timing	Description of Action Completed	Completed (Yes/No)	Supporting Evidence of action being completed / comments / observations
Fencing								
2019 - 2020		1A	Restrict and prohibit vehicle access across offset site. Mark the perimeter of Site 1 with suitably visible markers that meet CASA standards.	No vehicle or machinery access over offset site Visible to vehicles and aircraft and personnel.	Within 3 months of agreement and then quarterly inspections	Installation of site markers completed. Vehicle access noted during on ground implementation works.	Yes	Written records from conservation work crews; Photos. A single set of tyre tracks within the grassland was observed during implementation of on-ground works. Little to no damage was observed to the soil profile, however marks are still evident. All field staff have been informed that there is to be no vehicles driven within the offset site.
2019 - 2020		Property Boundary	Maintain fencing around boundary of the property in good condition. Conduct yearly monitoring to ensure all fencing meets the required standard.	Maintain fencing to DEPI fencing standards in BushBroker Information Sheet 12 - Standards for Management - Fencing.	Ongoing	Fence inspection & repair	Yes	Advice from land owner (Wellington Shire Council (WSC)) that there have been no breaches of perimeter fencing in the past 2 years. Airport fencing is constructed of chain mail to prevent animals or other unauthorised entry onto the operating airport runways.
Woody Weeds								
2019 - 2020	November - March	1A	Monitor for and eliminate all woody weeds. Monitor for any re-sprouting or seedlings and eradicate.	Aim to eliminate all woody weeds by end of year 1. <1% cover of all listed woody weeds at the end of year 10. Minimise off-target damage.	Spring-Autumn	<i>Rubus fruticosus</i> spp. agg. (Blackberry) knapsack control and mapping completed.	Yes	Written records from conservation work crews; Invoices; Weed mapping. Blackberry patches were located, mapped and knapsack sprayed. This included patches which had previously been controlled but were re-sprouting. One large patch found along eastern edge of site was carefully sprayed with a suitable herbicide to prevent damage to adjacent grassland species, along with other small scattered germinants located throughout the site. No Boxthorn has yet been identified on site. Total woody weed cover of both Blackberry & Boxthorn across the site is <1% at the end of Year 2.
2019	November	1A	Eliminate all new & emerging woody weeds	<1% cover of all woody weeds at the end of Year 10	Ongoing	Hand weeded <i>Prunus cerasifera</i> (Cherry Plum)	Yes	Written records from conservation work crews; Invoices. 1 Cherry Plum seedling hand weeded along the eastern side of site.
Herbaceous Weeds								

Year	Month Works Completed	Zone	Management Action / Commitments	Standard	Timing	Description of Action Completed	Completed (Yes/No)	Supporting Evidence of action being completed / comments / observations
2019 - 2020	November - March & July - August	1A	Monitor for and reduce cover of all high threat herbaceous and grassy weeds.	<5% cover	Various	Knapsack sprayed <i>Agrostis capillaris</i> (Brown-top Bent-grass), <i>Cirsium vulgare</i> (Spear Thistle), <i>Cynodon dactylon</i> var. <i>dactylon</i> (Couch), <i>Pennisetum clandestinum</i> (Kikuyu), <i>Phalaris aquatica</i> (Toowoomba Canary Grass), <i>Anthoxanthum odoratum</i> (Sweet Vernal Grass), <i>Conyza bonariensis</i> (Flatleaf Fleabane), <i>Dactylis glomerata</i> (Cocksfoot), <i>Holcus lanatus</i> (Yorkshire Fog), <i>Paspalum dilatatum</i> (Paspalum), and <i>Hypericum perforatum</i> (St. Johns Wort)	Yes	Written records from conservation work crews; Invoices. Central part of the site was targeted, with <i>Paspalum</i> identified as the main weed and many small patches scattered throughout, however this was observed as <1% coverage. Very little other high threat or herbaceous weeds are present within this central area (approx. 8 hectares in area). The main focus of work was around the western and northern perimeter of the site where weedy grasses make up the majority of the weed coverage and was observed in some areas to be between 30-40% (within an area of treatment 200m x 20m (0.4ha)). St Johns Wort is prevalent along the north western edge of the site and was treated twice during this period. Control activities along the eastern boundary primarily of weedy grasses found a total coverage of Cocksfoot 10%, <i>Paspalum</i> 5%, Kikuyu 5% and <i>Phalaris</i> 2% in the area of treatment.
2020	August	1A	Monitor for and reduce cover of all high threat herbaceous and grassy weeds.	<5% cover	Ongoing	Site audit completed to estimate current high threat weed coverage	Yes	Site audit results estimate the high threat weed coverage at the site to be between 6% & 7% at the end of year 2. This coverage is currently on track to meet the "<5% coverage required by the end of Year 5".
2019/2020	November - March & July - August	1A	Monitor for and control herbaceous weeds.	No increase beyond current level	Spring-Autumn	Knapsack sprayed <i>Sonchus oleraceus</i> (Common Sow-thistle), <i>Hypochaeris radicata</i> (Flatweed), <i>Plantago coronopus</i> (Buckshorn Plantain), <i>Lysimachia arvensis</i> (Pimpernel), and <i>Plantago lanceolata</i> (Ribwort).	Yes	Written records from conservation work crews; Invoices. 8 visits to site undertaken within this period. Whilst completing high threat herbaceous and grassy weed control, selective spraying of other weed species encountered was completed. This involved selectively controlling grasses within high quality areas or "pushing" back species to allow native recruitment. Flatweed is present across the site and when found large patches were targeted for control. Fleabane is sporadically present across the whole site but estimated to be <1%. Large patches of the native <i>Plantago gaudichaudii</i> , <i>Convolvulus</i> sp., <i>Senecio</i> sp. and native <i>Gallium</i> were observed in August in the area of weed control on the western side of the site. Masses of <i>Tricoryne elatior</i> (Yellow Rush-lily) were also flowering across the site and some large patches of <i>Wahlenbergia gracilis</i> (Australian Bluebell) were also in flower.

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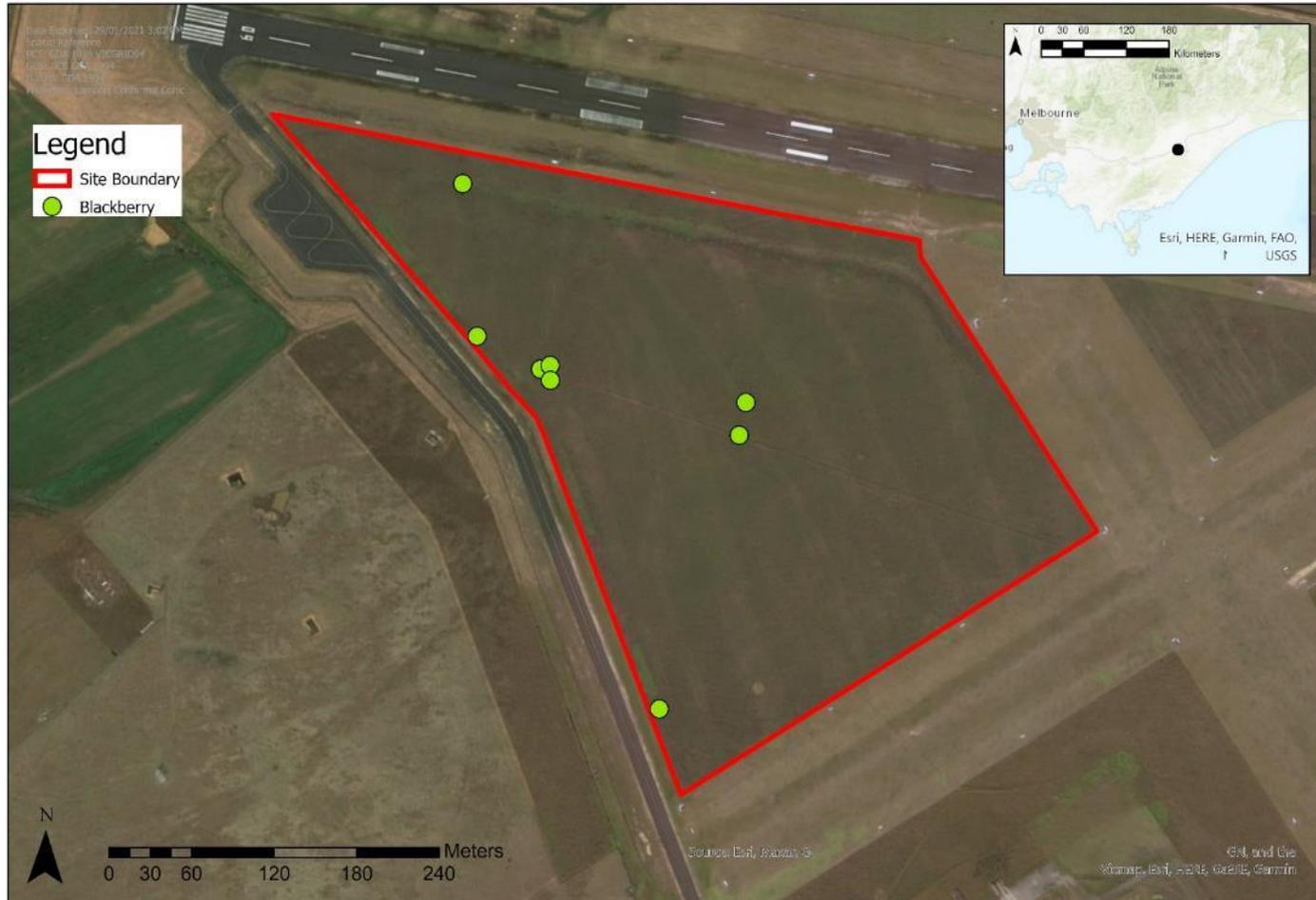
Year	Month Works Completed	Zone	Management Action / Commitments	Standard	Timing	Description of Action Completed	Completed (Yes/No)	Supporting Evidence of action being completed / comments / observations
2020	August	1A	Monitor for and control herbaceous weeds.	No increase beyond current level	Ongoing	Site audit completed to estimate current herbaceous weed coverage	Yes	Site audit results estimate the herbaceous weed coverage at the site to be between 8 & 10% at the end of year 2. This coverage is currently meeting the "no increase beyond current level" required.
2019 & 2020	November & July	1A	Eliminate all new & emerging herbaceous weeds	<1% cover	Ongoing	Knapsack sprayed Gamochaeta purpurea (Purple Cudweed), Arctotheca calendula (Cape Weed) and <i>Plantago bellardii</i> (Silky Plantain). <i>Disa bracteata</i> (South African Weed Orchid) individuals hand weeded (approx. 6 in total).	Yes	Written records from conservation work crews; Invoices. Cape Weed incursion from perimeter of the site primarily from the southern boundary has been treated. South African Weed Orchid location along the eastern boundary of the site was gps'd so that follow up works in the area can be completed to ensure no other individuals remain. New & emerging herbaceous weed coverage is <1% across the site.
2020	October		Monitor for and control herbaceous weeds.	No increase beyond current level	Ongoing	Parentucellia latifolia (Red Bartsia) , Anagallis arvensis (Pimpernel) , Cirsium vulgare (Spear Thistle) , Sonchus asper subsp. asper (Rough Sow-thistle) , Sonchus oleraceus (Common Sow-thistle) , Plantago coronopus (Buck's-horn Plantain) , Plantago lanceolata (Ribwort) , Hypochoeris radicata (Flatweed) , Bromus spp. , Paspalum dilatatum (Paspalum) , Holcus annuus (Annual Fog) , Holcus lanatus (Yorkshire Fog) , Anthoxanthum odoratum (Sweet Vernal-grass) , Pennisetum clandestinum (Kikuyu) , Cynodon dactylon (Couch) , Dactylis glomerata (Cocksfoot)	Yes	Treated exotic grasses and invasive broadleaf species along the western boarder all the way to the southern border. "-" indicated grasses. "O" indicated herbaceous broadleaf. "=" represents black berry.
2020	November		Monitor for and control herbaceous weeds.	No increase beyond current level	Ongoing	Anthoxanthum odoratum (Sweet Vernal-grass) , Briza maxima (Large Quaking-grass) , Paspalum dilatatum (Paspalum) , Pennisetum clandestinum (Kikuyu) , Dactylis glomerata (Cocksfoot)	Yes	Sprayed weedy grasses along the edge of the north western corner and along the old drain that runs through the centre of the site. Black Berry treated along the central drainage line, western and southern perimeters. African orchid noted and treated along the western corner. A tracker was used along the drainage line and on the blackberry,

Year	Month Works Completed	Zone	Management Action / Commitments	Standard	Timing	Description of Action Completed	Completed (Yes/No)	Supporting Evidence of action being completed / comments / observations
Pest Animals								
2019/2020	N/A	All	Monitor and control rabbits and foxes	No surface disturbance within the credit site. No active rabbit warrens to be present. No active fox dens to be present. No rubbish. Minimal artificial piles of logs and rocks.	On-going	No works required.	Yes	Written records from conservation work crews. No pest animal observations made in conservation crew notes. An old rabbit scat was identified in the site audit, however no other damage was noted.
2019 / 2020	N/A	All	Monitor for and control rabbits and foxes	Control numbers of rabbits and foxes	Ongoing	Pindone baiting completed as required.	Yes	Rabbits are controlled across the site on an annual basis through the use of Pindone oat baiting. This is undertaken as a response to observed scats and diggings primarily adjacent to airport buildings.
2019 / 2020	N/A	All	Monitor and control all new and emerging pest animals	Control numbers of any new and emerging pest animals	On-going	No works required.	Yes	Written records from conservation work crews; Invoices. No new and emerging pest animals observed as part of monitoring activities.
Biomass Management for High Rainfall Plains Grassland								
2019 / 2020	N/A	All	Ecological burning or slashing of grassland.	Aim to complete biomass reduction across the entire site by the end of Year 3. Complete biomass reduction at a 3-5 year interval from date of last burn. Use monitoring to inform application of the recommended mosaic approach to burning where no more than 50% of the site is burnt in any one year.	Autumn/Winter	No works completed.	Yes	WSC have a mosaic burn plan for the West Sale Aerodrome. Zone 1A is proposed to be burnt in autumn, early 2021 to comply with this biomass reduction requirement.
2019 / 2020	N/A	All	Monitor biomass accumulation	Annually.	Autumn/Winter	No works completed.	No	No works completed.

Maps

Map 1 - Blackberry locations

West Sale Aerodrome - LOA CW_CFL-3055_01 - Blackberry



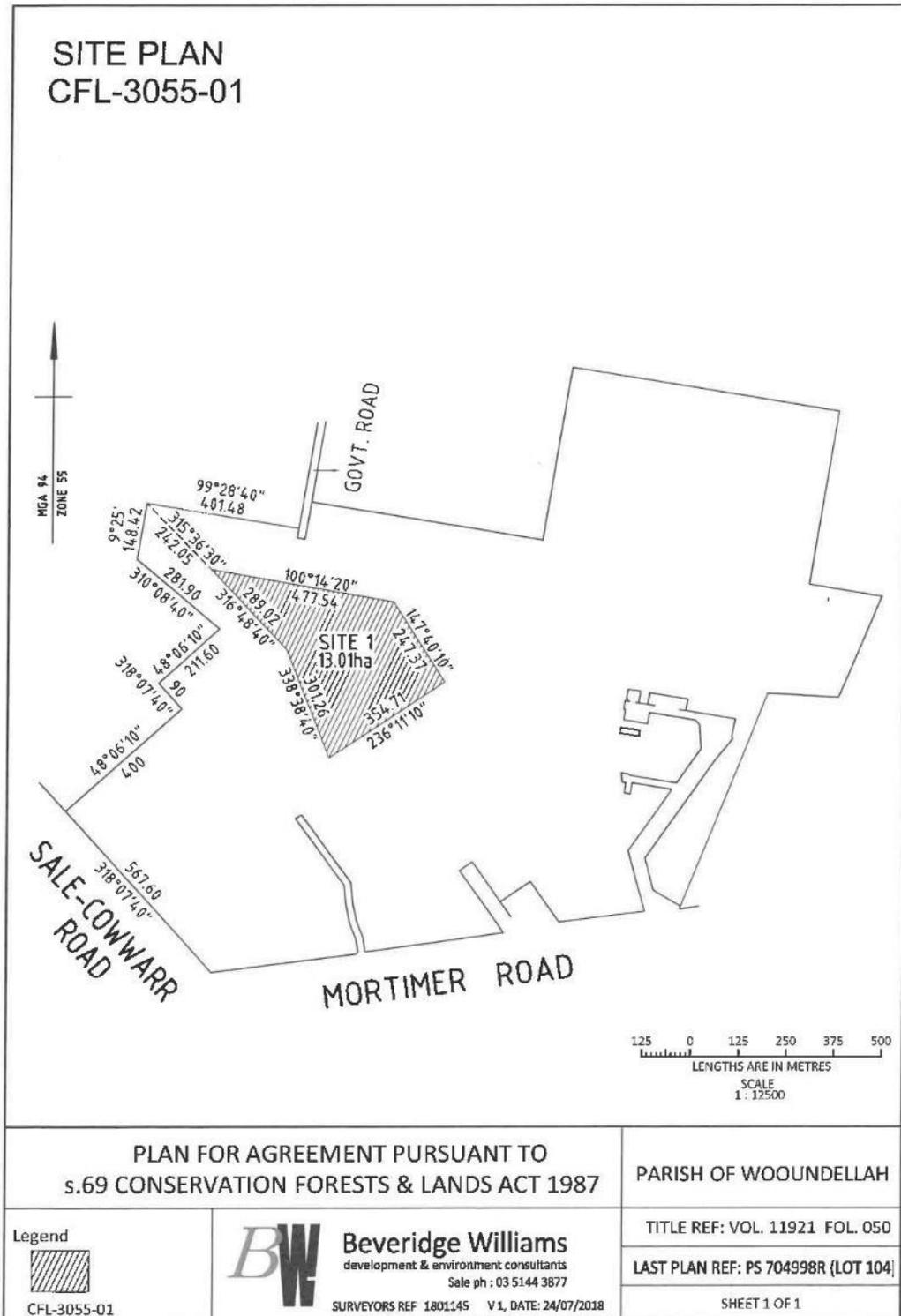
Map 2 - New & Emerging Herbaceous Weeds

West Sale Aerodrome - LOA CW_CFL-3055_01 - New and Emerging Weeds



Appendices

Appendix 1 – Landowner Agreement Management Plan



Management Plan for Credit Site [CFL-3055-01]

MANAGEMENT PLAN 1

Credit Site Details

Address of credit site	West Sale Airport, 2-6 Jackson Drive, Fulham, Victoria 3851
Land tenure	Freehold
Assessor details	
Site assessor	Kerry Spencer
Assessment date	8/10/2017
Credit details	
Credit identifier	CFL-3055-01
Number of sites(s)	1
Number of zone(s)	1
Total area of sites (ha)	13.0051ha
Asset type	Remnant Patch

Zone details								
Asset Type *	RP							
Zone number	1A							
Zone area (ha)	13.0051							

*Asset type = RP = Remnant Patch; ST = Scattered Tree

Management Plan for Credit Site [CFL-3055-01]

Landowner's ongoing management commitments

From the commencement of the agreement, the landowner agrees to undertake the following management commitments in perpetuity:

Ongoing management commitments	
Zone(s)	Commitment
All	<p>From the commencement of the agreement the landowner must, for all vegetation types:</p> <ul style="list-style-type: none"> • control all high threats • eliminate all woody weeds < 1 % cover • ensure that weed cover does not increase beyond the current level • monitor for any new and emerging weeds and eliminate to < 1% cover • control rabbits • manage all high threats • exclude stock. • undertake periodic biomass management at agreed timing/frequency. • ensure that perennial weed cover does not increase beyond the current level • ensure that annual weed cover does not increase beyond the current level.

Management Plan for Credit Site [CFL-3055-01]

10 year management commitments

The landowner agrees to undertake the following additional management commitments for a period of 10 years from the commencement of the agreement:

10 year management commitments	
Zone(s)	Commitment
	<ul style="list-style-type: none"> eliminate all high threat weeds to <5 percent cover (see Table 3)

Fencing

Threats including stock and unauthorised vehicle access must be excluded from the site at all times by adequate fencing around the property boundary.

Seven strand stock-proof fencing exists along the boundary of the property where it adjoins private land to the east, north and west. Cyclone wire fencing is present along southern boundary and also near airport buildings to the east.

Threats including stock must be excluded from the site(s) at all times. The intention of fencing is to protect the site(s) from threats. The location of fencing is not important as long as the site(s) are protected from all threats in perpetuity.

Vehicle movement near the offset area is only permitted by authorised Airport management or maintenance staff. There is a low risk of damage to the grassland area from vehicle (or aircraft) movement over the offset site or slashing of the edge of the offset site as. Fencing directly around the offset area is not an option as there are restrictions on the height of structures near the airstrip.

Ensure no vehicle movement over the offset area and establish site marking to identify the edge of the offset site.

Where fencing exists ensure all fencing around the perimeter of the property is maintained in good condition according to the standards detailed in BushBroker Information Sheet 12 - Standards for Management – Fencing, for the term of the contract.

Table 1: Fencing method and timing

Site(s)	Method	Location for fencing and length	Timing
All	Ensure no vehicle movement over the offset area and install markers around the perimeter of the offset area.	Entire perimeter of offset area.	Within 3 months from commencement of agreement.
Property boundary	Maintain fencing around boundary of the property in good condition according to the standards detailed in information sheet 12 * Standards for Management – Fencing. Conduct yearly monitoring to ensure all fencing meets the required standard.	Entire boundary around the property where fencing exists or is required	Ongoing

*DEPI 2013, BushBroker information sheet 12 – Standards for management – fencing. Department of Environment and Primary Industries, East Melbourne.

Management Plan for Credit Site [CFL-3055-01]

Woody weeds**Elimination of all woody weeds**

Two woody weed species were recorded within the offset site; Boxthorn and Blackberry. Boxthorn and Blackberry are listed as Regionally Controlled noxious weeds under the *Catchment and Land Protection Act 1994 (CALP Act)* within the West Gippsland CMA region. Landowners must meet their obligations under the *CALP Act* to prevent the growth and spread of Regionally Controlled weeds.

All woody weeds on site must be eliminated. Aim to eliminate all woody weeds listed in Table 2 by the end of the first year of management using the methods outlined in Table 2. Indigenous plants should not be impacted during treatment. Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull).

Refer to BushBroker Information Sheet 8* - Standards for Management – Weeds.
*DEPI 2013, *BushBroker information sheet 8 – Standards for management – weeds*. Department of Environment and Primary Industries, East Melbourne.

New and emerging woody weeds

Monitoring for new and emerging woody weeds should be conducted throughout the year for the term of the agreement, and any new and emerging woody weeds eliminated.

Refer to Information Sheet 8 - Standards for Management – Weeds

Table 2: Woody weeds to be eliminated – method and timing

Common name	Scientific name	Zone(s)	Method	Timing
Boxthorn	<i>Lycium ferocissimum</i>	All	Chemical Control – Foliar spray or cut and paint; Or handpulling for smaller plants.	Spring – Autumn
Blackberry	<i>Rubus fruticosus aggregate</i>	All	Chemical Control – Foliar spray or cut and paint; Or handpulling for smaller plants.	Spring – Autumn
		All	Monitor for and eliminate all new and emerging woody weeds	Ongoing

Management Plan for Credit Site [CFL-3055-01]

Herbaceous weeds**Elimination of all high threat herbaceous and grassy weeds < 5% cover:**

Seventeen high threat herbaceous or grassy weeds were recorded within the offset site; Spear Thistle, St John's Wort, Brown-top Bent-grass, Hair Grass, Couch, Kikuyu, Toowoomba Canary Grass, Rat-tail Grass, Sweet Vernal Grass, Prairie Grass, Fleabane, Cocksfoot, Tall Fescue, Yorkshire Fog Grass, Paspalum, Dock and Blackberry Nightshade. All high threat herbaceous and grassy weeds within zone 1A must be reduced to less than 5% cover. Aim to reduce the cover of all high threat weeds listed in Table 3 to <5% by the end of the fifth year of management using the methods outlined in Table 3. Treat weeds before the plant has flowered and set seed. Indigenous plants should not be impacted during treatment.

St John's Wort and Spear Thistle are listed as Regionally Controlled noxious weeds under the CALP Act within the West Gippsland CMA region. Landowners must meet their obligations under the CALP Act to prevent the growth and spread of Regionally Controlled weeds. Refer to BushBroker Information Sheet 8 - Standards for Management – Weeds.

Control of all herbaceous weeds:

Ensure that weed cover does not increase beyond current levels. Weeds listed in Table 4 were found on site. These weeds should be monitored each year to ensure their cover is not increasing. Increasing cover of these weeds should be controlled using the methods outlined in Table 4. Treat weeds before the plant has flowered and set seed. Indigenous plants should not be impacted during treatment. Refer to BushBroker Information Sheet 8 - Standards for Management – Weeds.

New and emerging herbaceous weeds

Monitoring for new and emerging herbaceous weeds should be conducted throughout the year for the term of the agreement, and any new and emerging weeds eliminated. Refer to BushBroker Information Sheet 8 - Standards for Management – Weeds.

Table 3: High Threat herbaceous and target weeds to be reduced to 5% cover– method and timing

Common name	Scientific name	Zone(s)	Method	Timing
Spear Thistle	<i>Cirsium vulgare</i>	All	Chemical control – foliar spray Spot spray or hand removal	Winter / Spring
St John's Wort	<i>Hypericum perforatum</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Brown-top Bent-grass	<i>Agrostis capillaris</i>	All	Chemical control – foliar spray Spot spray or hand removal	Winter / Spring
Hair Grass	<i>Aira spp.</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Couch	<i>Cynodon dactylon var. dactylon</i>	All	Chemical control – foliar spray Spot spray or hand removal	Winter / Spring
Kikuyu	<i>Pennisetum clandestinum</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Toowoomba Canary Grass	<i>Phalaris aquatica</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Rat-tail Grass	<i>Sporobolus indicus var. africanus</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Sweet Vernal Grass	<i>Anthoxanthum odoratum</i>	All	Chemical control – foliar spray Spot spray or hand removal	Winter- Spring

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Common name	Scientific name	Zone(s)	Method	Timing
Prairie Grass	<i>Bromus catharticus</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Fleabane	<i>Conyza spp.</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Cocksfoot	<i>Dactylis glomerata</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Tall Fescue	<i>Festuca arundinacea</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Yorkshire Fog Grass	<i>Holcus lanatus</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Paspalum	<i>Paspalum dilatatum</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Dock	<i>Rumex dumosus</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Blackberry Nighthshade	<i>Solanum nigrum</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
		All	Monitor and eliminate all new and emerging herbaceous weeds	Ongoing

Table 4: Herbaceous weeds to be controlled – method and timing

Common name	Scientific name	Zone(s)	Method	Timing
Sow Thistle	<i>Sonchus oleraceus</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Lesser Quaking-grass	<i>Briza minor</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Common Centaury	<i>Centaureum erythraea</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Large Quaking-grass	<i>Briza maxima</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Fiatweed	<i>Hypochoeris radicata</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Cal's Ear	<i>Hypochoeris radicata</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Pimpernel	<i>Lysimachia arvensis</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Buck's-horn Plantain	<i>Plantago coronopus</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Ribwort	<i>Plantago lanceolata</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Onion Weed	<i>Rumex rosea</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Sheep Sorrel	<i>Rumex acetosella</i> spp. Agg.	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn
Hare's Foot Clover	<i>Trifolium arvense</i>	All	Chemical control – foliar spray Spot spray or hand removal	Spring - Autumn

Table 5: Total cover of herbaceous weeds in the Zone

Zone(s)	Total cover of all herbaceous and grassy weeds (%) (including high threat herbaceous and grassy weeds)	Total cover high threat herbaceous and grassy weeds (%)
1A	20%	15%

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Pest animals

The *Catchment and Land Protection Act 1994* lists rabbits and foxes as established pest animals and requires that all landowners take reasonable steps to prevent the spread of, and as far as possible eradicate, established pest animals on their land.

Rabbit and fox activity, including diggings and scats were recorded on the property and within the offset site.

Rabbits should be monitored and controlled throughout the year. If rabbit activity is detected on the site use an integrated approach in accordance with BushBroker Information Sheet 7* - Standards of Management - Rabbits, which would involve fumigation, hand collapsing of burrows and baiting. Remove any carcasses to prevent poisoning of native predators.
**DEPI 2013, BushBroker information sheet 7 – Standards for management – rabbits. Department of Environment and Primary Industries, East Melbourne.*

Foxes are a threat to native fauna and should be controlled if found on your property. Fox dens where present are required to be destroyed through fumigation and hand collapse.

Remove rubbish. Disperse artificial piles of logs and rocks that may be used as harbour by pest animals. Do not remove indigenous plants, fallen logs or rocks from the site.

Continue to monitor and control rabbits and foxes all year round as well as any new and emerging pest animals.

Table 6: Pest animals to be controlled – species, method and timing

Zone(s)	Common name	Method	Timing
All	Rabbits & Foxes	Fumigation and hand collapse of rabbit burrows and fox dens	Ongoing
All	Rabbits	Baiting	Summer/ Autumn
All	Rabbits	When baiting collect and dispose of carcasses to prevent poisoning of native predators.	Summer/ Autumn
All	Rabbits & Foxes	Remove or disperse surface harbour	Ongoing
All	Rabbits & foxes	Monitor and control	Ongoing
All	New & Emerging pest animals	Monitor and control	Ongoing

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Biomass management for high rainfall plains grassland

The underlying EVC at the offset site is Plains Grassy Woodland (EVC 55), however the site has been historically managed as a grassland since the early 1930's. Vegetation management has involved the ongoing removal of woody shrub and canopy tree species for compliance with Civil Aviation Safety Authority (CASA) aviation obstacle safety standards for operating airports.

The current structure and ecological function of vegetation within the offset site best fits the description of the Plains Grassland (EVC 132) due to; the lack of woody lifeforms, *Themeda* dominated grassy cover and diverse number of herbaceous species present. Restoration of the site to Plains Grassy Woodland is not feasible due to CASA airport height restrictions, hence the offset area is best managed as the Plains Grassland EVC. Ecological burning of grassland areas at the airport has occurred, albeit at irregular intervals, over the past 15 years.

Biomass within patches of high rainfall plains grassland should be managed through the implementation of ecological burning or slashing every 3-5 years. Ecological burning of this site last occurred in March 2016. The recommended approach for biomass reduction is that a mosaic approach is undertaken where no more than 50% of the site is burnt in one year and the entire area is burnt within a 3 to 5 year period. Monitoring should be used to inform the need for and application of a mosaic burning approach.

Biomass management is required to maintain inter-tussock spaces and prevent excessive competition to ground layer forbs. Biomass levels are required to be monitored annually for the percentage of inter-tussock space available for recruitment and germination of native forbs and grasses.

Any ecological burns are to be conducted during benign (low wind and mild temperature) weather conditions and largely in accordance with the principles of BushBroker information sheet 14* – Standards for management. The landowner/manager is responsible for ensuring before any planned burning occurs the necessary permits are obtained.

Where slashing is used as a form of biomass reduction, it can only occur with strict weed hygiene and timed to reduce the likelihood of spreading introduced weeds across the site. Slashing can only occur in winter and grass must be slashed no lower than 10cm. Slashed material is required to be removed from the site.

Table 7: Biomass management - method and timing

Zone(s)	Method	Timing
All	Ecological burning or Slashing	Autumn or Winter at a 3-5 year interval. Complete first burn before end of year 3.

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Annual Reporting

This Landowner Agreement requires the landowner to submit a report annually for each year of the ten years of this management plan and thereafter at the reasonable request of the Secretary. 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 Annual Report addresses progress against the commitments set out in this agreement. Annual Reports should provide enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of/progress against the commitments for each zone.

Management Plan for Credit Site [CFL-3055-01]

Table 8: Management Actions Table**Year from Commencement: Year 1**

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
Fencing				
All	Restrict and prohibit vehicle access across offset site. Mark the perimeter of the Site 1 with suitably visible markers that meet CASA standards.	Table 1	Within 3 months of commencement of the agreement	No vehicle or machinery access over offset site. Visible to vehicles and aircraft and personnel. Compliant with Civil Aviation Standards.
All	Maintain fencing in good condition around entire boundary of all sites where fencing exists or is required. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	Maintain fencing to DEPI fencing standards in BushBroker Information Sheet 12 - Standards for Management – Fencing.
Woody Weeds				
All	Monitor for and eliminate all woody weeds. Refer to Table 2 for list of woody weeds, their control method and timing of actions. Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull).	Table 2	Refer to Table 2	Aim to eliminate all listed woody weeds by end of Year 1. <1% cover of all listed woody weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Eliminate all new & emerging woody weeds.	n/a	Ongoing	<1% cover of all woody weeds at the end of Year 10.
Herbaceous Weeds				
All	Monitor for and reduce cover all high threat herbaceous and grassy weeds. Refer to Table 3 for list of high threat herbaceous and grassy weeds, their control method and timing of actions.	Table 3	Refer to Table 3	Aim to reduce the cover of all listed high threat herbaceous and weeds to <5% by end of Year 5. <5% cover of all high threat herbaceous and weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions.	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds. Minimise off-target damage (avoid all native plants).
All	Monitor for and Eliminate all new & emerging herbaceous weeds.	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10.
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions.	Table 6	Refer to Table 6	No surface disturbance within the credit site. No active rabbit warrens to be present. No active fox dens to be present.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: Year 1

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
				No rubbish. Minimal artificial piles of logs and rocks.
All	Monitor for and control rabbits and foxes.	n/a	Ongoing	Control numbers of rabbits and foxes.
All	Monitor for and control all new and emerging pest animals.	n/a	Ongoing	Control numbers of any new & emerging pest animals.
Biomass Management for high rainfall plains grassland				
All	Ecological burning or slashing of grassland.	Table 7	Autumn / Winter	Aim to complete biomass reduction across the entire site by end of year 3. Complete biomass reduction at a 3-5 year interval from date of last burn. Use monitoring to inform application of the recommended mosaic approach to burning where no more than 50% of the site is burnt in any one year.
All	Monitor biomass accumulation.	Table 7	Autumn / Winter	Annually.
Annual reporting				
All	Prepare and submit an annual report.	n/a	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement. Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone. Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: Year 2

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
Fencing				
All	Restrict and prohibit vehicle access across offset site. Inspect markers and replace or repair as necessary.	Table 1	Summer, Autumn, Winter, Spring.	No vehicle or machinery access over offset site. Visible to vehicles and aircraft and personnel. Compliant with Civil Aviation Standards.
All	Maintain fencing in good condition around entire boundary of all sites where fencing exists or is required. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	Maintain fencing to DEPI fencing standards in BushBroker Information Sheet 12 - Standards for Management – Fencing.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull).	Table 2	Refer to Table 2	<1% cover of all listed woody weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging woody weeds.	n/a	Ongoing	<1% cover of all woody weeds at the end of Year 10.
Herbaceous Weeds				
All	Monitor for and reduce cover all high threat herbaceous and grassy weeds. Refer to Table 3 for list of high threat herbaceous and grassy weeds, their control method and timing of actions.	Table 3	Refer to Table 3	Aim to reduce the cover of all listed high threat herbaceous and weeds to <5% by end of Year 5. <5% cover of all high threat herbaceous and weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions.	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds. Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging herbaceous weeds.	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10.
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions.	Table 6	Refer to Table 6	No surface disturbance within the credit site. No active rabbit warrens to be present. No active fox dens to be present. No rubbish. Minimal artificial piles of logs and rocks.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: Year 2

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
All	Monitor for and control rabbits and foxes.	n/a	Ongoing	Control numbers of rabbits and foxes.
All	Monitor for and control all new and emerging pest animals.	n/a	Ongoing	Control numbers of any new & emerging pest animals.
Biomass Management for high rainfall plains grassland				
All	Ecological burning or shearing of grassland.	Table 7	Autumn / Winter	Aim to complete biomass reduction across the entire site by end of year 3. Complete biomass reduction at a 3-5 year interval from date of last burn. Use monitoring to inform application of the recommended mosaic approach to burning where no more than 50% of the site is burnt in any one year.
All	Monitor biomass accumulation.	Table 7	Autumn / Winter	Annually.
Annual reporting				
All	Prepare and submit an annual report.	n/a	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement. Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone. Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: Year 3

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
Fencing				
All	Restrict and prohibit vehicle access across offset site. Inspect markers and replace or repair as necessary.	Table 1	Summer, Autumn, Winter, Spring.	No vehicle or machinery access over offset site. Visible to vehicles and aircraft and personnel. Compliant with Civil Aviation Standards.
All	Maintain fencing in good condition around entire boundary of all sites where fencing exists or is required. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	Maintain fencing to DEP fencing standards in BushBroker Information Sheet 12 - Standards for Management – Fencing.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull).	Table 2	Refer to Table 2	<1% cover of all listed woody weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging woody weeds.	n/a	Ongoing	<1% cover of all woody weeds at the end of Year 10.
Herbaceous Weeds				
All	Monitor for and reduce cover all high threat herbaceous and grassy weeds. Refer to Table 3 for list of high threat herbaceous and grassy weeds, their control method and timing of actions.	Table 3	Refer to Table 3	Aim to reduce the cover of all listed high threat herbaceous and weeds to <5% by end of Year 5. <5% cover of all high threat herbaceous and weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions.	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds. Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging herbaceous weeds.	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10.
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions.	Table 6	Refer to Table 6	No surface disturbance within the credit site. No active rabbit warrens to be present. No active fox dens to be present. No rubbish. Minimal artificial piles of logs and rocks.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: Year 3

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
All	Monitor for and control rabbits and foxes.	n/a	Ongoing	Control numbers of rabbits and foxes.
All	Monitor for and control all new and emerging pest animals.	n/a	Ongoing	Control numbers of any new & emerging pest animals.
Biomass Management for high rainfall plains grassland				
All	Ecological burning or slashing of grassland.	Table 7	Autumn / Winter	Aim to complete biomass reduction across the entire site by end of year 3 using the recommended mosaic approach of burning no more than 50% of the site in one year. Complete biomass reduction at a 3-5 year interval from date of last burn. Use monitoring to inform application of the recommended mosaic approach to burning where no more than 50% of the site is burnt in any one year.
All	Monitor biomass accumulation.	Table 7	Autumn / Winter	Annually.
Annual reporting				
All	Prepare and submit an annual report.	n/a	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement. Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone. Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: Year 4

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
Fencing				
All	Restrict and prohibit vehicle access across offset site. Inspect markers and replace or repair as necessary.	Table 1	Summer, Autumn, Winter, Spring.	No vehicle or machinery access over offset site. Visible to vehicles and aircraft and personnel. Compliant with Civil Aviation Standards.
All	Maintain fencing in good condition around entire boundary of all sites where fencing exists or is required. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	Maintain fencing to DEPI fencing standards in BushBroker Information Sheet 12 - Standards for Management – Fencing.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull).	Table 2	Refer to Table 2	<1% cover of all listed woody weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging woody weeds.	n/a	Ongoing	<1% cover of all woody weeds at the end of Year 10.
Herbaceous Weeds				
All	Monitor for and reduce cover all high threat herbaceous and grassy weeds. Refer to Table 3 for list of high threat herbaceous and grassy weeds, their control method and timing of actions.	Table 3	Refer to Table 3	Aim to reduce the cover of all listed high threat herbaceous and weeds to <5% by end of Year 5. <5% cover of all high threat herbaceous and weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions.	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds. Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging herbaceous weeds.	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10.
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions.	Table 6	Refer to Table 6	No surface disturbance within the credit site. No active rabbit warrens to be present. No active fox dens to be present. No rubbish. Minimal artificial piles of logs and rocks.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: Year 4

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
All	Monitor for and control rabbits and foxes.	n/a	Ongoing	Control numbers of rabbits and foxes.
All	Monitor for and control all new and emerging pest animals.	n/a	Ongoing	Control numbers of any new & emerging pest animals.
Biomass Management for high rainfall plains grassland				
All	Ecological burning or slashing of grassland.	Table 7	Autumn / Winter	Complete biomass reduction at a 3-5 year interval from date of last burn. Use monitoring to inform application of the recommended mosaic approach to burning where no more than 50% of the site is burnt in any one year.
All	Monitor biomass accumulation.	Table 7	Autumn / Winter	Annually.
Annual reporting				
All	Prepare and submit an annual report.	n/a	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement. Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone. Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: Year 5

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
Fencing				
All	Restrict and prohibit vehicle access across offset site. Inspect markers and replace or repair as necessary.	Table 1	Summer, Autumn, Winter, Spring.	No vehicle or machinery access over offset site. Visible to vehicles and aircraft and personnel. Compliant with Civil Aviation Standards.
All	Maintain fencing in good condition around entire boundary of all sites where fencing exists or is required. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	Maintain fencing to DEPI fencing standards in BushBroker Information Sheet 12 - Standards for Management – Fencing.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull).	Table 2	Refer to Table 2	<1% cover of all listed woody weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging woody weeds.	n/a	Ongoing	<1% cover of all woody weeds at the end of Year 10.
Herbaceous Weeds				
All	Monitor for and reduce cover all high threat herbaceous and grassy weeds. Refer to Table 3 for list of high threat herbaceous and grassy weeds, their control method and timing of actions.	Table 3	Refer to Table 3	Aim to reduce the cover of all listed high threat herbaceous and weeds to <5% by end of Year 5. <5% cover of all high threat herbaceous and weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions.	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging herbaceous weeds.	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10.
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions.	Table 6	Refer to Table 6	No surface disturbance within the credit site. No active rabbit warrens to be present. No active fox dens to be present. No rubbish. Minimal artificial piles of logs and rocks.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: Year 5

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
All	Monitor for and control rabbits and foxes.	n/a	Ongoing	Control numbers of rabbits and foxes.
All	Monitor for and control all new and emerging pest animals.	n/a	Ongoing	Control numbers of any new & emerging pest animals.
Biomass Management for high rainfall plains grassland				
All	Ecological burning or slashing of grassland.	Table 7	Autumn / Winter	Complete biomass reduction at a 3-5 year interval from date of last burn. Use monitoring to inform application of the recommended mosaic approach to burning where no more than 50% of the site is burnt in any one year.
All	Monitor biomass accumulation.	Table 7	Autumn / Winter	Annually.
Annual reporting				
All	Prepare and submit an annual report.	n/a	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement. Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone. Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: 6 – 10

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
Fencing				
All	Restrict and prohibit vehicle access across offset site. Inspect markers and replace or repair as necessary.	Table 1	Summer, Autumn, Winter, Spring.	No vehicle or machinery access over offset site. Visible to vehicles and aircraft and personnel. Compliant with Civil Aviation Standards.
All	Maintain fencing in good condition around entire boundary of all sites where fencing exists or is required. Conduct yearly monitoring to ensure all fencing meets the required standard.	Table 1	Ongoing	Maintain fencing to DEPI fencing standards in BushBroker Information Sheet 12 - Standards for Management – Fencing.
Woody Weeds				
All	Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand pull).	Table 2	Refer to Table 2	<1% cover of all listed woody weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging woody weeds.	n/a	Ongoing	<1% cover of all woody weeds at the end of Year 10.
Herbaceous Weeds				
All	Monitor for and reduce cover of all high threat herbaceous and grassy weeds. Refer to Table 3 for list of high threat herbaceous and grassy weeds, their control method and timing of actions.	Table 3	Refer to Table 3	<5% cover of all high threat herbaceous and grassy weeds at the end of Year 10. Minimise off-target damage (avoid all native plants).
All	Monitor for and control all herbaceous weeds. Refer to Table 4 for list of herbaceous weeds, their control method and timing of actions.	Tables 4 & 5	Refer to Table 4	No increase in cover beyond the cover listed in Table 5 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants).
All	Monitor for and eliminate all new & emerging herbaceous weeds.	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10.
Pest Animals				
All	Monitor for and control rabbits and foxes. Refer to Table 6 for a list of control methods and timing of actions.	Table 6	Refer to Table 6	No surface disturbance within the credit site. No active rabbit warrens to be present. No active fox dens to be present. No rubbish. Minimal artificial piles of logs and rocks.
All	Monitor for and control rabbits and foxes.	n/a	Ongoing	Control numbers of rabbits and foxes.

Management Plan for Credit Site [CFL-3055-01]

Year from Commencement: 6 – 10

Zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
All	Monitor for and control all new and emerging pest animals.	n/a	Ongoing	Control numbers of any new & emerging pest animals.
Biomass Management for high rainfall plains grassland				
All	Ecological burning or slashing of grassland.	Table 7	Autumn / Winter	Complete biomass reduction at a 3-5 year interval from date of last burn. Use monitoring to inform application of the recommended mosaic approach to burning where no more than 50% of the site is burnt in any one year.
All	Monitor biomass accumulation.	Table 7	Autumn / Winter	Annually.
Annual reporting				
All	Prepare and submit an annual report.	n/a	Submit at least 2 months prior to agreement anniversary date	Annual report is signed, dated and submitted by the landowner at least 2 months prior to the anniversary date of the agreement. Report provides enough detail in the form of written comments and supporting evidence that an assessor can easily determine the completion of / progress against the commitments for each zone. Obligations of the landowner (compliance with section 6 of the Landowner Agreement) have been met and the obligations form is read, signed, dated and submitted with the annual report.

Appendix 2 - Audit Form



LOA Audit Form

Details
Site Name: West Sale Aerodrome
LOA number: CW-CFL - 3055-01
Client: Wellington Shire Council
Site / Zone Number: 1A
EVC: Central Gippsland Plains Grassland
Date: 25/08/2020
Audit undertaken by: Tim Bowler

Woody Weeds	Zone	Original Coverage	Required Coverage	Assessed coverage
<i>Lycium ferocissimum</i> - Box Thorn	1A	-	<1%	<1%
<i>Rubus fruticosus</i> spp. Agg. - Blackberry				
High Threat Herbaceous & Grassy Weeds				
<i>Agrostis capillaris</i> - Brown-top Bent-grass	1A	15%	5%	6.3%
<i>Aira</i> sp. - Hair Grass				
<i>Anthoxanthum odoratum</i> - Sweet Vernal Grass				
<i>Bromus catharticus</i> - Prairie Grass				
<i>Cirsium vulgare</i> - Spear Thistle				
<i>Conyza</i> sp. Fleabane				
<i>Cynodon dactylon</i> - Couch				
<i>Dactylis glomeratus</i> - Cocksfoot				
<i>Festuca arundinacea</i> - Tall Fescue				
<i>Hypericum perforatum</i> - St Johns Wort				
<i>Paspalum dilatatum</i> - Paspalum				
<i>Pennisetum clandestinum</i> - Kikuyu				
<i>Phalaris aquatica</i> - Toowoomba Canary Grass				
<i>Rumex dumosus</i> - Dock				
<i>Solanum nigrum</i> - Black Nightshade				
<i>Sporobolus africanus</i> - Rat-tail Grass				
Herbaceous Weeds			(Inc HT % coverage)	
<i>Briza maxima</i> - Large Quaking-grass	1A	20%	20%	8.4%
<i>Briza minor</i> - Lesser Quaking-grass				
<i>Centaureum erythraea</i> - Common Centaury				
<i>Hypochaeris radicata</i> - Flatweed				
<i>Lysimachia arvensis</i> - Pimpernel				
<i>Plantago coronopus</i> - Bucks-horn Plantain				
<i>Plantago lanceolata</i> - Ribwort				

Reference ID: [redacted] Version: 1 Revision: 1 Revision Date: 19/06/2020

Uncontrolled when printed



LOA Audit Form

<i>Romulea rosa</i> - Onion Weed				
<i>Rumex acetosella</i> - Sheep Sorrel				
<i>Sonchus oleraceus</i> - Common Sow-thistle				
<i>Trifolium arvense</i> - Hares Foot Clover				
New & Emerging Weeds				
<i>Arctotheca calendula</i> - Cape Weed	1A	-	Eliminate	<1%
<i>Disa bracteata</i> - South African Weed Orchid				
<i>Gamochaeta purpurea</i> - Purple Cudweed				
<i>Holcus lanatus</i> - Yorkshire Fog				
<i>Plantago bellardi</i> - Silky Plantain				

Pest Animal Notes
Rabbit/Fox/Deer potential at site: Old Rabbit scats at northern edge of the site. No other evidence observed.
Fencing Notes
Perimeter of airport fully fenced. CASA bollards delineate LOA area. No vehicles to drive over site.
Vehicle tracks observed within the site.
Other Notes
Four healthy Eastern Blue-tongue Lizards recorded within the site.
Acacia pycnantha (Golden Wattle) cut and sprayed by management prior to Indigenous Design's management.
7 Acacia pycnantha, 4 Kunzea ericoides (Burgan) and 4 Acacia mearnsii (Black Wattle) recorded, all juvenile.
Recent spraying of Ribwort observed at the western edge.

Reference ID: [REDACTED] Version: 1 Revision: 1 Revision Date: 19/06/2020

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Appendix 3 - Conservation Crew Daily Works Example



IMS-FM-01 V.1. R.3 Reference: 22/11/2019 15:06:44

Daily Works & Spray Record

Client:	Wellington Shire Council				
Work/Purchase Order No:	West Sale Aerodrome	Permit No:		SWMS Complete?	Yes
Temperature: (AM)	14.6	Temperature: (PM)	19.7	Vehicle/s:	1AQ7QK
Delta T: (AM)	3.3	Delta T: (PM)	6.1		
Wind Speed & Direction: (AM)	SW 13km	Wind Speed & Direction: (PM)	SSE 26km		

Worksite:	West Sale Aerodrome		
Location of works on site:	Zone 2 N edge	Date:	22/11/2019
Supervisor:	Justin Gorwell	Area of Land Treated (m2):	8,000
Team Members:	Andrew Healy , Denis Nagle , Tania Brooker	Start Time:	7:30 am
		Finish Time:	4:30 pm
		Works Completed?	No

WORKS UNDERTAKEN		
Target Species:	Method	Herbicide
Arctotheca calendula (Cape Weed) , Conyza bonariensis (Flaxleaf Fleabane) , Sonchus oleraceus (Common Sow-thistle) , Hypochaeris radicata (Flatweed) , Plantago coronopus (Buck's-horn Plantain) , Plantago lanceolata (Ribwort) , Blackberry (Rubus fruticosus aggregate) , Cirsium vulgare (Spear Thistle)	Knapsack	Garlon 600
Disa bracteata , Prunus cerasifera (Cherry Plum)	Handweed	
Cynodon dactylon (Couch) , Pennisetum clandestinum (Kikuyu) , Holcus lanatus (Yorkshire Fog) , Anthoxanthum odoratum (Sweet Vernal-grass) , Phalaris aquatica (Toowoomba Canary-grass) , Dactylis glomerata (Cocksfoot) , Paspalum dilatatum (Paspalum)	Knapsack	Weedmaster Duo

NOTES

Spot spraying of high threat weeds was undertaken across the northern edge of the LOA site. We completed the edge of the mound on the northern side and the southern side was completed approximately 2/3 back to the car. This work was all in zone 2. Coverages for northern part of zone 2: Cocksfoot coverage approximately 10%, Paspallum coverage approximately 5%, Kikuyu coverage approximately 4.92%, Phalaris coverage approximately 2%, Blackberry coverage approximately 1%. New and emerging weeds found include African orchid and Plum tree.

FUTURE WORKS

Finish southern edge of northern mound. Spray Phalaris in zone 1 before setting seed. Spray along mound on western edge. Finish NE corner

TOOLS EQUIPMENT NEEDED

Herbicide , PPE , Signs

KNAPSACK						
Herbicide	Unit	\$/Unit	Rate (ml or g/per 10L)	Volume (L)	Amount used (ml or g)	Cost
Garlon 600	ml	\$0.03	17	20	34	\$1.12
Weedmaster Duo	ml	\$0.01	100	65	650	\$7.15
BS 1000	ml	\$0.01	10	85	85	\$0.84
Envirodye Blue	ml	\$0.03	40	85	340	\$9.01
	0	\$0.00			0	\$0.00
	0	\$0.00			0	\$0.00
	0	\$0.00			0	\$0.00
TOTAL						\$18.12

RIG						
Herbicide	Unit	\$/Unit	Rate (L or g/per 100L)	Volume (L)	Amount used (L or g)	Cost
	0	\$0.00			0	\$0.00
	0	\$0.00			0	\$0.00
	0	\$0.00			0	\$0.00
	0	\$0.00			0	\$0.00
TOTAL						\$0.00

QUAD BIKE						
Herbicide	Unit	\$/Unit	Rate (L or g/per 60L)	Volume (L)	Amount used (L or g)	Cost
	0	\$0.00			0	\$0.00
	0	\$0.00			0	\$0.00
	0	\$0.00			0	\$0.00
TOTAL						\$0.00

VELPAR / DABBER				
Herbicide	Unit	\$/Unit	Amount used (ml)	Cost
	0	\$0.00		\$0.00
	0	\$0.00		\$0.00
	0	\$0.00		\$0.00
TOTAL				\$0.00

Total Herbicide Cost	\$18.12
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Other Materials or Costs (Tipping Fees, Plants, Stakes & Guards etc.)		
Item	Quantity	Cost
Tipping		
Stakes		
Guards		
Plants		
Other		
Total Materials & Costs		\$0.00

Green Waste Removed	
Rubbish Removed m³	



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