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Echuca-Moama Bridge Project, Victoria, (EPBC 2013/6850)

Declaration of accuracy

In making this declaration, I am aware that section 491 of the *Environment Protection and Biodiversity* Conservation Act 1999 (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed					
Full nai	me (pl	lease p	orint)		
Organi	sation	ı (plea:	se prir	nt)	
 Date	/	/			



Summary

Biosis Pty Ltd was commissioned by VicRoads to prepare an Offset Management Plan (OMP) for an offset site required for losses associated with the Echuca - Moama Bridge project on the Northern Highway at Echuca, Victoria.

The Department of the Environment and Energy has determined that compensatory offsets are required for the removal of 'Grey Box (Eucalyptus microcarpa) Grassy Woodland and Derived Native Grassland of Southeastern Australia' (GBGW community) from within the project footprint.

A suitable offset site has been identified near Fiery Flat, Victoria.

The 10.7 ha offset site represents Low Rises Grassy Woodland (EVC 175 61) that meets the definition of the nationally listed GBGW community. The site is dominated by scattered Grey Box Eucalyptus microcarpa with a sparse shrub layer and diverse ground cover of native grasses and herbaceous species. The 10.7 ha area provides an offset of 100.9% of the impact to GBGW community at the Echuca – Moama Bridge project site.

The offset site will be secured in-perpetuity through an appropriate legal encumbrance registered on the property (Bush Broker section 69 agreement). Gains in vegetation quality through on-ground actions are expected over the duration of the 10 year offset management plan, and through the ongoing land-use commitments to manage the site for biodiversity conservation.

This plan specifies a range of management actions for the offset area, including weed management, management of tree and shrub recruitment, and protection of the site from stock and unauthorised access.



1. Introduction

1.1 Project background

Biosis Pty Ltd was commissioned by VicRoads to prepare an Offset Management Plan (OMP) for an offset site required for losses associated with the Echuca – Moama Bridge project on the Northern Highway at Echuca, Victoria.

The bridge project has been assessed and approved without condition under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (EPBC Reference 2013/6850). Subsequent to this approval '*Grey Box* (Eucalyptus microcarpa) *Grassy Woodland and Derived Native Grassland of South-eastern Australia*' (GBGW community) has been listed as an Endangered ecological community under the EPBC Act. A recent vegetation reassessment of the bridge project clearing site has confirmed the presence of this listed community within the footprint (BL&A 2017). As a result the Department of the Environment and Energy has determined that compensatory offsets are required for the removal of patches of GBGW community.

A suitable offset site has been identified at Fiery Flat, Victoria.

This OMP prescribes management actions for the offset site required to meet the objectives of the EPBC Act Environmental Offsets Policy (Commonwealth of Australia 2012) for the loss of GBGW community associated with the Echuca – Moama Bridge project. The offset area is located within (i.e. a subset of) a larger parcel of land. Other sections of this parcel are already managed as a committed offset site under the Victorian BushBroker scheme (Bush Broker Credit Site BB-2835). Management prescriptions within this plan are consistent with the plan for the overall management of this parcel of land.

1.2 Objectives

The objective of the OMP is to document the impacts associated with the project, details the offset site and the proposed management required to meet the EPBC Act Environmental Offsets Policy (Commonwealth of Australia 2012). Department of the Environment and Energy (DoEE) requirements for offsetting impacts to GBGW include securing, maintaining and improving an area of GBGW within the designated offset site. The objectives of this plan are to:

- Identify the area within the Fiery Flat site that is nominated as an offset site, and:
 - To provide an offset plan to the satisfaction of the Australian Government Department of the Environment and Energy;
 - Develop an OMP to compensate for the permitted loss of vegetation as part of the proposed
 Project. This will include but not be limited to the following:
 - Means of calculating the offset;
 - Location of the offset site;
 - Type of offset to be provided;
 - Document the management actions to protect and improve GBGW within the site;
 - o Details of management actions for remnant vegetation;
 - Detail 'security' arrangements;
 - Provide a map of the offset site;
 - Develop a timetable of management actions, outcomes and progress reviews; and,
 - o Detail appropriate monitoring and evaluation of management actions.



1.3 Report Structure

The structure and content of this OMP is consistent with the requirements of the 'Standard Offset Plan' template provided by the Department of Environment, Land, Water and Planning (DELWP) and is organised in several parts:

- Introduction This section summarises the background information relevant to the Project, including the purpose and scope of the work and the assessment methodology.
- Part A: Offset Suitability This section assesses the suitability of the proposed offset site, and includes
 details regarding approved clearing, gain and site improvement calculations. Part A should be read in
 conjunction with Part B, but due to its technical nature, the information it contains is not intended to
 be placed on title (e.g. covenant or Section 69 Agreement pursuant to the Conservation Forests and
 Lands Act 1987).
- Part B: Offset Implementation This section describes how the offset is to be implemented. Part B
 includes details regarding landowner commitments, management activities, monitoring and
 reporting. This section is intended for those responsible for implementing the plan, including future
 landowners. Information in this section is intended to be placed on title.

1.4 Conditions

This management plan addresses the following approval conditions:

- The approval holder must not clear more than 2.2 hectares of the listed Grey Box Grassy Woodland ecological community within the Construction Area shown in Annexure 1.
- To compensate for the loss of up to 2.2 hectares of Grey Box Grassy Woodland, the approval holder must:
 - secure in perpetuity the offset site (Annexure 2) via an appropriate legal mechanism and provide written evidence of this to the Department, accompanied by the relevant offset attributes and shapefiles by 31 December 2018; and
 - implement the approved offset management plan for the agreed offset site.
- The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the offset management plan required by this approval, and make them available upon request to the Department. Such records may be subject to audit by the Department or an independent auditor in accordance with section 458 of the EPBC Act, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the Department's website. The results of audits may also be publicised through the general media.
- Within three months of every 12 month anniversary of the commencement of the action, the
 approval holder must publish a report on their website addressing compliance with each of the
 conditions of this approval, including implementation of any management plans as specified in the
 conditions. Documentary evidence providing proof of the date of publication and non-compliance
 with any of the conditions of this approval must be provided to the Department at the same time as
 the compliance report is published.
- Unless otherwise agreed to in writing by the Minister, the approval holder must publish all
 management plans referred to in these conditions of approval on their website. Each management
 plan must be published on the website within 1 month of being approved by the Minister.





2. Part A: Offset Suitability

This section provides details of the clearing site, assesses the suitability of the proposed offset site and includes details regarding the approved clearing, gain and offset site improvement calculations. This section should be read in conjunction with Part B, but due to its technical nature, the information it contains is not intended to be placed on title (e.g. covenant or Section 69 Agreement pursuant to the *Conservation Forests and Lands Act 1987*).

2.1 Clearing Site Details

A detailed description of ecological values within the Project area is provided in the flora and fauna assessment report (BL&A 2013) and is summarised below.

Landowner of clearing site:	Public road reserve managed by VicRoads
Location and address of clearing site:	1/8 Crofton Street Echuca 3564 (Lot 7B – 7B~1\PP5263)
Local Government Area:	Campaspe Shire
Catchment Management Authority:	North Central CMA
Proponent undertaking works	VicRoads
EPBC Reference No.	2013/6850

2.2 Vegetation Approved for Removal

Vegetation requiring removal for the Echuca – Moama Bridge project is described in the flora and fauna assessment (BL&A 2017). This vegetation was inspected and assessed by Biosis on 6 December 2017. The Biosis assessment conducted a standard habitat hectare vegetation quality assessment (DSE 2004) and the results of this assessment are provided in Table 1.

The habitat within the project area that would be affected by the project works is moderate quality woodland (BL&A 2017). This habitat can be characterised as open woodland habitat, with relatively intact remnant vegetation, mature trees, sparse understorey and low weed abundance.

The Echuca – Moama Bridge project will impact on two areas identified as the GBGW community by BL&A (2017). The assessment used the ecological vegetation class (EVC) benchmark for Plains Woodland (EVC 803) rather than the existing DELWP classification of Riverine Chenopod Woodland (EVC 103) as the site is dominated by Grey Box *Eucalyptus microcarpa* rather than Black Box *Eucalyptus largiflorens*. The total impact on this community amounts to 2.22 ha.



Table 1 Summary of proposed losses of patches of the GBGW community

Site ID					
Habitat	Habitat Zone ID		HZ19a HZ19c		
Ecologi	cal Vegetation Class		Plains Woodland 803	Plains Woodland 803	
	Max	Score	Score	Score	Total
	Large Old Trees	10	8	10	
	Canopy Cover	5	5	5	
_	Lack of Weeds	15	9	13	
Site Condition	Understorey	25	20	15	
Si	Recruitment	10	10	10	
J	Organic Matter	5	3	3	
	Logs	5	5	5	
	Total Site Score		60	61	
e e	Patch Size	10	8	8	
Landscape Value	Neighbourhood	10	2	2	
and	Distance to Core	5	4	4	
	Total Landscape Score		14	14	
HABITA	T SCORE	100	74	75	
Habitat	Zone area (ha)		1.02	1.20	2.22
Habitat	hectares (Hha)		0.75	0.90	1.65

2.3 Description of Offset Site: Boort - Kurting Road, Fiery Flat

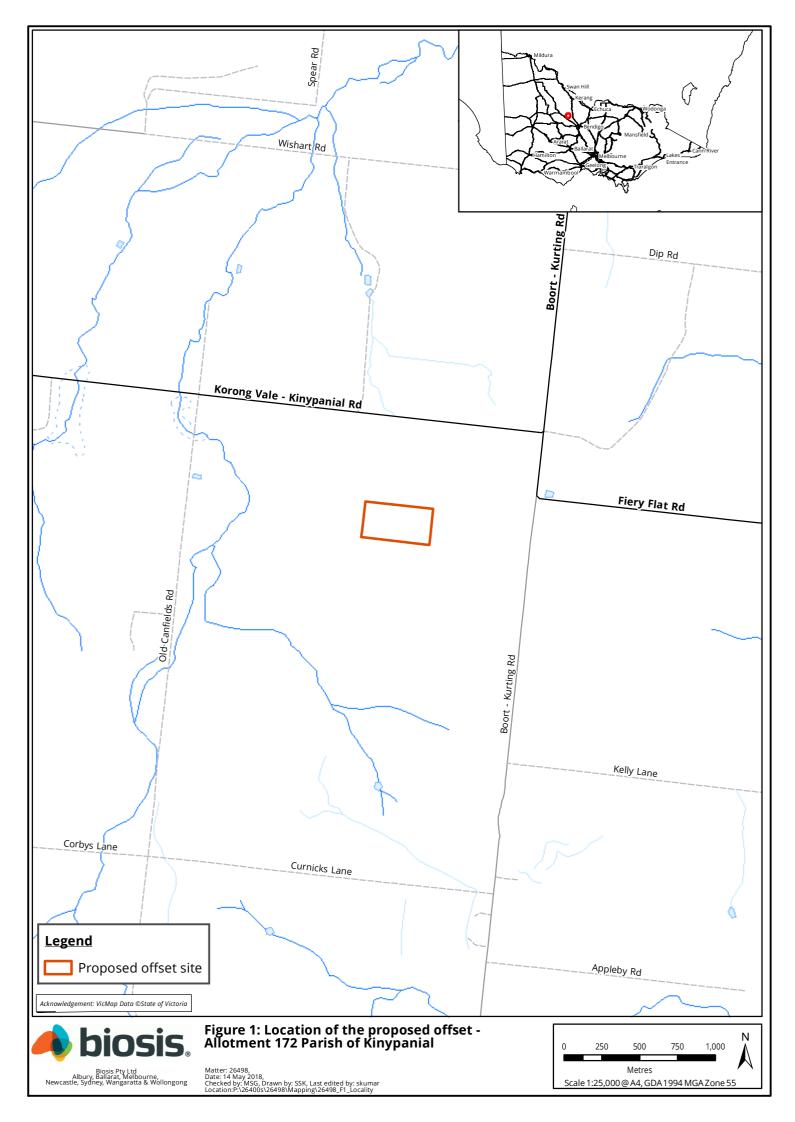
One offset site at Fiery Flat has been identified as meeting Commonwealth offset policy requirements (Commonwealth of Australia 2012). The following summarises the existing conditions, current permitted uses on this proposed site and offset suitability as assessed against Commonwealth requirements.

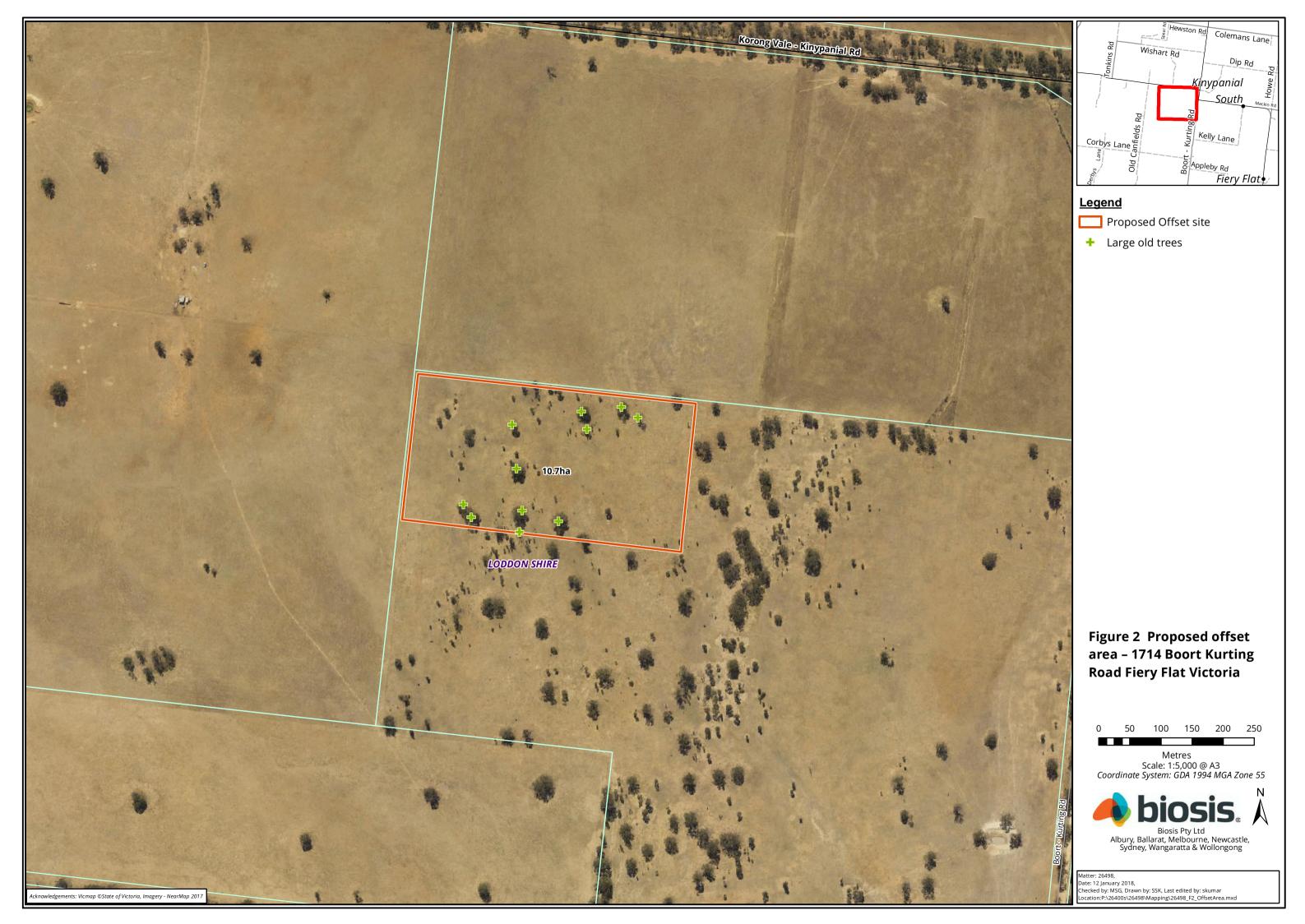
The site is located within Lot 172, Boort – Kurting Road, Fiery Flat 3518. This is approximately 37.5 km northwest of Bendigo and 180 km north-west of Melbourne (Figure 1). The proposed offset area is adjacent to an existing BushBroker registered offset site (BB-2835) (Appendix 2).

2.3.1 Habitat description

The site is located within the Goldfields Bioregion, and is mapped by DELWP as predominantly Grassy Woodland (EVC 175), with southern sections of the site adjacent to the un-named road reserve mapped as Hills Herb-rich Woodland (EVC 71).

The site supports scattered mature Grey Box *Eucalyptus microcarpa* often surrounded by varying amounts of sapling regeneration. Scattered occurrences of mature Buloke *Allocasuarina luehmannii* and associated regeneration are also present. The understorey is largely grassy although a sparse cover of medium to small shrubs (0.2m to 3m) is present. These shrubs include wattles such as Golden Wattle *Acacia pycnantha* and Gold-dust Wattle *Acacia acinacea*, and various peas such as Showy Parrot-pea *Dillwynia sericea* and Common Eutaxia *Eutaxia microphylla*.







The grassy ground cover is dominated by Spear grasses *Austrostipa* spp., Wallaby grasses *Rytidosperma* spp., Common Wheat-grass *Anthosachne scabra* and Brush Wire-grass *Aristida behriana*. Herbs are common and include species such as Variable Sida *Sida corrugata*, Grassland Wood-sorrel *Oxalis perennans*, Flannel Cudweed *Actinobole uliginosum*, Mayweed Sunray *Hyalosperma praecox*, Yellowish Bluebell *Wahlenbergia luteola*, Sand-spurrey *Spergularia brevifolia*, Nodding Chocolate Lily *Arthropodium fimbriatum* and the ground fern Green Rock-fern *Cheilanthes austrotenuifolia*.

The offset site is within the geographical range that the GBGW community 'may occur', and the characteristics of the Grassy Woodland present correspond to the criteria for the nationally listed community.

An assessment of woodland trees was undertaken within the site, including GPS mapping of all large old trees (over 70cm DBH). The proposed offset area includes 11 large old Grey Box trees.

2.3.2 Offset Site condition

The proposed offset site has been subject to past farming activity, although likely limited to partial clearing and grazing by domestic stock (sheep), which has impacted in-part upon the understorey and recruitment within the tree and shrub layer.

The site is considered to be in good condition, having an open Grey Box canopy with large old trees and most understorey life forms present including small and medium sized shrubs, perennial grasses and annual and perennial herbs and geophytes. There is evidence of robust recruitment of canopy species, and most other woody species were observed to be recruiting. The proposed offset area also adjoins existing areas of Low Rises Grassy Woodland that are being managed for current and potential future offset purposes.

Perennial weed cover is general low throughout the site (less than 5% cover) although weedy annual grasses are common and widespread (averaging about 30% cover). Scattered woody weeds include African Box-thorn *Lycium ferocissimum*, Sweet Briar *Rosa rubiginosa* and Horehound *Marrubium vulgare*.

Other high threat weeds include Spear Thistle *Cirsium vulgare*, Paterson's Curse *Echium plantagineum*, and Wild Sage *Salvia verbenaca*.

Common weedy annuals include Squirrel-tail Fescue *Vulpia bromoides*, Soft Brome *Bromus hordeaceus*, Red Brome *Bromus rubens*, and Wild Oat *Avena* sp.

There are also signs of rabbit activity within the site, although this appears to be at a low level. There was no evidence of recent stock grazing and the understorey biomass was high in some areas.

A habitat hectare assessment of this vegetation is provided in Table 2.

2.3.3 Current permitted land uses

The property is zoned Farming Zone (FZ-Schedule) within the Loddon Shire Planning Scheme. The purpose of the FZ is to allow for agricultural uses and land use compatible with agricultural purposes. Subdivision of the land is subject to a minimum lot size of 40 hectares.



Table 2 Condition assessment of the proposed offset area

Site ID			Lot 172 Boort Kurting Road	
Habitat	Habitat Zone ID		HZ1	
Ecologi	Ecological Vegetation Class		Grassy Woodland 175-61	
		Max Score	Score	
	Large Old Trees	10	3	
	Canopy Cover	5	3	
_	Lack of Weeds	15	6	
Site	Understorey	25	15	
Site Condition	Recruitment	10	10	
J	Organic Matter	5	5	
	Logs	5	0	
	Total Site Score		42	
e	Patch Size	10	8	
Landscape Value	Neighbourhood	10	2	
and Va	Distance to Core	5	4	
Total Landscape Score		14		
HABITA	T SCORE	100	56	

Within Victoria, removal of native vegetation is controlled under Clause 52.17 of the Victoria Planning Provisions. Some removal of native vegetation is currently permitted (exempt from a planning permit requirement - See Clause 52.17-7) to the minimum extent possible, for activities including:

- Removal of dead vegetation.
- Removal of vegetation for construction of a boundary fence.
- Mowing of understorey grass vegetation to a height of 100 mm above ground level.
- Grazing by domestic stock.
- Timber harvesting of 'reasonable amounts' for personal use, including firewood and construction of fences or buildings.
- Pruning of up to 1/3 of the foliage of individual plants.
- Treatment of pest animal burrows or weed infestations.
- Stone exploration or extraction.
- Fire protection, including periodic fuel reduction burning or construction of firebreaks and fire fighting access tracks.

Removal of native vegetation within the site may also require approval via the EPBC Act, for impacts to Matters of National Environmental Significance in relation to the listed community Grey Box (Eucalyptus microcarpa) Grassy Woodland and Derived Native Grassland of South-eastern Australia.

There are no existing buildings within the property in which the proposed offset area is located.

2.3.4 **Existing offset arrangements**

The proposed offset area has not been allocated for the provision of any other offsets, either under the EPBC offsetting policy or for provision of offsets under Victorian policy, including the Biodiversity Assessment Guidelines (DEPI 2013, DELWP 2017) or the Net Gain Framework (NRE 2002).



Sections of the property contain other Matters of National Environmental Significance, including populations of as yet undetected threatened flora and fauna.

Summary of offset suitability 2.3.5

Overall the protection and management of the proposed offset site is considered to provide an appropriate offset for impacts to the GBGW community resulting from the construction of the Echuca – Moama Bridge project. A summary of relevant matters is provided in Table 3.

Table 3 Summary of offset site suitability

Site feature	Impact site	Proposed offset site
Bioregion	Murray Fans	Goldfields
Site area	2.22 hectares.	10.7 hectares.
Ecological Vegetation Class (EVC)	Plains Woodland (EVC 803).	Low Rises Grassy Woodland (EVC 175_61).
Current condition (/10)	8	6
General description	A relatively intact mature overstorey with a degraded but predominantly native understorey	Scattered mature trees with an otherwise regenerating overstorey. A relatively diverse grassy ground cover and regenerating open shrub cover.
Meets the definition of GBGW	Yes	Yes
Current land use Zone	Public Park and Recreation (to be changed to Road Zone Category 1) with Environmental Significance Overlay (ESO1)	Farming
Proposed legal protection mechanism	Not Applicable	Trust for Nature covenant (<i>Victorian Conservation Trust Act 1972</i>)

Assessment of offset site using EPBC Act Offset Assessment Guide 2.3.6

Offset requirements were determined in accordance with the EPBC Act Offsets Policy (October 2012). An offset calculation has been undertaken using the EPBC Act Offset Assessment Guide spreadsheet (Appendix 1). A conservative set of parameters have been specified. The provision of a 10.7 hectare offset area results in a direct offset of over 100% of the impact. The parameters used are outlined in Table 4.

Impact at the clearance site

The area of impact (2.22 ha) and habitat quality (8/10) are derived from the Biosis (2017) vegetation quality assessment, using the Habitat Hectare score as a surrogate for EPBC Act offset assessment guide habitat quality. Habitat hectare scores at the clearing site included one patch (19c) scored as 0.75 and the other (19a) as 0.0.74. The score of 8 (80%) has been used in the offset calculator.



Table 4 Offset assessment guide calculations

Parameter	Value	Notes
Impact to GBGW		
Area of impact	2.22	Total area (hectares) of clearing
Quality	8	Scale of 0 – 10. Habitat hectare score has been used as a surrogate for site quality. The habitat hectare scores of the impacted areas were 0.74 and 0.75. These were conservatively rounded to 8/10.
Total quantum of impact	1.78	Output of the EPBC Act offset assessment guide
Offset calculations – Fiery Flat offs	et site	
Offset area	10.7	Hectares
Time until ecological benefit	10	Years of improvement management (site will be maintained in this condition in perpetuity)
Time over which loss is averted	20	Years
Start quality	6	Scale of 0 – 10.
Future quality without offset	5	Potential for decline in quality through weed invasion and grazing, which is currently allowable within the property according to current planning controls.
Further quality with offset	7	Gradual improvement in condition of overstorey and understorey through regeneration and pest plant and animal control works (above existing legal requirements).
Risk of loss (%) without offset	10%	Potential for partial permitted clearance of the site, including timber harvesting for firewood collection. Other permitted uses, including grazing would continue to decline the habitat condition.
Risk of loss (%) with offset	1%	Low risk of loss of vegetation following wildfire, climate change and unforeseen circumstances.
Confidence in results	80%	Based on experience with other offset sites
% of impact offset	100.9%	Exceeds minimum of 90% direct offset

Offset site quality

The current quality of the offset site is calculated as 6/10. This is based on a vegetation quality assessment, using the Habitat Hectare score (0.56) as a surrogate for EPBC Act offset assessment guide habitat quality. Within the period of the plan, it is expected that quality of the site will improve slightly, as trees continue to recolonise areas between existing mature trees and threats to ground cover vegetation condition are managed (i.e. pest plant and animal control works).



Risk of loss

If the site were not established as an offset area, there is a chance (10%) that the value of the site would be lost due to continuation of activities that are currently permitted, such as timber harvesting, grazing by domestic stock and establishing other farm infrastructure which does not require a permit. Existing threats would continue to be managed at current levels, which may result in increases in weed cover (most weeds are not noxious weeds) and prevalence of pest animals.

Vegetation within the site will continue to have a low risk of loss through wildfire, although this would initiate a management response to elevate weed control works, as most wildfires would be unlikely to kill all trees in this type of vegetation. Perimeter firebreaks would only be established if ecological burning was conducted as standard (6 m wide) firebreaks are ineffective in a wildfire situation.



3. Part B: Offset Implementation

This section presents the actions required to implement the OMP. The plan details methods for the management and conservation of GBGW (the protected matter) to improve its condition at the offset site over the requisite ten year management period and then maintain that condition in perpetuity.

The aim is to initiate the offset before the proposed impact arising from the action (Echuca – Moama Bridge project). This timing is distinct from the time it will take an offset to yield a conservation gain for the protected matter, which is identified as being achieved after a period of ten years.

All works would be conducted by a suitably qualified and experienced native bushland management contractor.

The plan aims to achieve vegetation improvement gains through on-ground actions and therefore is required to be achievable, straightforward and practical. All of the management actions specified must be measurable against the commitments made in the calculation of improvement over time to achieve the target conservation gains for the protected matter under the EPBC Act.

EPBC Act approval conditions

This OMP has been formulated to comply with DoEE requirements under EPBC 2013/6850 for VicRoads to provide an offset compliant with the EPBC Act environmental offsets policy (Australian Government 2012) for the Echuca - Moama Bridge project.

Offset Site Details 3.2

Table 5 provides details of the offset site, including the landowner, parcel details and local government property information.

Offset Security and Management Responsibility 3.3

VicRoads has located a suitable offset site and negotiated an agreement with the owners of the site. The proposed offset area is located within a larger parcel, other parts of which have been designated as an offset site which has been registered as a Native Vegetation Credit Site through the Victorian Bush Broker System. who will be responsible for ongoing management of the site throughout The site is owned by the period of this plan. The property is otherwise known as Kelly North.

The offset site is to be secured and managed for the purposes of conservation in perpetuity via a covenant with the Trust for Nature under the Victorian Conservation Trust Act 1972. The management strategy for the proposed offset site consists of implementing a vegetation offset management plan incorporating retaining trees and fallen timber, excluding stock, weed and vermin control and regular monitoring. Details of security and management responsibility are shown in Table 6.



Table 5 **Offset Site Details**

Offset Site Details						
Landowner of offset site						
Type of offset	3 rd party					
Location and address of offset site	Boort – Kurting Road Fiery Flat 3518					
Area of offset site	10.7 ha					
Parish	Kinypanial					
Allotment / Plan of Subdivision	172 / TP527408Q					
Volume / Folio	2728 / 487					
Local Government Area	Loddon Shire					
Catchment Management Area	North Central					
SPI	172\PP2885					
Council Property Number	63605300					
Bioregion	Goldfields					

Security and Management Responsibility Table 6

Responsibility						
Who is liable/responsible for meeting offset requirements?	VicRoads					
Type of security	Trust for Nature Covenant under Victorian Conservation Trust Act 1972					
Date 10-year offset management to commence	01 April 2018					
Date 10-year offset management expires	01 April 2028					
Date agreement registered on-title	Permanent					
Offset site management responsibility	Land Owner					
Offset Monitoring Responsibility	Land Owner					
Site management	Land Owner					
Monitoring	Land Owner					
Auditing	Land Owner					
Reporting responsibility (to Trust for Nature)	Land Owner					
Reporting responsibility (to Department of the Environment and Energy)	Trust for Nature					
Plan review	Trust for Nature					



The offset area will be secured in-perpetuity through an appropriate legal encumbrance registered on the property. The encumbrance registered on title will require the landholder to manage the land in accordance with this Offset Management Plan. In addition, the Deed will specifically state the in-perpetuity land-use commitments across the site to:

- Retain all standing trees (dead or alive);
- Retain all fallen timber/branches/leaf litter;
- Exclude domestic stock except as permitted under this plan;
- Eliminate all high threat environmental woody weeds (to < 1% cover) and ensure that the cover of other high threat weeds does not increase beyond current levels;
- Monitoring for any new and emerging weeds and eliminate to < 1% cover;
- Manage ground cover biomass; and
- Control rabbits, hares and foxes.

The offset site owner will be responsible for implementing the management plan and carrying out the management actions. The implementation of the management plan will be monitored by an independent ecologist who will verify that the actions have been carried out appropriately.

3.4 Ongoing management commitments

The offset site will be managed for the purposes of conservation. Management of this site will be in accordance with the EPBC Act approval conditions and aims to achieve an improvement in the overall condition of vegetation in accordance with the EPBC Act offset Calculator (Appendix 1).

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

- Eliminating all wood weeds < 1% cover.
- Ensuring that weed cover does not increase beyond the current level (current total weed cover averages 30%).
- Monitoring for any new and emerging weeds and eliminate to < 1% cover.
- Controlling foxes, rabbits and hares.
- Retaining all standing trees, dead or alive (except as otherwise permitted by this plan).
- Retaining fallen logs and fallen branches.
- Manage ground cover biomass as required.
- Exclude stock (except as otherwise permitted by this plan).

3.5 Adaptive management

This Plan provides actions for a period of 10 years. The timing of actions and whether they occur is based on adaptive management. By monitoring the outcomes of actions, management may be adapted to ensure the stated commitments in the Plan are adhered to. Also over time, new management techniques may become available, or further information on the ecology and status of the vegetation community onsite may necessitate adjustment to management actions. Seasonal conditions can also vary greatly from year to year and influence site management actions in any one year. This seasonality is recognised in this offset plan by allowing for flexibility around timing of actions at the discretion of the land manager.



Section 4 includes tables of management actions (Table 8) and a risk assessment (Table 9) with associated monitoring (Table 10) and reporting (Table 10) programs.

Management Actions - Land Use Commitments 3.6

This section presents the actions required to implement the management strategy for the offset site to satisfy the requirements of the EPBC Act Environmental Offsets Policy. The site is to be secured and managed for conservation purposes in perpetuity. Management actions described in this OMP are to be implemented for a period of 10 years (see Appendix 2). The landowner will continue to manage the offset site after the completion of year 10 as specified under the covenant agreement.

Offsets will be achieved by:

- Weed control:
 - Ensuring that weed cover does not increase beyond current levels.
 - Eliminating all high threat environmental woody weeds (< 1% cover).
 - Monitoring for any new and emerging weeds and eliminate to < 1% cover.
- Managing logs and organic litter.
- Regeneration monitoring and ecological thinning.
- Controlling rabbits, hares and foxes.
- Monitoring and controlling new and emerging pest animals.
- Retaining all standing trees, dead or alive (except as otherwise permitted by this plan).
- Monitoring tree regeneration and overstorey condition and undertaking supplementary planting if required.
- Retaining fallen logs and fallen branches.
- Excluding stock (except as otherwise permitted by this plan).

The management actions listed below outline the prescribed actions for achieving the required gains through active management (maintenance and improvement) and permanent protection of the offset site. Table 7 details these prescribed actions and outlines the relevant timing for implementation. These actions will be applied to the entire Offset Areas identified in Figure 2.

Where appropriate, the offset management plan and specified management actions should form part of a broader strategy for long-term management of ecological values within contiguous land.

3.6.1 **Fencing**

Threats, including unrestricted stock access must be controlled / excluded from the site at all times. Unauthorised access must also be prevented, particularly access via vehicle for excluded activities such as firewood collection. Preventing access will also minimise soil disturbance, soil compaction and importing of weeds and pathogens. The intention of fencing is to protect the sites from all threats in perpetuity. The location of fencing is not important as long as the site is protected from all threats in perpetuity.

The site is currently securely fenced and grazing livestock are excluded. Monitoring of access and threats will be conducted on an ongoing basis with fencing repaired or upgraded as required to control threats.



Where fencing exists or is required to control threats, ensure all fencing around the perimeter of the site is maintained in good condition according to the standards detailed in BushBroker Information Sheet 12 -Standards for Management – Fencing (DSE 2012c), in perpetuity.

3.6.2 Woody weeds

Elimination of all woody weeds

Existing wood weed cover is relatively low. Woody weeds observed include African Boxthorn Lycium ferocissimum, Horehound Marrubium vulgare and Prickly Pear Opuntia spp.

Woody weeds recorded on site must be eliminated appropriately. Indigenous plants must not be impacted during treatment. Monitor for any re-sprouting or seedlings and eradicate (either cut & paint, spot spray or hand pull).

Prickly Pear occurs only as scattered small plants which are easily removed by hand. Pulled material must be disposed of off-site.

Horehound was observed as scattered individuals. This material can be physically removed or spot sprayed with an appropriate herbicide.

The site appears to have been subject to some African Boxthorn control as only relatively young plants were observed. These should be hand pulled, larger plants cut and the woody stump painted with neat herbicide or otherwise spot-sprayed as appropriate. Complete elimination of these species is plausible given their relatively low abundance within the offset site.

New and emerging woody weeds

Monitoring for new and emerging woody weeds will 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 (DSE 2012).

3.6.3 Herbaceous weeds

Control of all herbaceous weeds

The Catchment and Land Protection Act 1994 lists noxious weeds and requires that all landowners take reasonable steps to prevent the spread of, eradicate and / or control noxious weeds on their land.

The control of high threat and listed noxious weed species is a key management action within the offset site and must be adequately addressed if improvement site gains are to be achieved.

All weeds will be treated, with an emphasis on ensuring that weed cover does not increase beyond current levels. Weeds listed in Table 7 were found on site and are considered to be a high threat. These weeds will be monitored each year to ensure their cover is not increasing. Increasing cover of these weeds will be controlled using the methods outlined in Table 7. Treat weeds before the plant has flowered and set seed. Indigenous plants will not be impacted during treatment.

Refer to BushBroker Information Sheet 8 - Standards for Management - Weeds (DSE 2012b).

New and emerging herbaceous weeds

Monitoring for new and emerging herbaceous weeds will be conducted throughout the year for the term of the agreement, and any new and emerging weeds eliminated. In addition to any high threat weeds, this must include any noxious weeds listed under the Catchment and Land Protection Act 1994 (CaLP).



Table 7 Herbaceous weeds to be controled - method and timing

Scientific name	Common name	Method	Timing
Echium plantagineum	Pattersons Curse	Spot spray with an appropriate herbicide.	Winter and Spring
Cirsium vulgare	Spear Thistle	Chip out or spot spray with an appropriate herbicide.	Winter and Spring
Dittrichia graveolens	Stinkwort	Spot spray with an appropriate herbicide.	Spring and Summer
Erodium spp.	Stork's bill	Spot spray with an appropriate herbicide.	Winter and Spring
Gazania linearis	Gazania	Spot spray with an appropriate herbicide or hand pull	Winter and Spring
Carthamus lanatus	Saffron Thistle	Spot spray with an appropriate herbicide	Winter and Spring
Lolium spp.	Rye-grass	Spot spray with an appropriate herbicide.	Winter to Spring
Trifolium spp.	Clovers	Spot spray with an appropriate herbicide.	Winter to Spring
Romulea spp.	Onion Grass	Spot spray with an appropriate herbicide approximately 6 weeks after emergence, prior to flowering.	Autumn and Winter
Vulpia spp., Bromus spp., Avena spp., Aira spp.	Weedy annual grasses	Spot spray with an appropriate herbicide. Crash graze in Winter, burn in early spring	Winter to Spring

3.6.4 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.

Rabbits and Brown Hares will be monitored and controlled throughout the year. If activity is detected on the site use an integrated approach in accordance with BushBroker Information Sheet 7 – Standards of Management – Rabbits (DSE 2012a). This involves fumigation, hand collapsing of burrows and baiting. Remove any carcasses to prevent poisoning of native predators.

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

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



3.6.5 Biomass / organic litter control

Biomass management is essential to maintain indigenous flora and fauna values throughout the offset site. Biomass management is also required to maintain inter-tussock spaces and prevent excessive competition to ground cover forbs. Where there is a sustained build up in ground cover biomass over any one year or series of years, resulting in a reduction of inter grass tussock space to an average of less than 20%, biomass will need to be actively reduced. This will not necessarily occur annually and biomass may not build to unacceptable levels for a number of years. Judgements on the cover of inter-tussock space and the build-up of groundcover biomass will be made by the landowner in consultation with the TfN.

The independent ecological monitoring will also assess the effectiveness of the biomass control techniques applied and the need for any adjustments to the management regime to provide the prescribe outcome.

Where appropriate, ecological burning could be utilised. Burning has the advantage of being able to provide broad area control of introduced annual grasses when implemented with appropriate timing (i.e. before seed set or while seed is still held above ground – generally in mid to late spring).

Use of fire for ecological management

Burning within the offset area will be undertaken only with due consideration to relevant health and safety issues, in consultation with the local Country Fire Authority and in line with a fire management plan completed by the landholder in consultation with TfN. Any fire plan will also be provided to TfN prior to any burning event identified within that plan. The following provides guidelines for use of burning only in an ecological sense. The land owner is responsible for ensuring the requirements of this OMP can be carried out only if compliant with all other government planning requirements and permits.

The controlled application of fire may be an efficient and cost-effective technique for reducing biomass in grassy ecosystems such as those that occur within the offset site. Importantly, burning (c.f. grazing or slashing) allows greater access and efficiency for weed control and increased natural regeneration of indigenous plant species. While burning may enhance germination of indigenous species, it can also be expected to promote certain exotic species and as such post-burning weed-control will be vital in maintaining remnant vegetation. However stimulating the soil stored weed seed bank is seen as positive as this allows this seed bank to be exhausted through active management.

The controlled application of fire can be used for biomass reduction in all or parts of the offset site. Selected areas of this grassy woodland may be burnt to tackle particular weed issues or to assist in the lowering of soil nitrogen and phosphorous which would also assist in weed control works. However no area is to be subject to a planned burn more frequently than every three years and no more than 30% of the offset site will be deliberately burnt in any one year. The application of a mosaic burning regime is also considered advantageous and therefore any individual planned burn will not cover a contiguous area of more than 10% of the offset site (i.e. there may be five separate planned burns in any one year covering a total of about 5 ha but any one planned burn will cover a maximum of 1 ha and be separated from other burnt areas by at least 20 m of unburnt vegetation.

Note that no fire should occur within 20 metres of any Buloke Allocasuarina leuhmannii individual and these trees need to be protected from any burn.

The landowner will prepare maps identifying the fire history of the offset area to ensure compliance with the area restrictions identified above.

Any ecological burns will be conducted during benign (low wind and mild temperature) weather conditions and may be patchy (i.e. not result in the uniform burning of all areas). Patchy burns are a desirable outcome.

It is accepted that a wildfire event is out of the control of the landowner and is not subject to these conditions.



3.6.6 **Control of Eucalypt regeneration**

Dense eucalypt regeneration will result in the shading of the grassy herb-rich ground cover and locally reduce species richness. This is contrary to the biodiversity management objectives of this offset site. This outcome is evident in Kelly South and has the potential to develop in parts of Kelly North.

A mature woodland in this environment is estimated to support 15 large old trees (trees with a diameter at breast height of at least 70 cm). This amounts to one large old tree within an area of 25 metres by 25 metres. While stands of tree regeneration will eventually self-thin this process may take many decades and have significant negative impacts for biodiversity.

To prevent this negative biodiversity outcome eucalypt regeneration will need to be controlled. Therefore where eucalypt regeneration establishes and is at least two metres tall, individuals will be selected to grow into mature trees. Selected trees will be at least 15 metres from existing established mature trees. These trees will then be protected. All other eucalypt regeneration within a 10 metre radius of that tree will be treated as a woody weed. Trees considered as woody weeds will be cut close to the ground and the stump painted with an appropriate herbicide (generally undiluted).

These measurement can be altered if undesirable outcomes are apparent. Undesirable outcomes will be identified by the Trust for Nature or an experienced ecologist.

Monitoring 3.7

Fence condition 3.7.1

Fences will be subject to at least an annual condition assessment. Any damage of fault in fencing which would allow any uncontrolled stock or other access to the site will be promptly repaired.

Weed and biomass monitoring 3.7.2

The extent of woody weeds within the offset site is relatively low and will therefore be monitored by walking the site and recording the location of any infestations.

It is anticipated that that abundance of woody weeds will be negligible within three years of the initiation of this OMP.

A minimum of five permanent photo points will be established by the monitoring ecologist, marked and accurately located by GPS or similar within the offset site. Photo points will be located to adequately characterise the current vegetation condition, and include a range of weed species. These photo points will be used to monitor the vegetation for the 10 year period covered by this plan.

Within a 5 m x 5 m area centred on each photo point the ecologist will assess the percentage total vegetation cover, percentage cover of inter-tussock space, average height of vegetation and the cover of native and exotic life-forms will be recorded.

This information, in conjunction with a broad site inspection will provide information on the efficacy of the weed control program and the need for any biomass control works.

3.7.3 Pest animal monitoring

At a minimum spotlight shooting over a minimum period of three hours targeting all pest animals will occur over the entire site once every three months. This will be conducted by the landowner or a professional shooter employed by the landowner.

If significant pest animal populations are observed (particularly rabbits) the site will be walked to identify the location of any warrens or other harbour. Warrens will be targeted for fumigation and other harbour will be



targeted for suitable non-destructive control works (i.e. hollow logs lying on the ground will harbour rabbits but are valuable habitat for native fauna and will not be destroyed).

3.8 Reporting

The landowner must submit a report annually to TfN and DoEE for each year of the ten years of this management plan. Reports are to be submitted at least two months prior to the anniversary date of the execution of the OMP 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 will 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 this offset site.

The annual report must include:

- Details of management actions, including on ground works, undertaken within the reporting period.
- Results of monitoring activities, including fence condition, weeds, pest animals, biomass and overstorey condition.
- Site photographs showing relevant information.
- Details of compliance or non-compliance with the schedule of management actions (Table 8).
- Details of compliance or non-compliance with performance targets (Table 8).
- Details of any incidents or new and emerging management issues, with recommendations for corrective action and plan review.



4. Schedule of management actions, risks, monitoring and reporting

This section provides a schedule of management actions (Table 8) for the offset area. Table 9 provides an assessment of the risk of failing to achieve desired outcomes, and specifies how this relates to the monitoring (Table 10) and reporting (Table 11) program.

Table 8 Management Actions

Year No	Objective - Habitat Zone 1A	Timing of activity – month(s)	Standard to be achieved	Related monitoring activity (# -see Table 10)
1 and ongoing	1. Control of stock. Ensure the offset site is appropriately fenced from neighbouring land and road reserves. Fences to be monitored and maintained in functional condition. Internal and boundary fences to be modified as specified in the Bush Broker Management Plan.	As soon as possible	Control of domestic stock access to the offset area. Exclusion of vehicles from offset area. Exclusion of unauthorised access or unauthorised firewood collection. Maintain fencing around the perimeter of the site to the standard detailed in BushBroker Information Sheet 12 – Standards for Management – Fencing (DSE 2012c) (sheep fencing standard). Any new fences, if required to control threats to ecological values, will be constructed to this standard.	1 Section 3.7.1
1 and ongoing	2. Remove all woody weed infestations within the offset area	As soon as possible	No woody weeds present within offset area (< 1% cover). Woody weeds not to interfere with shrub and canopy recruitment. Minimise off-target damage (avoid all native plants)	2 Section 3.7.2
Annual	3. Monitor and control herbaceous weeds.	Refer to Table 7.	Herbaceous weed cover to not exceed current levels. Herbaceous weeds not to interfere with shrub and canopy recruitment. Minimise off-target damage (avoid all native plants)	2 Section 3.7.2



Year No	Objective - Habitat Zone 1A	Timing of activity – month(s)	Standard to be achieved	Related monitoring activity (# -see Table 10)
	Control methods and timing specified in Table 7.			
Ongoing	4. Monitor and control new and emerging woody weeds	Ongoing	New outbreaks of woody weeds to be removed as soon as detected. No woody weeds present within offset area. Minimise off-target damage (avoid all native plants)	2 Section 3.7.2
Ongoing	5. Monitor and control Rabbits, Hares and Foxes.	Ongoing	No fresh ground disturbance by pest animals (particularly rabbits) observed in the offset area. No active rabbit warrens within offset area, minimal surface harbour for rabbits and hares present (but excluding natural harbour such as logs and rocks). No active fox dens within offset area, if present they are to be destroyed through fumigation and hand collapse. Continue to monitor and control rabbits and foxes all year round.	3 Section 3.7.3
Ongoing	6. Monitor and control all new and emerging pest animals.	Ongoing	Control numbers of any new and emerging pests	3 Section 3.7.3
Annual	7. Monitor tree and shrub regeneration and overstorey condition and undertake ecological thinning if required (section 3.6.6).	Autumn	Tree layer continues to regenerate and gradually increases canopy cover while not forming dense swards of eucalypt regeneration. Maintain cover of immature canopy trees and understorey trees or large shrubs to a level of not greater than 20% higher than the EVC benchmark of 20%.	4 Section 3.6.6



Year No	Objective - Habitat Zone 1A	Timing of activity – month(s)	Standard to be achieved	Related monitoring activity (# -see Table 10)
All (annually)	Prepare and submit an annual report.	Submit 2 months prior to agreement anniversary. Annual OMP reporting aligned with Trust for Nature covenant.	Annual report is signed, dated and submitted by the landholder at least 2 months prior to the anniversary date of the agreement, as specified in the Trust for Nature covenant.	Refer to section 3.8

Table 9 Risk assessment and management

Objective	Event or circumstance	Likelihood	Consequence	Risk level	Trigger	Contingency/s	Related monitoring activity (# See Table 10)
1	Uncontrolled entry of domestic stock to the offset area. Grazing, browsing and trampling damage to vegetation. Damage to or loss of juvenile trees and shrubs	Unlikely	Minor	Low	Uncontrolled domestic stock sighted on offset site. Signs of recent stock access.	Remove stock. Repair fencing. Monitor vegetation.	1
1	Entry of vehicles to offset area. Damage to understorey vegetation, soil compaction.	Unlikely	Minor	Low	Vehicle observed on offset site. Evidence of recent vehicle access e.g. tyre tracks.	Repair fencing. Assess adequacy of fencing.	1
1	Unauthorised access or unauthorised firewood collection occurs. Loss of habitat components i.e. fallen logs, standing dead timber.	Unlikely	Minor	Low	Evidence of firewood collection observed, including cut stumps or fallen cut branches.	Assess adequacy of fencing.	1



Objective	Event or circumstance	Likelihood	Consequence	Risk level	Trigger	Contingency/s	Related monitoring activity (# See Table 10)
2, 3, 4	Woody weeds are present within offset area (> 1% cover). Herbaceous weed cover exceeds current levels (30%).	Possible	Minor	Low	Woody weed cover exceeds 1%. Herbaceous weed cover exceeds current levels. Weeds appear to be interfering with shrub and canopy recruitment.	Increase weed control works. Minimise off-target damage (avoid all native plants)	2
5, 6	Pest animals observed within offset site. Damage to understorey vegetation or recruiting trees and shrubs.	Possible	Moderate	Medium	Fresh ground disturbance or scats of pest animals observed in the offset area. Active rabbit warrens observed within offset area. Active fox dens observed within offset area. New and emerging pest observed within offset area.	Destroy fox dens through fumigation and hand collapse. Undertake control works for new and emerging pests as appropriate.	3
7	Tree and shrub recruitment is significantly above or below that for the EVC benchmark.	Possible	Minor	Low	Cover of immature trees and shrubs are more than 20% above benchmark levels. Cover of immature trees and shrubs are significantly less than 5%.	Ecological thinning to achieve a cover of approximately 5%. Undertake action to encourage regeneration and address threats to regeneration.	4



Objective	Event or circumstance	Likelihood	Consequence	Risk level	Trigger	Contingency/s	Related monitoring activity (# See Table 10)
	Wildfire. May impact temporarily or permanently on overstorey condition. May destroy fencing.	Possible	High	Medium	Wildfire observed within offset area.	Monitor tree and shrub regeneration and overstorey condition (immediately post fire and 12 months post fire). Undertake supplementary planting if significant tree death has occurred. Inspect fence condition and repair any damage.	1, 4
	Outbreak of defoliating insect pest. May impact upon overstorey condition.	Possible	Moderate	Medium	Dieback observed in tree canopy during monitoring.	Monitor overstorey condition (immediately post fire and 12 months post fire). Undertake supplementary planting if significant tree death has occurred.	1



Table 10 Monitoring schedule

#	Monitoring activity	Parameter/s measured	Survey / monitoring guidelines	Where	When	Reliability
1	Fence condition	Condition of boundary fences.	Survey the perimeter of the offset site to ensure fences are intact and assess evidence of domestic stock, vehicle access or firewood harvesting. Refer to Section 3.7.1 for details.	Offset site perimeter	Quarterly	
2	Weed monitoring	Cover of woody and herbaceous weed species present.	Vegetation survey to be conducted to identify woody and herbaceous weed species and determine cover. Woody species to be mapped using GPS. Herbaceous weed cover (percentage cover) to be estimated for each habitat zone. All weed species present identified to species level. Refer to Section 3.7.2 for details.	Offset area	Annual - Spring	
3	Pest animal monitoring (Rabbits, Hares and Foxes, and new and emerging pest animals)	Presence of pest animals or signs e.g. scats, diggings, browsing or grazing	Signs of pest animals to be recorded during vegetation surveys. Locations of rabbit warrens to be mapped using GPS. Refer to Section 3.7.3 for details.	Offset area	Annual – Spring During vegetation condition survey	



Table 11 Reporting schedule

#	Type of report	Approval condition	Timing	Reporting authority	Trigger (if any)
1	Annual report		Within one month of completion of each year of management.	DoEE, TfN	



5. References

BL&A 2013. Mid-West 2 Murray River Crossing at Echuca-Moama: Detailed flora, fauna, native vegetation and net gain assessment. Report for VicRoads. Brett Lane & Associates, Hawthorn. Report No. 8194 (3.7).

BL&A 2017. Echuca-Moama Bridge Project: EPBC Act – Listed ecological community assessment: Grey Box Grassy Woodland. Report for VicRoads. Brett Lane & Associates, Hawthorn. Report No. 8194 (25.2).

Biosis 2017. Echuca-Moama Bridge Project: Habitat hectare assessment of Habitat Zones 19a and 19c. Report prepared for VicRoads. Author: S. Mueck. Biosis Pty Ltd, Ballarat. Project no. 26498.

Commonwealth of Australia (2012). Environment Protection and Biodiversity Conservation Act 1999 -Environmental Offsets Policy. Australian Government Department of Sustainability, Environment, Water, Population and Communities.

DSE 2012a. BushBroker information sheet number 7. Standards for management - Rabbits. Department of Sustainability and Environment, Melbourne.

DSE 2012b. BushBroker information sheet number 8. Standards for management - Weeds. Department of Sustainability and Environment, Melbourne.

DSE 2012c. BushBroker information sheet number 12. Standards for management – Fencing. Department of Sustainability and Environment, Melbourne.



6. Appendices



Appendix 1 EPBC Act Offset Calculator

Offsets Assessment Guide
For use in determining offsets under the Environment Protection and Biodiversity Conservation Act 1999
2 October 2012
This guide relies on Macros being enabled in your browser.

	Grey Box Grassy
Name	Woodland
EPBC Act status	Endangered
Annual probability of extinction	1.2%
Based on IUCN category definitions	1.270

			Impact calcu	lator									
	Protected matter attributes	Attribute relevant to case?	Description	Quantum of imp	act	Units	Information source						
			Ecological c	ommunities									
				Area	2.22	Hectares							
	Area of community	Yes		Quality	8	Scale 0-10	Brett Lane & Assoc. report No. 8194 (25.2)						
				Total quantum of impact	1.78	Adjusted hectares							
	Threatened species habitat												
				Area									
ator	Area of habitat	No		Quality									
Impact calculator				Total quantum of impact	0.00								
Imp	Protected matter attributes	Attribute relevant to case?	Description	Quantum of imp	act	Units	Information source						
	Number of features e.g. Nest hollows, habitat trees	No											
	Condition of habitat Change in habitat condition, but no change in extent	No											
			Threatene	d species									
	Birth rate e.g. Change in nest success	No											
	Mortality rate e.g Change in number of road kills per year	No											
	Number of individuals e.g. Individual plants/animals	No											

Key to Cell Colours User input required Drop-down list Calculated output Not applicable to attribute

	Offset calculator																					
	Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon	(years)	Start are: qualit		Future are quality witho		Future are quality with	ea and h offset	Raw gain	Confidence in result (%)	Adjusted gain	Net prese (adjusted		% of impact offset	Minimum (90%) direct offset requirement met?	Cost (\$ total)	Information source
										Ecolog	ical Com	ımunities										
	Area of community	Yes	1.78	Adjusted hectares	10.7 ha at 1714 Boort Kurting Road Fiery Flat	Risk-related time horizon (max. 20 years)	20	Start area (hectares)	10.7	Risk of loss (%) without offset Future area without offset (adjusted hectares)	9.6	Risk of loss (%) with offset Future area with offset (adjusted hectares)	1%	0.96	80%	0.77	0.61	1.79	100.92%	Yes		
						Time until ecological benefit	10	Start quality (scale of 0-10)	6	Future quality without offset (scale of 0-10)	5	Future quality with offset (scale of 0-10)	7	2.00	80%	1.60	1.42					
	Threatened species habitat																					
						Time over				Risk of loss (%) without offset		Risk of loss (%) with offset										
ator	Area of habitat	Yes Adjusted hectares			Start area (hectares)		Future area without offset (adjusted hectares)	0.0	Future area with offset (adjusted hectares)	0.0	0.00		0.00	0.00	0.00	#DIV/0!	#DIV/0!					
Offset calculator						Time until ecological benefit		Start quality (scale of 0-10)		Future quality without offset (scale of 0-10)		Future quality with offset (scale of 0-10)		0.00		0.00	0.00					
Offs	Protected matter attributes	Attribute relevant to case?	Total quantum of impact	Units	Proposed offset	Time horizon	(years)	Start va	llue	Future value offset		Future valuoffse		Raw gain	Confidence in result (%)	Adjusted gain	Net prese	ent value	% of impact offset	Minimum (90%) direct offset requirement met?	Cost (\$ total)	Information source
	Number of features e.g. Nest hollows, habitat trees	No																				
	Condition of habitat Change in habitat condition, but no change in extent	No																				
										Thr	eatened s	species										
	Birth rate e.g. Change in nest success	No																				
	Mortality rate e.g Change in number of road kills per year	No																				
	Number of individuals e.g. Individual plants/animals	No																				

	Summary												
				% of impact offset		Cost (\$)							
	Protected matter attributes	Quantum of impact	Net present value of offset		Direct offset adequate?	Direct offset (\$)	Other compensatory measures (\$)	Total (\$)					
	Birth rate	0				\$0.00		\$0.00					
Summary	Mortality rate	0				\$0.00		\$0.00					
Sumi	Number of individuals	0				\$0.00		\$0.00					
	Number of features	0				\$0.00		\$0.00					
	Condition of habitat	0				\$0.00		\$0.00					
	Area of habitat	0	0.00	#DIV/0!	#DIV/0!	\$0.00	#DIV/0!	#DIV/0!					
	Area of community	1.776	1.79	100.92%	Yes	\$0.00	N/A	\$0.00					
			•			\$0.00	#DIV/0!	#DIV/0!					



Appendix 2 BushBroker Management Plan

This section provides a copy of the BushBroker management plan for credit site BB-2835-LA01. The proposed GBGW offset site documented in this OMP is comprised of Habitat Zone 1A.

Imaged Document Cover Sheet

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30/10/2015 \$124.70 CFL

Application for recording of an agreement under Section 72 Conservation Forests & Lands Act 1987

Lodged by Department of Environment, Land, Water and Planning

Name: Sam Gilbert Phone: (03) 9637 8434

Address: Level 2, 8 Nicholson Street, East Melbourne

Customer Code: 14354H

The Secretary to the Department of Environment, Land, Water and Planning applies for a recording of an agreement made under Section 69 of the Conservation Forests & Lands Act 1987 in relation to the land.

Land: - Being part of the land at Crown Allotment 172 on TP 527408Q, Parish of Kinypanial, and being part of the land in Volume 02728, Folio 487, and being the land hatched on the plan in the First Schedule to the Agreement.

Name of party to agreement: - Victoria.

Date of Agreement: 19 October 2015

The Agreement is expressed to be binding on the land owners successors in title.

Date: 26 October 2015

Signed by Sheri Burmeister, Senior Project Officer, Native Vegetation Regulation, on behalf of the Secretary to the Department of Environment Land Water and Planning.



LANDOWNER AGREEMENT BB-2835/LA01

BETWEEN THE SECRETARY TO THE DEPARTMENT OF ENVIRONMENT, LAND, WATER AND PLANNING

- and -

AM291367Y 30/10/2015 \$124.70 CFL

No Clause

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Landowner Agreement

This Agreement is made on the day of OCTOBER 2015 between the Landowner specified in the First Schedule and the Secretary to the Department of Environment, Land, Water and Planning of the State of Victoria in respect of the Subject Land.

INTRODUCTION

- 1. The Landowner and the Secretary will execute an agreement with another party requiring the Landowner to execute this Agreement with the Secretary (Credit Agreement). The purpose of the Credit Agreement is (amongst other things) to enable the Landowner to trade Credits which may be used as an Offset for the purposes of complying with the requirements of the Planning Scheme and the Planning and Environment Act 1987.
- 2. The Landowner enters into this Agreement to secure the right to trade Credits via the Register, regardless of whether a Credit created pursuant to this Agreement has already been sold pursuant to the Credit Trading Agreement. The Landowner and the Secretary may envisage the execution of other agreements which allow Credits created by this Agreement (which remain unsold) to be sold to other persons via the Register.
- 3. The Secretary and the Landowner have agreed to enter into this Agreement in order to protect and improve the extent and quality of Native Vegetation on the Site.
- 4. This Agreement is made pursuant to Part 8 of the Act.
- 5. As at the date of this Agreement, the Subject Land is encumbered by Mortgage No. in favour of the Mortgagee. The Mortgagee has consented to the Owner entering into this Agreement with respect to the Subject Land.



IT IS AGREED:

1 DEFINITIONS

- 1.1 'Act' means the Conservation, Forests and Lands Act 1987.
- 1.2 'Attached Plan' means the plan contained in First Schedule which delineates the boundaries of the Site.
- 1.3 'Available Gain' means the estimated improvement in the extent and quality of native vegetation on the Site as assessed on behalf of the Secretary in accordance with the *Permitted clearing of native vegetation Biodiversity assessment guidelines*. (the Guidelines).
- 1.4 'Commencement' means the date of commencement of this Agreement specified in the First Schedule.
- 1.5 'Credit' means the value assigned by the Register to a defined part of the Subject Land in accordance with this Agreement.
- 1.6 'Establishment' of a weed means the stage of the weed's development at which it is able to reproduce.
- 1.7 'EVC' means an Ecological Vegetation Class as defined in the Guidelines.
- 1.8 'Gain scoring target weed' means a plant that meets the definition of a high threat weed and has a reasonable expectation that it can be eliminated.
- 1.9 'Habitat Zone' means a habitat zone described in the Second Schedule.
- 1.10 'Landowner' means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as proprietor or proprietors of an estate in fee simple of the Subject Land.
- 1.11 'Management action' means the management actions the Landowner will undertake in order to meet their management commitments as specified in the Management Plan.
- 1.12 'Management commitment' means the management obligations of the Landowner as specified in the Management Plan.
- 1.13 'Management Plan' means the management actions to be carried out for a period of ten years as specified in the Second Schedule (as amended from time to time with the prior written consent of the Secretary) according to the timeframes specified in the Second Schedule for the purposes of achieving the commitments.
- 1.14 'Mortgagee' means the person or persons registered or entitled from time to time to be registered by the Registrar of Titles as Mortgagee of the Subject Land or any part of it.
- 1.15 'Native Vegetation' has the same meaning as in the Planning Scheme.
- 1.16 'Parties' means the Landowner and the Secretary.
- 1.17 **'Planning Scheme'** means the Loddon Planning Scheme and any other planning scheme that applies to the Subject Land from time to time.
- 1.18 'Regionally Prohibited Weed' or 'Regionally Controlled Weed' have the same meaning as in the Catchment and Land Protection Act 1994.
- 1.19 'Register' means the Native Vegetation Credit Register administered under the direction of the Secretary and any successor to it.
- 1.20 'Report' means a report provided to the Secretary demonstrating progress against the management commitments and completion of all the management actions specified in the Management Plan for the preceding year.
- 1.21 'Revegetation'. means any vegetation established within the site in accordance with the Second Schedule.
- 1.22 'Secretary' has the same meaning as in the Act and, where the context requires, includes the Secretary's officers, employees, agents, contractors, invitees and licensees.
- 1.23 'Site' means that part of the Subject Land upon which the Management Plan is to be carried out as specified in the First Schedule and as shown on the Attached Plan.
- 1.24 'Subject Land' means all those parcels of land containing the Site as identified in the First Schedule.
- 1.25 **'Supplementary Planting'** means any vegetation established within the site in accordance with the Second Schedule.
- 1.26 'the Guidelines' means the 'Permitted clearing of native vegetation Biodiversity assessment guidelines.' A copy of the Guidelines is available from the website administered on behalf of the Secretary, which at Commencement is <(www.delwp.vic.gov.au)>.



2 INTERPRETATION

- 2.1 Where there is more than one Landowner the terms and conditions of this agreement bind the Landowners jointly and severally.
- 2.2 The singular includes the plural and the plural includes the singular.
- 2.3 A reference to one gender includes each other gender.
- 2.4 A reference to a statute includes the statute as amended from time to time and all subsidiary legislation made pursuant to that statute.
- 2.5 A reference to a person indicates a reference to a firm, corporation or other corporate body.
- 2.6 In this clause words that are defined in A New Tax System (Goods and Services Tax) Act 1999 have the same meaning as their definition in that Act. Except as otherwise provided in this Agreement, all consideration payable under this Agreement in relation to any supply is exclusive of GST.

3 PURPOSES

- 3.1 This Agreement provides for a ten year Management Plan designed to improve the condition of the Site and to protect the site in perpetuity.
- 3.2 The Landowner has agreed to manage the Site in accordance with the Management Plan and to permit the Secretary to have access to the Subject Land for the purposes of evaluating the Management Plan and the Landowner's management of the Site.
- 3.3 The Landowner acknowledges that the purpose of this Agreement is to achieve the management commitments in order to improve the extent and quality of Native Vegetation on the Site in perpetuity, including:
 - (i) for the conservation and enhancement of wildlife habitat;
 - (ii) its natural interest and beauty;
 - (iii) its ecological significance;
 - (iv) bushland, trees and rock formations; and
 - (v) watercourses, lakes, ponds, marshes and other bodies of water.

4 COMMENCEMENT OF THIS AGREEMENT

This Agreement commences on the date referred to in the First Schedule unless otherwise specified.

5 LANDOWNER'S SUCCESSORS TO BE BOUND

This Agreement shall be binding upon the Landowner and the Landowner's successors in title and the provisions of section 72 of the Act shall apply in perpetuity.



6 OBLIGATIONS OF THE LANDOWNER

Management of the Site

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

- 6.1 To complete the Management Actions specified in the Management Plan to the satisfaction of the Secretary, for the purposes of achieving the management commitments, regardless of whether all Credits have been sold to other people. As specified in clause 7.8, where the Landowner has completed the Management Actions specified in the 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.
- 6.2 To allow the Secretary and the Secretary's officers, employees, agents, contractors, invitees and licensees access to, and entry onto the Site on reasonable notice being given to the Landowner.
- 6.3 To be responsible for ensuring that the works required to implement the Management Plan comply with the lawful requirements of any Authority, and with all Acts, regulations and other laws which may be applicable to the Management Plan.
- 6.4 That at all times from the date of Commencement, except in accordance with the Management Plan, it must not:
 - 6.4.1 permit any Native Vegetation (dead or alive) on the Site to be removed, destroyed or lopped;
 - 6.4.2 permit any Native Vegetation (including branches or leaf litter) to be removed from the Site or otherwise interfered with;
 - 6.4.3 apply for a permit under the *Planning and Environment Act* 1987 to remove destroy or lop Native Vegetation from the Site;
 - 6.4.4 permit livestock to enter any part of the Site unless notified in writing by the Secretary that this requirement is waived and then in strict accordance with guidelines and conditions included with that notification:
 - 6.4.5 allow any non-indigenous fauna (including any cat, dog or other domestic animals) to be introduced to the Site, save for up to two dogs which are to be kept under control at all times; or
 - 6.4.6 allow indigenous flora or the habitat or potential habitat of any indigenous fauna to be adversely affected.
- 6.5 That at all times from the date of Commencement, except with the prior written consent of the Secretary, it must:
 - 6.5.1 where internal or external threats to the site are identified, whether stock or human activity, maintain or construct fences and gates between such area and the site in good working order and condition at all times.
 - 6.5.2 prevent the spread of and, as far as possible, eliminate established pest animals in accordance with section 20 of the Catchment and Land Protection Act 1994;
 - 6.5.3 eradicate Regionally Prohibited Weeds and prevent the growth and spread of Regionally Controlled Weeds as required by section 20 of the Catchment and Land Protection Act 1994;
 - 6.5.4 prevent the growth and spread of any other high threat weeds identified in the second Schedule;
 - 6.5.5 prevent the application of fertilizer to any part of the site; and
 - 6.5.6 prevent the establishment and spread of high threat weed species as identified by the Secretary.
- 6.6 Except with the prior written consent of the Secretary, the Landowner must not erect, place nor permit any structure or dwelling to be placed on the Site.
- 6.7 In relation to the Site the Landowner covenants and agrees that except with the prior written consent of the



Secretary, at all times from the date of Commencement it must not:

- 6.7.1 allow (unless required by law) any deterioration in the natural state or in the flow, supply, quantity or quality of any body of water on to or from the Site;
- 6.7.2 allow (unless required by law) any exploration or mining extraction or production of gas, petroleum, minerals or other substances on the Site;
- 6.7.3 allow (unless required by law) any transmission lines or other services or works on the Site;
- 6.7.4 permit the removal, introduction or disturbance of any soil, rocks, or other minerals or the construction of dams other than those already existing on the Site;
- 6.7.5 permit the subdivision of any part of the Site; or
- 6.7.6 permit the operation of any trade, industry or business, the recreational use of trailbikes or four wheel drive vehicles, the accumulation of rubbish or the storage of any materials or any other activities not consistent with the purposes of this Agreement, except with the written consent of the Secretary.

Reporting

- 6.8 That the Landowner covenants and agrees that it must submit a Report to the Secretary within one year after the execution of this Agreement, and every year thereafter for a period of ten years after the execution of this Agreement, and thereafter at the reasonable request of the Secretary.
- That the Landowner must provide the Secretary with 7 days written notice before removing, destroying, lopping or otherwise damaging any native vegetation in the circumstances referred to in clauses 8.1, 8.2 or 8.5.

Credits

- 6.10 In relation to any Credit established, created, issued or otherwise recorded pursuant to this Agreement, the Landowner covenants and agrees that:
 - 6.10.1 the value of any Credit depends on market conditions;
 - 6.10.2 the Secretary makes no promises in relation to the likely market value of a Credit or that any offer will be made to purchase a Credit; and
 - 6.10.3 once the Register is amended to record that a Credit has been traded to another person the Landowner cannot lay any further claim to the value of the Credit.

Indemnity

- 6.11 The Landowner hereby indemnifies the Secretary and agrees to keep the Secretary indemnified from and against all claims, demands, loss or damage which the Secretary may suffer or sustain in respect of:
 - 6.11.1 the death or injury to any person or loss of or damage to property which is attributable to or is the result or consequence of the Secretary's access to the Subject Land or any part of the Subject Land for the purposes of this Agreement or the works and activities for which the Secretary is responsible under the Management Plan except to the extent that any such loss or damage is caused by or is attributable to any negligent act or omission of the Secretary; or
 - 6.11.2 any costs incurred by the Secretary in obtaining any remedy against the Landowner in respect of any contravention of this Agreement.
- 6.12 The Landowner hereby acknowledges and agrees that:
 - 6.12.1 the Secretary is not and will not at any time be construed as the employer or principal of the



Landowner or any employees that the Landowner might have, for the purposes of any Relevant Legislation; and

6.12.2 the Landowner is solely responsible and liable for making any payments in respect of superannuation, payroll or any other tax, WorkCover levy or any similar payments in relation to any employees that the Landowner might have.

7 OBLIGATIONS OF THE SECRETARY

- 7.1. Upon Commencement, the Secretary will record the value of the Available Gain as a Credit on the Register and assign that Credit in favour of the Landowner.
- 7.2. The Secretary will maintain the Register as an accurate record of all Credits issued pursuant to this Agreement which shall be available to be searched by any person who may wish to purchase a Credit from the Register.
- 7.3. The Secretary will allow any Credit to be traded to other persons in accordance with any Credit Trading Agreement and the rules of the Register.
- 7.4. The Secretary will only be bound to make payments to the Landowner to the extent that:
 - 7.4.1 all Credits created pursuant to this Agreement have been purchased through the Register; and
 - 7.4.2 to the extent that monies have been paid to the Secretary in return for the Credits purchased.

For Credits Already Purchased

- 7.5. To the extent that Credits created pursuant to this Agreement have been purchased through the Register as at the date of this Agreement:
 - 7.5.1 the Secretary will make the Initial Payment (as defined in Part A of the Third Schedule) to the Landowner as soon as practicable after Commencement, after receipt of an invoice from the Landowner; and
 - 7.5.2 all subsequent payments other than the Initial Payment will be made annually by the Secretary in accordance with Part A of the Third Schedule. Each payment will be subject to receipt of a Report from the Landowner which is satisfactory to the Secretary.

For Credits Which Are Available for Purchase Via The Register

7.6. Once a Credit which has not been sold by the Landowner as at the date of this Agreement is purchased through the Register and the Secretary holds funds for the benefit of the Landowner, the Secretary will, subject to the receipt of a Report from the Landowner which is satisfactory to the Secretary, make payments on an annual basis to the Landowner in accordance with Part B of the Third Schedule. Once satisfied with the Report, the Secretary will ensure that any back payments are made for services carried out in previous years.

Payments Generally

- 7.7. If satisfied that the Landowner has implemented the Management Plan for a relevant year and otherwise complied with this Agreement, the Secretary will authorise the Landowner to submit an invoice and make payments in accordance with the relevant part(s) of the Third Schedule to the Landowner for the relevant year.
- 7.8. If the Landowner has carried out the Management Plan to the satisfaction of the Secretary, but a commitment



is not achieved for reasons out of the control of the Landowner, the Secretary will not withhold any payment to the Landowner.

8 ACKNOWLEDGMENTS BY THE SECRETARY

The Secretary acknowledges that compliance with the prohibitions and restrictions on vegetation removal specified in this Agreement are waived to the minimum extent necessary in the following circumstances:

- 8.1. To any action which is necessary to keep the whole or any part of any vegetation clear of an electric line provided the action is carried out in accordance with a code of practice prepared under Part 8 of the *Electricity Safety Act* 1998.
- 8.2 To any action necessary to remove, destroy or lop vegetation situated within electricity supply easements in accordance with any code of practice prepared in accordance with Part 8 of the Electricity Safety Act 1998 in order to minimise the risk of bushfire ignition in the proximity of electricity lines.
- 8.3 If the vegetation presents an immediate risk of personal injury or damage to property.
- 8.4 If the removal, destruction, or lopping of vegetation is necessary for fire fighting measures. or
- 8.5 If the removal, destruction or lopping of vegetation is in accordance with a fire prevention notice under:
 - section 65 of the Forests Act 1958; or
 - section 41 of the Country Fire Authority Act 1958.

9 TRANSFER OF LAND

- 9.1 The Landowner must immediately upon transferring title to the Site to another person ('Transferee'), notify the Secretary in writing of the transfer date, and the Transferee's name, address and contact details.
- 9.2 The Secretary will, as soon as reasonably practicable after receiving notification under clause 9.1 make all necessary recordings on the Register to transfer any unsold Credits from the name of the Landowner into the name of the Transferee.
- 9.3 The parties acknowledge that on and from the date that the unsold Credits are registered in the name of the Transferee, the Transferee may trade the unsold Credits in accordance with this agreement and the rules of the Register.

10 DEFAULT

- 10.1 If the Landowner defaults or fails to perform any of its obligations under this Agreement the Secretary may without prejudice to any other remedies vary or terminate this Agreement.
- 10.2 If the Landowner fails to comply with this Agreement and as a consequence of such failure to comply, the ecological condition of the Site is degraded the Secretary may demand the immediate reimbursement for any payments previously made to the Landowner under this Agreement. The Landowner will be liable to compensate the Secretary for the reasonable cost of carrying out works to reinstate the condition of the Site to its condition prior to the relevant contravention of the Agreement, or to achieve an equivalent gain in another location.
- 10.3 If the Landowner fails to comply with this Agreement and as a consequence of such failure to comply, the ecological condition of the Site is degraded the Secretary is entitled to cancel the recording of any Credit on the Register, only to the extent that:
 - the Credit relates to the Available Gain pursuant to this Agreement; and

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- the Credit remains assigned in favour of the Landowner.
- 10.4 The Secretary may enforce any right to compensation which arises under clause 10.2 of this Agreement as a charge which may be registered on the title to the Subject Land.
- 10.5 If the Secretary defaults or fails to perform any of the Secretary's obligations under this Agreement the Landowner may without prejudice to any other remedies apply to the Minister to vary or terminate this Agreement and is entitled to pursue the remedies available under the Act.

11 TERMINATION

- 11.1 The Secretary may terminate this Agreement at any time by notice in writing to the Landowner if the Landowner breaches any of the 'Obligations of the Landowner' as specified in Clause 6 of this Agreement, and is entitled to withhold from the Landowner any outstanding payments under this Agreement.
- 11.2 The Secretary and Landowner may terminate this Agreement at any time by mutual agreement in writing.
- 11.3 In the event that this Agreement is terminated, the Secretary is entitled to cancel the recording of any Credit on the Register, only to the extent that:
 - the Credit relates to the Available Gain pursuant to this Agreement; and
 - the Credit remains assigned in favour of the Landowner.

12 GENERAL

Costs

12.1 Each party shall bear that party's own legal costs in respect to the drafting, execution and stamping of this Agreement.

Service of Notices

- 12.2 Any notice to be served under this Agreement shall be in writing and in English and shall be sufficiently served if sent by registered post addressed to the recipient or left:
 - 12.2.1 In the case of the Secretary at the Secretary's service address specified in the First Schedule;
 - 12.2.2 in the case of the Landowner at the address of the Landowner shown in the First Schedule;
 - 12.2.3 provided that any party may give notice of change of address to the other parties and the changed address so notified shall for the purpose of this clause stand in lieu of the address it replaces as from the date of its notification;
 - 12.2.4 a notice sent by registered post shall be deemed to have been received on the seventh day after its posting.

Variations

12.3 No modification variation or amendment of this Agreement agreed upon by the parties shall be of any force or effect unless such modification, variation or amendment is in writing and has been executed by all parties.

No waiver

12.4 Any time or other indulgences granted by the Secretary to the Landowner or any other variation of the terms



and conditions of this Agreement or any judgment or order by the Secretary against the Landowner will not in any way amount to a waiver of any rights or remedies of the Secretary in relation to the terms of this Agreement.

Severability

12.5 If a court, arbitrator, tribunal or other competent authority determines that a word, phrase, sentence, paragraph or clause of this Agreement is unenforceable, illegal or void, then it shall be severed and the other provisions of this Agreement shall remain operative.

Governing Law

12.6 This Agreement shall be subject to and construed in accordance with the laws of the State of Victoria.



Executed as a Deed

The Official Seal of the Secretary to the Department of Environment, Land, Water and Planning a body corporate established under the Conservation, Forests and Lands Act 1987 was affixed

on: /-/_/_/2015

by: Peter Betson, Executive Director, Environme

Peter Betson, Executive Director, Environment and Landscape Performance, Land Fire and Environment, pursuant to an instrument of delegation dated 25th November 2014



SIGNED, SEALED AND DELIVERED by

in the presence of:

Mortgagee's Consent

as Mortgagee of registered mortgage numbers consents to the Owner entering into this Agreement for the purposes of section 77 of the *Transfer of Lands Act* 1958 and if the Mortgagee or an External Administrator (includes a liquidator, receiver and manager, trustee, provisional liquidator, liquidator or any other person (however described) holding or appointed to an analogous office or acting or purporting to act in an analogous capacity) enters into possession of the Site, it will not be responsible for any liability of the Landowner in connection with this Agreement arising prior to the date it enters into possession of the Site or while it is in possession of the Site or after the date it ceases to be in possession of the Site.

AGRIBUSINESS MANAGER



FIRST SCHEDULE

AGREEMENT DETAILS

Commencement and termination

Date of Commencement of Agreement: 4 day of CTOBER 2015

Secretary's Service Address

Name (or) Title of Office	The Secretary Department of Environment, Land, Water and Planning
Address	Level 2 – 8 Nicholson Street, EAST MELBOURNE VICTORIA 3002
Telephone / Mobile	136 186

The Landowner

Name of Landowners	
Mailing Address	
Contact name of person who should receive correspondence	

Details of land within which the Agreement applies

Property name	
Property Address	Boort-Kurting Road, Fiery Flat VIC 3518



Description of land to which the Agreement applies

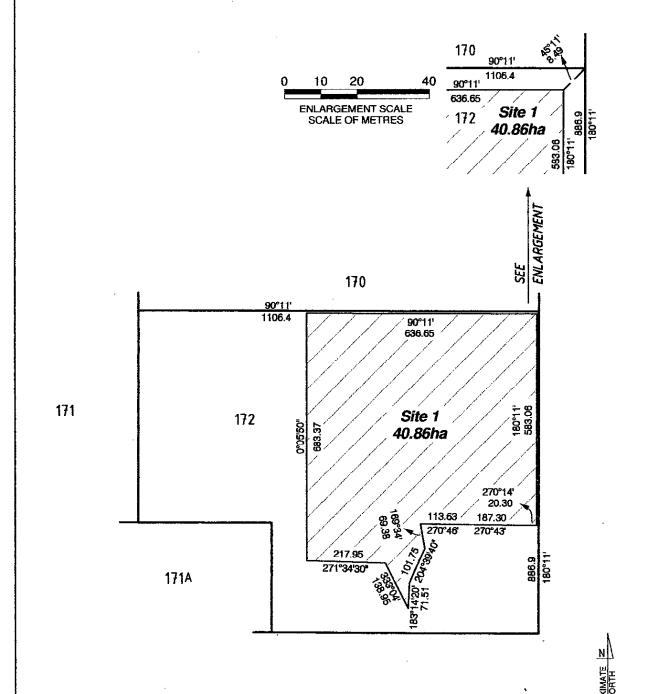
Site: BB-2835-01

Part of the land in Certificates of title set out on the Attached Plan

Volume	Folio	Parish	Area
02728	487	Kinypanial	40.86 ha
Allotment			
Crown Allotment 172 Paris			

BUSHBROKER SITE PLAN BB-2835-01





PLAN FOR AGREEMENT PURSUANT TO s.69 CONSERVATION FORESTS & LAND ACT 1987

400

LEGEND
BushBroker Site
BB-2835-01

100

200

SCALE OF METRES



Prepared By - Price Merrett Consulting (03 5032 3685)

Date - 07/08/2015

PARISH OF KINYPANIAL

TITLE REF: VOL 02728 FOL 487

PLAN REF: LOT 172 TP527408Q

SHEET 1 OF 1

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SECOND SCHEDULE

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Management Plan for Credit Site [BB-2835/LA01]

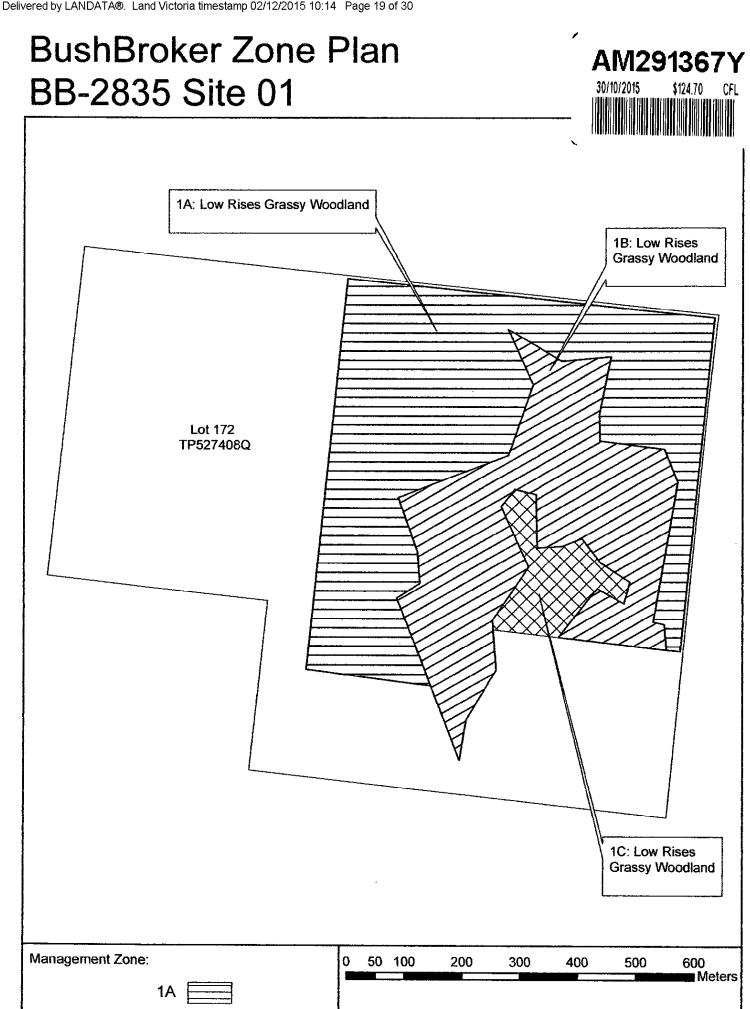
MANAGEMENT PLAN 1

Credit Site Details

Address of credit site	Boort-Kurting Road, Fiery Flat 3518
Land tenure	Freehold
Assessor details	
Site assessor	Greg Waddell
Assessment date	17th & 18th June 2015
Credit details	
Credit identifier	BB-2835
Number of sites(s)	1
Number of zone(s)	3
Total area of sites (ha)	40.87
Asset type	Protection of remnant vegetation

Habitat zone details	Charles of the Control of the Contro		
Asset Type *	RP	RP	RP
Habitat zone number	01A	01B	01C
Habitat zone area (ha)	22.99	15.16	2.72

^{*}Asset type = RP = Remnant Patch; ST = Scattered Tree



Prepared by Greg Waddell Accredited DELWP Agent

30/06/2015

Ν



Management Plan for Credit Site [BB-2835/LA01]

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			
Habitat zone(s)	Commitment			
All	 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. 			
All	retain all standing trees (dead or alive) retain all logs and fallen timber exclude stock.			



Management Plan for Credit Site [BB-2835/LA01]

10 year management commitments

Erosion Control

Minor erosion is occurring in three areas along the drainage lines in zone A, and in the southern end of the drainage line in zone 1B. There is more severe erosion encroaching into the northeast corner of zone 1A. Monitor erosion on the site especially after heavy rains or flooding. Where possible, prevent head erosion from spreading beyond current levels. Refer to your Local Catchment Management Authority for advice on erosion control.

Fencing

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.

Stock proof fencing exists along the northern, eastern, and western boundaries of the property where threats from stock are present or possible.

There is no fencing along the eastern two thirds of the southern boundary as this boundary adjoins a road reserve and the property to the south which is under the same ownership and managed for biodiversity. There are no stock threats from this boundary.

Stock proof fencing is present along the northern end of the eastern boundary inside the actual property boundary. Remove this fence and repair the fencing along the northern section of the eastern boundary of the property to stock proof condition. Fencing is to be completed within 3 months of signing the Agreement. Refer to Table 1 for details of fencing location and timing.

Where fencing exists or is required, ensure all fencing around the perimeter of the site 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
Site 1	Remove current fencing which is inside the property boundary.	Northern two thirds of the eastern boundary 700 m	Within 3 months of commencement of the agreement
Site 1	Upgrade fencing along the eastern boundary of the property according to the standards detailed in information sheet 12 * Standards for Management – Fencing.	Northern two thirds of the eastern boundary - approx. 700 m	Within 3 months of commencement of the agreement
All Sites	Maintain fencing around boundary of all sites in good condition according to the standards detailed in information sheet 12 * Standards for Management – Fencing.	Entire boundary around all sites 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 [BB-2835/LA01]

Woody weeds

Elimination of all woody 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	Habitat zone(s)	Method	Timing
African Boxthorn	Lycium ferocissimum	1A	Cut and Paint with appropriate herbicide, or spot spray where damage to native vegetation can be avoided.	Spring/Summer
Prickly Pear/Wheel Cactus	Opuntia robusta	1A	Plants are small enough to spot spray or be hand pulled and removed from the site.	Spring
		Ali	Monitor and eliminate all new and emerging woody weeds	Ongoing



Management Plan for Credit Site [BB-2835/LA01]

Herbaceous weeds

Control of all herbaceous weeds:

Ensure that weed cover does not increase beyond current levels. Weeds listed in Table 3 were found on site and are considered to be a high threat. 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 3. 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: Herbaceous weeds to be controlled - method and timing

Common name	Scientific name	Habitat zone(s)	Method	Timing
Patersons Curse	Echium plantagineum	All	Spot Spray	Autumn/Winter
Gazania	Gazania linearis	1A,1B	Spot Spray	Winter/Spring
Flatweed/Cat's Ear	Hypochaeris radicata	All	Spot Spray	Winter/Spring
Rats-tail Fescue	Vulpia myuros	All	Spot Spray	Winter/Spring
Bulbous Meadow Grass	Poa bulbosa	All	Spot Spray	Autumn/Winter
Subterranean Clover	TrifoEum subterraneum	Ali	Spot Spray	Winter/Spring
Peppercress	Lepidium africanum	1A,1B	Spot Spray/Chip	Winter/Spring
Soft Brome	Bromus hordeaceus	All	Spot Spray	Winter/Spring
Spear Thistle	Cirsium vulgare	All	Spot Spray/Chip	Winter/Spring
Saffron Thistle	Cathamus lanatus	All	Spot Spray/Chip	Winter/Spring
Capeweed	Arctotheca calendula	Ali	Spot Spray	Winter/Spring
Storks Bills	Erodium sp.	All	Spot Spray	Winter/Spring

Table 4: Total cover of herbaceous weeds in the Habitat Zone

Habitat zone(s)	Total cover of all herbaceous weeds (%) (including GS Target weeds)
1A	23%
18	30%
1C	23%



Management Plan for Credit Site [BB-2835/LA01]

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.

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 any rubbish including old fencing wire. 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 5: Pest animals to be controlled - species, method and timing

Habitat zone(s)	Common name	Method	Timing
Ali	Rabbits & Foxes	Furnigation and hand collapse of rabbit burrows and fox dens	Ongoing
Ail	Rabbits	Baiting – concentrate efforts in Summer/Autumn	Ongoing
All	Rabbits	When bailing, collect and dispose of carcasses to prevent poisoning of native predators.	Ongoing
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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Management Plan for Credit Site [BB-2835/LA01]

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.

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Table 6: Management Actions Table

Year from Commencement: Year 1

00	real from Commencement, real f			
Habitat zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
Fencing				
Site 1	Remove current fencing which is Inside the eastern edge of the property boundary.	Table 1	Within 3 months of commencement of the agreement	Erect fencing to DELWP fencing standards in BushBroker Information Sheet 12 - Standards for Management Fencing
Site 1	Upgrade fencing along the eastern boundary of the property according to the standards detailed in information sheet 12 * Standards for Management - Fencing.	Table 1	Within 3 months of commencement of the agreement	Upgrade to DELWP fending standards in BushBroker information Sheet 12 - Standards for Management – Fending
All Sites	Maintain fencing in good condition eround entire boundary of all sites where fencing exists or is required	Table 1	Ongoing	Maintain fencing to DELWP fencing standards in BushBroker Information Sheet 12 - Standards for Management – Fencing
Woody Weeds	ods			
¥	Eliminate all woody weeds. Refer to Table 2 for ilst of woody weeds, their control method and timing of actions Monitor for any re-sprouting or seedlings and eradicate (either spot spray or hand	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)
	AMILE AMERICAN PROPERTY OF THE	olejkingdikkinjetjajajajakanementeritko ilianiritiio	production a programme particular speciment and a straightful to	
Ą	Eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds at the end of Year 10
Herbaceous Weeds		ericken i Neiskelm i Prijedije ja se prijedije	Tokashiran dagan samanan taka kabu taga mamanan katak samala taga kabunda dagan dagan dagan dagan dagan dagan d	AND THE PROPERTY AND AND THE PROPERTY AND AND THE PROPERTY AND THE PROPERT
All	Control all herbaceous weeds. Refer to Table 3 for list of herbaceous weeds, their control method and timing of actions	Tables 3 & 4	Refer to Table 3	No increase in cover beyond the cover listed in Table 4 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	Eliminate all new & emerging herbaceous waeds	n/a	Ongoing	<1% cover of all new and emerging herbaceous weeds at the end of Year 10
Pest Animals		PRACUMATION OF THE PROPERTY OF	en de la compa de la companya de la	
A	Control rabbits and foxes. Refer to Table 5 for a list of control methods and timing	Table 5	Refer to Table 5	No surface disturbance within the credit site
	or actions			No active rabbit warrens to be present
				No active fox dens to be present
		ATTACAMENTALISMENT OF THE STREET OF THE STRE	And the second second of the second s	NO TUDDISTA

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Management Plan for Credit Site [BB-2835/LA01]

Year fr	Year from Commencement: Year 1			
Habitat zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
				Minimal artificial piles of logs and rocks
A	Monitor and control rabbits and foxes	n/a	Ongoing	Control numbers of rebbits and toxes
All	Monitor and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Annual reporting	porling			
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 [BB-2835/LA01]

Year from Commencement: Years 2 - 10

Habitat zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
Fencing				
All Sites	Maintain fencing in good condition around entire boundary of the property where fencing exists or is required	Table 1	Ongoing	Maintain fencing to DELWP fencing standards in BushBroker Information Sheet 12 - Standards for Management - Fencing
Woody Weeds				
All	Monitor for any re-sprouting or seedlings of woody weeds 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	Eliminate all new & emerging woody weeds	n/a	Ongoing	<1% cover of all woody weeds at the end of Year 10
Herbaceous Weeds		A CHAIN AND AN	d deficies and tendescondings - bein serial manages of the consistent of paging	
A	Control all herbaceous weeds. Refer to Table 3 for list of herbaceous weeds, their control method and timing of actions	Tables 3 & 4	Refer to Table 3	No Increase in cover beyond the cover listed in Table 4 for each Zone for all herbaceous weeds Minimise off-target damage (avoid all native plants)
All	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	Control rabbits and foxes. Refer to Table 5 for a list of control methods and tirning of actions	Table 5	Refer to Table 5	No surface disturbance within the credit site No active rabbit warrens to be present No active fox dens to be present No rubbish Manmal artificial niles of tone and move
A	Monitor and control rabbits and foxes	n/a	Ongoing	Control numbers of rabbits and foxes
Ali	Monitor and control all new and emerging pest animals	n/a	Ongoing	Control numbers of any new & emerging pest animals
Annual reporting	orting	A THE STREET AND ASSOCIATION OF THE STREET ASSOCIATION OF THE STREET, AND ASSOCIATION OF THE	- Natural de Antonio de Constante de Antonio de Constante	
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

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Management Plan for Credit Site [BB-2835/LA01]

Year fro	from Commencement: Years 2 - 10			
Habitat zone(s)	Management Action Description	Reference Table for action	Timing	Standard to be achieved
				20108
				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



THIRD SCHEDULE

Secretary's Commitment

Schedule of payments - Remnant Vegetation

Zones: BB-2835 1A, 1B, 1C

(A) For Credits purchased and funds held for the benefit of the Landowner as at the date of this Agreement

NB: the Total equals the amount of money paid to the Register and held by the Secretary for the benefit of the Landowner, subject to this Agreement.

Initial Payment on Commencement of the Agreement (Init	25% of the Total tial Payment)
At the end of the first year	10% of the Total
At the end of the second year	5% of the Total
At the end of the third year	10% of the Total
At the end of the fourth year	10% of the Total
At the end of the fifth year	5% of the Total
At the end of the sixth year	5% of the Total
At the end of the seventh year	10% of the Total
At the end of the eight year	5% of the Total
At the end of the ninth year	5% of the Total
At the end of the tenth year	10% of the Total

(B) For Credits which remain available for sale by the Landowner as at the date of this Agreement (Remaining Credits)

NB: The value of the Remaining Credits equals the price for which the relevant Credits are sold by the Landowner via the Register, as recorded in the Register and held by the Secretary for the benefit of the Landowner subject to this Agreement.

At the end of the first year	No more than 35% of the value of the remaining credits
At the end of the second year	No more than 5% of the value of the remaining credits
At the end of the third year	No more than 10% of the value of the remaining credits
At the end of the fourth year	No more than 10% of the value of the remaining credits
At the end of the fifth year	No more than 5% of the value of the remaining credits
At the end of the sixth year	No more than 5% of the value of the remaining credits
At the end of the seventh year	No more than 10% of the value of the remaining credits
At the end of the eighth year	No more than 5% of the value of the remaining credits
At the end of the ninth year	No more than 5% of the value of the remaining credits
At the end of the tenth year	No more than 10% of the value of the remaining credits



Appendix 3 Department of the Environment and Energy **EMP Guidelines Risk Framework**

Risk Framework

				Consequence		
		Minor	Moderate	High	Major	Critical
	Highly Likely	Medium	High	High	Severe	Severe
pod	Likely	Low	Medium	High	High	Severe
Likelihood	Possible	Low	Medium	Medium	High	Severe
Like	Unlikely	Low	Low	Medium	High	High
	Rare	Low	Low	Low	Medium	High

Likelihood

Qualitative measure of likelihood (how likely is it that this event/circumstances will occur after management actions have been put in place/are being implemented

Highly Likely	Is expected to occur in most circumstances
Likely	Will probably occur during the life of the project
Possible	Might occur during the life of the project
Unlikely	Could occur but considered unlikely
Rare	May occur in exceptional circumstances

Consequence

Qualitative measure of consequences (what will be the consequence / result if the issue does occur)					
Minor	Minor incident of environmental damage that can be reversed				
Moderate	Isolated but substantial instances of environmental damage that could be reversed with intensive efforts				
High	Substantial instances of environmental damage that could be reversed with intensive effort				
Major	Major loss of environmental amenity and real danger of continuing				
Critical	Severe widespread loss of environmental amenity and irrecoverable environmental damage				



Appendix 4 **Glossary**

This appendix contains definitions of technical terms used in this OMP.

Items marked with an asterisk (*) are cited from DELWP (2007b)

Benchmark*

A standard vegetation –quality reference point, dependent on vegetation type, which is applied in Habitat hectare assessments. Represents the average characteristics of a mature and apparently long undisturbed state of the same vegetation type.

Biodiversity*

The variety of all life forms, the different plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part.

Bioregion*

Biogeographic areas that capture the patterns of ecological characteristics in the landscape or seascape, providing a natural framework for recognising and responding to biodiversity values. A landscape based approach to classifying the land surface using a range of environmental attributes such as climate, geomorphology, lithology and vegetation.

BushBroker

A program coordinated by DELWP to match parties that require native vegetation offsets with third party suppliers of native vegetation offsets.

DBH (Diameter at Breast Height)*

The diameter of the main trunk of a tree measured 1.3 m above ground level.

Ecological vegetation class (EVC)*

A native vegetation type classified on the basis of a combination of its floristic, life form, environmental and ecological characteristics.

EPBC Act

Environmental Protection and Biodiversity Conservation Act 1999

Gain

Predicted improvement in the contribution to Victoria's biodiversity achieved from an offset, calculated by combining site gain with the strategic biodiversity score or habitat importance score of the site. Gain is measured with biodiversity equivalence scores or units.

Habitat hectares*

Combined measure of condition and extent of native vegetation. This measure is obtained by multiplying the site's condition score (measured between 0 and 1) with the area of the site (in hectares).

Habitat score*

The score assigned to a habitat zone that indicates the quality of the vegetation relative to the ecological vegetation class benchmark – sum of the site condition score and landscape context score, usually expressed as a percentage or on a scale of 0 to 1.

Habitat zone*

A discrete area of native vegetation consisting of a single vegetation type (EVC) within an assumed similar quality. This is the base spatial unit for conducting a Habitat hectare assessment. Separate Vegetation Quality Assessments (or Habitat hectare assessments) are conducted for each habitat zone within the designated assessment area.

Improvement gain*

This is gain resulting from management commitments beyond existing obligations under legislation to improve the current vegetation quality. Achieving improvement gain is predicated on maintenance commitments being already in place. For example, control of any threats such as grazing that could otherwise



damage the native vegetation must already be agreed.

Indigenous vegetation*

The type of native vegetation that would have normally been expected to occur on the site prior to European settlement.

Large Old Tree (LOT)*

A tree with a DBH equal to or greater than the large tree diameter as specified in the relevant EVC benchmark.

Offset*

Protection and management (including revegetation) of native vegetation at a site to generate a gain in the contribution that native vegetation makes to Victoria's biodiversity. An offset is used to compensate for the loss to Victoria's biodiversity from the removal of native vegetation.

Offset Management Plan (OMP)

A document which sets out the requirements for establishment, protection and management of an offset site.

Revegetation*

Establishment of native vegetation to a minimum standard in formerly cleared areas, outside of a remnant patch.

Scattered tree*

An indigenous canopy tree that does not form part of a remnant patch of native vegetation (see definition of remnant patch of native vegetation).

Site

An area of land that contains contiguous patches of native vegetation or scattered trees, within the same ownership.

Site gain

Predicted improvement in the condition, or the condition and extent, of native vegetation at a site (measured in Habitat hectares) generated by the landowner committing to active management and increased security.

Recruitment*

The production of new generations of plants, either by allowing natural ecological processes to occur (regeneration etc.), by facilitating such processes such as regeneration to occur, or by actively revegetating (replanting, reseeding). See Revegetation.

Remnant vegetation*

Native vegetation that is established or has regenerated on a largely natural landform. The species present are those normally expected in that vegetation community. Largely natural landforms may have been subject to some past surface disturbance such as some clearing or cultivation (or even the activities of the nineteenth century gold rushes) but do not include manmade structures such as dam walls and quarry floors.

Supplementary planting

Establishment of overstorey and/or understorey plants within a remnant patch. Typically includes the planting or direct-seeding of understorey life forms.

Understorey*

Understorey is all vegetation other than mature canopy trees - includes immature trees, shrubs, grasses, herbs, mosses, lichens and soil crust. It does not include dead plant material that is not attached to a living plant. More information on understorey life forms is set out in the Vegetation Quality Assessment Manual (DSE 2004).

Victoria Planning Provisions

A list of planning provisions that provides a standard template for individual planning schemes.

