[redacted]

Plan EPBC Act Referral 2019/8569 Western Outer Ring Main (WORM) high pressure gas transmission pipeline from Plumpton to Lindum Vale, Victoria

Report prepared for APA VTS AUSTRALIA (OPERATIONS) PTY LIMITED

[redacted]

Contents

Executive Summary

[redacted] was commissioned by APA VTS AUSTRALIA (OPERATIONS) PTY LIMITED to prepare an Offset Management Plan (OMP) for the [redacted] for the Western Outer Ring Main pipeline project. The proposed action is *to construct and operate the Western Outer Ring Main (WORM) high pressure gas transmission pipeline between Plumpton and Lindum Vale,* [redacted] *[See EPBC Act referral 2019/8569 subject to the variation of the action accepted by the Minister under section 156B on Wednesday, 21 April 2021]* and was approved by DCCEEW on 24 June 2022.

The Approval Decision contains a requirement for an Offset Management Plan (OMP) for the [redacted] (Condition 3) to be submitted to the Department for the Minister's approval. The [redacted] is one of two offset sites required to meet the overall offset requirement for impacts to the protected matter *Grassy Eucalypt Woodland Victorian Volcanic Plain* (GEWVVP).

Specifically, the [redacted] contributes 64% of the overall offset requirement for the proposed removal of 2.09 hectares of GEWVVP, as outlined in the EPBC Act Offset Strategy that formed part of the Preliminary Documentation for the Approval.

The purpose of this Offset Management Plan is to describe how APA VTS AUSTRALIA (OPERATIONS) PTY LIMITED (APA) will meet approval Condition 3 for the provision of Environmental Offsets under the approval conditions for Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) referral number **EPBC 2019/8569 Western Outer Ring Main (WORM) high pressure gas transmission pipeline from Plumpton to Lindum Vale, Victoria**, as amended on 7 November 2023.

In summary, this condition will be met by purchasing an area of unsold Native Vegetation Credits within an existing Victorian State S.69 Offset Site [redacted] is provided as an associated document. The [redacted] Victoria, 165 kilometres west of the development site.

The management commitments and methods in this OMP come directly from the [redacted] with management for improvement focussed around control of weeds and pest animals, excluding stock, controlling erosion and macropod grazing, and excluding human impacts.

1. Introduction

1.1 Approval Conditions

Condition 3 will be met within a 6.1ha area of the existing Victorian State offset site [redacted] An EPBC Act Offset Strategy prepared by GHD and APA identified that the [redacted] would meet 64.3% of the overall offset for the protected matter *Grassy Eucalypt Woodland Victorian Volcanic Plain* (GEWVVP).

Table A: Conditions of approval reference table

Ref	Cond.	Condition Requirement	Plan reference	**Demonstration of how the plan addresses condition requirements and key commitments made in the plan to address condition requirements**
1	3(a)	A summary of the residual impacts to **GEWVVP** that will be compensated for by the **Ararat-Dobie Site**. This summary must include the extent of **GEWVVP** and its **condition** at all impact sites which the [redacted] is to address.	1.2 Impacts to GEWVVP	GEWVVP 2.09 ha at quality 4/10 with further information already provided in the approved Offset Strategy
2	3(b)	A reference to the **EPBC Act** approval conditions to which the [redacted] refers.	Table A	The relevant protected matter is *Grassy Eucalypt Woodland Victorian Volcanic Plain* (GEWVVP). The [redacted] refers to Condition 3 of the EPBC Act approval.
3	3(c)	Measures that will be implemented to achieve the ecological benefits for **GEWVVP** and the timing and effort to be applied to these measures.	2. Objectives and **Commitments** 7. Management Action Table [redacted]	[redacted] already in place providing in perpetuity legal protection which details monitoring and control of all threats, resulting in native vegetation and habitat improvement.

Ref	Cond.	Condition Requirement	Plan reference	**Demonstration of how the plan addresses condition requirements and key commitments made in the plan to address condition requirements**
4	3(d)	A table of commitments made in the [redacted] to achieve the objectives, and a reference to where the commitments are detailed in the [redacted]	2. Objectives and **Commitments** 3. Management Commitments and Actions 7. Management Action Table [redacted] 11th May 2020 [redacted]	Commitments to control all threats to native vegetation noted in OMP, with additional detail around erosion management provided in separate EMP.
5	3(e)	The reporting and review mechanisms, and documentation standards that will be implemented to inform others annually regarding compliance with management and environmental commitments, and attainment and maintenance [redacted]	2.3 Reporting 4. Environmental Monitoring 5. Audit and Review [redacted]	Annual reporting required to be submitted by Landholder to DEECA and DCCEEW detailing all monitoring and management of offset site and to be overseen by a suitably qualified ecologist.
6	3(f)	An assessment of risks to achieving the ecological benefits and risk management strategies that will be applied to address these.	6. Risk Evaluation	Information on risk levels and risk management strategies provided in the OMP.

Ref	Cond.	Condition Requirement	Plan reference	**Demonstration of how the plan addresses condition requirements and key commitments made in the plan to address condition requirements**
7	3(g)	A monitoring program, which must include: (i) evidence that effectively determine progress towards, attainment of and maintenance of the ecological benefits for the **GEWVVP** (ii) measurable performance indicators to monitor attainment of the ecological benefits for the **GEWVVP** (iii) trigger values for corrective actions (iv) the timing and frequency of monitoring capable of detecting trigger values and changes in the performance indicators (v) proposed corrective actions, if trigger values are reached.	4. Environmental Monitoring 5. Audit and Review [redacted]	Annual Reporting by Landholder to DEECA and DCCEEW required. DEECA also conduct monitoring site assessments to monitor Agreement at least 3 times in 10 years and ongoing beyond Year 10. Trigger values assessed by DEECA annually based on Landholder Annual Report and from monitoring site assessments for compliance. DEECA holds all credit trade money and pays back to Landholder over 10 years. Corrective actions specified by DEECA and annual payments withheld until Landholder is compliant or alternatively, extension of 10 year end date may be applied, or DEECA may use Landholder funds to carry out management.
8	3(h)	Proposed corrective actions to ensure ecological benefits for the **GEWVVP** are attained or maintained, if trigger values are reached or performance indicators not attained	As above	As above
9	3(i)	Links to referenced plans and applicable conditions of approval (including State approval conditions) if any.	8. References 9. Appendices	All relevant referencing provided in References or Appendices sections

1.2 Impacts to GEWVVP

The project was found to impact 2.09ha of GEWVVP as outlined in the approved Offset Strategy (April 2022).

Offsets for impacts to 2.09 hectares of GEWVVP will be provided across two sites:

- The [redacted] – 64% of the overall requirement achieved across 6.1 hectares, and
- The [redacted] – 36% of the overall requirement achieved across 4.7 hectares.

The calculations behind the determination of the area of the [redacted] are provided in the Offset Strategy.

[redacted]

[redacted] is a very large freehold grazing property approximately 10km east [redacted] There is an [redacted] in the northeast corner of the property adjacent to the [redacted]

[redacted]

This 6.1-hectare Commonwealth Offset area meets the diagnostic characteristics required to qualify as GEWVVP as noted in the EHP report '*Vegetation Assessment of GEWVVP, Western Hwy, Dobie, Victoria', 22nd April 2022*, summarised as:

- *The patch occurs within the Victorian Volcanic Plain* - yes
- *The site occurs on Quarternary basalt soils on low elevation plains* – yes VVP
- *The site is a native remnant dominated by native species* – Red Gum canopy with shrub layer of species such as Black Wattle, Varnish Wattle, Hedge Wattle, Hop Bush, over 20 native herb species, several native graminoid species and briophytes and soil crust
- *The projected foilage cover of native trees in the patch is more than 5%* - Native tree cover is 20%
- *The ground vegetation layer is dominated by native grasses, forbs and other herbs and small shrubs* – Yes
- *The patch is bigger than 0.5ha* – Patch size is 6.1ha
- *50% or more of the perennial ground layer vegetation comprises native species* – Perennial ground layer vegetation dominated by native grasses such as Wallaby grasses (Rytidosperma spp.) and Spear Grasses (Austrostipa spp.) Very few perennial weeds present (Perennial Rye, Yorkshire Fog and Cat's Ear).

The Commonwealth Offset area is dominated by a River Red Gum canopy which has an abundance of Large and Very Large Old Trees which are generally below full health with some dead large trees present. There is an abundance of canopy cover due to a recruitment

event many years ago that established several stems of Red Gum that have now reached canopy height. Organic Litter therefore is also above recommended Benchmark levels. The canopy cover is variable with some open areas, and some denser sections. Due to the high numbers of large old trees there is a good cover of logs, and whilst there are a few large logs present, they are under Benchmark expectations. There is a scattered cover of small and medium shrubs, mainly dominated by Acacia species, with Black Wattle the only Understorey Tree which provides added structural complexity. There is a broad diversity of herbs and grasses, with over 23 herbs observed, although their cover is well below Benchmark levels. There are over 16 grasses/sedges/rushes with a reasonable cover, but less than half Benchmark levels. Briophytes and Soil Crust are present with good cover, and High Threat weeds are at low levels. There is a significant cover and diversity of annual low threat weeds.

1.3.1 Offset Area Baseline Condition

The Quality (measured out of 10) of the GEWVVP within the offset site was 6.3 at the time of the State Offset assessment (Based on VQA Habitat Hectare Scoring), and 6.1 based on condition score alone.

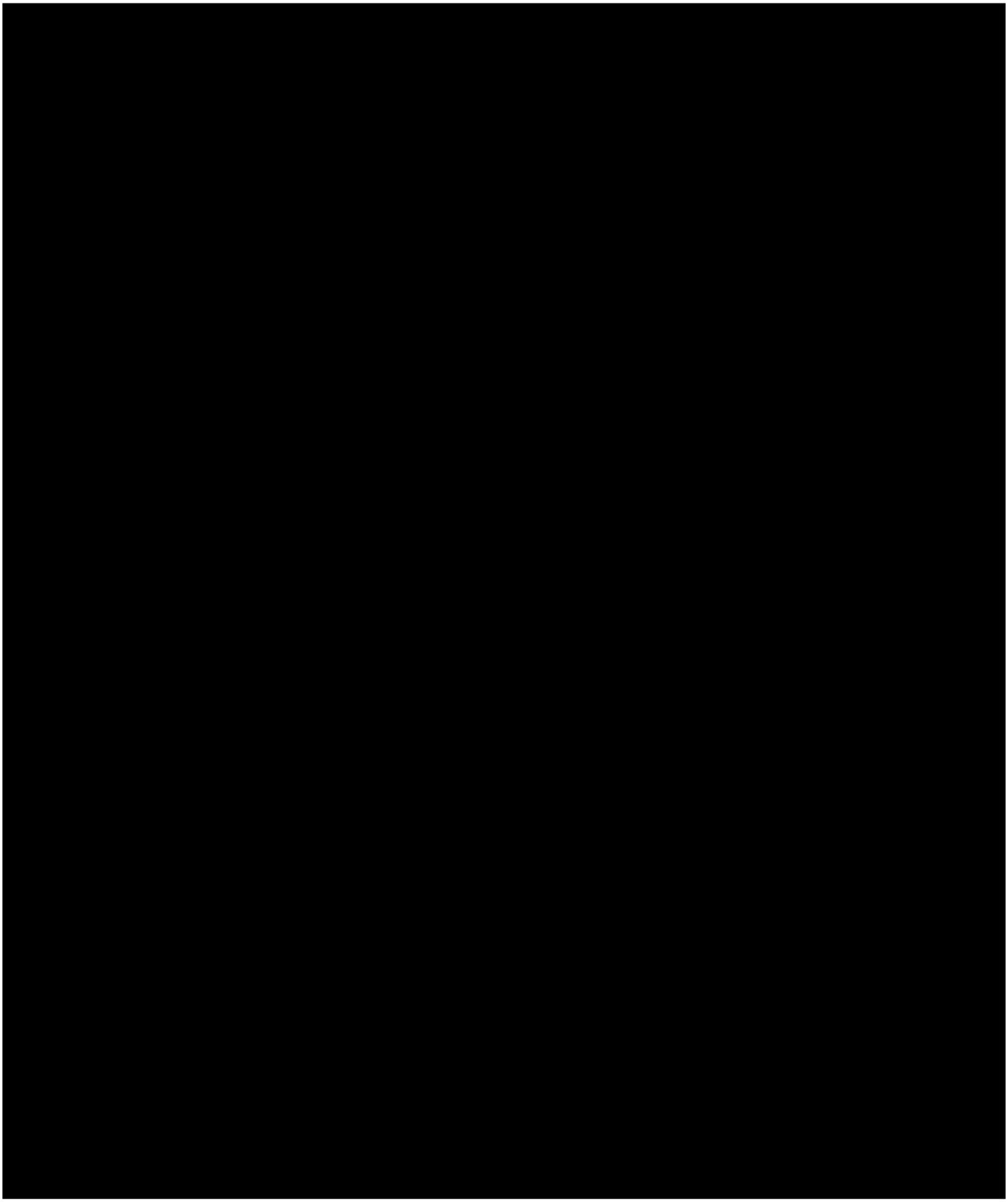
The vegetation condition of the Offset area was assessed using the Habitat Hectares method (Parkes et al. 2003) by [redacted] in November 2019, and received a score of 63 out of 100 (as assessed against the Plains Grassy Woodland EVC benchmark). This is a high score for native vegetation that has been subject to agricultural disturbance and gives a rounded Quality score of 6 out of 10.

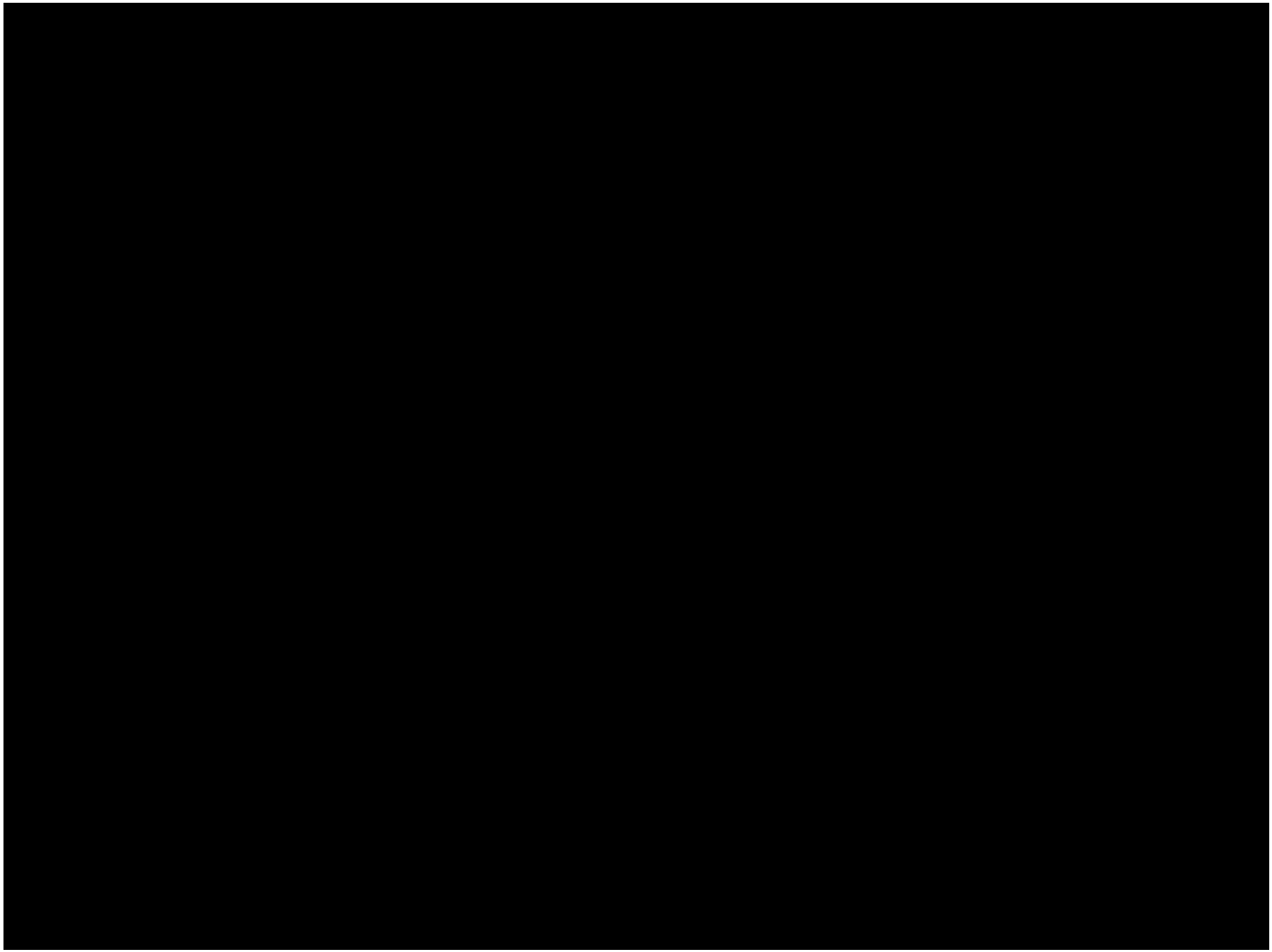
Table B: Original Habitat Hectare Scoring

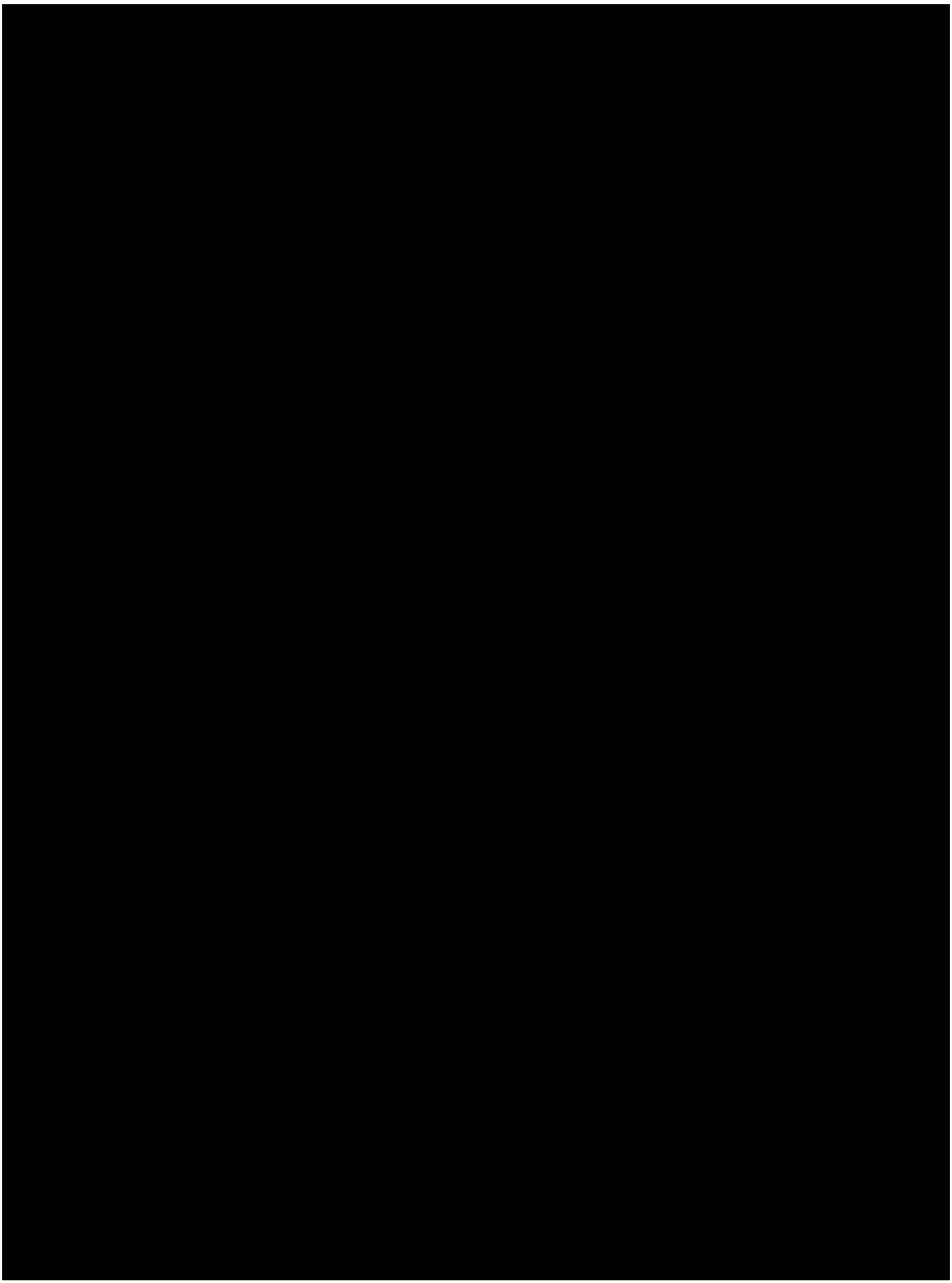
Habitat scoring	Original Scoring
Large trees	9
Tree canopy cover	2
Understorey	20
Lack of weeds	2
Recruitment	6
Organic litter	3
Logs	4
Site condition (/75)	**46**
Landscape context (/25)	17
Habitat score (/100)	**63**

Table C: Ecological Vegetation Classes, their conservation status and habitat score (State zones of Federal Offset Site) (*P = Native Vegetation Patch)

Habitat zone(s)	Asset Type*	Area (ha)	Bioregion	Ecological Vegetation Class (EVC)	EVC number	Conservation status	Habitat score	# of Large Trees	Species of Large/Medium Trees in zone (scientific name)
9B	P	0.9153	Victorian Volcanic Plain	Plains Grassy Woodland	0055_61	E	0.63	13	*Eucalyptus camaldulensis* *Eucalyptus melliodora*
9C	P	0.9033	Victorian Volcanic Plain	Plains Grassy Woodland	0055_61	E	0.63	8	*Eucalyptus camaldulensis* *Eucalyptus melliodora*
11A	P	3.3232	Victorian Volcanic Plain	Plains Grassy Woodland	0055_61	E	0.63	57	*Eucalyptus camaldulensis* *Eucalyptus melliodora*
12A	P	0.9582	Victorian Volcanic Plain	Plains Grassy Woodland	0055_61	E	0.63	17	*Eucalyptus camaldulensis* *Eucalyptus melliodora*







1.3.2 Expected Quality Improvement with Offset

Quality improvement will be measured using the Victorian Vegetation Quality Assessment method (the 'Habitat Hectares' method) which generates a score out of 100 (Site Condition Score out of 75), converted to a score out of 10 for the EPBC Act Offsets Assessment Guide. Improvement is expected to come through purposeful management which includes pest plant and animal control, erosion control, native animal grazing control, and removal of stock. A summary of improvement is provided below:

• Large Old Trees scored 9 (out of 10) with possible improvement of 1 for improved Health (currently 30-70% to become >70%). Current Large Old Tree numbers are well above Benchmark levels.

• Canopy scored 2 (out of 5) with possible improvement of 1 for improved Health (currently 30-70% to become >70%). The current canopy cover (20%) is above Benchmark levels of 10% due to denser levels of less mature trees, so improvement in actual cover is unlikely to be achieved.

• Understorey scored 20 (out of 25) with possible improvement of 5 coming from improved cover in Medium Tufted Graminoids (increase cover from 15% to above 23%) and Medium Herbs (increase cover from 3% to above 8%) which are currently modified due to low cover. All Understorey lifeforms are present.

• Recruitment scored 6 (out of 10) with a possible improvement to 10. Currently 4/8 woody species show recruitment (including canopy) and 2 extra species are required to improve the score (6/8). Likely additional species are Hopbush, , Hedge Wattle, and Prickly Moses (Heath on site unlikely to recruit).

• Organic Litter scored 3 (out of 5) due to an overabundance of litter (30% vs 10% Benchmark). Improvement in OL score is unlikely without burning management.

• Lack of Weeds scored 2 (out of 15) with possible improvement to 6. Although High Threat weeds are only 2%, it is unlikely they will be eliminated totally, so improvement is most likely to come from a change in Low Threat weed cover from 52% to below 50%. It is unlikely Low Threat weed cover will get below 25% to score 9.

• Logs scored 4 (out of 5) with Large Logs below Benchmark levels (18m out of required 25m). An improvement of 1 is possible but not reliable unless more large logs fall.

• The Landscape score is not influenced by on-site management actions and so is not expected to change of the 10-year management period.

The Habitat Hectares scoring that can be expected to be achieved at the end of the 10-Year management period is shown below in Table D: 'Completion Criteria'. Note that the confidence in achieving the highest possible score is too low for this to be the required amount of improvement and still meet the confidence requirements. Site Condition Scores in Table D show the expected Future Quality to be 56/75 which equals 7.47 out of 10. This meets the Future Quality Criteria Score of 7. However, a condition score of 53/75 which equals 7.06 out of 10 would also still meet the Future Quality score of 7. Hence, there is scope for the tree health gains not to be met and still meet the Future Quality Criteria Score. Recruitment and Weed improvements must still be achieved to reach this though.

Table D: Completion Criteria Table

VQA Habitat scoring	Original VQA Scoring	Performance Indicators (observable through regular site monitoring)	Management Measure to achieve Completion	Completion Criteria VQA scoring after 10 years	Highest Possible scoring expected
Large trees	9 Above Benchmark numbers of LOT's but tree health in the 30-70% range	At Year 2 VQA assessment: LOT health 30-70% with percentage cover at the higher end (VQA Score 9) At Year 5, 8 and 10 VQA assessment: LOT health >70% (VQA Score 10)	Exclusion of stock, control of macropod grazing, control of weeds and pest animals, and control of feral animals and erosion	10 Large Old Tree health >70% - (>70% cover of leaves on upper canopy branches, or less than 30% stick endings of branches with leaves missing)	10
Tree canopy cover	2 Canopy over abundant due to denser levels of less-mature trees, and tree health in the 30-70% range	At Year 2 VQA assessment: Canopy health 30-70% with percentage cover at the higher end (VQA Score 2) At Year 5, 8 and 10 VQA assessment: LOT health >70% (VQA Score 3)	Exclusion of stock, control of macropod grazing, control of weeds and pest animals, and control of feral animals and erosion	3 Canopy Tree health >70% - (>70% cover of leaves on upper canopy branches, or less than 30% stick endings of branches with leaves missing)	3
Understorey	20 All Lifeforms are present but Medium Tufted Graminoid's (15% cover) and Medium Herbs	At Year 2 VQA assessment: All Lifeforms are present. Medium Tufted Graminoid's at least 15% cover. Medium Herbs at least 3% cover (VQA Score 20) At Year 5, 8 and 10 VQA assessment:	Exclusion of stock, control of macropod grazing, control of weeds and pest animals, and control of feral animals and erosion	20 Maintain understorey so all 13 Lifeforms are present and only Medium Tufted Graminoid's and Medium Herbs are modified	20 or 25 It is possible that within the 10 year timeframe, Medium Tufted Graminoid's may increase to above 23% cover and Medium Herbs

VQA Habitat scoring	Original VQA Scoring	Performance Indicators (observable through regular site monitoring)	Management Measure to achieve Completion	Completion Criteria VQA scoring after 10 years	Highest Possible scoring expected
	(3% cover) are modified	All Lifeforms are present. Medium Tufted Graminoid's at least 20% cover. Medium Herbs at least 5% cover (to provide a buffer for maintaining quality) (VQA Score 20)			may increase to above 8% cover to be unmodified
Lack of weeds	2 52% cover of all weeds with 2% cover of High Threat Weeds.	At Year 2 VQA assessment: Total weed cover 50% or below. High Threat Weeds 1% cover or below (VQA Score 6) At Year 5 VQA assessment: Total weed cover 45% or below. High Threat Weeds <1% cover or below (VQA Score 6) At Year 8 and 10 VQA assessment: Total weed cover 45% or below. High Threat Weeds <1% cover or below (VQA Score 6)	Control herbaceous and woody weeds	6 Total herbaceous weedcover to decrease to under 50% and High Threat weeds remain below 2% . No woody weeds present.	6 or 7 It may be possible to eliminate HT weeds totally within the 10 year management period.
Recruitment	6 4/8 Woody species recruiting	At Year 2 VQA assessment: 4/8 Woody species recruiting (VQA Score 6) At Year 5 VQA assessment: 5/8 Woody species recruiting (VQA Score 6)	Exclusion of stock, control of macropod grazing, control of weeds and pest animals, and control of feral	10 Recruitment to increase with 6/8 woody species recruiting – Species possible are Hopbush, Hedge Wattle, or Prickly Moses.	10

VQA Habitat scoring	Original VQA Scoring	Performance Indicators (observable through regular site monitoring)	Management Measure to achieve Completion	Completion Criteria VQA scoring after 10 years	Highest Possible scoring expected
		At Year 8 and 10 VQA assessment: 6/8 Woody species recruiting (VQA Score 10) Please note that species may not continually recruit every year, so in any given year, a particular species may not be actively recruiting. This could affect the VQA assessment and attainment of performance indicators. To allow for this, Recruitment will be seen to be occurring if there has been a recruitment event in the last 2 years, and there is no evidence of threats impacting recruitment.	animals and erosion	Recruiting will be evident if there is 1 recruit (>1yo but not mature enough to flower) per 10 mature plants.	
Organic litter	3 Overabundance of litter (30% vs Benchmark 10%)	At Year 2, 5, 8 and 10 VQA assessment: No improvement expected in litter. Litter remains dominated by native litter. (VQA Score 3)	Control of herbaceous and woody weeds	3 No improvement expected in litter. Litter remains dominated by native litter.	3
Logs	4 150m/ha, Large logs 18m/ha	At Year 2, 5, 8 and 10 VQA assessment: No improvement expected in log. Logs remain at least 150m/ha	Exclusion of unauthorised access into the site. Ensure no firewood	4 No improvement expected in log. Logs at least 150m/ha with large logs at least 18m/ha.	4 or 5 Large logs may come from bigger trees dropping

VQA Habitat scoring	Original VQA Scoring	Performance Indicators (observable through regular site monitoring)	Management Measure to achieve Completion	Completion Criteria VQA scoring after 10 years	Highest Possible scoring expected
		with large logs at least 18m/ha. (VQA Score 4)	collection from the site		branches to increase large log length to over 25m/ha
Site condition (/75)	**46**			**56**	**62**
Quality	**46/75 = 6.1 out of 10**			**56/75 = 7.4 out of 10**	**62/75 = 8.2 out of 10**
Rounded	**6**			**7**	**8**
Landscape context (/25)	17			17	17
Habitat score (/100)	**63**			**73**	**79**

1.3.3 Expected Quality Decline without Offset

Without this offset in place, the quality of the site is expected to decline due mainly to an increase in weed cover and erosion, and impacts on the understorey and recruitment from rabbits and other feral animals such as deer and wild pigs. Stock grazing would also contribute substantially to lack of growth and recruitment, as well as soil disturbance/erosion and an increase in soil nutrients leading to greater weed growth and impact. Other agricultural uses would also be permitted that could degrade the site considerably (including cropping). The surrounding vegetation/landscape is not expected to change to any significant level.

Table E: Expected decline without Offset

Habitat scoring	Original Scoring	Expected scoring
Large trees	9	9
Tree canopy cover	2	2
Understorey	20	15
Lack of weeds	2	0
Recruitment	6	3
Organic litter	3	3
Logs	4	4
Site condition (/75)	**46**	**36**
Quality	**46/75 = 6.1 out of 1**	**36/75 = 4.8 out of 1**
Rounded	**6**	**5**

2. Objectives and Commitments

2.1 Summary of Objectives and Key Commitments

From the commencement of the [redacted] on 17th July 2020, the landowner agreed to undertake the following management commitments to improve the quality and condition of native vegetation in the site for a period of 10 years from the commencement of the agreement:

10-year management commitments	
Zone(s)	Commitment
All	control ALL high threats (e.g. grazing threats from introduced animals or overgrazing by native herbivores, inappropriate fire or flooding regime, erosion, other threats as identified).

From the commencement of the [redacted] the landowner agreed to undertake the following management commitments to improve the quality and condition of native vegetation at the site in perpetuity:

Ongoing management commitments	
Zone(s)	Commitment
All	eliminate all woody weeds < 1 % cover with no mature plants present ensure that weed cover does not increase beyond the current level monitor for any new and emerging high threat weeds and eliminate to < 1% cover control rabbits retain all standing trees (dead or alive) retain all logs, fallen timber and leaf litter exclude stock

The same management commitments will continue to apply to the GEWVVP offset area from the date of approval of this OMP.

2.2 Roles and Responsibilities

APA: The approval for EPBC Act referral 2019/8569 is granted to the approval holder, who is APA VTS AUSTRALIA (OPERATIONS) PTY LIMITED (APA). As the approval holder, APA is ultimately responsible for execution of the approval conditions for their project. Unless otherwise agreed in a legally binding document, APA retains ultimate responsibility for ensuring the approval conditions are met to the satisfaction of DCCEEW including providing compensation for loss of GEWVVP via

implementation of the OMP, ecological monitoring, reporting to DCCEEW, and ensuring adequate oversight (e.g. auditing). APA has engaged the Landholder of the [redacted] to deliver Environmental Services on their behalf, including implementation of the management actions in this OMP.

DEECA: The responsible authority for the [redacted] under the Victorian Conservation Forest and Lands Act 1987 is Department of Energy, Environment, and Climate Action (DEECA). DEECA has authority under the Act to enforce restrictions contained in the S.69 Agreement and also provides advice on land management to the Landholder (both during the 10 year management period and from Year 11 onwards when site monitoring is carried out, as well as by giving feedback on Landholder Annual Reports). DEECA bears no responsibility for the execution of approval conditions for EPBC Act referral 2019/8569.

Landholder: The S.69 Agreement binds the current (and future) Landholder to the standard restrictions in the S.69 Agreement and to the requirements described in this OMP. As agreed with APA and DEECA, the Landholder will be responsible for carrying out the works and associated reporting to manage the Offset area. The Landholder will also facilitate access to the Offset area for ecological monitoring and auditing, as required and engage a suitably qualified ecologist to oversee monitoring and reporting. The Landholder can engage suitably qualified contractors to carry out the works on the Landholder's behalf where necessary. The Landholder can deputise responsibility for carrying out the works to a designated site manager and/or managing ecologist, however, the Landholder remains responsible for ensuring the works are undertaken.

Funding arrangements: Financial liabilities have been agreed between DEECA and the Landholder, who are parties to the S.69 Agreement. In general terms, DEECA will retain sufficient funding to ensure that the Offset area can be managed according to the 10-year management period described in this OMP. A portion of the funds held in trust are released each year to the Landholder, provided the Landholder Annual Reporting is approved, with the exact arrangements stipulated in the S.69 Agreement. The Credit Trading Agreement has further arrangements pertaining to financing the management and monitoring of the Offset area, however, the details of the financial arrangements associated with the Offset area are beyond the scope of this OMP.

2.3 Reporting

This OMP requires the landowner to submit a report annually for each year of the ten years for the State Offset Agreement and thereafter at the reasonable request of the Secretary of DEECA. Reports are to be submitted by the anniversary date of the execution of the agreement on the Annual Report template provided by DEECA. Reporting to DCCEEW for the Federal Offset Site will occur simultaneously for the first 7 years of overlap, then to DCCEEW only for the remaining 3 years. Reporting will be overseen by a suitably qualified consultant. Reporting to DCCEEW by APA will continue beyond the initial 10 year active management period, at three yearly intervals for years 10-25, and then at five yearly intervals for the remainder of the life of EPBC approval 2019/8569. Reports to be submitted within the annual EPBC compliance report.

The Annual Report addresses progress against the commitments set out in the Agreement and this OMP. Annual Reports must 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 the site.

This OMP outlines management commitments and targets required to be achieved at the site to improve the quality and condition of native vegetation. At the completion of the 10-year active management period, the landowner is required to continue to undertake management to maintain native vegetation quality and condition at the site. This includes maintaining native vegetation condition and targets required to be achieved at the end of the 10-year management period and all ongoing management commitments and targets in perpetuity.

3. Management Commitments and Actions

Management Commitments are outlined below and are exactly the same as those specified in the [redacted] Whilst the commitments are identical, there are slight variations in data to take into account that the Federal GEWVVP offset site covers only a smaller area of whole State S.69 Agreement.

3.1 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.

Kangaroo proof fencing has been erected around the perimeter of the State Offset sites (which includes the Commonwealth Offset area) to keep kangaroos and other feral animals out of the sites. Prior to this, Kangaroos/Wallabies had been grazing grasses and some shrubs affecting growth, seeding and recruitment, and creating tracks which contributed to erosion in the drainage line area.

Although there are no stock threats from [redacted] to the east, feral pigs and kangaroos had been maintaining openings in the old stock fence. There is a deep drainage line running east-west through the site which is currently stock proof but is a point of weakness to be monitored more regularly. There is a gate on the western boundary for management access and also to let kangaroos out who breach the fence. There are no signs of stock entry.

Ensure all kangaroo proof fencing around the perimeter of the site is maintained in good condition according to the standards detailed in *Management standards for native vegetation offset sites, September 2019* – Fencing management standard, for the term of the contract.

Table F: Fencing Method and Timing

Method	Location for fencing and length	Timing
Maintain fencing around the boundary of all sites in good condition according to DEECA *Management standards for native vegetation offset sites,*	Entire boundary around all sites	Ongoing - at least once per season as well as after high winds or heavy rains

Method	Location for fencing and length	Timing
September 2019. Conduct regular monitoring to ensure all fencing meets the required standard.	where fencing exists or is required	
If a fence breach is identified, or evidence of macropods or feral animals is observed within the site, find and repair any breaches to ensure all fencing meets the required standard. The eastern boundary adjacent to the State Park is particularly vulnerable. Remove any animals that breach the fencing as soon as breach identified. Detailed records are to be kept of all native animal issues and management.	Entire boundary around all sites where fencing exists or is required	Monitor the breach location one week after each repair, and then monthly for the next 4 months, and then once per season if stable.

3.2 Erosion control

Ensure that erosion does not increase beyond current levels. Gully erosion, if not actively managed, is a hazard to vegetation.

The main drainage line running east-west across the southern end of the Sites 1C,11A, and 12A has a range of erosion issues, including active in-gully erosion, head cuts, bank erosion and tunnelling. The erosion is likely to be caused by over-grazing, loss of topsoil, sodic soils, animal diggings and movement, and human use of the site. The gully is generally reasonably stable, with the gully banks and channel well vegetated, however, there are areas of significant active erosion within and connected to the gully that can be classified as:

- head cuts in gullies and on animal tracks/crossings
- overland flow causing sheet, rill and gully erosion along the banks and in-stream
- tunnel erosion, most likely from rabbit burrows, animal digging and other disturbances (e.g. tree removal)
- base of bank being cut out by in-stream erosion, also known as toe cuts or toe erosion
- animal tracks and diggings causing sheet, rill and gully erosion
- sedimentation, in the form of 'slugs' of sediment that slowly move downstream

There are 14 main erosion areas, and in between these, there are also some areas of minor erosion such as small toe cuts, overland flow, and animal track erosion.

There is one major active head cut erosion over 1m deep at the eastern end of 11A where there is an old ford which is eroding. There is also a large active undercut erosion of a northern bank further downstream. There is a smaller area of erosion on the western bank in the south eastern area of the drainage line in 12A which is also active. There are several other areas where erosion is also occurring along the gully.

Active management commenced within six months of the site's State Offset registration as required, and includes direct control of active erosion areas, kangaroo and rabbit management, increasing gully bed height where indicated, and supervision of works by a suitably qualified professional as inappropriate materials or placement of materials could result in an increase in erosion.

The erosion must be monitored seasonally and after heavy rain events, and yearly monitoring by a suitably qualified professional is also recommended. Adaptive management will be undertaken with advice from a suitably qualified professional if the erosion continues to be active or new active areas form.

For full details of erosion management refer to [redacted]

Table G: Erosion – method and timing

Method	Timing
Increase bed height at toe cuts at all recorded toe cut sites and apply to all other toe cut locations if erosion is increasing in those areas. Bed height can be increased by adding sustainably sourced branches less than 5cm diameter (without seeds) or carefully cut and placed coir logs across the gully immediately above and below the toe cut. Place coir logs perpendicular to the slope across the old crossing track on both sides of the gully where the major head cut is present at the eastern end of 11A. Start placing logs before the track becomes obvious and pack the track with pasteurized mulch to slow water flow. The track can then be planted out in the future to help in stabilization and water use. Details of planting are to be established in response to erosion monitoring. The actual undercut at the crossing must be packed with weed-free organics, such as coir logs or coconut fibre, and this must protrude from the undercut by about 10 to 15 cm. Branches from a sustainable source should be placed immediately below the overhang. The toe cuts in other areas of the gully must be managed in the same way as above. The work at this site must be planned and carried out by an erosion control specialist. Control all animal impacts which contribute to erosion. Take photos at photopoints at each 6 monthly monitoring as well as when monitoring after any heavy rain events if conditions have changed. Photos to include ruler measurement to indicate details of size and if erosion is increasing obtain further advice from a suitably qualified professional. Contact local CMA for advice on any permits required.	Carry out ongoing seasonal monitoring as well as monitoring after any heavy rain events

For details of control works and monitoring refer to [redacted]	

3.3 Woody Weeds

All woody weeds on site must be eliminated. No woody weeds were observed at the time of the assessment but they may appear from time to time in the future.

Monitoring for new and emerging woody weeds must be conducted throughout the year for the term of the agreement, and any new and emerging woody weeds eliminated. Indigenous plants must not be impacted during treatment.

Refer to DEECA *Management standards for native vegetation offset sites, September 2019* – Weed management standards.

Percentage cover of Woody Weeds at initial assessment = 0%

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

Method	Timing
Monitor for and eliminate all new and emerging woody weeds.	Ongoing at least once per season

3.4 Herbaceous/Grassy Weeds

Ensure that weed cover is reduced to below 50%. Weeds listed in Table I were found on site. These weeds must be monitored each year to ensure their cover is not increasing. Increasing cover of these weeds must be controlled using the methods outlined in Table I. Treat weeds before the plant has flowered and set seed. Indigenous plants must not be impacted during treatment, in which case weeds that are amongst native plants will need to be hand pulled or chipped out rather than spot sprayed.

Refer to DEECA *Management standards for native vegetation offset sites, September 2019* – Weed management standards.

Monitoring for new and emerging high threat herbaceous and grassy weeds must be conducted throughout the year for the term of the agreement, and any new and emerging weeds eliminated.

Refer to DEECA *Management standards for native vegetation offset sites, September 2019* – Weed management standards.

Percentage cover of all Herbaceous/Grassy Weeds at initial assessment (2019)= 52%

Percentage cover of High Threat Herbaceous/Grassy Weeds at initial assessment (2019) = 2%

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

Common name	Scientific name	Method	Note on threat	Timing
Slender Thistle	*Carduus pycnocephalus*	Spot Spray/Chip/Handpull	High Threat Weed Sparse isolated patches around base of trees	Winter/Spring
Spear Thistle	*Cirsium vulgare*	Spot Spray/Chip/Handpull	High Threat Weed Occasional plants	Winter/Spring
South African Orchid	*Disa bracteata*	Spot Spray/dab or chip/handpull – ensure bulb is removed	High Threat Weed None observed in Federal Site but spreading in adjacent areas	Spring
Yorkshire Fog Grass	*Holcus lanatus*	Spot Spray/Chip	High Threat Weed Sparse throughout damper areas of the drainage line	Autumn/Winter
Perennial Rye	*Lolium perenne*	Spot Spray/Chip	High Threat Weed Occasional plants	Autumn - Spring
Cat's Ear/Flatweed	*Hypochaeris radicata*	Spot Spray or chip/handpull – ensure tap root is removed	High Threat Weed Sparsely scattered across the sites	Winter/Spring
Silky plantain	*Plantago bellardii*	Spot Spray	Scattered across the sites, at times in dense patches	Winter/Spring
Smooth Cat's Ear	*Hypochaeris glabra*	Spot Spray	Scattered across the sites	Winter/Spring
Capeweed	*Arctotheca calendula*	Spot Spray	Scattered across the sites	Winter/Spring
Rat's tail/Squirrel tail Fescue	*Vulpia spp.*	Spot Spray	Widespread across the sites	Autumn - Spring

Common name	Scientific name	Method	Note on threat	Timing
Large Quaking Grass	*Briza maxima*	Spot Spray	Widespread across the sites	Autumn - Spring
Great Brome	*Bromus diandrus*	Spot Spray	Widespread across the sites focussed around base of trees	Autumn - Spring
Hop Clover	*Trifolium campestre*	Spot Spray	Scattered across the sites at times in dense patches	Winter/Spring
Chickweed	*Stellaria media*	Spot Spray	Sparse isolated patches	Winter/Spring
Childing/Velvety Pink	*Petrorhagia sp.*	Spot Spray/Chip	Occasional small infestations	Winter/Spring
Red Brome	*Bromus rubens*	Spot Spray	Occasional small infestations	Autumn - Spring
Lesser Quaking Grass	*Briza minor*	Spot Spray	Occasional small infestations	Autumn - Spring
Onion Grass	*Romulea rosea*	Spot Spray	Widespread across the sites. Control only where damage to native vegetation can be avoided	Winter/Spring
Common Heron's Bill	*Erodium cicutarium*	Spot Spray	Occasional small infestations	Winter/Spring
Hare's foot clover	*Trifolium arvense*	Spot Spray	Occasional small infestations	Winter/Spring
Soft Brome	*Bromus hordeaceus*	Spot Spray	Sparse isolated patches	Autumn - Spring
Barley	*Hordeum sp.*	Spot Spray	Sparse isolated patches	Autumn - Spring
Wimmera Rye	*Lolium rigidum*	Spot Spray	Sparse isolated patches	Winter/Spring
White Clover	*Trifolium repens*	Spot Spray	Occasional small infestations	Winter/Spring

Common name	Scientific name	Method	Note on threat	Timing
Sorrel	*Acetosella vulgaris*	Spot Spray	Scattered across sites with some denser patches in Grassy Woodland	Winter/Spring
Sow Thistle	*Sonchus asper*	Spot Spray	Occasional small infestations	Winter/Spring
Annual Fog Grass	*Holcus*	Spot Spray	Sparse isolated patches	Winter/Spring
French Catchfly	*Silene gallica*	Spot Spray	Occasional small infestations	Winter/Spring
Cluster Clover	*Trifolium glomeratum*	Spot Spray	Occasional small infestations	Winter/Spring

3.5 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 must be monitored and controlled throughout the year. No rabbits were observed at the time of the assessment, however several burrows were observed mostly concentrated along the drainage line in 11A, 12A. Use an integrated approach in accordance with DEECA *Management standards for native vegetation offset sites, September 2019*, which would involve fumigation, hand collapsing of burrows and baiting. Remove any carcasses to prevent poisoning of native predators.

Foxes are a threat to native fauna and must be controlled if found on your property. Two foxes were observed on the sites, and two possible fox dens were observed along the drainage line in 11A. Fox dens and tracks in the southern area drainage line also contribute to erosion. Fox dens where present are required to be destroyed through fumigation and hand collapse. Monitor the fox dens to establish if foxes or native animals are using them. Destroy the dens if foxes are using them.

Feral pigs are a high threat to native flora and overall site quality, and their tracks contribute to erosion. There were several areas throughout the sites where wild pigs had turned over soil in varying sized patches whilst rooting for food, and this disturbance had increased before the implementation of the State Offset Agreement which includes the Commonwealth Offset area.

No evidence of deer was observed at the time of the assessment but there is a known large population in [redacted] Carry out regular monitoring for deer and control if deer are impacting the sites.

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

Common name	Method
Rabbits & Foxes	Fumigation and hand collapse of rabbit burrows and fox dens within 2 weeks of being identified during monitoring
Rabbits	Baiting - Concentrate efforts in Summer/Autumn
Rabbits	When baiting, collect and dispose of carcasses to prevent poisoning of native predators.
Rabbits & Foxes	Remove or disperse surface harbour
Rabbits, foxes, feral pigs	Monitor and control at least once per season and carry out follow up monitoring within 2 weeks after any required control actions to assess effectiveness of management until the threat is controlled.
Deer	Monitor and control numbers of deer at least once per season using the following protocol: No browsing/grazing of native vegetation by deer, no areas cleared of vegetation by deer, no deer tracks, wallows, pellets, pugging, rubbing of trees, or trampled vegetation by deer
Feral Pigs	Feral proof fencing has been erected around the perimeter of the State Offset sites, but feral pigs may breach fencing at times. Carry out ongoing seasonal monitoring within the site for feral pig impacts through observations of fresh soil diggings, hoof tracks, and impacts on vegetation. Repair any fencing breaches to prevent feral pig entry and after each breach, monitor one week after each breach, then monthly for the next 4 months, then seasonally ongoing. Feral pig shooting is to be carried out in response to monitoring if feral pigs are impacting the site, and also coordinated with adjacent Crown Land and private land managers under the 'Good Neighbour' scheme to control feral pigs in the vicinity of the property. Detailed records to be kept of all feral pig issues and management.
New & Emerging pest animals	Monitor and control at least once per season

3.6 All High Threats

All high threats to native vegetation condition improvement including threats to soil structure, natural water flow, vegetation condition and the recruitment cycle must be controlled. Typical high threats requiring control include:

- grazing threats from introduced animals including deer, wild pigs, horses and goats
- overgrazing by native animals including kangaroos, wallabies and possums

- high threat weeds
- inappropriate fire or flood regime
- inappropriate drainage
- threats to condition from vehicles including motorbikes
- illegal firewood collection / tree/log harvesting
- other threats as identified or that may appear during the 10-year active management period.

3.7 Other Management

Do not drive on sites when soil is damp and wheel ruts may occur. Do not remove indigenous plants, fallen logs or rocks from the site.

At the completion of the 10 year active management period, the landowner is required to continue to undertake management to maintain native vegetation quality and condition at the site. This includes maintaining native vegetation condition and targets required to be achieved at the end of the 10 year management period and all ongoing management commitments and targets in perpetuity.

4. Environmental Monitoring

Annual Reporting and Monitoring by the Landowner (to DEECA) is required under the existing s.69 Landowner Agreement which commenced on 17th July 2020, with 2 years of monitoring/reporting completed. For the GEWVVP offset area, management, monitoring and reporting will continue for 10 years after the approval of this OMP (provided the Completion criteria have been met after 10 years). Annual reports will be submitted to DCCEEW in July each year to align with the current DEECA reporting schedule. If the Completion Criteria are not met at the end of 10 years, active management and yearly monitoring and reporting will continue until the Criteria are met.

In addition to this, to help ensure the Completion Criteria are maintained in perpetuity, DCCEEW require further monitoring for the life of this EPBC Approval (until 2072). This monitoring by APA will occur every 3 years for the first 15 years after the Completion Criteria have been met, and if the Completion Criteria have been continually met for this period, monitoring will then occur every 5 years ongoing until 2072. If at any time the Criteria are no longer met, monitoring will return to every 3 years until the Criteria are met for at least 3 consecutive visits (9 years). Monitoring reports will be submitted to DCCEEW within the annual EPBC compliance report, showing results of site condition assessed against the completion criteria in Table D. APA will be responsible for funding and arranging this monitoring and the Landholder must allow access to the site.

The GEWVVP offset site will be actively managed by the landowner with the supervision from a suitably qualified and independent ecologist. The ecologist will carry out monitoring site assessments once per season for the first year and twice per year thereafter (Autumn and Spring) for

the following 2 years. For the remaining 7 years, ecologist monitoring will occur once per year (in Spring) for the remainder of the 10 year period. Ecologist monitoring may be more frequent if management standards are below requirements.

The ecologist monitoring visits in the first year after OMP approval (once per season) will establish the baseline offset site habitat conditions, and also focus on identifying outstanding threats as they appear each season which will need to be addressed by the landholder. This is to gain a full understanding of the site throughout the year. Advice will be given to the landowner around management techniques and processes involved to address management issues.

In subsequent years, the ecologist will continue to assess threats and give feedback to the landholder on progress of the management carried out.

The ecologist will provide a written report to the landowner after each monitoring visit. The report will include a summary of site condition, an estimation of weed covers, notes on each weed species and any other threats, maps showing threat locations (where required), photos of significant areas, and recommendations for management actions or adaptive management. The ecologist will include a VQA assessment in Spring in years 2, 5, 8, and 10 to track progress on habitat improvement.

Annual reports will use data from the landowner (as per S.69 Reporting requirements) and ecologist monitoring visits and include a record of management actions completed, the results of the actions, and an assessment of the progress against the OMP performance indicators and completion criteria listed in Table D: Completion Criteria Table, Section 1.3.2 Expected Quality Improvement with Offset.

Annual reporting will allow for adaptive management in a reactive manner (if required).

5. Audit and Review

5.1 Environmental auditing

APA is responsible for overseeing the audits and submitting audit reports to DCCEEW.

A third party suitably qualified ecological consultant will be engaged to carry out the auditing of the GEWVVP offset site.

DEECA will also audit the GEWVVP offset site as part of their general auditing of all sites within [redacted] to assess site condition and management techniques and will advise in writing to the landholder any mitigation or adaptive management required. These auditing reports will be available to APA from the Landowner and data from the GEWVVP offset site area can be used to help inform the auditing report provided to DCCEEW. DEECA auditing occurs at least 3 times in 10 years (and less frequently ongoing beyond Year 10).

The effectiveness of this OMP will be reviewed by a suitably qualified environmental consultant in line with the timing when environmental auditing is carried out, or if monitoring finds that the objectives of the plan are not being met, or after any significant environmental incidents. Any changes to the approved plan triggered by the review will be submitted to DCCEEW for the Minister's approval.

The landholder will provide access to the site and APA will provide relevant monitoring records for the purpose of any DCCEEW audit activities.

[redacted]

- Stage one –verifies the management actions are being implemented as per the OMP, detail site conditions by which improvement will be measured and measures progress against OMP management commitments and quality improvement measures. Stage one generally spans the early years (e.g. first three or four years) of the 10 year management period.

- Stage two – similar to Stage one but also includes a measure of performance against offset completion criteria. The Stage two audit is typically conducted in year four or five.

- Stage three – as per Stage two but conducted around year eight and includes an increased focus on performance against offset completion criteria.

- Stage four - Year 10 completion audit to confirm offset completion criteria have been met

  Significant environmental incidents (e.g. bushfire) that result in a material change to the offset site conditions will be described in the annual reports and/or audit reports and may trigger potential changes to OMP. Any changes to the OMP will be in agreement with APA, the offset site landowner and the relevant statutory authorities (to be carried out by consultant ecologist).

5.2 Trigger Values

Trigger values will be assessed on an ongoing basis at least once per season (or after any significant environmental incident) by the landowner during site monitoring, as well as by an independent and suitably qualified ecologist once per season for the first year, twice per year for years 2 - 3, and once per year for years 7-10, and in response to significant environmental events at the site. Refer to Table K, 'Trigger Values Table' below.

Trigger values are also assessed by DEECA annually based on Landholder Annual Reports and from monitoring site assessments by DEECA for compliance. DEECA holds all credit trade money and pays it back to the Landholder over 10 years. Corrective actions required by the landowner from auditing are specified by DEECA and annual payments withheld until Landholder is compliant, or alternatively, extension of 10 year end date may be applied. Failing this, DEECA may use Landholder funds to carry out management.

Trigger values for corrective action will apply if there is any degradation to the site or if threats are not being properly managed to allow improvement in condition.

Audit findings will be discussed and agreed with the landowner and implemented accordingly.

Any new additions to management that appear in response to auditing or monitoring which are not covered in this OMP will be included in the Annual Reports and will also require consultation and approval from DEECA before being implemented.

Table K: Trigger Values Table

Trigger Values	**Detection Monitoring**	**Corrective Actions if trigger is reached** - (Any adaptive management will require consultation and approval from DEECA before being implemented).
Large Tree health falls below 50% in the first two years or below 70% in subsequent years	Once per season	River Red Gum canopy health can vary naturally over time in response to such things as water availability, rainfall, and insect attack. Observations of canopy stress in one season are not representative of overall canopy health. If the trigger value is reached over 3 consecutive seasons (with average rainfall), seek advice from a consultant ecologist for advice.
Tree canopy health falls below 50% in the first 2 years or below 70% in subsequent years	Once per season	River Red Gum canopy health can vary naturally over time in response to such things as water availability, rainfall, and insect attack. Observations of canopy stress in one season are not representative of overall canopy health. If the trigger value is reached over 3 consecutive seasons (with average rainfall), seek advice from a consultant ecologist for advice.
Understorey Lifeforms are not all present or Medium Tufted Graminoid's fall below 15% cover or Medium Herbs fall below 3% cover	Once per year in Spring in November	Increase scope and frequency of weed control activities and ensure control is carried out pre-seeding/flowering to reduce competition for native plants. Focus spraying around edges of stands of native plants so there is a seed source available to colonise the sprayed ground. Adaptive management may also be used if spraying is not effective such as focussed burning in the vicinity of stands of native plants which may prompt germination and growth. Seek advice from a consultant ecologist for any adaptive management.
Total Weed cover is above 52% in the first 2 years or above 50% in the following 3 years, or above 45% in subsequent years.	Once per season	Increase scope and frequency of weed control activities and ensure control is carried out pre-seeding/flowering to reduce future spread. Adaptive management may be used if spraying is not effective with such things as brush-cutting seed heads prior to maturity, and or focussed burning and follow up spraying of small areas. Seek advice from a consultant ecologist for any adaptive management.
High Threat herbaceous weed cover is above 2% in the first 2 years or	Once per season	Increase scope and frequency of weed control activities and ensure control is carried out pre-seeding/flowering to reduce future spread. Adaptive management may be used if spraying is not effective with such things as brush-cutting seed heads prior to maturity, and or focussed burning and

Trigger Values	Detection Monitoring	**Corrective Actions if trigger is reached** - (Any adaptive management will require consultation and approval from DEECA before being implemented).
above 1% in subsequent years.		follow up spraying of small areas. Seed advice from a consultant ecologist for any adaptive management.
Presence of new and emerging High Threat herbaceous weeds	Once per season	Control any new high threat weeds species to eliminate from the site
Presence of any woody weeds	Once per season	Control any new seedlings or mature plants missed in previous monitoring
Woody species Recruitment falls below 4/9 in the first two years or below 6/9 in the following 3 years or below 7/9 in subsequent years	Once per season	Increase weed control around vicinity of adult plants and engage a consultant ecologist for advice around methods for such things as scarifying the ground, small burn patches to prompt seed germination (especially for Acacia species), or planting or direct seeding.
Observation of rabbits or evidence of rabbit activity such as scrapings, active burrows, scats.	Once per season and if activity is detected (and controlled) monitor the location two weeks after each control, and then monthly for the next 4 months. If no further activity present, monitor once per season.	Remove or control any pest or feral animals within the site. Repair any breaches in fencing and continue to monitor and repair as specified in the 'Detection Monitoring' column. Check adjacent areas for other evidence of activity.

Trigger Values	**Detection Monitoring**	**Corrective Actions if trigger is reached** - (Any adaptive management will require consultation and approval from DEECA before being implemented).
Observation of macropods or feral animals, or evidence of macropod or feral animal activity such as tracks, scats, grazing of shrubs or grasses, soil disturbance.	Once per season and if a breach is identified (and repaired) monitor the breach location one week after each repair, and then monthly for the next 4 months, and then once per season if stable	Remove or control any animals within the site. Repair any breaches in fencing and continue to monitor and repair as specified in the 'Detection Monitoring' column. Check adjacent areas of the fence for other possible openings.
Total Log length falls below 150m/ha or large logs fall below 18m/ha	Once per season	Identify source of log loss. Check with all staff and contractors if internal removal has occurred and check fencing for any breaches from unauthorised access. If unauthorised access, repair fencing and erect signage stating 'private property'. If internal, educate staff/contractors not to take firewood.
Active erosion observed or erosion mitigation material moved or degraded and ineffective.	Once per season as well as after heavy rains	Suitably qualified erosion specialist engaged to advise appropriate remedial actions.
Damage to surrounding native vegetation as a result of weed spot spraying	One month after weed control activities by landholder and annually by consultant ecologist	Consultant Ecologist to educate Landholder on species identification, and landholder to ensure all staff carrying out weed control have appropriate plant knowledge to identify natives vs weeds.

5.3 Corrective Actions

Where the site exceeds threat trigger value limits in any of the above listed threats, the Landholder will carry out corrective actions as listed in the Trigger Values Table above to mitigate the threat immediately upon identification of the degrading threat. The Landholder and/or consultant ecologist will carry out regular monitoring after the mitigation measures have been completed (at timing relevant to the threat) to ensure the threat remains mitigated. After this, regular seasonal monitoring may be resumed.

Procedures to mitigate a given threat may require the engagement of a suitably qualified professional or contractors to carry out the work and all contractors will have appropriate permits. This information will be included in the Annual report provided to DEECA and DCCEEW.

6. Risk Evaluation

A risk assessment has been undertaken to address potential threats to the success of the Offset area. Monitoring of the Offset area is an integral component of risk management and includes both routine inspections by the Landholder and ecological monitoring by a qualified ecologist for erosion management and for vegetation condition, and auditing by DEECA. These activities allow for early identification of changes, appropriate and timely management responses, and adaptive management to changing conditions. Regular reporting to regulatory bodies will track the improvement of the Offset area over time.

Table L shows the risk level for this OMP.

There is residual risk posed by emergency events such as wildfire, floods or unexpected pest outbreaks. These events present a risk of damage to the Offset area, and may require higher levels of management to mitigate post-event deterioration of the site. Major Flood events may impact erosion stabilisation in the deep channel running through site but impacts are likely to be highly localised. Wildfire may temporarily have a major impact on the site, but burning is part of the Grassy Woodland ecosystem so the site is expected to recover over time. Extra management will be required post an emergency event to ensure threats do not increase while the site recovers.

Table L: Risk Evaluation - With Current S.69 State Agreement

Hazard	Likeli-hood	Conse-quence	Risk	Hazard control and OMP ref:
Pest animals or macropods breach fence	Possible	Minor	Low	Exclusion fence erected around entire site. Regular monitoring and repair of fence carried out. Animals that breach fence are controlled – Section 3.1: Fencing, and Section 7: Management Action Table

Hazard	Likeli-hood	Conse-quence	Risk	Hazard control and OMP ref:
Increase in Fox numbers and activity	Possible	Minor	Low	Regular Fox baiting carried out as well as seasonal monitoring for any dens or fox activity – Section 3.5: Pest Animals, and Section 7: Management Action Table
Increase in Rabbit numbers and activity	Possible	Minor	Low	Rabbits monitored at least once per season (with extra focus in Autumn) and burrows fumigated and hand collapsed - Section 3.5: Pest Animals, and Section 7: Management Action Table
Increase in Erosion	Possible	High	Med	Erosion Management Plan included as part of S.69 Agreement and OMP - Section 3.2: Erosion, and Section 7: Management Action Table
High Threat Weeds Spread	Possible	Moderate	Med	Regular monitoring and control of High Threat weeds carried out to prevent spread – Section 3.3: Woody Weeds, Section 3.4 Herbaceous Weeds, and Section 7: Management Action Table
Low Threat Weeds spread	Likely	Minor	Low	Low threat to native vegetation recovery. Monitoring carried out at least once per season for cover levels and control required if spreading – Section 3.4 Herbaceous Weeds, and Section 7: Management Action Table
New weed infestations occur	Possible	Minor	Low	Regular monitoring at least once per season for new high threat weeds and new plants eliminated – Section 3.4 Herbaceous Weeds, and Section 7: Management Action Table
Landowner does not carry out s.69 to required standard	Possible	Moderate	Med	DEECA withhold Annual Payments until works are completed and may extend 10 year finish date, or for worst case scenario will use the money to carry out the required works – Section 4: Environmental Monitoring
Completion criteria not met despite management attempts by Landowner	Possible	Moderate	Med	The 10 year active management period (including management, monitoring and reporting) will continue until the Completion Criteria are met - Section 4: Environmental Monitoring
Emergency Events occur	Rare	Potential for Major	Med	Major rare floods may impact the drainage line despite erosion control measures carried out by landholder. Erosion Management Plan allows for extra mitigation works and adaptive management post flood. Some erosion will also occur as part of the natural stabilisation of the channel. Management post wildfire includes rebuilding of fences, increased weed control to prevent large scale seeding, and

Hazard	Likeli-hood	Conse-quence	Risk	Hazard control and OMP ref:
				control of soil disturbance impacts on fragile soil from pest animals. In the case of emergency events, the Landholder will immediately notify DEECA and the approval holder (APA) who will immediately notify DCCEEW of any environmental emergencies and consult with the department to seek advice on the appropriate response and any remedial actions required - Section 5.1: Environmental Auditing, and Section 5.2 Trigger Values

The risk levels are determined from the Risk Evaluation Matrix tables below:

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

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 or doubtful
Rare	May occur in exceptional circumstances
Qualitative measure of consequences (what will be the consequence/result if the issue does occur)	
Minor	Minor risk of failure to achieve the plan's objectives. Results in short term delays to achieving plan objectives, implementing low cost, well characterised corrective actions.

Moderate	Moderate risk of failure to achieve the plan's objectives. Results in short term delays to achieving plan objectives, implementing well characterised, high cost/effort corrective actions.
High	High risk of failure to achieve the plan's objectives. Results in medium-long term delays to achieving plan objectives, implementing uncertain, high cost/effort corrective actions.
Major	The plan's objectives are unlikely to be achieved, with significant legislative, technical, ecological and/or administrative barriers to attainment that have no evidenced mitigation strategies.
Critical	The plan's objectives are unable to be achieved, with no evidenced mitigation strategies.

7. Management Action Tables

Year from Commencement: Years 1 - 10

Management Action Description	Reference Table for action	Timing	Target to be achieved
Fencing			
Maintain fencing in good condition around entire boundary of all sites where fencing exists or is required. Conduct regular monitoring to ensure all fencing meets the required standard.	Table F	Ongoing - at least once per season as well as after strong winds or heavy rain	Maintain fencing to DEECA fencing standards outlined in *Management standards for native vegetation offset sites, September 2019*
If a fence breach is identified, or evidence of macropods or feral animals is observed within the site, find and repair any breaches to ensure all fencing meets the required standard. The eastern boundary adjacent to the State Park is particularly vulnerable. Remove any animals that breach the fencing as soon as breach identified. Detailed records are to be kept of all native animal issues and management.	Table F	Monitor the breach location one week after each repair, and then monthly for the next 4 months, and then once per season if stable.	Fencing repaired and maintained to prevent macropods/feral animal access
Woody Weeds			
Monitor for and Eliminate all new & emerging woody weeds	Table H	Ongoing - at least once per season	<1% cover of all woody weeds, with no mature plants present at the end of Year 10

Year from Commencement: Years 1 - 10

Management Action Description	Reference Table for action	Timing	Target to be achieved
Herbaceous Weeds			
Monitor for and control all herbaceous weeds. Refer to Table I for list of herbaceous weeds, their control method and timing of actions	Table I	Refer to Table I for which season to focus control efforts in for each weed. Monitoring must begin within the first half of that season. Carry out follow up monitoring one month after control actions to assess effectiveness of control and to control any missed plants	A reduction in overall cover below 50% for all herbaceous weeds Minimise off-target damage (avoid all native plants)
Monitor for and Eliminate all new & emerging high threat weeds	n/a	Ongoing – at least once per season and monitoring must begin within the first half of that season. Carry out follow up monitoring one month after control actions to assess effectiveness of control	<1% cover of all new and emerging high threat weeds at the end of Year 10

Year from Commencement: Years 1 - 10

Management Action Description	Reference Table for action	Timing	Target to be achieved
		and to control any missed plants	
Pest Animals			
Monitor for and control rabbits and foxes. Refer to Table J for a list of control methods and timing of actions	Table J	Refer to Table J Ongoing – at least once per season	No surface disturbance within the site No active rabbit warrens to be present No active fox dens to be present No rubbish Minimal artificial piles of logs and rocks
Monitor for and control numbers of deer at least once per season	Table J	Refer to Table J Ongoing – at least once per season	No browsing/grazing of native vegetation by deer, no areas cleared of vegetation by deer, no deer tracks, wallows, pellets, pugging, rubbing of trees, or trampled vegetation by deer
Carry out ongoing seasonal monitoring within the site for feral pig impacts through observations of fresh soil diggings, hoof tracks, and impacts on vegetation. Repair any fencing breaches to prevent feral pig entry.	Table J	Ongoing – at least once per season and after a fence breach, monitor one week after each repair, then monthly for the next 4 months, then seasonally	No fresh soil disturbance, hoof tracks, scats, or impacts on vegetation.

Year from Commencement: Years 1 - 10

Management Action Description	Reference Table for action	Timing	Target to be achieved
Feral pig shooting is to be carried out in response to monitoring if feral pigs are impacting the site, and also coordinated with adjacent Crown Land and private land managers under the 'Good Neighbour' scheme to control feral pigs in the vicinity of the property. Detailed records to be kept of all feral pig issues and management.		ongoing if fence not impacted.	
Monitor for and control all new and emerging pest animals	n/a	Ongoing – at least once per season	Control numbers of any new & emerging pest animals
Erosion			
Control head cut erosion at crossing and all other toe cuts, as well as the run off from the crossing track, and any other erosion impacts from animals. Refer to management action description and Table G for an integrated program of monitoring and control actions including method and timing of actions	Table G	Within 6 months and monitor every 6 months ongoing as well as after heavy rains	No increase in, and where possible a reduction of presence, activity and impact of identified threat(s) from levels recorded at commencement date . Works to be completed within designated time frame and Erosion to be stabilised
Monitor for new high threats - and for each new threat identified develop an integrated program of management and control actions to be implemented	3.6 All other high threats	Within 3 months of identification of threat and	Develop an integrated program of management and control actions for DCCEEW to include in annual reporting, and also for DEECA approval.

Year from Commencement: Years 1 - 10

Management Action Description	Reference Table for action	Timing	Target to be achieved
		Ongoing at least once per season	Implement program upon approval from DCCEEW and DEECA.
Annual reporting			
Prepare and submit an annual report (with engaged ecological consultant overseeing process and monitoring site)	4. Environmental monitoring	Submit in July each year	Annual report is signed, dated and submitted to DCCEEW in July each year to align with the current DEECA reporting schedule. 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
A third party suitably qualified ecological consultant will be engaged to carry out the auditing of the GEWVVP offset site.	5. Audit and Review	Stage One, Two, Three, and Four	Auditing report is signed, dated and submitted to DCCEEW in July to align with the current DEECA reporting schedule.

8. References

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Commonwealth of Australia 2014. Guidelines for the preparation of an Offset Management Plan under the EPBC Act offsets policy. Australian Government Department of Sustainability, Environment, Water, Population and Communities, Canberra

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DSE 2004. Native Vegetation: Sustaining a living landscape. Vegetation Quality Assessment Manual – Guidelines for applying the Habitat hectares scoring method. Version 1.3. Victorian Government Department of Sustainability & Environment, Melbourne. https://www.environment.vic.gov.au/__data/assets/pdf_file/0016/91150/Vegetation-Quality-Assessment-Manual-Version-1.3.pdf

DSE 2004. EVC/Bioregion Benchmark for Vegetation Quality Assessment, Victorian Volcanic Plain bioregion, EVC 55_61: Plains Grassy Woodland. https://www.environment.vic.gov.au/biodiversity/bioregions-and-evc-benchmarks

DSEWPaC 2011. Nationally Threatened Ecological Communities of the Victorian Volcanic Plain: Natural Temperate Grassland & Grassy Eucalypt Woodland A guide to the identification, assessment and management of nationally threatened ecological communities. The Australian Government, Canberra.

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[redacted]

9. Appendices

Appendix A: Species List

Key:

EPBC Act

- CR – Critically Endangered
- EN – Endangered
- VU - Vulnerable

FFG = Listed under the *Flora and Fauna Guarantee Act 1988*

- L – listed as threatened under FFG Act

VROT = Victorian rare or threatened

- e - endangered
- v - vulnerable
- r - rare
- k - poorly known but thought to be rare or threatened

Weed = plant taxa introduced into Victoria or Australia

- * - weed
- # - native species outside natural range

Status	**Scientific name**	**Common name**
	Eucalyptus melliodora	Yellow Box
	Eucalyptus goniocalyx	Long Leaf Box/Bundy
	Eucalyptus camaldulensis	River Red Gum
	Tall Shrubs	
	Acacia mearnsii	Black Wattle
	Small/Medium Shrubs	
	Acacia paradoxa	Hedge Wattle
	Acacia verniciflua	Varnish Wattle
	Acacia verticillata	Prickly Moses
	Astroloma humifusum	Cranberry Heath

Status	Scientific name	Common name
	Dodonaea viscosa	Hop Bush
	Kenedia prostata	Running Postman
	Leptospermum continentale	Prickly Tea Tree
	Pimelia flava	Yellow Rice Flower
	Pimelia humilis	Common Rice Flower
	Herbs	
	Acaena echinata	Sheeps Burr
	Acaena ovinum	Sheeps Burr
	Arthropodium strictum	Chocolate Lily
	Asperula conferta	Common Woodruff
	Brachyscome/Calotis sp.	Daisy
	Brunonia australis	Blue Pincushion
	Chamaescilla corymbosa	Blue Stars
	Crassula colorata	Dense Crassula
	Crassula decumbens var. decumbens	Spreading Crassula
	Cynoglossum suaveolens	Sweet Hounds Tongue
	Drosera auriculata	Tall Sundew
	Geranium sp.	Native Crane's Bill
	Gonocarpus tetragyna	Common Raspwort
	Goodenia geniculata	Bent Goodenia
	Hydrocotyl callicarpa	Small Pennywort
	Hypericum graminaeum	Native St John's Wort
	Microtis unifolia	Common Onion-orchid
	Oxalis perennans	Grassland Wood-sorrel
	Pelargonium rodneyanum	Magenta Stork's Bill
	Rumex brownii	Native Dock
	Senecio glomeratus	Annual Fireweed

Status	Scientific name	Common name
	Senecio picridioides	Hawkbit Fireweed
	Senecio phelleus	Stony Fireweed
	Thelymitra sp	Sun Orchid
	Wahlenbergia sp.	Bluebell
	Wahlenbergia sp2	Bluebell
	Grasses/Gramminoides	
	Anthosachne scabra	Common Wheat-grass
	Austrostipa mollis	Supple Spear Grass
	Austrostipa scabra	Rough Spear Grass
	Carex tereticaulis	Basket Sedge
	Gahnia radula	Thatch Saw Sedge
	Juncus sp 1	Native Rush
	Juncus sp 2	Native Rush
	Juncus sp 3	Native Rush
	Lomandra filiformis	Wattle Mat Rush
	Lomandra micrantha	Small Flowered Mat Rush
	Luzula meridionalis	Woodrush
	Microlaena stipoides	Weeping Grass
	Poa ensiformis	Sword Tussock-grass
	Poa morrissii	Velvet Tussock Grass
	Poa sieberiana	Grey Tussock Grass
	Rytidosperma caespitosum	Wallaby Grass
	Rytidosperma geniculata	Bent Wallaby Grass
	Themeda triandra	Kangaroo Grass
	Other	
	Pteridium esculentum	Bracken Fern

Status	Scientific name	Common name
	Cheilanthes astrotenuifolia	Rock Fern
	Weeds	
*	*Carduus pycnocephalus*	Slender Thistle
*	*Cirsium vulgare*	Spear Thistle
*	*Holcus lanatus*	Yorkshire Fog Grass
*	*Lolium perenne*	Perennial Rye
*	*Hypochaeris radicata*	Cat's Ear/Flatweed
*	*Plantago bellardii*	Silky plantain
*	*Hypochaeris glabra*	Smooth Cat's Ear
*	*Arctotheca calendula*	Capeweed
*	*Vulpia spp.*	Rat's tail/Squirrel tail Fescue
*	*Briza maxima*	Large Quaking Grass
*	*Bromus diandrus*	Great Brome
*	*Trifolium campestre*	Hop Clover
*	*Stellaria media*	Chickweed
*	*Petrorhagia sp.*	Childing/Velvety Pink
*	*Bromus rubens*	Red Brome
*	*Briza minor*	Lesser Quaking Grass
*	*Aira sp.*	Fairy Grass
*	*Romulea rosea*	Onion Grass
*	*Erodium cicutarium*	Common Heron's Bill
*	*Trifolium arvense*	Hare's foot clover
*	*Bromus hordeaceus*	Soft Brome
*	*Hordeum sp.*	Barley
*	*Lolium rigidum*	Wimmera Rye
*	*Trifolium repens*	White Clover
*	*Acetosella vulgaris*	Sorrel

Status	Scientific name	Common name
*	*Sonchus asper*	Sow Thistle
*	*Holcus*	Annual Fog Grass
*	*Silene gallica*	French Catchfly
*	*Trifolium glomeratum*	Cluster Clover

Appendix B: Soil Erosion Management Plan

Appendix C: S69 Landowner Agreement on Title

Appendix D: Declaration of Accuracy

DECLARATION OF ACCURACY

I declare that:

1. To the best of my knowledge, all the information contained in, or accompanying this Management Plan[1] *(Offset Management Plan - EPBC Act Referral 2019/8569 - Western Outer Ring Main (WORM) high pressure gas transmission pipeline from Plumpton to Lindum Vale, Victoria)* is complete, current and correct.

2. I am the designated proponent or the approval holder for [redacted] action.

3. I am aware that:

a. Section 490 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) makes it an offence for an approval holder to provide information in response to an approval condition where the person is reckless as to whether the information is false or misleading.

b. Section 491 of the EPBC Act makes it an offence for a person to provide information or documents to specified persons who are known by the person to be performing a duty or carrying out a function under the EPBC Act or the *Environment Protection and Biodiversity Conservation Regulations 2000* (Cth) where the person knows the information or document is false or misleading.

c. The above offences are punishable on conviction by imprisonment, a fine or both.

[redacted]

[1] Insert the title and version number of the plan so that it is clear which is being declared accurate